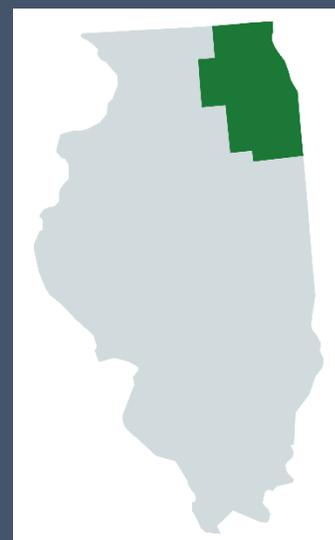


NORTHEAST ECONOMIC DEVELOPMENT REGION (NEEDR)

Regional WIOA Plan, 2020-2024



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CHAPTER 1: ECONOMIC & WORKFORCE ANALYSIS

A. Provide an analysis of the:

1. Economic conditions including existing and emerging in-demand industry sectors and occupations (Sec. 679.560(a)(1)(i))

- Targeted industries, high-impact industry clusters, and in-demand occupations
- Industries and occupations with favorable LQ
- Industries and occupations with demand projections based on growth
- Industries and occupations with demand projections based on replacements
- Industries and occupations considered mature, but still important to the economy
- Industries and occupations considered emerging in the Regional economy
- Sources of supply and demand data used to determine the targeted industries, occupations, and skills

Introduction to Labor Market Information

The data analysis update is based on a two-year timeframe of 2018-2020. There were many moving parts during this time from an extreme low unemployment in the region pre-pandemic to an erratic 2020 and 2021. The 10-year projections are a best guess based on 2018 data or 2020 data. The labor force landscape is changing with a decline in the region's workforce and real-time data is not available to assist the region in analyzing the true impact of the pandemic on industry and underserved groups.

Using the data to map out a plan for recovery is going to require enhanced work from the Regional Integrated Business Team to best understand the industry pains and areas of opportunity for real-time services. Looking at this data through an equity lens requires an analysis of the workforce in 2021. This population makes up the region's labor force decrease from 2018 to 2020 and have rejoined the workforce. There are lingering challenges contributing to certain groups not rejoining the workforce and these challenges pose needed service strategies that the region can focus on in the near and long term. The current data sets do not capture this information.

As industry continues to be challenged with filling open positions, the region will continue to see changes in the skills and education requirements, changes in wages and benefits, and movement in the workforce seeking out better jobs, wages and work/life balance not readily captured in data.

Overall and based on the following data snapshot – Illinois has not experienced a slight increase in employment from October 2020 to October 2021 and the region has not experienced any additional decline in industry employment during the year. The state of Illinois and region have remained relatively consistent and stationary in terms of 2021 industry data. This does signify a level of resiliency in the region due to the diversity of the industry and workforce. The rest of the chapter will provide updated data and discuss more about the COVID-19 National Health Emergency and workforce equity.

Through the Illinois’ Workforce Innovation and Opportunity Act (WIOA) Unified State Plan, the State has provided direction on analysis of economic conditions. The Illinois Northeast Economic Development Region (NEEDR) plan will use similar analysis in this plan update. Table 1 details the changes in gross domestic product (GDP), employment, and earnings for the NEEDR, Illinois, and United States between 2008-2013, 2013-2018, and 2008-2018 and 2008-2020. Data was collected through the U.S. Bureau of Economic Analysis.

Between 2018-2020 the NEEDR’s GDP fared well when compared to the state and trailed slightly to the national GDP rate. The NEEDR experienced employment growth during the ten years of 2008-2018 – outpacing the state and national growth but that employment growth changed in 2020 with the NEEDR experiencing a measurable decrease between 2018-2020 (-25.08%); a greater decrease than the state (-22.34%) and experienced and a substantial decrease compared to the national rate which actually reports a growth rate of 3.35%. Earnings increase in NEEDR, state and nation were reported between 2008-2018. A data set has not been made available for 2018-2020 but based on the experience it can be inferred an earnings increase continues across the NEEDR, state and nation.

Table 1: Region vs. Illinois vs. Nation: Change in GDP, Employment, and Earnings Over Last 10 12 Years

	Gross Domestic Product (\$)				% Change			
	2008	2013	2018	2020	08-13	13-18	08-18	18 -20
NEEDR¹	4797B	5464B	6544B	650,1B	13.9%	19.8%	36.4%	-0.64%
Illinois	646.4B	739.6B	865.3B	837.0B	14.4%	17.0%	33.9%	-3.27%
USA	14.7T	16.8T	20.6T	20.6T	14.1%	22.6%	39.9%	-----
	Employment				% Change			
	2008	2013	2018	2020	08-13	13-18	08-18	18 -20
NEEDR	5,350,959	5,372,343	5,804,719	4,348,549	0.4%	8.1%	8.5%	-25.08%
Illinois	7,553,059	7,503,158	7,952,370	6,175,547	-0.7%	6.0%	5.3%	-22.34%
USA	141,576,000	141,103,000	153,133,000	158,257,411	-0.3%	8.5%	8.2%	3.35%
	Earnings				% Change			
	2008	2013	2018	2020	08-13	13-18	08-18	
NEEDR	235,057,437	247,876,619	302,130,647	NA	5.5%	21.9%	28.5%	NA
Illinois	303,356,416	320,099,420	382,942,059	NA	5.5%	19.6%	26.2%	NA
USA	6,534,248,000	7,113,178,000	8,888,491,000	NA	8.9%	25.0%	36.0%	NA

Source: U.S. Bureau of Economic Analysis; Regional Data, GDP & Personal Income; Personal Income and Employment by County and Metropolitan Area, Compensation of Employees by Industry; Gross Domestic Product by County and Metropolitan Area, GDP in current Dollars.

Location quotient is a helpful way of better understanding how concentrated a specific industry is in a Region compared to the nation and what makes a Region “unique” in comparison to the

¹ The NEEDR Region is comprised of 10 Illinois counties: Cook, DeKalb, DuPage, Grundy, Kane, Kankakee, Kendall, Lake, McHenry, & Will

national average. Industry sectors are defined in three separate groupings based on location quotient. These grouping detail the level of demand the industry is in the Region:

- **Leading Industries:** industries that are expected to grow during the projection period, and which are important within the state (i.e., have a location quotient greater than 1.0)
- **Emerging Industries:** industries that are not strongly represented in the current economy (i.e., have a location quotient that is less than 1.0), but are expected to grow during the projection period.
- **Maturing Industries:** industries that are important within the state but are not expected to grow during the projection period.

Table 2 details industry sectors in the NEEDR at the 2-digit NAICS (North American Industry Classification System) level, as well as employment changes between 2018-2028, location quotient and demand.

The top industries in the NEEDR at the 2-digit NAICS level based on projected employment numbers in 2028 are Professional & Business Services (823,948 jobs); Health Care & Social Assistance (607,025 jobs); Leisure & Hospitality (473,404 jobs); and Retail Trade (411,425 jobs). These top industries have not changed but each industry’s projected job growth is being reported at a much smaller percentage with Retail Trade reporting the greatest decline in jobs, losing over (8,000) jobs. The Health Care & Social Assistance industry reports the greatest job change of 7.1% or 40,000 jobs. Manufacturing and Wholesale Trade are two of the leading industries from the previous reporting period of 2016-2026 that are now reporting a decline in jobs: Manufacturing losing 7,548 and Wholesale Trade losing 3,141.

Leading industries in the NEEDR include are now reported as Transportation & Warehousing; Professional & Business Services; and Financial Activities.

Table 2: Regional Employment By Sector

NAICS Title	2018 Employment	2028 Employment	Net Employment Change	Percent Employment Change	Location Quotient	Demand
Professional & Business Services	806,801	823,948	17,147	2.1%	1.28	Leading
Health Care & Social Assistance	566,862	607,025	40,162	7.1%	0.93	Emerging
Leisure & Hospitality	447,417	473,404	25,987	5.8%	0.95	Emerging
Retail Trade	419,677	411,425	(8,252)	(2.0%)	0.92	Maturing
Educational Services	379,868	385,456	5,588	1.5%	0.93	Emerging
Manufacturing	381,748	374,200	(7,548)	(2.0%)	1.04	Maturing

Financial Activities	315,852	323,986	8,134	2.6%	1.28	Leading
Wholesale Trade	230,195	227,054	(3,141)	(5.2%)	.093	Maturing
Government	219,570	215,284	(4,286)	(2.0%)	*	Mature
Transportation & Warehousing	237,481	242,125	4,644	2.0%	1.36	Leading
Self Employed Workers	194,382	192,014	(2,368)	(2.0%)	0.69	N/A
Other Services	190,691	188,243	(2,448)	(1.3%)	1.00	Maturing
Construction	160,843	163,635	2,792	1.7%	0.76	Emerging
Information	75,849	71,904	(3,945)	(5.2%)	0.93	N/A
Utilities	12,823	13,124	301	2.3%	0.80	Emerging
Agricultural Production	10,708	10,984	276	2.6%	0.24	Emerging
Natural Resources & Mining	1,408	1,522	114	8.1%	0.07	Emerging

Source: Illinois Department of Employment Security

Referencing Table 2 above, data shows industry clusters in the Region identified as LEADING, EMERGING and MATURING based on employment projections 2018-2028. Attachment A provides a crosswalk between the detailed (3-digit) industry clusters and the occupational pathways for the Region. This crosswalk identifies occupations related to the industry clusters identified LEADING, EMERGING and MATURING.

Table 3 below details the top occupations at the 2-digit SOC (Standard Occupational Classification) level. The top occupations in the NEEDR in 2018 included Office and Administrative Support Occupations (598,305 jobs); Sales and Related Occupations (443,897 jobs); Food Preparation and Serving Related Occupations (355,783 jobs); Transportation and Material Moving Occupations (460,632 jobs); and Management Occupations (360,619 jobs).

Office and Administrative Support Occupations makes up the largest percentage share of occupations in the NEEDR in 2018 and is projected to experience a decline in jobs between 2018-2028 (-72,269 jobs) (as is Food Preparation and Serving Related Occupations (-72,457)). It also has the greatest number of average annual job openings due to replacement jobs. Sales and Related Occupations is projected to experience the greatest decline in jobs between 2018-2028 (-88,453).

The job change in NEEDR is being reported at a -337,493 with only seven to the top twenty-two occupations reporting a level of positive job change. Healthcare Support Occupations is projected to add the greatest number of jobs during that same time period (19,747 jobs) and Transportation and Material Moving Occupations employment change reports the largest number of average annual job openings due to growth.

Occupations with the high LQ score include: Transportation and Material Moving Occupations (1.26); Management Occupations (1.26); Legal Occupations (1.26); Business and Financial Operations Occupations (1.13).

Table 3: Regional Employment by Major Occupational Sector

SOC	Job Title	2018 Jobs	% Share of 2018 Jobs	2028 Jobs	Employment Change		LQ	Average Annual Job Openings Due To:	
					Job Change	% Change		Growth	Replacement
43-0000	Office and Administrative Support Occupations	598,305	12.9%	526,036	(72,269)	(12.1%)	1.05	2,775	61,371
41-0000	Sales and Related Occupations	443,897	9.5%	355,444	(88,453)	(19.9%)	0.95	1,092	48,934
35-0000	Food Preparation and Serving Related Occupations	355,783	7.6%	283,325	(72,457)	(20.4%)	0.87	2,729	52,736
53-0000	Transportation and Material Moving Occupations	460,632	9.9%	461,725	1,093	0.2%	1.26	5,866	56,827
11-0000	Management Occupations	360,619	7.7%	343,131	(17,488)	(4.8%)	1.26	2,800	27,298
51-0000	Production Occupations	291,967	6.3%	248,154	(43,813)	(15.0%)	1.09	2,380	28,849
25-0000	Education, Training, and Library Occupations	276,062	5.9%	275,880	(182)	(0.1%)	1.07	2,651	23,871
13-0000	Business and Financial Operations Occupations	278,816	6.0%	290,562	11,746	4.2%	1.13	2,651	24,446
29-0000	Healthcare Practitioners and Technical Occupations	251,834	5.4%	252,780	946	0.4%	1.00	2,137	13,703
49-0000	Installation, Maintenance, and Repair Occupations	153,994	3.3%	145,509	(8,485)	(5.5%)	0.87	1,306	14,008
15-0000	Computer and Mathematical Occupations	144,249	3.1%	146,169	1,920	1.3%	1.02	1,613	11,647
39-0000	Personal Care and Service Occupations	134,403	2.9%	116,826	(17,577)	(13.1%)	0.91	1,508	17,772
37-0000	Building and Grounds Cleaning and Maintenance Occupations	151,310	3.3%	139,602	(11,709)	(7.7%)	0.91	890	19,346
47-0000	Construction and Extraction Occupations	153,588	3.3%	139,240	(14,348)	(9.3%)	0.70	1,035	15,135
31-0000	Healthcare Support Occupations	171,442	3.7%	191,189	19,747	11.5%	0.86	3,104	26,286

33-0000	Protective Service Occupations	110,225	2.4%	93,528	(16,697)	(15.1%)	0.98	324	11,259
17-0000	Architecture and Engineering Occupations	3 61,705	1.3%	55,055	(6,200)	(10.0%)	0.77	400	4,521
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	82,063	1.8%	73,101	(8,962)	(10.9%)	0.93	671	8,273
21-0000	Community and Social Service Occupations	71,036	1.5%	74,551	3,515	4.9%	0.92	990	8,071
23-0000	Legal Occupations	46,814	1.0%	46,702	(112)	(0.2%)	1.26	270	3,264
19-0000	Life, Physical, and Social Science Occupations	27,274 33,090	0.7%	34,744	1,654	5%	0.84	595	3,602
45-0000	Farming, Fishing, and Forestry Occupations	5,640 6,139	0.1%	6,022	(118)	(1.9%)	0.18	96	1,027
TOTAL		4,653,261	100.0%	4,315,768	(337,493)	(7.3%)		37,890	510,366

Source: Emsi Burning Glass 2021.4 Occupational Data

2. Employment needs of employers in existing and emerging in-demand industry sectors and occupations (Sec. 679.560(a)(1)(ii))

The NEEDR has chosen to focus sector efforts on the following industries, with the understanding that information technology (IT) underlies all of these and is an important economic driver in its own right:

- Healthcare and Social Assistance (and Life Sciences)
- Manufacturing (with an emphasis on Advanced Manufacturing)
- Transportation and Warehousing

As outlined in Table 2, these sectors are critical to the NEEDR economy and are emerging or leading sectors. NEEDR has broadened its understanding of the Healthcare industry to include the broader Life Sciences industry, in keeping with the State Plan, and recognizing the value to the local economy of industry that bridge sectors such as pharmaceuticals, food manufacturing, environmental and ecological sciences, biotechnology and more. Local Workforce Innovation Areas (LWIA) in the NEEDR also focus on additional sectors as warranted by local conditions.

The economic impact these industries have in the NEEDR is considerable. Table 4 details the aggregate effect on jobs for the Region by industry.

Table 4: NEEDR Annual Impact By Sector (Event Size = 100)

	Added Jobs	Direct Jobs	Indirect Jobs	Induced Jobs

Healthcare (62)	100	25	13	77
Jobs to Earning Multiplier	100	\$1,988,247.75	\$1,054,373.72	\$5,394,450.23
Manufacturing (31-33)	100	47	29	164
Jobs to Earning Multiplier	100	\$4,880,979	\$2,537,140	\$12,13,942
IT	100	35	14	141
Jobs to Earning Multiplier	100	\$2,710,298.4	\$1,034,898	\$9,359,893
Transportation and Warehousing	100	37	14	93
Jobs to Earning Multiplier	100	\$ 3,069,717	\$ 1,405,264	\$ 8,081,305

Source: Emsi Burning Glass 2021.4, Illinois Department of Employment Security, Bureau of Economic Analysis

Table 5: NEEDR Changes in Taxes on Production and Imports (TPI) 2022

	Local	State	Federal
Healthcare	\$826,568	\$648,893	\$351,451
IT	\$1.3 M	\$1.1 M	\$734,489
Manufacturing	\$4.8M	\$4.1M	\$2.6M
Transportation and Warehousing	\$ 2.5M	\$ 2.0 M	\$672,166

Source: Emsi Burning Glass 2022.1

Manufacturing is, and continues to be, a sector with tremendous innovation. The Region has always been at the forefront of technological innovation in this industry and intends to maintain that place in national leadership. The manufacturing sector also is a driver in terms of sales and employment creation in the Region.

Table 6 shows the percent change of Total Nonfarm Employment in the region for the LWIAs and the state of Illinois. NEEDR and Illinois have experienced similar rates in some Total Nonfarm Employment categories; all NEEDR rates determined are positive.

Table 6: Total Nonfarm Employment

Over the Year Percent Change (October 2021)

	NEEDR	Illinois
Total NonFarm Employment	1.5%	3.4%
Construction	2.3%	5.2
Education & Health Services	1.4%	1.2
Financial Activities	.7%	(1.1)
Leisure and Hospitality	12.1%	13.1
Manufacturing	.2%	.8
Professional Services	5.0%	5.6
Retail Trade	.9%	.8
Transportation, Warehousing & Utilities	10.4%	8.4

3. Knowledge and skills needed to meet the employment needs of the employers in the Region, including employment needs in in-demand industry sectors and occupations (Sec. 679.560(a)(2))

- What are the targeted career pathway clusters in the Region?
- What are the skills that are in demand in the Region?
- How well do the existing skills of job seekers match the demands of local businesses?

The Region is targeting the four main industry sectors of Healthcare and Social Assistance, Manufacturing, Transportation and Warehousing, and Information Technology for its work overall, and each is also an area where the Region has developed comprehensive career pathways.

In 2016 the Region received funding from DCEO and hired a consultant (EDSI, Inc.) to develop industry guides and manuals, industry and occupational focused PowerPoint templates, industry sector information sheets, and demand occupation information sheets. This project is intended to aid both One-Stop staff and job seeking customers in understanding opportunities in the nine county Region in the four main industry sectors:

- Healthcare
- Information Technology (industry-occupation hybrid)
- Manufacturing
- Transportation/Logistics (including Wholesale Trade)

The guides and manuals incorporate career pathway materials and information to help individuals, workforce career counseling staff, other staff and business customers in developing pathway-focused training and worker preparation activities. Additionally, the Region utilizes the Illinois Pathways web platform as well as tools developed and utilized by community colleges in the Region and from other sources to provide graphic pathway maps and the details that align with them.

The table below details the most in-demand technical skills for each of the targeted industries in the NEEDR as identified in job postings within those industries in the Region. Technical skills

are updated with a focus on more advanced technological skills, process improvements, customer service and direct care.

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Table 7: Technical Skills for Targeted Industries in the NEEDR

Healthcare	Information Technology	Manufacturing	Transportation & Logistics
<ul style="list-style-type: none"> • Nursing • Basic Life Support • Cardiopulmonary Resuscitation (CPR) • Medical Records • Caregiving • Nursing Care • Treatment Planning 	<ul style="list-style-type: none"> • Salesforce • Finance • Customer Success • Agile Methodology • Customer Relationship Management • Software as a Service (SaaS) • Automation 	<ul style="list-style-type: none"> • Packaging & Labeling • Auditing • Warehousing • Finance • New Product Development • Process Improvement • Supply Chain • Forecasting • Accounting 	<ul style="list-style-type: none"> • Warehousing • Palletizing • Forklift Truck • Auditing • Supply Chain • Packaging And Labeling • Colocation • Flatbed Truck Operation

Source: Emsi Burning Glass 2021.4; Job Posting Analytics

4. Regional workforce considering current labor force employment and unemployment data, information on labor market trends, and educational and skill levels of the workforce, including individuals with barriers to employment (Sec. 679.510(a)(1)(iv) and Sec 679.560(a)(3))

- How is the Region changing in terms of demographics, labor supply, and occupational demand?
- What special populations exist in the Region, what is their magnitude, and what are the policy and service implications to meet the needs of these individuals?

Labor Force Size, Demographics, Employment and Unemployment

Table 8 details the labor force statistics of the NEEDR between 2008-2020. The greatest employment figure was reported in 2018 when the NEEDR had a total of 4,318,702 individuals employed; it has since declined to under 4M in 2020. Unemployment in the NEEDR has continually decreased since 2010 and has hit its lowest mark in 2019 with 174,008. 2020 reflects the economic downturn as a response to the pandemic with the NEEDR reporting the highest number of unemployed since 2010 and subsequently the lowest number reported in the labor force over the twelve years of data and lowest number reported employed. A greater number exited the labor force in 2020.

Table 8: Labor Force Statistics in the NEEDR, 2008-2020

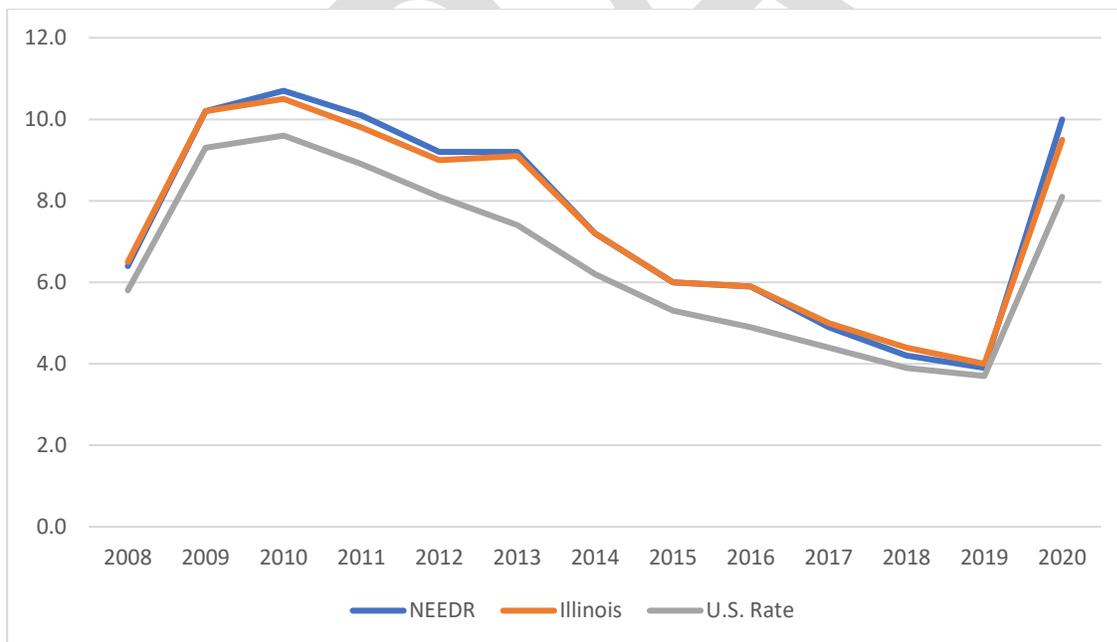
Year	Labor Force	Employment	Unemployment
2008	4,535,480	4,254,512	280,968

2009	4,516,319	4,054,537	461,782
2010	4,510,185	4,032,421	477,764
2011	4,495,876	4,045,713	450,163
2012	4,519,778	4,104,093	415,685
2013	4,538,130	4,123,341	414,789
2014	4,521,819	4,198,899	322,920
2015	4,521,725	4,254,200	267,525
2016	4,559,757	4,298,215	261,542
2017	4,526,044	4,307,103	218,941
2018	4,499,862	4,318,703	181,159
2019	4,488,081	4,314,073	174,008
2020	4,350,675	3,914,978	435,697

Source: U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics, 2010-2020

The unemployment rate for the NEEDR was experiencing a continued decline since the Great Recession in 2010 when the unemployment rate was reported at its highest at 10.7% and experienced the lowest unemployment rate in 2019 at 3.9%. In 2020 the region experienced a jump in the unemployment rate to 10.0% - contributing to this rate was the labor force participation and the number employed were reported at it lowest during the 2008-2020 reporting timeframe. NEEDR unemployment rate trends along the line of Illinois and the United States and experienced a higher unemployment in 2020.

Figure 1: Unemployment Rate, 2008-2020



Source: Illinois Department of Employment Security, Local Area Unemployment Statistics, 2008-2020

The NEEDR population in 2020 was reported at 8,838,190 – an increase of 138,132 since 2010 and reporting a higher portion of Illinois population in 2020 at 68.98%. The largest demographic population was White, followed by Hispanic (22.9%), Black (16.3%), Asian (7.8%), Two or More Races (1.65%), and American Indian or Alaskan Native (0.1%). Two populations, Hispanic and Asian groups have shown marked increases in the region during the past decade. The diverse population in the region contributes to the region reporting over 30% of the residents speak a language other than English at home – this percentage is higher than the statewide level of 23.1% and national level of 21.6%.

The NEEDR Region has an aging population. The population cohorts that increased the most between 2011-2021 were the cohorts from 55-64 and over 65 years of age with a net increase of 440,421. All other age cohorts experienced a decline in the population numbers with the greatest decline in the working-age cohort of 35-54 with a decrease of (213,407) and the future workforce under the age of 19 recording a decline of (207,520).

The statewide median income for all households was \$65,886, which is 5% higher than the national level of \$62,843. In Illinois, median income for married couples with children was \$107,172 and the counties in the region range from DuPage County reporting just under \$140,000 and Kankakee and DeKalb counties reporting below \$100,000.

Table 9: Population by Age in the NEEDR, 2011-2021

Age Cohort	2021 Population	2011-2021 Change		2021 % of Cohort
Under 5 years	495,766	(81,249)	(14.1%)	5.8%
5 to 19 years	1,616,636	(207,520)	(11.4%)	18.8%
20 to 34 years	1,799,091	(61,880)	(3.3%)	20.9%
35 to 54 years	2,249,512	(213,407)	(8.7%)	26.1%
55 to 64 years	1,085,836	81,844	8.2%	12.6%
65 years and over	1,369,019	358,577	35.5%	15.9%
TOTAL	8,615,860	(123,635)	(1.4%)	100.0%

Source: Emsi Burning Glass 2021.4

Table 10: Population by Race/Ethnicity in the NEEDR, 2011-2021

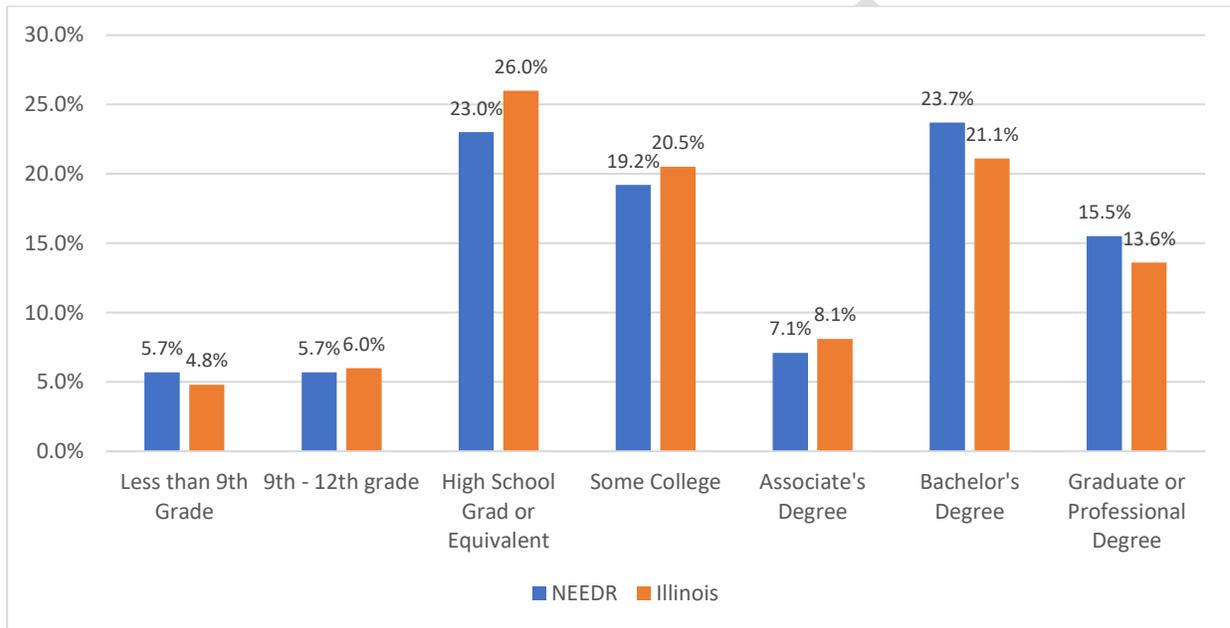
Race/Ethnicity	2021 Population	2011-2021 Change		2021 % of Cohort
White	4,366,042	(332,218)	(7.1%)	50.7%
Hispanic	1,972,964	130,842	7.1%	22.9%
Black	1,407,969	(83,536)	(5.6%)	16.3%
Asian	672,723	126,377	23.1%	7.8%
Two or More Races	141,800	28,578	25.2%	1.65%
American Indian or Alaskan Native	10, 10,653	(620)	(5.5%)	0.1%
Native Hawaiian or Pacific Islander	2,124	197	10.2%	0.0%

Total	8,615,860	(123,635)	(1.4%)	100.0%
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Source: Emsi Burning Glass 2021.4

NEEDR reports a more educated population of 25 and over, reporting over 65% continued education past high school compared to Illinois reporting over 63%. The NEEDR has a higher educational attainment of those with a four-year degree or higher than the state. Nearly a quarter of the Region’s population has a Bachelor’s degree (23.7%) and 15.5% have a Graduate of Professional Degree.

Figure 2: Educational Attainment of Population 25 & Over, NEEDR



Less Than 9 th Grade	9 th – 12 th Grade	High School Graduate or Equivalent	Some College	Associate’s Degree	Bachelor’s Degree	Graduate or Professional Degree	Total
340,964	337,900	1,365,774	1,142,113	420,840	1,403,954	922,622	5,934,167

Source U.S. Census Bureau, 2015-2019 American Community Survey, Table S1501

Labor Market Trends and Education and Skill Levels including individuals with barriers to employment

The NEEDR’s labor market is characterized by high educational attainment and a large labor force. Since 2018, there has been a decline in the workforce for NEEDR, the distribution across typical entry-level education has not shifted but the median income has increased at all levels. As has been the trend, occupational skill requirements continue to increase in many industries, both across the nation and in the northeast Illinois Region, as are the typical entry-level educational attainment. Table 10 details the 20120 employment by typical entry-level education in the United States.

Table 11: Employment, Wages, and Projected Change in Employment by Typical Entry-Level Education (employment in thousands)

Typical entry-level education	2020 Employment		Employment change 2020-2030	Median annual wage, 2020 ⁽¹⁾
Total, all occupations	153,533.8	100.0	7.7	\$41,950
Doctoral or professional degree	4,204.0	2.7	8.9	\$110,160
Master's degree	2,782.8	1.8	16.4	\$76,800
Bachelor's degree	36,407.8	23.7	9.9	\$78,020
Associate's degree	3,274.8	2.1	10.5	\$55,870
Postsecondary nondegree award	9,542.7	6.2	9.7	\$41,520
Some college, no degree	3,868.9	2.5	3.0	\$37,770
High school diploma or equivalent	59,150.7	38.5	5.1	\$39,070
No formal educational credential	34,302.1	22.3	8.9	\$27,510

Footnotes:

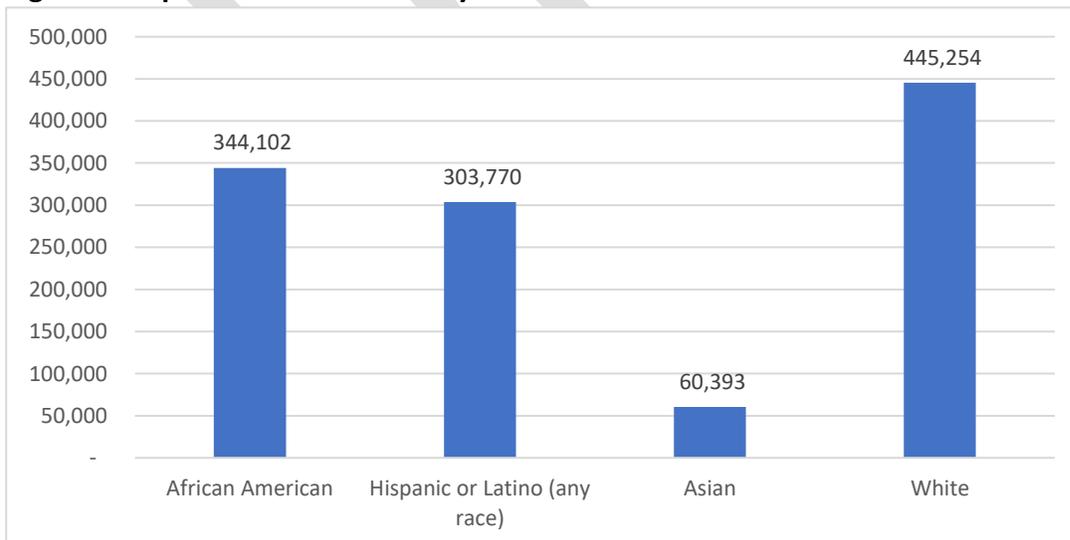
⁽¹⁾ Data are from the Occupational Employment and Wage Statistics program, U.S. Bureau of Labor Statistics. Wage data cover non-farm wage and salary workers and do not cover the self-employed, owners and partners in unincorporated firms, or household workers.

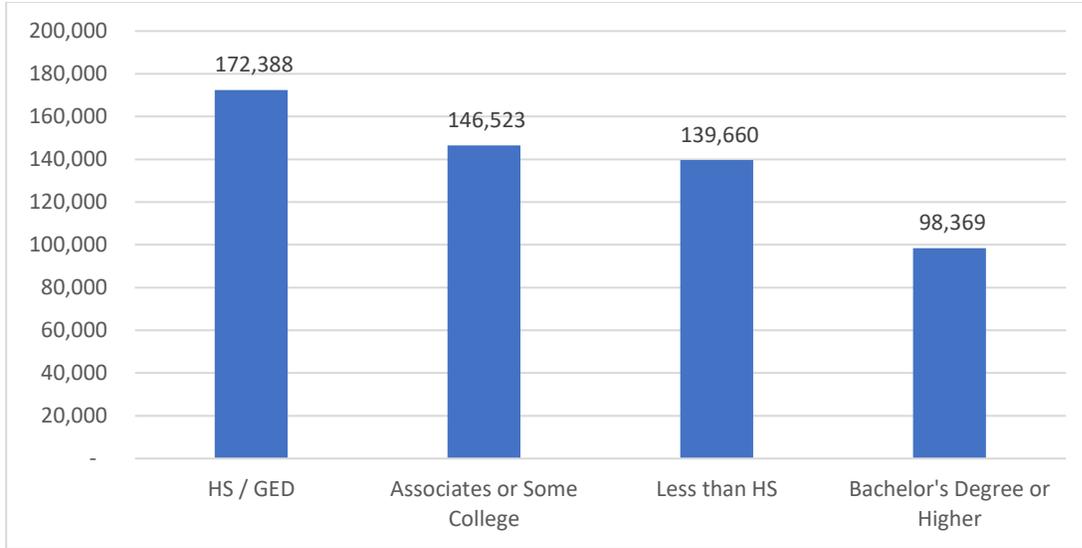
Note: The occupational employment and growth rates shown in this table include projected growth in all jobs from 2020-30, not just entry-level jobs. Entry-level education reflects 2020 requirements—BLS does not project educational requirements.

Source: Employment Projections program, U.S. Bureau of Labor Statistics

The education and skill levels of individuals with barriers to employment are an ever-present challenge in the NEEDR. Approximately 12.5% of the population in Illinois are below the poverty level compared to 13.4% nationwide. About 44.6% of the population in poverty worked full-time, year-round. In contrast, 32% of the working age population living in poverty do not work and 23.3% of the population living below poverty report working part-time or seasonally. Figure 3 details the population living below poverty in the NEEDR.

Figure 3: Population Below Poverty





Source: U.S. Census Bureau, 2015-2019 American Community Survey, Table S1701

The NEEDR has approximately 837,608 people with disabilities in the region. Over one-third of individuals presenting with a disability are of working age between the ages of 35-64 and an additional 11% between the ages of 18-34. Only 21.4% of the individuals with a disability in the NEEDR are reported as self-cared.

The NEEDR has approximately 302,962 veterans in the region. Over 55% of the veterans are age 65 and older. Overall, the 67% of the veteran population in the region has some college or post-secondary degree.

Table 12 provides a snapshot of additional target population statistics in the NEEDR, as provided by the state.

Table 12: Target Population Statistics

Low-Income Indicators

SNAP Households, Monthly Average 2020	673,651
SNAP Cases, Monthly Average 2020	1,270,996
TANF Cases, Monthly Average 2020	14,762
TANF Persons, Monthly Average 2020	39,010

Foster Care Indicators

Total Foster Youth, October 31, 2021	8,835
Foster Youth- Foster Care	3,737
Foster Youth- Relative	4,363
Foster Youth- Institution or Group Home	394
Other Foster Youth	341

DOC Indicators

Adult Prison Population by Sentencing Region, June 30th,	15,513
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Adult Parolee Population by Region of Residence, June 30,	11,912
Average Daily Juvenile Detention Population, June 2021	225.3

Other Indicators

Single Parents	
Male Householder with own children, no partner present	33,239
Female Householder with own children, no partner	173,029
Adult Population at Risk	
Foreign Born Population	1,640,432
Age 18+ without high school diploma	773,633

Source: EDR 4 Northeast 2022 Data Packet

Subpopulations with barriers to employment in the Region which are targeted by the Regional system include:

- Basic skills deficient. Title II entities throughout the Region work directly with individuals to raise basic skill levels. Title II adult basic education plans align with WIOA Regional and Local plans.
- Individuals with Disabilities. The Illinois Department of Human Services Division of Rehabilitation Services (DRS) works to ensure that individuals with a disability have access to assistive technology throughout the One-Stop system, access to Employer Networks/Ticket To Work programs, and a coordinated Regional network of organizations. Vocational Rehabilitation is an active, vibrant partner in the Region providing professional services to this population, including job readiness for youth, Pre-employment training services, comprehensive evaluations, vocational counseling and access to assistive technology, and staff that serves customers at various sites such as, local high schools, and community-based organizations. The Bureau of Blind Services offers individualized services for the blind and visually impaired individuals and businesses that hire these individuals throughout the Region.
- Returning citizens. There is an effort across the Region to prepare returning citizens for reentry into the workforce. The One-Stop system across the Region partners with local court, health and mental health groups, county jails, the Department of Corrections and a network of organizations and providers to deliver work-readiness training and make connections to employers hiring.

Service/policy implications of these targeted population groups include the need for more intensive career services including more intensive upfront job readiness/essential skills services prior to employment and training. Making it imperative that partners implement service integration to ensure the right mixture of career services are being delivered to the priority populations throughout the one-stop system. The One-Stop service integration action plans provide the framework for partners to leverage programs and services to increase service strategies when working with individuals with barriers to employment.

Local Workforce Innovation Boards set priority of services policies. These local policies include priority of service for veterans and qualified spouses, persons receiving public assistance, and low income and/or basic skills deficient individuals as well as individuals with a disability. Local areas take steps to promote awareness in the employer community about the benefits of hiring special populations, particularly Veterans, Individuals with Disabilities, and others prioritized for workforce services by the State of Illinois. As noted in Chapter II, local areas invest in a variety of strategies to serve individuals with barriers to employment across partnering agencies including TANF, Title II, CDBG, Title V, IDES, the Department of Corrections, Veterans Affairs, community based organizations and Small Business Development Centers among others.

B. Describe the development and implementation of sector initiatives for in-demand industry sectors or occupations for the planning Region (Sec. 679.510(a)(1)(iii)). Plans must answer the following questions:

- How will the workforce partners convene employers, foundations, and Regional institutions to help lead sector partnerships and make coordinated investments?
- Identify the established and active sector partnerships in the region (as defined in Illinois' Next Generation Sector Strategies Guide7)? If any exist, are they business-led and what is their role in WIOA planning?
- Identify any regional sector partnerships that are inactive or have disbanded since the prior planning cycle. What other public-private partnerships exist in the region that could support sector strategies and what is their role in planning?
- What neutral conveners with the capacity to help establish sector partnerships exist in the region and what is their role in planning?

The NEEDR has significant experience in sector-based workforce initiatives. The Workforce Partners of Metropolitan Chicago (WPMC) is a consortium comprised of the Directors of the Workforce Development Boards (WDBs) and the Title I providers in the NEEDR. This group formed a formal partnership more than 15 years ago. Since then, WPMC has been working together for the purpose of conducting WIOA planning and implementation, integrating Regional business services, developing workforce sector strategies, and coordinating activities with WIOA core partners, economic development entities, community colleges/training providers, and other stakeholders. WPMC recognize that the economic vitality of each local area and county is impacted by cross-geographic issues and that geographic boundaries are often meaningless to businesses and residents. WPMC also realize the importance of collaboration to produce a greater impact across the Region. WPMC focuses on Regional initiatives aimed at supporting business and sustaining the Region's economic vitality. By building a progressive system of change strategies and initiatives, WPMC support an education and workforce system that can be more closely aligned with what industries need in a quality workforce and ensures continued economic growth of the Region and the state.

The Workforce Partners of Metropolitan Chicago are committed to building a demand-driven

workforce system that provides skilled employees for employers and develops real career opportunities for job seekers and career changers. The system makes it easy for business to access qualified applicants and an abundance of workforce development services. In terms of the COVID-19 National Health Emergency, regional leadership will keep track of industries such as Transportation & Logistics, Ecommerce, and Hospitality that experienced lingering effects of the pandemic.

Each local area has a Business Service Team (BST) that implement job development and job placement and layoff aversion initiatives and a range of work-based opportunities including On-the-Job Training (OJT), Customized or Incumbent Worker Training, Paid Work Experience, and Re-Entry. BSTs are the teams that facilitate services and workshops in response to the Worker Adjustment and Retraining Notification (WARN) and coordinating and delivering hiring events and resource fairs. BST serve the Regional business community contributing to various sector-focused committees and/or initiatives.

The WPMC have initiated a Regional Integrated Business Services Team (BST) for NEEDR made up of the individual BST's from each of the seven local workforce areas, including all partners' business facing staff. The goal of the Regional Integrated Business Services Team is to coordinate business services across the Region, including addressing needs of Regional businesses, integrating core partner agencies (and other partners in the future), identifying and sharing best practices, discussing challenges and identifying solutions, and engaging in professional development activities. Key accomplishments include hosting regional hiring events, Business U, sharing promising practices, joint business meetings, and coordinating responses to major employers with large and critical needs. The BST works with local, Regional, state and federal elected officials and others on the creation of policy and implementation of workforce initiatives designed to decrease unemployment and increase skilled workers. As businesses and employers relocate to the Region and expand across the Region, the BST has responded through customized hiring and talent connection events. Amazon is the most recent employer to open multiple facilities across the Region and utilize the local One-Stop systems to meet immediate and ongoing hiring needs.

In LWIA #7, the Business Relations and Economic Development (BRED) Unit collaborates with local and national business communities to develop diverse and innovative projects and programs to meet their business workforce needs as well as the needs of those seeking employment opportunities. BRED has modeled specialization for the wider BST, with their Business Relations Specialists each assigned to focus one or more of the Region's high growth, high demand industry sectors. They support the wider Regional BST by offering expertise in each of their targeted industries.

The WPMC have formed a coalition with the Community College Presidents in the NEEDR – the Northeastern Illinois Workforce Coalition (NIWC). The coalition was originally formed as a result of the Critical Skills Shortage Initiative (CSSI) sector work more than a decade ago and continues to coordinate sector-driven and employer-focused initiatives. The members of the coalition meet quarterly, have developed key strategies to work together on, have joined together on

grant applications, shared information and coordinated resident and business services throughout the Region. NIWC has continued to expand this in-district tuition model for WIOA customers receiving tuition vouchers. It is an agreement that workforce boards and community colleges have agreed to, charging in-district tuition for all students accessing WIOA ITAs.

In 2019 WPMC received a grant from the Illinois Department of Commerce and Economic Opportunity (DCEO) to hire and support two Regional Apprenticeship Navigators. Working primarily in the Healthcare, Manufacturing, and Transportation, Distribution and Logistics sectors (and the technology related to these sectors), the Navigators are working with local business service teams or resource teams to identify employers interested in establishing or expanding apprenticeship programs, including pre-apprenticeship and youth apprenticeship programs.

In 2019 WPMC began working together on incumbent or current worker training projects. WPMC received a grant from DCEO to support incumbent worker training in the TDL and manufacturing industries. WPMC targeted projects that cover at least three of the seven workforce areas in the Region. WPMC completed a project with Ford Dealerships throughout the Region training current technicians. In addition, WPMC has completed Regional training projects with multiple TDL businesses across the Region training incumbent workers in equipment maintenance management.

While individual areas regularly interact with their philanthropic peers in the workforce development space, no major coordinated projects have been developed at the Regional level. The NEEDR partner workforce areas and WPMC have this as a priority and will capitalize on existing relationships such as that with the Chicagoland Workforce Funders Alliance, a partnership of more than 30 foundations and other funders focusing on workforce development.

Working together on Regional sector initiatives goes as far back as the state's Critical Skills Shortage Initiative (CSSI) through which the Region applied sector-based labor market analysis to workforce investments across the Region. More recently workforce, education, economic development and human services entities have collaborated on significant sector projects. The infrastructure, relationships and lessons learned from these projects will drive the Region's sector-based programs into the future. These Regional initiatives tend to be grant-funded and the NEEDR has been competitive in receiving these funds. All initiatives are driven by the Region's employer-led local workforce boards.

The Region works across a broader range of sector-based partnerships, including business-led partnership and not contingent on grant funding including partnerships with Regional economic development groups, state and Regional business and industry associations; community college advisory boards; Small Business Administration; and Anchor institution advisory committees.

Collaboration across partners and the Region will continue to focus strategies around Regional partners engaging with small employers and employers in in-demand industry sectors and

occupations. Work with community colleges will continue to focus around industry sector talent development especially where industry-recognized credential attainment is necessary. Business service teams and One-Stop partners work with partners such as IDES, DRS, DCEO RED team to work with local businesses and Regional employers.

The Region will promote entrepreneurial skills training and microenterprise services working with the IWIB and the Business Integration Team to meet the goals set out by the Illinois Integrated Business Services Team. A representative from the Region serves on the Illinois Integrated Business Services Team and shares information with WPMC and partners as the Region works towards integrated business services. In addition, the Region actively fosters relationships with Regional foundations with a vision and mission on workforce strategies and ongoing *coordination with Illinois Office of Minority Economic Empowerment to develop outreach and training grants for workforce skills enhancement*

In addition to sector initiatives in the Title I program, there has been significant development in Title II programs to align adult education with sector-specific career planning and skills training. A number of the Region's community colleges offer the Integrated Career and Academic Preparation System (ICAPS) model, through which adult education students (including ESL, Adult Basic Education, and Adult Secondary Education) simultaneously receive basic skills instruction that is contextualized to a specific industry sector and credit-bearing, industry-recognized college coursework that leads to a credential for jobs with family-sustaining wages. These programs offer robust support services, cohort models, team-teaching strategies, and yield high completion rates in various career cluster areas, such as Manufacturing, Healthcare, IT, and TDL. All Title II- funded adult education providers (colleges and community-based organizations) in the Region also provide at least one bridge program for adult learners, which help transition underprepared adults to career pathway programs. These programs deliver contextualized instruction and career planning in Healthcare, Early Childhood Education, Industrial Arts/Manufacturing, IT, TDL/Automotive, and Office Administration.

One example of a provider that has established a sector partnership and developed a career pathway training program in the Region is the Jane Addams Resource Corporation (JARC). JARC operates the Manufacturing Career Pathways Bridge Training Program which is a training program to equip job seekers with industry-related skills needed to secure employment and progress along their career pathway in the manufacturing sector. Career pathways training allows low-skilled job seekers to combine work and education while obtaining in-demand postsecondary credentials. Orientations include an overview of the targeted industry including labor market data, a map of the pathway or occupational ladder within the industry, a listing of occupations and average earnings as well as a thorough overview of the specific Career Pathway Bridge Training Program pre-requisites and WIOA eligibility requirements. Prior to starting the training program each participant must have a thorough understanding of the expectations and rules of the program. The program includes career exploration, contextualized instruction that integrates reading, math and language skills with industry and occupation knowledge and "hard" or technological skills as well as instruction in soft skills and

job seeking skills such as job interviewing and resume development. The training may also include internships, work experience and site visits to employers.

The Region’s local areas have been successful in utilizing WIOA funding as well as private funds to implement a wide array of business-led sector initiatives. These include:

- The Chicago Cook Workforce Partnership (The Partnership)’s workforce system includes One-Stop “Sector Centers” in three industries in the Region. National ABLE Network operates a sector center for IT businesses and job-seekers interested in information technology careers. The Chicagoland Retail & Hospitality Sector Center is operated by Pyramid Partnership, Inc. and the Chicagoland Healthcare Sector Center is operated by ResCare Healthcare. Additionally, the Partnership delivers ConstructionWorks, a contract from the Illinois Toll Highway Authority (Illinois Tollway), somewhat similar to a sector center with a focus on expanding access to employment opportunities in construction for populations traditionally not well represented in the skilled trades. ConstructionWorks delivers recruiting, facilitates pre-apprenticeship and builds career pathways through apprenticeship and into employment, as well as focusing significantly on retention and advancement in the industry.
- Four Chicago-area hospitals (Ann & Robert H. Lurie Children’s Hospital of Chicago, NorthShore University HealthSystem, Rush University Medical Center, and the University of Chicago Medicine) are partnering with the regional workforce entities to create a new healthcare pathway program to help existing employees in entry-level and majority non-clinical roles transition to medical assistant roles. Healthcare system partners view this innovative collaboration as a vehicle to fill high-demand jobs and increase talent retention and advance front-line employees. The hospitals, all members of the employer-led Chicagoland Healthcare Workforce Collaborative, worked with partners, including Malcom X College, West Side United, Civic Consulting Alliance, World Business Chicago, and the Chicago-Cook Workforce Partnership to create a structure that provides incumbent worker training to employees at no cost while mitigating risk for the employers.
- The Workforce Partners of Metropolitan Chicago (WPMC) have successfully implemented sector initiatives over the past decade. Several of the initiatives noted here have demonstrated results that met the needs of the industries, increased the number of customers earning industry credentials and obtaining employment, and developed regional promising practices that continue to be replicated in like projects.
 - The Accelerated Training for Illinois Manufacturing (ATIM) program brought together a regional network of manufacturers, Local Workforce Boards Illinois workNet Centers (also known as WorkNet Centers but referenced as Illinois workNet Centers throughout this Plan) economic development organizations, and industry associations working together to develop industry awareness tools and communications; screening candidates and identifying workplace competencies. Participants earned industry credentials and occupational competencies in paid work experiences/internships or

employment.

- The Health Professions and Opportunity Program (HPOG) grant from the U.S. Health and Human Services Department trained low-income individuals in healthcare occupations. The initiative was a unique partnership among the Region’s Local Workforce Boards, the Illinois Department of Human Services (IDHS), community colleges and community-based workforce organizations. Through bridge educational programs and occupational training the initiative provided access to healthcare careers for TANF participants and other low-income individuals.
- A Job Driven NEG Grant funded a Regional project that provided services, occupational and work-based training, certification(s) and job placement in the information technology sector, focusing on long-term unemployed job seekers, recipients who have been profiled as likely to exhaust benefits, and foreign-trained immigrant workers who qualify as dislocated workers and face barriers to obtaining employment in their trained field or profession.
- Lake County Workforce Development has worked with partners to launch the Lake County Workforce Ecosystem – a business outreach and workforce solution initiative led by a core partnership of Lake County Workforce Development, Lake County Partners, and College of Lake County. The Ecosystem drives talent development through an industry sector strategy.
- The Workforce Board in Will County is a part of the Will County Community Friendly Freight Plan. This unique plan is aiming to address issues of land-use and community livability in this fast-growing business sector in the County. The Freight Plan will encompass a holistic planning approach covering freight mobility, land-use integration, workforce development, education/training and community livability. Workforce issues were identified by Freight companies in the County to be one of the top concerns of growing the industry locally and as such will be carefully considered and addressed in the plan.
- DuPage County has developed a healthcare talent pipeline in conjunction with Edward-Elmhurst Health and Northwestern Medicine to increase volume of patient care technicians and medical assistants in the local workforce area-- conducting outreach for those career paths, steering more WIOA eligible individuals toward that need, using incumbent worker training to train/promote current workers in areas like housekeeping or patient transporting, etc.

There are many other sector-based initiatives in the Region that are either led by local areas or with which Local Workforce Boards and system partners collaborate. Sector initiatives not described above are listed in the table below. These are examples and not meant to be a comprehensive list of sector initiatives that have been discussed regionally for purpose of sharing innovation, identifying areas of improvement, expanding participation locally and regionally, and documenting processes and successes for possible regional replication.

Table 13: Other Regional Sector Initiatives

Initiative	Key Partners	Geographic Area	Industries Targeted
Pharmacy Tech Program	<ul style="list-style-type: none"> • Waukegan High School • College of Lake County • Walgreens 	<ul style="list-style-type: none"> • Lake County 	<ul style="list-style-type: none"> • Healthcare
Healthcare Professional Education Consortium Rosalind Franklin University led consortium of education leaders focused on workforce solutions in healthcare sector	<ul style="list-style-type: none"> • Rosalind Franklin • College of Lake County • McHenry Community College • Universities/Colleges • Lake County Partners • Lake County Workforce Board • McHenry County Workforce Network • Northwestern Medicine • Private Sector 	<ul style="list-style-type: none"> • Lake County • McHenry County 	<ul style="list-style-type: none"> • Healthcare
National ABLE Network IT cohort training and work experience	<ul style="list-style-type: none"> • Nation ABLE Network • Job Center of Lake County • Lake County Tech Hub • IDES 	<ul style="list-style-type: none"> • Lake County 	<ul style="list-style-type: none"> • IT
Manufacturing and Healthcare Career Training and Internship Program for O/S Young Adults	<ul style="list-style-type: none"> • Private Business • McHenry County College 	<ul style="list-style-type: none"> • McHenry County 	<ul style="list-style-type: none"> • Manufacturing • Healthcare
Harvard and Woodstock Enterprise Zone	<ul style="list-style-type: none"> • Local Economic Development 	<ul style="list-style-type: none"> • McHenry County • Boone County 	<ul style="list-style-type: none"> • Agriculture and Food Processing • Manufacturing • Healthcare
Manufacturing Careers Internship Program	<ul style="list-style-type: none"> • Business Career Services (BCS) 	<ul style="list-style-type: none"> • Kane County (youth ages 18-21) 	<ul style="list-style-type: none"> • Manufacturing

(MCIP); Designed to help employers find and hire young adults interested in manufacturing and provide out- of-school youth with an opportunity to start a career in manufacturing		<ul style="list-style-type: none"> • Cook County 	
My Way	<ul style="list-style-type: none"> • Private Business 	<ul style="list-style-type: none"> • DuPage County 	<ul style="list-style-type: none"> • Manufacturing • TDL • Hospitality
Disability Employment Initiative Grant	<ul style="list-style-type: none"> • Downers Grove High School • College of DuPage 	<ul style="list-style-type: none"> • DuPage County 	<ul style="list-style-type: none"> • IT
1E Grant	<ul style="list-style-type: none"> • Business and Training Providers 	<ul style="list-style-type: none"> • DuPage County 	<ul style="list-style-type: none"> • Manufacturing • TDL • Hospitality • IT
Title 1 Sector-Based Career Pathway Training and Bridge Programs	<ul style="list-style-type: none"> • Greater West Town • Instituto del Progreso Latino • Jane Adams Resource Corporation • Symbol 	<ul style="list-style-type: none"> • Cook County • Chicago 	<ul style="list-style-type: none"> • Manufacturing • Shipping & Receiving
TWL (CDL) Employer Services	<ul style="list-style-type: none"> • Local TDL Employers 	<ul style="list-style-type: none"> • Grundy County • Kankakee County • Livingston County 	<ul style="list-style-type: none"> • TDL
Community Friendly Freight Plan	<ul style="list-style-type: none"> • Will County Center for Economic Dev • Will County WDB • Will County • Private Business 	<ul style="list-style-type: none"> • Will County 	<ul style="list-style-type: none"> • TDL
One-Stop Sector Centers	<ul style="list-style-type: none"> • The Chicago Cook Workforce Partnership • Pyramid Partners • ResCare Healthcare 	<ul style="list-style-type: none"> • Cook County • Chicago 	<ul style="list-style-type: none"> • Healthcare • Retail • IT

	<ul style="list-style-type: none">• National ABLE Network• Private Business		
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C. As part of the 2022 modification, if needed, describe the impact of the pandemic on the ability to collect and analyze regional labor market information not mentioned in the previous sections. Include what steps, to the extent known, that will be taken over the next two years to adapt to the impact of the pandemic.

The impact of the pandemic is still being understood and COVID-19 continues to affect the way people live and work. Therefore, data is still being collected and analyzed about COVID-19. The Integrated Business Services Team will continue to utilize data to grasp how the regional workforce is operating. The region is trying to understand the totality of COVID-19 on the workforce. Some residents have retired earlier than expected, moved outside of the region, or have had to put in-person training on hold due to the pandemic. The region will work to understand changes in the workforce.

It will be important for workforce boards and staff to use “real-time” data, meaning current, vital data points about the workforce. For example, IDES has been providing current data on unemployment insurance (UI) claimants. This data shows very recent trends and fluctuations in UI claims that are significant to workforce service delivery. Regional data sharing will also be important in the future to address regional needs and issues. The Workforce Development Network sees an opportunity for growth and retention strategizing with local economic development councils, which relates to sharing of labor market data and achieving similar goals for the region. Also, it will be helpful check the data more often and keep data on websites and shared with staff updated. For example, the region can utilize 2021 labor market data as soon as sources have fully published this information. This will allow for the most accurate data.

Another step that the region will take is to determine mechanisms for tracking data in a COVID-19 world. Consideration is being given to continue virtual offerings and have hybrid service delivery models. The LWIAs found that enrollment and referrals numbers, for example, can be difficult to track. This data provides information on who is receiving and following up about services. The data would also give information, such as demographic background of a customer, into who exactly is taking advantage of workforce offerings. This would assist the regional in catering their services and offerings to populations and participants who need them most and in determining the highest needs.

D. As part of the 2022 modification, describe how a *workforce equity lens* is incorporated into the local planning requirements for collecting and analyzing labor market information.

The workforce equity lens will be taken into account by collecting and analyzing data about demographics, race, ethnicity, among other characteristics of participants in the workforce

system. The region will ensure inclusion of Census data and other credible data sources to understand the diverse workforce and how to best serve them. As will be discuss further in the document, the region has created a workforce equity lens definition that will provide guidance about representative data.

DRAFT

CHAPTER 2: STRATEGIES FOR SERVICE INTEGRATION

A. Provide an analysis of workforce development activities, including education and training, in the Region. This analysis must include the strengths and weaknesses of workforce development activities and capacity to provide the workforce development activities to address the education and skill needs of the workforce, including individuals with barriers to employment, and the employment needs of employers (Sec. 679.560(a)(4)). Plans must respond to the following:

- Analyze the strengths and weaknesses of the workforce development activities in the Region
- Analyze the capacity of the Regional partners to provide workforce development activities to address the education and skill needs of the workforce including individuals with barriers to employment
- Analyze the capacity of the Regional partners to provide activities to address the needs of employers
- How well do existing training programs in the Region and local areas prepare job seekers to enter and retain employment with Regional businesses
- Summarize the commitments of each program partner to implement the selected strategies described in the “Action Plan for Improving Service Integration in the Region.”

Title I is operated through the Local Workforce Innovation (LWIAs) There are seven LWIAs in the Northeast Economic Development Region and ten counties: Cook, DeKalb, DuPage, Will, McHenry, Lake, Grundy, Kane, Kankakee and Kendall. Residents are served through a range of comprehensive One-Stop Centers, affiliate organizations, and training providers. Title II (Adult Education) is administered through community colleges and providers throughout the Region. Title III (Wagner-Peyser) is administered through Illinois Department of Employment Security. Title IV (Vocational Rehabilitation) is administered by the Illinois Department of Human Services Vocational Rehabilitation. Each partner delivers services and activities at partner sites as well as through co-location in the comprehensive One-Stop Centers. There are 17 community college districts in the NEEDR.

The Northeast Economic Development Region faced the COVID-19 National Health Emergency in 2020 and 2021 and the workforce boards came up with ways to adapt their service delivery models. The LWIAs abided by federal, state, and local health guidelines and procedures. LWIAs experienced temporary closing of in-person services and moved to virtual service delivery. The LWIAs completed Local Reopening Plans for American Job Centers and utilized the Governor’s “Restore Illinois” checklist. The Reopening Plans discussed open by appointment only, use of masks and social distancing, and instituting referral systems to assist clients to partners. Partners were often off site and saw return to in-person work late 2020 or within 2021, depending on the partner and LWIA. Additional details will be mentioned throughout this chapter. The Region has developed important points of coordination that provide ongoing opportunities to deploy integrated strategies in the Region. One is the Northern Illinois Workforce Coalition that convenes quarterly meetings of the Community College Presidents

and Local Workforce Board Directors. The coalition was originally formed as a result of the CSSI sector work; the partnership was formalized 6 years ago. The coalition has joined together for grant applications, shared information and coordinated individual and business services throughout the Region.

As described in Chapter 1, the Workforce Partners of Metropolitan Chicago (WPMC) is the coalition of Local Workforce Boards developed nearly 15 years ago that is the platform for developing many of the NEEDR's sector strategies. The Workforce Partners of Metropolitan Chicago undertakes joint grant applications, project coordination and information sharing. Providing services during the COVID-19 National Health Emergency was one of WPMC's regional initiatives. The WPMC discussed customer and workforce center pivots, which was a major activity in 2020. The WPMC also prioritizing data to make COVID-19-related changes and congressional outreach about effects to funding.

Due to the large geographic size of the NEEDR and the diversity of its economy, level of development, and needs of residents and businesses, the types of workforce development services offered vary. Each local area has different strategies, toolboxes and areas of focus for best servicing the needs of its residents and employers. There are, however, many commonalities of workforce development activities and types of services with promising return-on-investment (ROI) that warrant continued focus and development.

- **Work-Based Learning Opportunities:** Several of the Local Workforce Boards use On-the-Job-Training (OJT), Apprenticeships, internships and work-experiences to provide the skills needed for job-seekers to be successful in the workplace. In addition, all of the community colleges coordinate internships, on-the-job-training, apprenticeships, and incumbent worker training within the Region. Efforts have begun to better connect adult education students to these opportunities. Overall, these types of programs are an opportunity for growth under WIOA. A model example is the Nicor Gas Co partnership with the Quad County Urban League which launched the Nicor Gas Career Academy - a six-week job-readiness program designed to prepare participants for entry-level work in the utility industry, with a focus on natural gas.
- **Career Pathways:** Workforce development and education partners in the NEEDR are increasingly developing Career Pathway programs to prepare individuals to be successful in secondary and post-secondary education as well as help individuals enter or advance within a specific occupational cluster. Community colleges offer stackable credentials in many sectors, providing a pathway approach for adult learners, who can complete one credential and advance to the next credential. ICAPS programs, bridge programs, transition coordinators, faculty (through specialist job-skills courses), and career development service areas provide goal-setting, academic advising, and enrollment assistance. This type of coordination/advising will be necessary within the One-Stop centers in order to meet the needs of clients/students.
- **Sector Strategies:** As detailed in Chapter 1, the NEEDR provides an extensive array of sector-based workforce development services for residents and businesses including comprehensive sector centers and multiple business-driven, multi-area partnerships, many

funded through competitive grants the region has secured.

Many promising cooperative service delivery strategies are currently present within the Region. Additionally, the Regional plan will provide opportunities for new Regional cooperative agreements.

NEEDR Strengths and Weaknesses of Workforce Development Activities

An online survey was distributed to Partners in NEEDR to identify the strengths and weaknesses of Regional workforce development activities.

Strengths of the Region’s workforce system as identified by core partners.

Demographic/Location Strengths

- Access to large quantities of diverse talent
- Access to transportation and transportation routes (i.e., highways, roads, etc.)
- Overall, a highly educated workforce with sub-Regional differences
- Diverse industry and employer base
- Wage and employment growth, acting as the economic driver of the state

Relationship and Partner Advantages

- Long history of partnership and collaboration through the Workforce Partners of Metropolitan Chicago
- WIOA system partnerships are strong across all of the mandatory partners of the WIOA system and beyond.
- Partners are committed greater service integration and beginning to work on service integration action plans (see Service Integration section)
- Existing local partnerships across the WIOA system
- Strong employer partnerships
- Commitment to work-based learning opportunities
- Strong partnership with Regional education systems (high schools/K-12, community colleges, and other training institutions)
- Economic development partnerships with shared goals
- Customer-centric

Existing Training Programs That Meet the Needs of Employers

- Apprenticeship – There are many apprenticeship efforts happening in the Region and these are well coordinate among many partners
- Organized work-based learning (on-the-job training, incumbent worker, work experience, internships)
- Strong training programs in multiple career paths, especially in transportation and logistics, building trades, manufacturing, and healthcare
- Quality workforce
- Funding – The Region and the local areas are able to leverage many sources of funding including competitive grants in addition to WIOA formula funds

- Strong partnership with training and educational providers

Policy and Advocacy Capacity: The Workforce Partners of Metropolitan Chicago are skilled at analyzing the current state of the workforce system and advocating for policies that can support improved systems and services.

Challenges of the Region’s workforce system as identified by core partners.

Resource Challenges

- Federal funding inconsistencies and aggressive timelines which affect planning and implementation of programs over time
- Lack of awareness of all the resources available to jobseekers
- Lack of sufficient and flexible resources to serve jobseekers that present in the WIOA system with multiple barriers to employment, including basic-skills deficient, criminal records, and undocumented workers.

Geographic Challenges

- Lack of consistent public transportation throughout the NEEDR
- Minimal access to services to rural communities in the NEEDR
- Deteriorating infrastructure in rural communities
- Lack of transportation access and options to less urban areas

Demographic Challenges

- Large number of non-English speaking individuals
- Cultural barriers to employment of diverse population
- Lack of technical skills
- Aging population
- Decline in overall population numbers with sub-Regional differences

Systems-level Challenges

- Shared responsibility among partners and expectations of collaboration. In terms of governance and service integration, Title I shares most responsibility for the success of the MOU, coordination and core service delivery while other partners may not receive consistent levels of guidance from national and state agencies.
- Silos among Titles (opportunities for coordination under WIOA) remain at the Federal and State level.
- Lack of an integrated, shared data system across the core partners for job seeker and business customer data and case management.

The LWIAs convened in January 2022 to discuss strengths and weaknesses in service delivery experienced during the pandemic. Some strengths and weaknesses regarding the COVID-19 National Health Emergency include the following:

Pandemic Era Strengths:

- Use of technology and equipment for continued service delivery

- Smooth transitions to virtual service delivery and changes to in-person staff
- Safe at home remote work for AJC staff
- Virtual partner meetings and easy access to partners
- Online applications that could go directly to staff such as a WIOA application to an eligibility specialist
- Expansion of service offerings since available outside of normal weekday hours; recordings posted on websites
- Resiliency and strength of the NEEDR; met together regularly and collaborated strategies about COVID-19 National Health Emergency

Pandemic Era Weaknesses:

- State shutdown and stay-at-home order, but had to navigate alternative continued service delivery
- Ability to get technological equipment short-term due to supply chain issues
- In some cases, online partner program meetings resulted in less interaction with LWIAs
- Some service delivery functions were harder to accomplish virtually such as job search workshops
- The vast influx of unemployed individuals due to the pandemic
- Measuring outcomes could be difficult due to the virtual service delivery strategies, i.e. different than capturing foot traffic at an AJC Low collaboration with local economic development councils

NEEDR will continue to address challenges posed by COVID-19 in 2022 and long-term in the areas.

Capacity to provide workforce development activities to individuals with barriers to employment

Due to the large geographic area and the differences in population throughout the Region, as well as access to different funding sources, each local area focuses on individuals with different barriers to employment. Examples are provided in the sub-sections below related to key populations. It should be noted that individuals with barriers to employment were hit particularly hard by the COVID-19 National Health Emergency. NEEDR continued to address these populations throughout the pandemic. However, changes to workforce development activities such as limited in-person offerings or cancellation of in-person education and training programs affected activities such as access to and for some completion regarding individuals with barriers.

Low-Skilled Adults

The Region's education partners including the community college partners of each local workforce area are also focusing on deliver of the Integrated Career & Academic Preparation System (ICAPS). ICAPS aims to provide an integrated pathway in Career and Technical Education (CTE) for college credit and program certificate opportunities for Adult Education and Literacy (AEL) students that lack basic skills. Through ICAPS programs students work to complete their

high school equivalency and are co-enrolled in credit CTE courses/certificates through an integrated instructional model including contextualized and industry-focused basic skills education. The model provides career pathway/employment opportunities for students while enabling their transition into additional postsecondary certificate/degree programs.

The adult education programs at many of the region's colleges are working to incorporate workforce development activities into programming for low-skilled adults. At Triton College, adult education will work with The Chicago Cook Workforce Partnership to create and promote accelerated high school completion courses and short-term job skills courses to reduce the time between school and employment. Many adult education providers in the Region include career readiness activities within the ABE/ASE/ESL curriculum. For example, at South Suburban, it is mandatory for students to complete a resume with a transitions coach, and this is a classroom activity, along with attending an on-site job fair as a field trip once per year. The College of Lake County makes available workforce activities lesson plans to its instructors through a Blackboard community page. Elgin Community College's adult education division includes a workforce development department wherein various employment-related programs and services are available, including unemployment services, resume assistance, a TANF program, two WIOA programs for youth, and an AARP program for adults. The College of Lake County has an Adult Education Student Success Team that provides coaching, mentoring, and job assistance to students and to clients at the Job Center of Lake County. Co-enrollment for adult education students in these programs is common. McHenry County, Kankakee and Grundy counties offer ABE/ ESL / GED on site at the One-Stop center.

Many areas in the region utilize WIOA funding to support Bridge programs, which enroll adults with basic skills deficiencies in literacy and numeracy and transition them into occupational training and employment. Bridge programs typically enroll participants at a 6.0 grade level in reading and math, contextualize their education to a specific industry and occupation, and offer supportive services to adults. The Partnership currently funds four Career Pathway and one Bridge programs across two industries. The region supports those bridge programs that have a strong track record of increasing participants' education levels to at least an 8.9 in reading and math, offering entry-level industry recognized credentials, and transitioning participants to occupational training and employment. As a supporter of career pathway models, The Partnership recognizes the importance of collaborating with those adult education programs that enroll participants at lower levels than 6.0 – those programs are some of the strongest feeders for the bridge programs. The Partnership has representation in the Illinois Community College Board Area Planning Council (APC) in Chicago. The APC is a mandated group of local adult education providers that come together on a quarterly basis to provide the development and coordination of adult basic education programs in the city.

Individuals with Disabilities

Local Title I providers coordinate with Vocational Rehabilitation staff and other WIOA system partners in delivery of services for people with disabilities. Local areas have Disability Navigators embedded within the One-Stops or within the system to target and serve people with disabilities.

As part of service integration and coordination activities, the Region has engaged an expert trainer to deliver training to companies (leadership/owners, managers and line staff) on key disability issues, how to develop and maintain an inclusive workplace and ensure accessibility both physical and cultural. This includes a model disability inclusion training: Training and Performance Management for Employees with Disabilities. This training is based on real-world scenarios and includes practice interactions and includes:

- An overview of disability types, common accommodations used and guidance for etiquette when interacting with individuals with those disabilities.
- Guidance on and techniques for specific learning and communication modalities
- How to leverage these techniques with people with a variety of different kinds of disabilities to maximize their job performance.

Examples of some innovative projects in local areas that can be replicated or expanded throughout the Region include:

- Waukegan Housing Authority participated in the Mainstream Voucher Program (MVP). The purpose of MVP is to assist non-elderly person with disabilities and their families (age 18-61) who meet certain requirements to live independently in the community.
- Will County has a pilot on-the-job training project for individuals with disabilities, which includes both work experience and a job coach.
- Parents Alliance Employment Project is a community based organization located in the workNet DuPage Career Center which provides a variety of programs and services to individuals with developmental disabilities including career counseling, job training and preparation, job development, job placement, and job coaching and follow-up services. Project Search, which is administered by Parent Alliance Employment Project, is in place in McHenry, Kane, Kendall and DeKalb counties as well as in DuPage. Project Search is focused on providing education and training to young adults with intellectual and developmental disabilities through an internship format. It is a one-year program geared toward selected high school seniors who are entering their last year of a transitional high school program. Funding for teachers is from Vocational Rehab and Parents Alliance provides the job coaches who are funded through WIOA. Central DuPage Hospital provides the space and wages for the students who are rotated through multiple positions at the hospital and then hired full time in the position they are best suited for upon completing the program. Other partners include SASSED, Cadence Health, Community High School 84, District 200, and the Department of Commerce (Commerce).
- In addition, in DuPage County, there is a Disability Employment Initiative (DEI) grant that is a partnership with Vocational Rehabilitation, the College of DuPage and Downers Grove High School to transition youth with disabilities from high school to community college.

- Lake County Workforce Development has created partnerships through formal MOU agreements with Department of Rehabilitation Services (DRS) and several agencies that serve disabled individuals. The partnerships are based on creating a referral network among the agencies and participating where appropriate as part of the integrated resource teams.
- College of Lake County delivers the Personal Success Program (PSP) which provides vocational skills training to students challenged with mild to moderate cognitive disabilities. PSP opens the door to students who may not otherwise enter post-secondary education. The purpose is to introduce basic skills and concepts for a variety of professions, while also providing opportunities to experience college life.
- In 2017, the Mayoral Task Force on Employment and Economic Opportunity for People with Disabilities was created in Chicago. Comprised of 26 members representing workforce agencies, disability leaders, job seekers, employers, and representatives from local and state government agencies, the Task Force has focused on four (4) areas to improve employment outcomes of people with disabilities:
 - Encourage economic development through entrepreneurship
 - Align, enhance, and promote comprehensive job training and placement
 - Facilitate greater participation of students in higher education for careers
 - Examine the City of Chicago policies that promote and/or discourage employment

Adult education providers have always been strong in serving individuals with learning disabilities. Excellent professional development is available, leading to a Special Learning Needs credential for adult educators and staff working with potentially learning disabled students. Accommodations are available to adult education students with disabilities through the ADA coordinators at each college campus, as well.

Vocational Rehabilitation staff has a regularly scheduled presence and meetings with center managers and is co-located in most workforce areas One-Stops. In addition, there is cross training of staff in proper and effective processes for providing services to customers with disabilities. All One-Stop centers are required to provide auxiliary aids and accommodations to customers with disabilities upon request. Vocational Rehabilitation provides technical assistance in these and other areas to the One-Stop centers. Vocational Rehabilitation and career center business services staff work together to share information on how to effectively work with employers to provide employment opportunities for individuals with disabilities. Through the Regional Integrated Business Service Team, these discussions will be formally scheduled on a quarterly basis and will be included in the memorandum of understanding. Under WIOA, The Chicago Cook Workforce Partnership will have a standing committee for providing services to customers with disabilities. This committee will develop policies and procedures related to the memorandum of understanding to enhance the coordination of career center services with those offered by Vocational Rehabilitation.

Returning Citizens

The NEEDR includes a number of communities that are major points of re-entry for those being released from the Corrections system. The WBMC and local areas collaborate closely with the Illinois Department of Corrections (IDOC) and key providers of re-entry and other services for returning citizens (formerly incarcerated individuals) and in particular those recently released. Several areas (Lake County, Kane DeKalb Kendall, and Will County) provide mini-One-Stop services on-site at local prisons and jails, in order to deliver services prior to an individual's release.

Lake County Workforce Development and College of Lake County participate in the Lake County Coalition to Reduce Recidivism providing community-based reentry services and assisting returning individuals in becoming productive members of the community through programs and supportive services. This includes Revive Lake County, a five-week program that is delivered at two location – the Lake County Adult Corrections Facility and the Job Center of Lake County – to provide accessibility to individuals throughout all stages of the rehabilitation process. Training topics include career awareness, employability skills, communication pointers, and transferable skills. The program includes a hands-on curriculum organized in five distinct modules. Each module is designed to instill foundational workplace values and behaviors that are critical to obtaining and keeping a job, including: career awareness, employability skills, communication pointers, and transferable skills. In addition to the modules, participants complete activities in “Bring Your ‘A’ Game” — a workforce development curriculum shaped by input of 1,500 national employers regarding essential workplace skills. The program concludes with a capstone presentation prepared by each participant and presented at a ceremony attended by program partners, participant supporters, and local business leaders. The participants summarize new skills, individual goals, and a plan for success. The capstone empowers participants to take ownership of their professional development by identifying personal hinderance, sharing progress, and planning for success alongside peers. The College of Lake County's Adult Education program delivers ESL and High School Preparation classes at the Lake County Jail to develop their skills necessary for life after release. Lake County also has a Transitional Jobs program delivered in conjunction with area adult transition centers and other partners.

In 2019, The Chicago Cook Workforce Partnership, together with the Chicago Justice Advisory Council, received a grant to design a coordinated re-entry system for returning citizens in Chicago and Cook County. The Partnership is convening a Re-entry Council to generate system-wide recommendations and design a demonstration project. The demonstration project will attempt to provide appropriate pre- and post-release services to participants with the goal of reducing recidivism.

Cook County received a major Department of Justice grant of \$1M to integrate services across all the agencies that work with returning citizens. The Partnership also funds the Safer Foundation for adults who are returning citizens for job preparation and other services.

McHenry County partners with the Stateline Society of HR Managers (SHRM) and Leadership

Greater McHenry County on an initiative to work with states attorneys and parole offices to provide soft-skills trainings, pre-apprenticeship, and other services for ex-offenders. McHenry County also offers re-entry workshops and counseling and acts as a referral for the drug and mental health courts.

Out of School Youth

All areas report that this population is by definition difficult to reach because they are often not engaged with public entities and traditional community and other recruiting partners. Also, in a low unemployment economy, many young adults successfully secure some employment and do not always see the value of participation in a workforce program or education or have the ability to balance their employment with training or education. However, the Region knows that this population's employment is too often at a low wage, often even at the minimum wage, and without further training and support, is too often precarious and lacking in career pathways.

The Chicago Cook Workforce Partnership is part of the local Opportunity Works initiative which has the goal of creating the largest employer-led private sector coalition committed to creating pathways to employment for opportunity youth (OY). Thrive serves as the backbone organization to lead local 100K efforts in Chicago, and The Partnership leads the implementation of the 100K employer-facing work. The Partnership's Business Relations and Economic Development (BRED) team leverages its existing employer relationships to focus more specifically on the OY population. BRED staff will lead the OY efforts supported by 100K to cultivate employer relationships, identify open positions, and aggregate demand to be met through bi-monthly hiring events and other innovative engagement activities. BRED works closely with Thrive to lead the planning of hiring events as well as the development of other placement, retention, and career advancement strategies for OY. In 2019, 126 businesses hosted Opportunity Works interns, and over 80% of participants were connected to a career pathway. In the initiatives' first two years, 751 young adults have been impacted.

Other local areas provide specific initiatives for out-of-school youth as well. In Will County, the Connect to Your Future youth program provides occupational training and work based learning opportunities and, in both Will, and DuPage counties all youth funding is for programming for out- of-school youth. WorkNet DuPage offers the "My Way" program which was replicated from Northern Cook County. The program serves out-of-school youth and young adults. It includes pay for three weeks of career and employer exploration, placement in a paid internship of up to eight weeks and job search assistance and help with further funding for school or technical training. The program currently offers training and internships in office/admin, manufacturing, hospitality and logistics. McHenry County offers GED boot camp for opportunity youth as well as career pathway programs in healthcare and manufacturing which focus on classroom and work based learning opportunities. In Kane, Kendall and DeKalb Counties, WIOA services focus on pathways to employment and education through several components. In Lake County, two YouthBuild Lake County and Youth Conservation Corp are DOL YouthBuild grant recipients. The YouthBuild programs serve out-of- school youth with multiple barriers in a pre-apprenticeship model program leading to additional training,

internships and/or employment in key industry sectors. These programs include work based learning initiatives, which are employment opportunities that allow youth to experience a specific occupation through relationships that youth services develop with community employers as well as programs that focus on vocational exploration, aiming to broaden a youth's awareness of available careers as they develop a plan for their future. Additionally the College of Lake County works with the Youth Conservation Corp in providing HVAC career programs and Adult Education programs to its youth clientele.

The Illinois Immigrant Funders Collaborative and the Chicagoland Workforce Funders Alliance are working together on an initiative to ensure Deferred Action for Childhood Arrivals (DACA) eligible residents can access WIOA services. As part of this project, the Chicago Community Trust approved a grant to the National Council of La Raza (NCLR) to spearhead the project that will target DACA youth and enroll them into WIOA services. NCLR will be partnering with agencies that have both WIOA and immigration/legal services programs, including Erie Neighborhood House, Instituto del Progreso Latino, Chinese American Service League and the Polish American Association. These projects will create assessments and tracking mechanisms that can follow participants that enroll into DACA to make the WIOA referrals and follow-up with DACA recipients. NCLR will facilitate the cross-training between staff so the immigration staff learn about the WIOA system and vice-versa. The Chicago Jobs Council, Chicago Citywide Literacy Coalition, Illinois Coalition for Immigrant and Refugee Rights, and Illinois Business Immigration Coalition will help facilitate the cross-training.

Several areas have added Individual Training Accounts (ITAs) for Youth to their WIOA service strategy, enhancing the ability to deliver skills training for out-of-school Youth specifically and to more seamlessly weave together adult service strategies with the youth program.

Veterans

Veterans receive priority of service, as required by WIOA. IDES provides veteran representatives and WIOA managers in each workforce area who coordinate job fairs and host quarterly meetings with veterans representatives from community colleges and other veteran entities. In addition, the IDES staff host workshops and do presentations to veteran groups. IDES hosts workshops for veterans and performs intakes of all veterans with priority of service. Other targeted veterans programs in the Region include:

- The U.S. Chamber of Commerce and IDES sponsor the Hiring Our Hero's program which connects veterans, transitioning service members, and military spouses with meaningful employment opportunities. A large hiring and information event will be held in 2020 in Chicago and the Partnership will coordinate with WIOA agencies to increase attendance and discuss Title I services available to veterans in the Region.
- The Chicago Federation of Labor, with support from the Partnership, has a specialized training program with Peoples Gas to train veterans for jobs with opportunities for advancement and family-supporting wages. WIOA Individual Training (ITA) account funds support these efforts.
- Will County has a Disabled Veteran representative located full-time in their One-Stop Center and the Will County Veteran's Assistance Commission is located across the hall

from the One-Stop Center for ease of client referral.

- Waukegan Housing Authority participated in Housing and Urban Development’s (HUD) VASH program providing housing vouchers to veterans.
- McHenry County has 45 veterans’ vouchers.

English Language Learners

One-Stop centers provide referrals to the ESL programs at community colleges. In addition, the College of DuPage offers transition courses in ESL, including workforce prep and/or college prep at the workNet DuPage Career Center, ESL is offered onsite at the McHenry County One-Stop center and onsite at the Grundy and Kankakee County workforce services offices. In Lake County, the Job Center of Lake County is co-located in the same building as the College of Lake County’s Adult Education program providing easy referral for ELLs. ELLs at the Advanced level are provided opportunities for career exploration through career fairs and job fairs sponsored by CLC and the Job Center of Lake County. Bridge programs have proven successful in serving ESL learners. Many ELLs at the College of Lake County’s Adult Education program take Bridge to Career courses that help them set career goals and prepare to transition to college career programs. These ELLs are provided wrap-around services, that includes retention and job places services, when they transition to college by the Adult Education Student Success Team DuPage County was awarded a youth contract to World Relief in 2020 to serve youth who are asylum seekers and refugees. The program includes career counseling, job readiness training as well as the opportunity to attend training to earn credentials in in-demand occupations.

The Chicago Cook Workforce Partnership awards WIOA Title I funds to delegate agencies that work with large populations of English Language Learners, including the Chinese American Service League, Polish American Institute, and Instituto del Progreso Latino. Staff are workNet job centers are trained in a Limited English Proficiency program.

Kane County has partnered with World Relief to boost earning potential for asylum seekers and refugees.

Homeless Individuals

In DuPage County there is a Community Partner Mutual Service Agreement with DuPage Pads serving individuals and families who are at risk or homeless in DuPage County. This includes a referral program, as well as career counseling, job search assistance and resume writing to individuals referred to the workNet Center. Lake County Workforce Development works with local community agencies such as Northpoint to provide specialized workforce services to individuals with disabilities as well as a disability case manager. In McHenry County, workforce staff partners with the Housing Authority to provide staff outreach at various locations around the County. In Kane, Kendall and DeKalb Counties, Title I staff coordinate with the local Continuum of Care system and have attended meetings to convey information regarding employment and training services and opportunities to homeless providers in the area. Staff will continue to incorporate homeless service strategies related to employment and training in collaborating with the Continuum of Care boards.

Older Workers

The Senior Community Service Employment Program (SCSEP) program sponsored by the Illinois Department on Aging and designed to assist the mature worker (at least 55 years old) in re-entering the job market is an active partner in the region's Illinois workNet Centers. SCSEP places eligible individuals, usually for 20 hours a week at minimum wages, in nonprofit agencies or community service agencies community assignments. Mature workers will also be assisted in skill enhancement opportunities and assistance in the transition to unsubsidized employment.

National ABLE Network, on-site at the workNet DuPage Career Center and the Job Center of Lake County, provides recruitment and workshops for older workers and SERS is on-site to provide services at the One-stop in McHenry County. The workNet Center in DeKalb coordinates with Experience Works to serve the population 55 years of age and older.

The "Back to Work 50+ Cook County" grant from AARP serves Cook County jobseekers through workshops, career coaching, and vocational training services (including computer training) in order to help them obtain employment. Through this grant, The Chicago Cook Workforce Partnership will link older workers to the Region's high demand sectors: Business & Professional Services, Healthcare, Retail, Culinary and Hospitality, Information Technology, Manufacturing and Transportation Distribution & Logistics. Job Seekers will be connected to training that prepares them for one of 40 occupations that have strong projected growth, including health information technician, retail supervisor, and computer support specialist. Joliet Junior College received a Plus 50 Grant to assist older workers in returning to the workforce. They work collaboratively with the WIOA system to offer training and workshops to job seekers over 50 who are re-entering the workforce.

"5 Steps to Your Next Job" – This is a 5-day workshop series that is offered monthly at the Job Center of Lake County and is being considered for use in other areas within the Region and beyond. Completion of the program leads to a Job Center 5 Steps Certificate of Completion. The five steps include:

1. **Research:** aligning the jobseeker with current workforce demand with online research tools. They will take inventory of their skillsets, research local companies, and use an online tool to determine their next job move
2. **Prepare:** the jobseeker examines industry trends and educational requirements to get into their next job. They will learn about free resources and funding options to take their training to the next level.
3. **Document:** the jobseeker will fully document their knowledge, skills, and experience with written tools including applications, social media, email, letters, and resumes.
4. **Find:** the jobseeker will develop their elevator speech, identify target companies and practice targeted networking techniques in order to find their next job opportunity.
5. **Land:** lastly, the jobseeker will learn how to prepare for an interview and negotiate salary and benefits.

COVID-19 National Health Emergency and Individuals with Barriers to Employment

Education and training providers have engaged in remote learning delivery models throughout the pandemic and responsive to fluctuations in employment demand. NEEDR finds provision of wraparound services and addressing digital equity to be important for aiding certain target populations in order for them to succeed when engaging in educational training opportunities.

Capacity to Address the Needs of Employers

Employer services include occupational and labor market information to inform economic forecasting, no-cost human resource services for recruiting, retaining, and hiring qualified employees and accelerated and a range of customized employer-based training initiatives for increasing skills of existing and new employees.

Each local area's WIOA system includes a business services team made up of staff from all partners who are business-facing and focused on job development and business services. These teams:

- Engage the business community to identify industry-hiring trends and industry-recognized credentials.
- Support industry-specific sector strategies designed to facilitate in-depth focus on particular industries with business partnerships in these areas.
- Analyze and disseminate labor market information to project job growth, wages, and training requirements.
- Provide comprehensive analysis of our Regional labor market.
- Provide Area wage and benefits analysis for targeted positions.
- Create custom recruitment plans.
- Post jobs online.
- Conduct targeted recruitment through email and social marketing tools.
- Provide an application collection center.
- Conduct applicant screening using business' key criteria and assessment tools.
- Organize job fairs and special employer events.
- Provide interview scheduling service and facilities.
- Provide pre-hire training for eligible applicants.
- Provide On-the-job training program funds.
- Facilitate employed worker training for industry certifications and credentials.
- Respond to WARN notices, facilitating workshops on behalf of the State, City, and County by providing information on rights, responsibilities, and resources for the workforce.

As noted above in Chapter 1, Section B on sector initiatives, the NEEDR convenes a Regional Integrated Business Service Team with the focus of bringing together these groups and coordinating and streamlining services to employers, and in particular those larger employers with sites in multiple areas or with a workforce drawn from across the Region. A 2020-2021 Business Services Work Plan was completed and approved. A goal is to reduce the employer's work in engaging with the public workforce system and ensure they can access workers,

training and other services from any of the workforce areas in the Region once they engage with any one of the areas.

The NEEDR is committed to ensuring training programs in the region and local areas prepare job seekers to enter and retain employment with regional businesses. It will continue to work with the IWIB and the Business Integration Team to meet the goals set out by the Illinois Integrated Business Services Team. Representatives from the region serve on the business services teams and shares information with local boards and partners as each local area works towards more integrated business services.

Each local area in the NEEDR conducts formal and ongoing efforts to ensure the existing skills of job seekers match the demands of local businesses. Each area reviews training programs and meets with industry advisory groups and board members who are business representatives to review their list of programs on the Eligible Training Provider List (ETPL) to ensure that training and curriculum is aligned with the needs of industry and that training programs prepare workers for specific positions that are in-demand and provide industry-recognized credentials for these in-demand opportunities. An annual analysis of labor market information is conducted to ensure training programs meet the needs of the regional economy.

The WPMC has tried to address the needs of employers due to the COVID-19 National Health Emergency, which had immediate effects on layoffs, scheduling and safety of workers, and which industries were most affected. The Regional Business Services team was trained on rapid response activities, incumbent worker training, and targeted outreach to employers. In 2020, the WPMC received grant funding close to \$650,000 for Apprenticeship Navigator and Apprenticeship Intermediary purposes. These Apprenticeship endeavors include a Business Advisory council for the region, partial funding for three regional apprenticeship programs, and assistance with DOL registration. Other ways to address employers needs in 2020 and 2021 included Business U Trainings on topics like “Overcoming Employer Objections” and “Prospective for New Business Customers.” At least two Illinois Manufacturing Excellence Center (IMEC) Employer Panels and discussion occurred. The collection and distribution of data through surveys and discussion of implementation continued to occur during the pandemic as well.

Illinois Department of Employment Security provide the following services to employers throughout the Region:

- Assists employers with creating an Illinois Job Link registration, posting job orders and searching for resumes in illinoisjoblink.com.
- Assists employer with their recruitment events, either at the One-Stop centers or at their assigned location.
- Facilitate quality job matches, conforming to State labor laws.
- Create customized Phone Notifications and e-mail blasts to job seekers to inform them to attend events in an effort to assist employers with their workforce needs.
- Conduct outreach efforts to assist the business community.
- Provide employer seminars to keep employers informed on new laws and regulations

in Unemployment Insurance and employment services.

- Provide Labor Market Information to employers.
- Provide mass notification of local hiring events.
- Provide assistance with Work Opportunity Tax Credits (WOTC), Fidelity Bonding, Apprenticeship Information, On-Job-Training (OJT), Veteran Programs and Federal Contractor Regulations.

Commitments of each program partner to implement the selected strategies described in the “Action Plan for Improving Service Integration in the Region.”

The NEEDR partners have completed in 2019 and early 2020 the State facilitated process of conducting local assessments and developing Action Plans for Service Integration in each of the one-stops and throughout the Region. All partners in each workforce area commit to implement the strategies in the local areas’ Action Plans. Major priorities in the Region include communication across partners which includes improving and expanding technological capabilities that can facilitate referrals; joint case management; coordination of services across partners for individuals, cohorts and the entire system; coordinated employer services; and shared performance reporting and management. Because many of the challenges of integrating services across multiple areas and multiple programs cannot truly be solved at the local level, the Region continues to request from the State technological solution(s) that are system-wide, cross-program and customer-centered such as a single system-wide case management system.

The LWIAs identified goals for service integration in their action plans. In January 2022, NEEDR convened together to assess their current priority of plan goals and to update this Regional Plan. The LWIAs thought through how the goals may have changed in regard to the COVID-19 National Health Emergency and workforce equity. The LWIAs were also surveyed about altering goals with these two topics in mind. The following is the compiled list of the goals in order of priority across the Region:

Goal
Goal 4 Communication occurs across One-Stop partners
Goal 9 Processes are streamlined and aligned
Goal 11 Access to services is timely and aligned
Goal 3 Cross training provided to staff
Goal 8A Services delivered by function: Business Services
Goal 1 Customer input used to design and deliver services
Goal 2 Job expectations communicated to staff
Goal 13 Customer information is shared
Goal 12 Partners share an understanding of Career Pathways
Goal 5 All staff valued and respected
Goal 8 Services delivered by function
Goal 15 Board expectations drive One-Stop expectations
Goal 7 Staff collaborate on customer assessment
Goal 6 Customers provide basic information once

Goal 10 Service plans are living documents
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Goal 14 Current LMI informs services and programs

The LWIAs identified Goal 4 as very important when dealing with service delivery changes and other obstacles of the pandemic. Goals 9 and 11 were also highlighted as important during the COVID-19 pandemic. The LWIAs discussed how they reinvented themselves during the pandemic and thought through streamlining and aligning processes, which are apparent in these goals. The Goals of 4, 5, and 8a were noted in particular when thinking about applying a workforce equity lens. LWIAs mentioned the gathering insight from staff partners who work with special populations, professional development opportunities and best practices for staff when working with special populations, and workshops or seminars on hiring those of special populations. This feedback corresponds with Goal 3 and Goal 5 about cross-training and respecting staff too. LWIAs also found that customized services are important for a balanced workforce equity lens and these goals. NEEDR did come to an agreement on a workforce equity lens definition, which will be discussed in more detail later on, and used these goals thinking through areas in the definition.

Goal 4 - Communication across partners

- Use technology to share information via social media and websites, which has become even more significant due to the COVID-19 National Health Emergency
- Develop/improve communication vehicles such as newsletters, meetings, calendars, partner meetings
- Improve the partner referral form; finalize the process and share information
- Create work group to review referral system and develop a feedback process
- Create detailed handbook of partners services
- Increase knowledge of Career Pathways using common language across partners

Goal 9: Processes are streamlined and aligned

- Administer common needs assessments to all customers
- Develop a cross-agency follow-up process
- Create, train staff, and implement uniform policies/procedures in referral and follow up services, then evaluate effectiveness
- Obtain waiver to assessment testing for customers with associate degrees; work with community college to “hold spots” for students with ITA vouchers
- Create a committee to map participant flow of services and identify gaps as well as opportunities for process streamlining

Goal 11: Access to services is timely and coordinated

- Identify/implement common electronic referral system for partners
- Review referral outcomes monthly
- Increase partner presence at AJCs
- Inventory marketing/social media resources and communicate to customers

- Produce workNet Center orientation video
- Improve TANF referral outcomes
- Create master calendar of workshops/sessions throughout the region

Goal 3: Cross-training provided to staff

- Create work group and set schedule meetings for cross-training
- Create onboarding/cross-training program, supported with training materials
- Establish shared vision for customer service
- Include agency tours with training
- Bus tour of all agencies/services
- Encourage staff contribution for continuous improvement

Goal 8a: Business services

- Expand the current Business Service Team (BST) with a focus on capacity and partner representation
- Develop a script for BST staff to follow up on employer visits/contact protocol
- Track outcomes via Illinois JobLink
- Integrate BST members into Perkins Tech Advisory Committee, Talent Pipeline Management efforts, other business led groups
- Asset mapping
- Identify sector champions to strengthen partnerships and increase engagement with small and medium employers requiring specialized attention
- Increase frequency of BST meetings
- Host coordinated hiring events with all system partners
- Use the LWIB and BST to guide strategic planning
- Obtain information from the community needs assessment
- Create employer list by sector

Goal 1: Use customer input to design and deliver services

- Continue to use/revise/update existing customer satisfaction tools
- Use a universal intake form
- Institute customer navigators
- Automated tracking system
- Form a Job Seeker Service Team of frontline staff
- Create FAQ on partner programs
- Create a One-Stop customer pledge
- Implement focus groups with all partners
- Third party follow-up calls
- Secret shopper visits

Goal 2: Job expectations communicated to staff

- Establish core staff competencies
- Continue/increase frequency of partner meetings for updates, share feedback
- Update staff procedures manual
- Require new staff to attend OSC orientations
- Establish a vision for customer service
- Update partner service quarterly

Goal 13: Customer information is shared

- Create OSC manual of all partner services
- Develop shared database/case management system
- Explore use of Career Connect for electronic referral system
- Select a workNet Center to pilot a shared database
- Hold quarterly BST/employer roundtables
- Review customer satisfaction survey to represent all programs/services
- Hire a career navigator to liaise between partners and customers
- Share Integrated Career Plan for customers during referral

Goal 12: Partners share an understanding of Career Pathways

- Use the CIS information; provide training for all staff
- Develop Career Pathways training for frontline staff
- Host industry representatives to inform staff of career pathways
- Provide info from WIOA regional plan survey and Perkins needs assessments to frontline staff

Goal 5: All staff valued and respected

- Solicit frontline staff input into policy at the State level
- Include frontline staff at center-level workNet Center meetings
- Ensure staff provided with time to discuss customer service, continuous improvement service integration, working relationships at regular staff meetings

Goal 8: Services delivered by function

- Map flow of all customers and services
- Review services by function for each title and identify opportunities for collaboration
- Create Business Services Team and client organizational charts and reevaluate the referral process

Goal 15: Board expectations drive One-Stop expectations

- Conduct anonymous survey of LWIB and partner staff
- Provide WIOA 101 for all staff
- Program Services Team invites LWIB to quarterly meeting
- Evaluate plan for all OSCs

Goal 7: Staff collaborate on customer assessment

- Share assessment information at Partners Meetings
- Develop collaboration tools for jobseekers
- Create matrix of assessments currently in use across partners
- Share workforce data more frequently to build bridges across partners agencies

Systems Level Coordination

- The Illinois Department of Human Services is a partner in each one-stop center throughout the NEEDR. This includes formal MOU's and informal agreements. In addition, IDHS has agreements with some of the community colleges for TANF Job Placement Programs.
- At Elgin Community College, a new Workforce Development Council has been established (inclusive of an employee from the Kane County Office of Community Reinvestment) to improve collaboration and employer outreach efforts college-wide, co-led by adult education and career-technical education.
- In Will County, OJT service delivery is provided through a contractor who has staff located at the One-Stop center. Youth programming is provided through Joliet Junior College and Joliet Junior College Workforce Development is a partner in the One-Stop System, provides staff to assist in resource room, provide workshops, and to advise customers on JJC. IDES and Workforce Services Division of Will County coordinate joint job fairs, employer recruitment events and workshops. In addition, the Local Workforce Board and Will County Center for Economic Development are co-located and have a formal cooperative arrangement to do joint marketing, outreach, and communications, sharing of staff/costs, business attraction/retention, coordination of workforce and training support, enhancement of training opportunities and skill enhancement funding, and coordination of talent pipeline development.
- Title I Business Services collaborate with the Workforce Development Department at Waubensee Community College to identify and address workforce needs, develop services and curriculum to address those needs, as well as to exchange referrals. The DeKalb workNet center partners with Goodwill Industries to co-host a computer literacy class once a month at the center and also on site at Goodwill's facility. Experience Works has maintained an on-site SCSEP employee at the DeKalb workNet center for the past 4 years, providing valuable work experience for the participant and helping the center with its staffing needs. Title I staff also attend monthly workforce development meetings to discuss the needs of Elgin area businesses and residents.
- The Chicago Cook Workforce Partnership is collaborating with the Chicago Housing Authority on the CHA Employment Training and Placement Program, which takes place at all of the Chicago based workNet Centers and in the Washington Heights community. This program helps CHA family housing and housing choice voucher recipients join the workforce, increase earnings and advance in the workforce through career readiness training, technology skills training, vocational education, and job placement services.
- Lake County Workforce Development integrated its TABE testing services with the College of Lake County's Adult Education program. Both WIOA partners are co-located in the same building at the Job

Center of Lake County and College of Lake County administers the TABE test to all participants.

Key Service Integration Solutions

- Adult education partners with numerous agencies in the cooperative delivery of services. The majority of adult education programs in the Region offer classes at outreach sites located throughout their communities in public schools, churches, municipalities, and other locations. Often, these agreements provide free or low-rent locations in order to expand the local delivery of basic skills education. Some adult education programs offer classes within Illinois workNet locations or unemployment offices, and some affiliate One-Stop locations are located within adult education programs.
- Elgin Community College and Harper College partner with The Chicago Cook Workforce Partnership at the Hanover Park Education and Work Center, offering adult education and workNet services within one location.
- College of DuPage employs a Workforce Development Liaison who is co-located at the One-Stop. She provides career counseling and information on the College's Career and Technical programs. Staff from ABE are also co-located in the Center; they assess and enroll students into the ELA and HSE programs offered at the College. Additionally, DuPage County partners with College of DuPage to administer TABE testing for WIOA clients.
- Oakton Community College serves as a satellite location for The Chicago Cook Workforce Partnership and is operated by National ABE network, offering on-site career services and WIOA orientation sessions as a satellite of the One-Stop. They coordinate TABE testing to avoid duplication of services, allowing one test to meet the needs of both agencies.
- Elgin Community College assists with coordinating TABE testing options for Title I participants residing in their district.
- Lake County Workforce Development provides career services to adult education students at multiple College of Lake County sites. In addition, two College of Lake County adult education staff are co-located at the Lake County Job Center to provide direct services to customers needing basic adult education services and workshops. Workforce Development and College of Lake County Adult Ed have partnered to deliver career and employment services directly to the students enrolled in classes – during and after classroom times.
- The Kane County Office of Community Reinvestment sends an employee to ECC one-half day per week to conduct on-site WIOA eligibility screening. South Suburban College partners with IDES and offers on-site adult education classes at this location, which will be expanded soon.
- College of DuPage currently provides adult education and career technical education staffing at their One-Stop and will offer classes on-site in the near future.
- McHenry County College offers ESL classes, which are now offered within the One-Stop center, where the college also supports a part-time employee. In addition, McHenry uses Community Service Block Grant (CSBG) funding to provide training funds for customers that are not WIOA eligible but who meet CSBG guidelines. Through the braiding of these two funding streams the McHenry LWIA can provide coordinated services and training.
- Kankakee Community College and Joliet Junior College offers on-site adult education classes in both the Kankakee and Grundy Counties workforce services office.

Technological Solutions

- Kankakee is planning to install computers with Skype capability at the Bradley One-Stop extension center to offer face-to-face communication for students/clients rather than a referral.
- Many of the areas are considering methods such as shared spreadsheets for tracking referrals and other activities, though very often these are challenging due to confidentiality needs and data management considerations. As noted elsewhere, areas would welcome statewide solutions wherever possible.
- All LWIAs have engaged in technological based solutions due to COVID-19 virtual operational and service delivery adjustments

B. Describe how transportation and other supportive services are coordinated within the Region (Sec. 679.510(a)(1)(vi)). Plans must respond to the following questions:

- What Regional organizations currently provide or could provide supportive services?
- What policies and procedures will be established to promote coordination of supportive services delivery?

The NEEDR is fortunate to have an extensive transportation system, including public transit, although, as mentioned above, outside of the core, transit can be a challenge. The Regional Transportation Authority (RTA) provides more than two million rides each weekday on bus and rail services in Cook, DuPage, Kane, Lake, McHenry, and Will Counties. The Region's transportation system includes the Chicago Transit Authority (CTA), Metra and Pace bus and (ADA) Paratransit Service. The RTA's system covers approximately 3,700 square miles and serves approximately 8.4 million residents. The RTA also provides rider services, including online and telephone travel planning assistance and travel training for seniors and people with disabilities. Public transportation is less available in the lower-density, outlying areas of the Region. The RTA does not cover Kendall, Kankakee, Grundy or DeKalb counties, which have smaller, local bus services and paratransit services. Some of the local areas provide gas cards to clients in training in areas with less public transportation options and some will work with suburban bus lines to provide easy to understand information for job seekers on transportation services. Although there is an extensive transportation system in the Region – there are areas underserved including rural, last miles, off-hours and weekend services, service off main routes and across county lines.

One-Stop clients are referred to entities or organizations that are not available at the One-Stop center for supportive services. Examples include housing, health, transportation, services for individuals with disabilities and financial counseling. Veterans have assistance available to them for transportation needs and expediting referral to housing and medical services. In addition, supportive services are available for IDHS customers receiving TANF and/or SNAP benefits that agree to participate in any approved program with the partners. In some local areas, youth receive incentive payments and gas cards for training and work experience transportation.

WPMC received a TDL grant worth in total about \$780,000. A component of the grant money

was to go over incumbent worker training focused on Disability Inclusion. This resulted in Disability Inclusion training program for TDL employers. The training was postponed for COVID-19-related reasons, but plans to be implemented could occur in 2022. WPMC and IMEC also completed other trainings with employers and incumbent workers. Employers who were involved in these trainings included Chicago Welding & Fabrication, Chicago Circuits, and PDL Machining. Furthermore, apprenticeship monies can continue to support TDL-related work-based learning.

Some adult education providers are able to collaborate and deliver childcare services. Many adult education programs have a transitions coordinator to assist underprepared adults with the transition to college. Some colleges offer special services for all students on campus, such as a women's center providing support in the case of emergency. Many colleges provide credit waivers of differing amounts for high school equivalency (HSE) graduates and/or ESL completers, and many have a scholarship fund for high scoring HSE graduates. Foundations on campus are often able to provide various types of support to students, such as funding the cost of the GED test.

Resource guides from IDES are available in all areas to serve individuals with barriers to employment. These resource guides provide a list of supportive services available in the community and are updated regularly. Statewide IDES offices and staff have access to these resource guides. In several areas these are supplemented by content gathered by the other partners. In a number of counties in the region, the 2-1-1 non-emergency telephone line is available. 2-1-1 connects people with essential community information and services. Callers can receive live assistance with needs such as food and shelter, counseling and mental health services, income and employment support, help for the elderly and people with disabilities, and resources for children and families.

C. Describe the coordination of services with Regional economic development services and WIOA service providers (Sec. 679.510(a)(1)(vii)). Plans must answer the following questions:

- What economic development organizations, WIOA service providers, or businesses are actively engaged in Regional planning?
- What economic development organizations, WIOA service providers, or businesses were invited to participate but declined?

Due to the large population and geographic size of the Region, and the smaller scope of many economic development entities at the county level, much of the coordination with economic development services and providers happens at the local level rather than region wide. For example, in many of the local areas, the local economic development department or authority has a seat on the Local Workforce Board and is included in policy making decisions and a range of activities.

- Local Workforce Boards across the Region work with county and municipal economic

development offices to address workforce issues associated with companies relocating to the Region. For example, The Partnership works closely with the City of Chicago Department of Planning Development and the Mayor’s economic development team. In this capacity, the Partnership has assisted with supporting the expansion of local companies and participated in “pitch” meetings whereby the City, World Business Chicago, and The Partnership have met with companies considering locating to Chicago.

- In DuPage County, Choose DuPage Regional Economic Development Corporation works consistently with the DuPage Business Services Team to identify training needs for businesses. The Workforce Development Core Partner’s Business Services Representatives meet quarterly along with a representative from Choose DuPage Regional Economic Development Alliance to coordinate team visits and share information on the businesses in DuPage.
- Lake County Workforce has partnered with the local economic development group, Lake County Partners (LCP), to provide Business Service Outreach. LCP partners with Lake County Workforce Development in meeting with employers as part of the business outreach visit related to expansion, retention and attraction. LCP provides referrals back to Lake County Workforce as appropriate from interactions/conversations. These services include additional partners and stakeholders including the local community college, College of Lake County.
- In Lake County, the Workforce Ecosystem was formed to ensure that local businesses have access to talent, training, and development resources for retention and expansion purposes. The Ecosystem consists of a partnership between Lake County Workforce Development, College of Lake County, Lake County Partners, and Lake County High Schools Technology Campus, local high schools, and the Lake County University Center. A major element of this collaboration is the use of a shared CRM system to manage the business outreach visits and relationships.
- In Will County, the Local Workforce Board conducts joint planning with the Will County Center for Economic Development (CED) and all Local Workforce Board staff are located at the CED. This partnership enhances coordination with economic development and provides additional services to employers.
- In Cook County, The Chicago Cook Workforce Partnership's CEO is a member of the County’s Economic Development Advisory Committee (EDAC). EDAC is the forum where certain tax credit and loan applications are reviewed and approved. Additionally, the Committee also provides advisement on the allocation of Community Development Block Grants, HOME Investment Partnership, Emergency Solutions Grants, and other eligible projects. As part of EDAC, The Partnership connects with the entities receiving these grants to promote the business services of the workforce system. The Partnership provides workforce development advisement on capital planning projects with diversity goals and manages the workforce recruitment activities associated with these projects. The Partnership also engages any of the more than 100 Cook County municipalities around their workforce development needs by supporting their economic development interests and presenting to companies that are expanding and/or considering location within the municipality. The Partnership supports strategy development in the City of Chicago’s master planning initiative to accelerate growth in priority growth sectors (Tourism and Hospitality,

Transportation, Distribution, and Logistics; Technology, and Healthcare and Life Sciences). These working groups are facilitated by World Business Chicago.

- The Chicago Cook Workforce Partnership participates in various forums created by the Mayor’s Office to address underserved communities throughout Chicago at mini town hall meetings and provides support in the planning and implementation of the City of Chicago’s resource fairs for residents and for business owners. Recently, the Mayor’s Office created Invest South West, a community improvement initiative led by the Department of Planning and Development with collaboration from multiple City departments, community organizations and corporate partners to support development in 10 neighborhoods on Chicago’s South and West sides.
- In McHenry County, representatives from the Department of Commerce Economic Development unit and local economic development agencies participate on the business services team. McHenry County partners with economic development groups in the Northern Stateline EDR for grant applications, business outreach activities, and the implementation of a comprehensive economic development strategy.
- Grundy Livingston Kankakee Workforce Board staff are co-located with the Economic Alliance of Kankakee County in order to continue to coordinate economic and workforce development.

At the Regional level, an example of coordination with economic development entities is the Chicago Metro Metal Consortium. The Chicago Metro Metal Consortium is one of 24 'Investing in Manufacturing Communities Partnership' (IMCP) designated by the U.S. Department of Commerce. With leadership from Cook County's Bureau of Economic Development, it is an unprecedented collaboration of more than 70 partners, including the 7 counties of northeastern Illinois and the City of Chicago. Representatives from The Chicago Cook Workforce Partnership and the McHenry County Workforce Board co-chair the workforce development committee.

Additionally, at least one Local Workforce Board Director is a member of the Chicago Metropolitan Agency for Planning’s (CMAP) Economic Development Committee and regularly provides input on the Regional planning efforts that CMAP is responsible for. CMAP has addressed challenges posed by the COVID-19 National Health Emergency. Most importantly, Chicago and county leadership leaned on CMAP and Choose Chicago to create a Regional Economic Recovery Task Force at the end of 2020. The Regional Economic Recovery Task Force completed its work by November 2021. This Task Force warranted collaboration and engagement across workforce, tourism, and economic development; within this engagement, equity and addressing communities facing barriers was a chief concern. The Task Force raised a need for collaboration on business and retention efforts so CMAP will be working with industry experts to improve these efforts. LWIAs that were on the Economic Recovery Task Force include DuPage Workforce Innovation Board, McHenry County Workforce Network Board, and the Workforce Investment Board of Will County. The WPMC was also cited on the list and several economic development-focused organizations. Examples of economic development and business organizations on the Task Force include the Will County Center for Economic Development, Chicagoland Chamber, and the GOA Regional Business Association.

The NEEDR invited feedback from workforce system partners during this planning process. First, an online survey was distributed broadly to contacts of each of the local workforce areas including all local system partners, local economic development organizations, businesses, WIOA service providers and other community stakeholders, and through contacts of the Workforce Partners of Metropolitan Chicago. The survey remained open for 2 weeks to secure input on the strengths and challenges of the region and how partners are working collectively to support job seeker and business customers. LWIA Directors attended a webinar to solicit feedback and provide detailed information of initiatives taking place in their local areas. Another webinar was hosted with stakeholders from across the workforce system including education, economic development, business service teams, and other partners to gather additional content for the Plan.

There were not any economic development organizations, WIOA services providers, or businesses that were invited to participate but declined.

D. Describe the coordination of administrative cost arrangements, including the pooling of funds for administrative costs, as appropriate (Sec. 679.510(a)(1)(v))

The Local Workforce Boards work together on the cost sharing for the operations of the local AJCs. The LWIAs each contribute to improvements in service integration and delivery, which ultimately contributes to the region as a whole. Additionally, partners have identified cost contributions based on available funds and system use. The partners will work together towards continuous system improvements through shared costs, leveraging of resources and a foundation of cooperation.

The NEEDR pools a significant portion of WIOA funds toward collaboration. For more than 15 years, the Workforce Partners of Metropolitan Chicago (formerly Workforce Boards of Metropolitan Chicago) have agreed to pool funds to execute Regional projects identified through strategic planning. Activities include:

- A half day Workforce Board Strategic Planning event
- Customer Service/Cross-Training Series with Core Partners
- Common Customer Tracking System
- Common Customer Relationship Management (CRM) Systems
- Shared Labor Market Information data

The convener of these activities, the Regional Coordinator, is responsible for:

- Convening meeting of WPMC partner staff
- Assisting with the development and management of an annual Regional cost share agreement and budget
- Assisting with the development and execution of activities to support the strategic Regional plan
- Assisting in fostering Regional partnerships with stakeholder and employers to support

Regional workforce development and economic development initiatives

- Planning and convening events designed to advance Regional initiatives, address capacity building needs of One-Stop system staff, and actively engage workforce development stakeholders and employers
- Facilitating ongoing communication among WPMC
- Performing tasks that support Regional communication strategies
- Maximizing the Region’s benefit from each of the local workforce area’s initiatives by fostering the sharing of information
- Managing procurement processes related to Regional initiatives, in accordance with applicable competitive and small purchase procurement requirements
- Preparing progress reports and materials on Regional initiatives
- Adapting Regional reports and project deliverables for use at the local level

The local Title I staff will negotiate with partners to include Regional Planning costs in the MOU. The MOU, which is to include administrative cost sharing arrangements among the partners.

E. As part of the 2022 modification, if needed, describe the impact of the pandemic on the regional service strategies, including use of cooperative service delivery strategies and the connection of job seekers with employers, not covered in the above sections. Include what steps, to the extent known, that will be taken over the next two years to adapt to the impact of the pandemic regarding the regional service strategies, including use of cooperative service delivery strategies and the connection of job seekers with employers.

In addition to the previous sections, WPMC engaged in trainings as a part of pandemic regional service strategies. Examples of trainings include “Safety and Security Training for One-Stop Staff” and “Utilizing Technology.” The safety and securing training discussed procedures and options for handling difficult customers; One-Stop staff learned how to deescalate situations and manage COVID-19-related issues. The technology training offered ideas for customers who lacked technology devices and figuring out resources they can access. The “Recruitment and Enrollment of Jobseekers” discussed diversification of recruitment strategies, engagement of a population, and using data to inform recruitment. Some of these sessions were provided multiple times and attracted a multitude of workforce participants.

In terms of the next two years, NEEDR plans to continue learning about the circumstances surrounding COVID-19 and abiding by federal, state, and local recommendations and guidelines. The changes in service delivery did result in some advantages such as access to services outside of business hours and flexibility of online meetings with partners or staff. It is likely that practices and ways of service delivery utilized during the height of the pandemic will continue to an extent. Some LWIAs mentioned the possibility of exploring hybrid service delivery models. The WPMC and other regional collaboration such as meetings, training sessions, and initiatives will be ongoing. The COVID-19 National Health Emergency and its rippling effects on the regional workforce, industry, training providers, and supportive services, among other areas, will be continually evaluated. As previously noted in Chapter 1, the regional

will utilize data in various forms to understand areas impacted by the COVID-19 National Health Emergency.

F. As part of the 2022 modification, describe how a *workforce equity lens* is or will be incorporated in the regional service integration strategies, including the coordination of service delivery strategies to job seekers and employers.

The region has created a workforce equity lens definition: “We actively work to expand access and eliminate disparities people experience, especially those from marginalized communities, by providing a customized service approach to all clients.” The region will use this when it comes to thinking through regional integration strategies. The Workforce Development Network can share this definition or information about this definition when interacting with partner programs and employers. Partners and employers should be addressing various populations for recruitment and retention that should be in line with areas that the workforce system would like to address. The region can continue to work towards initiatives and discussions about equitable practices. Additionally, the Hiring Initiative to Reimagine Equity (HIRE) initiative was recently created by the Department of Labor (DOL). The LWIAs were informed about this initiative, and it entails removing barriers, stressing equal participation and opportunity, and expanding job access for workers in underrepresented communities. Regional workforce leaders and partners can be mindful of the HIRE initiative and how it could be applied in coordination of services. Lastly, training staff on how to work with diverse populations will be important for equity in service delivery processes.

CHAPTER 3: VISION, GOALS, & IMPLEMENTATION STRATEGIES

A. Describe the local strategic vision to support state and Regional economic growth (Sec. 679.560(a)(5)). Describe how this aligns with the State of Illinois' vision and principles.

The Northeast Economic Development Region WIOA partners from the onset of the global COVID-19 National Health Emergency pandemic frequently came together to discuss, learn and aid the local boards as a regional effort to ensure no disruption in WIOA program services were encountered. While for some they may have been paused to implement alternative service delivery models, the Region as a whole, never closed completely and successfully continued serving their businesses and participant labor market needs. We have learned much from the COVID-19 pandemic about what can be gained by reaching out and supporting one another to meet a challenge.

The pandemic almost immediately introduced the adoption and utilization of advanced technologies to address immediate business operational needs and keeping everyone safe. This called for teleconferencing platforms such as zoom or teams meeting programs. This enabled the Regional partners to engage in more frequent meetings with greater participation than the traditional scheduled in person meetings. The meetings were moved to online technology supported which availed them to increased interaction amongst themselves but also with their partner program leaders.

While not all workforce system programs and agencies were ready to collaborate due to their own specific program pandemic priorities established, they do recognize the need to begin to do so in the upcoming two years. Regional leaders will continue to invite workforce system partners to regional meetings where best practices, lessons learned and exchange of data outcomes can be explored in order to implement new practices, policies and more efficient service models.

The Northeast Economic Development Region WIOA partners will work collaboratively to deliver a workforce development system that provides opportunities for career growth for the Region's jobseekers and workers as well as ensures a skilled workforce to meet the needs of businesses.

The Region's workforce development system will be responsive to changes in the economy, including changes in dominant industry sectors, as well as changes in the skills and education needed for jobs. The workforce development system will assist the Region's workers and job-seekers to advance along career pathways and will effectively collaborate with educators and economic development agencies to provide an aligned system for the Region's stakeholders. Specifically, the One-Stop delivery system shall provide a true "One-Stop" experience, at which any employer, worker or job seeker can access the programs and resources they need, whether in-person or electronically.

Finally, the workforce system will utilize ongoing evaluations to assess programmatic success, providing for continuous system improvement.

Regional leaders have learned the COVID-19 pandemic brought about the implementation and sustainability of utilizing online technology for a broad range of services not only for the WIOA program delivery model but also for the business operations of those programs. The quick acceptance of utilizing teleconferencing in order to expedite meetings proved not only to be resourceful but successful in regional exchanges of the workforce needs, along with exploration of ideas and solutions in meeting those needs. Regional leaders now recognize not all services have to be provided in person.

The regional workforce system partner's goal will be to sustain the utilization of virtual services and operational practices in order to increase and expand access to business and industry workforce needs throughout the region. While business and industry adapted their business models to these new technology platforms, so did the public workforce system in aiding them in meeting their needs.

The region also will engage in analyzing best practices in WDB coordination from other similar metro urban regions in other states to better understand how to best serve their needs. Analyzing these other metro region comparable plans provides opportunities for operational optimization and alignment within the local boards. Our regional WDB leadership will commence a process designed to improve our alignment in serving the needs of our jobseekers, educators, and corporate partners.

Increasingly, our companies, educators, and strategies are multi-regional and require coordinated action. We understand more so now, than pre-pandemic, our workforce system should be more aligned with this trend and better support multi-regional planning and service delivery. Regional workforce leaders shared that efforts to shape the local workforce system would include a review of policies and procedures to ensure they are effective, flexible and to identify gaps and possible solutions to any service gaps that exist.

B. Describe the local goals for preparing an educated and skilled workforce (including youth and individuals with barriers to employment) and goals relating to the performance accountability measures based on performance indicators (Sec. 677.155(a)(1)).

Local goals include:

- Improved and expanded Regional sector partnerships, which increase the focus on critical in- demand occupations in key sectors
- Expanded career pathway opportunities, including work-based training models and integrated programs of study, that lead to industry-recognized credentials and improved employment and earnings
- Expanded workforce opportunities for populations facing multiple barriers to career advancement through improved career services, career pathway programs and expansion of bridge programs.

The Region recognizes and accepts the rapid technological change and workforce shortage the region's businesses are faced with. The Regional leaders are all engaged in implementation of

technology-based services into their service delivery models of not only WIOA services, but their partner providers such as approved training providers and partner programs. Many of the regional training providers implemented online learning platforms; hybrid programs of study and virtual training simulators for some occupational training opportunities. As new technology advancements are introduced into the workforce development industry, the region is committed to exploration and adoption as it may apply and enhance program services. Some recent examples that have come to light is virtual work-based learning opportunities, digital media rich career exploration, and oculus virtual occupational training programs.

With these new technology advancements, not all are affordable or equitable to regional partners, businesses and participants. The regional workforce leaders will continue to explore funding resource opportunities to engage in collectively for digital equity implementation and support.

The region has been nimble in order to ensure the public workforce system's performance is maximized and serves in the best interest of the client by meeting them at their point of need. It is noteworthy to add, as regional workforce leaders, we have learned the other side of the technology coin – that is the need to have a balance with all the service delivery models available – not all clients want or can even use technology-based service models – some want and need face to face service delivery models. There is a need now to achieve balance with them in order to meet the diverse clients the region serves. Further monitoring, evaluation and exploration will continue.

As mentioned in the earlier chapter, during the pandemic, the State did present a high priority of focus in supporting their reopening procedures with the local American Job Centers. With this high priority came state guidance and compliance issuances. Together as a region we were able to quickly respond to the State's guidance in full compliance.

For reopening practices, several boards noted the best practices included flexibility, sharing their use of split schedules and hybrid options that have utilized virtual methods of communication and ensured that staff were not all on-site together daily for public health safety measures. Respondents also noted that a regional effort, a best practice included the frequent pandemic regional meetings where an exchange of information at local levels was shared.

C. Provide a description of the Regional and local strategies that will achieve the vision and principles. This must include a description of the strategies and services that will be used in the local areas:

- To facilitate engagement of employers in the workforce development programs, including small employers and employers in in-demand industry sectors and occupations
- To support a local workforce development system that meets the needs of businesses in the local area
- To better coordinate workforce development programs and economic development

- To strengthen linkages between the One-Stop delivery system and unemployment insurance programs
- To promote entrepreneurial skills training and microenterprise services
- To implement initiatives such as incumbent workforce training programs, OJT programs, customized training programs, industry and sector strategies, career pathways initiatives, utilization of effective business intermediaries, and other business services and strategies to meet employers needs

NEEDR is committed to collaborate across partners and services to develop strategies to address the skills gaps across the Region, through the workNet Centers and led by the core partners. The partners will engage in a Regional planning process that explores career pathways, bridge programs, further development of ICAPPs, and workNet Centers tracking unemployed and underemployed individuals that lack a high school diploma, basic skills deficient, and post-secondary credentials. The NEEDR will develop additional strategies on how identified individuals will have access to the services and employment and training activities including providing access through the workNet Center, job readiness training integrated into classrooms, and working with training and service providers around stackable credentials.

The vision and principles of the NEEDR will be implemented through the following policy strategies that together are necessary to reach the NEEDR plan goals. The NEEDR has incorporated the following strategies, including several that align directly with strategies from the Illinois Unified State Plan and solutions addressing the bullets above within multiple strategies as well as specific strategies as appropriate.

The regional workforce leaders have worked together in building consensus for a regional equity lens definition in order for each local board to operate from: *We actively work to expand access and eliminate disparities people experience, especially those from marginalized communities, by providing a customized service approach to all clients.*

The above stated strategies as defined from two years ago will remain post pandemic and continue to serve the region and its business and industry needs. The pandemic did provide opportunities in how these strategies can be further supported through the use of advanced technology-based platforms. While many businesses are still altering their business models as state and local pandemic mandates are imposed upon them, they too are learning the value of how technology is aiding them in keeping their doors open and their workforce employed. We have learned now more than ever; the region is experiencing a lack of skilled workforce to these now technology based enhanced occupations.

Strategy 1: Strengthen relationships with local industry and enhance the ability to meet the needs of businesses

The NEEDR has been working to increase partnerships with businesses to better serve their needs through cooperative strategies with partners. For example, Will County developed a Business Service Team that identified the key employer services provided by the following entities: Joliet Junior College Career Services, Joliet Junior College Workforce Development,

Joliet Junior College Corporate and Community Education, Illinois Department of Employment Security, Employer and Employment Services, Workforce Services Division of Will County, Will County Center for Economic Development, and the Workforce Board of Will County. Two immediate projects are underway: the first is the identification and implementation of a Customer Relationship Management system to share employer connections and activities. The second is the development of a web-based information system to provide employers with an avenue to connect with the appropriate entity for specific employer services.

Lake County Workforce Development is also expanding and enhancing business services. As part of the work developing their local plan, workforce development staff have had opportunities to engage employers in surveys and focus groups to solicit new input into programming. Lake County Workforce Development also will review training programs and classes with employers to verify the relevancy of training programs to the skills needed in the workplace. Lake County Workforce Development is also developing solutions around the hiring needs of employers with a greater focus on the hard-to-fill jobs and positions that struggle with retention, as well as working with staffing firms and growing internship programs. In addition, Lake County Workforce Development is utilizing an on-the-job training strategy to assist small businesses that want to help employees move up the career ladder and create opening in entry-level positions.

In Kane, Kendall and DeKalb Counties, the Business Services Team has established contacts with small businesses that have participated or expressed interest in the on-the-job training and incumbent worker programs. Partnerships have also been established with the Aurora Regional Chamber of Commerce and the Elgin Development Group. Kane, Kendall and DeKalb counties are expanding the business services team to include two additional Business Service Representatives to strengthen the outreach to local businesses and to form mutually beneficial partnerships with employers. Existing relationships with the business centers at the Elgin, Kishwaukee, and Waubensee Community Colleges will also be vital to maintaining open channels of communication with employers across all three counties in the local area. Kane County is currently developing web content to market and promote services to businesses on its website.

DuPage County continues to enhance and refine its business services offerings, with a renewed focus on work-based learning. New business services representatives were added in order to grow and strengthen relationships with employers, to learn of their workforce challenges and needs, and to provide them with a talent pipeline, especially for sectors experiencing a shortage of talent. A county-wide Business Services Team has been assembled to coordinate and synergize outreach to businesses. The team includes representatives from DuPage County Workforce Development Division, Illinois Department of Commerce, Choose DuPage (Economic Development), College of DuPage Business Solutions, and College of DuPage Center for Entrepreneurship. In addition to expanded outreach, the team conducts information sessions at which businesses can learn of the grants, tax credits, and other services available to help them become more competitive. The team is conducting a campaign to recruit additional business leaders to the DuPage Workforce Board in order to capitalize on the industry expertise

that they would bring to the Board and that would inform and guide local workforce development initiatives.

In order to coordinate business services as a Region, LWIAs in the NEEDR will explore ways to market Regional on-the-job training and incumbent worker opportunities to employers with multiple locations throughout the metro Region through coordinated efforts across local areas. The NEEDR is working to coordinate with IDES to provide system-wide services to employers and leverage employer relationships across funding streams. Local Business service team members held a Regional meeting to discuss best practices and Regional collaboration.

The Region's local boards are working to increase coordination around layoff events. Rapid response teams from each area will share their layoff events with others and encourage local employers to attend layoff event that might be outside of their county or city to recruit valuable workers from another location. The Region is working toward a Regional strategy that will include monthly communications that will approach layoffs from a Regional perspective.

The Workforce Partners of Metro Chicago have convened the Regional Integrated Business Services Team. The Regional BST meets regularly to discuss how each of the local areas have their business services structured and how different job functions are managed and delivered in each area. Incumbent worker training, on-the-job training projects, internships, adult work experience, files and monitoring, Rapid Response, and business services strategies are discussed, and promising practices are shared. The Regional BST provides an opportunity for building relationships among business service teams across the Region, exchanging ideas, and sharing job openings and company closures. For example, a large mail sorting company that recently moved into DuPage and contacted workNet DuPage's Business Services team for guidance on how to source candidates for roughly 30 openings. workNet DuPage shared the job information with counterparts within a reasonable commuting distance of those areas and connected the company to partners serving disabled and veteran job seekers. The Regional Integrated Business Services Team has made a commitment to meet six times a year and rotate meeting locations throughout the Region.

As mentioned in the earlier chapter, during the pandemic, regional BST meetings in 2020 were initially held in person but had to move to a zoom platform due to COVID. The inclusion of IDES and DRS has led to the team receiving information on what is going on at the state level and on upcoming events. Overall though their participation has also led to the development of special activities locally such as virtual or drive through job fairs for people with disabilities and enhanced coordination on rapid response events. Local area staff have also received training and information on IDES systems and greater assistance with outreach to dislocated workers through e-blasts. DRS has also provided information on their hiring events and business outreach activities so that referrals could be made across agencies where appropriate.

- a. 2021 Plan: For 2021 the regional BST plan was recalibrated to be relevant to the current environment with COVID, mass layoffs and significant unemployment.

The plan was developed with input from the regional team and WPMC directors. It was decided that for 2021, the group would focus on three things: incumbent worker training, targeted business outreach and rapid response activities. The plan includes third party training, opportunities for peer discussion and learning, and the opportunity to work together on one to two projects in the coming months. The energy in this group and the interactions have been fantastic. It bodes well for future regional business services work.

- b. Training needs: Training needs for regional BST members had been identified in late 2020 regarding the three focus areas for 2021: targeted employer engagement, rapid response and incumbent worker training. WPMC conducted a bid process to identify and obtain third party trainings for regional BST members. These trainings have been interspersed on the team’s 2021 calendar of meetings, along with opportunities for discussion and planning regional activities. These trainings will initially need to be delivered virtually but hopefully by the third quarter of 2021, the team will be able to meet in person for them.

Engagement of Small Business and Promotion of entrepreneurial skills training and microenterprise services

The NEEDR and the local areas continue to target small business as well as larger employers, in recognition that small businesses employ nearly half of workers, including 48.3% working for firms with under 500 workers (the Federal threshold for “small business”), and 18% working for “very” small businesses employing fewer than 20 workers.²

Local WDB's coordinate with their Chambers of Commerce and Small Business Development Centers on entrepreneurship and a range of activities for small businesses and entrepreneurs, including hosting informational and networking events and workshops for small businesses. The region will explore offering workshops electronically and with coordination of other Regional partners. This work is often conducted in conjunction with the DCEO RED team. Local WDB's will engage SCORE (Service Corps of Retired Executives) to explore promoting entrepreneurial skills and microenterprises in the NEEDR.

NEEDR regional partners played a key role in the development of CMAP Bringing the Region Together for a stronger economic recovery report in 2020 and 2021. All regional partners understand and support greater coordination and investment in economic development in order to strengthen the region’s competitiveness, by leveraging existing efforts to deliver more than the sum of their parts. Cooperation reduces intra-regional competition and enhances the region’s global market reach, capital projects, and site readiness. New research shows the potential to sustain small- and medium-sized manufacturers by improving market growth and ecosystem initiatives across local boundaries.

² JPMorganChase, Institute: Small Business Data Dashboard, <https://www.jpmorganchase.com/corporate/institute/small-business-economic.htm> (retrieved January 26, 2020)

Strategy 2: Support employer-driven Regional sector initiatives

The NEEDR will gather information on promising practices throughout the Region and leverage these practices to support high-quality, customized, Regional and local initiatives in all of the targeted industry sectors. The many sector initiatives listed above in Chapter 1, Section B, provide further detail about how this strategy is being implemented in the Region and provide a sample of the type of initiatives that will be pursued in the coming years.

In September 2020, the seven county board chairs and the mayor of Chicago called on the Chicago Metropolitan Agency for Planning (CMAP) and Choose Chicago to assemble the Regional Economic Recovery Task Force and pursue robust economic growth that reduces inequity. Over the past year, this group helped the region focus on priorities, collaborate on solutions, and speak as one collective voice. With the task force completing its work in November 2021, we are pursuing these initiatives as a way forward for the region’s recovery — working together, for the benefit of all.

Strategy 3: Provide economic advancement for all populations through career pathways and a strong focus on work-based learning activities

The NEEDR pursues a number of strategies focused on supporting economic advancement for all populations, with a specific focus on supporting entry into the workforce and movement along career pathways for our targeted populations as outlined above. The Region will pursue customized programs and work to build career pathways as outlined in Chapter 2, Section A, for populations including:

- Low-skilled adults
- Individuals with disabilities
- Returning Citizens (formerly incarcerated individuals)
- Out of School Youth
- Veterans
- English Language Learners
- Homeless individuals
- Older individuals
- Long-term unemployed individuals

A number of projects are being pursued Region-wide. In all cases, the WPMC will work to disseminate information about the project and support peer-to-peer learning so when an initiative is successful in one Region it can be replicated or adapted to succeed in another Region.

As outlined in Chapter 1, Section A.3, the Region worked to develop and implement industry guides and manuals, industry and occupational focused PowerPoint templates, industry sector information sheets, and demand occupation information sheets. The guides and manuals incorporate career pathway materials and information to help individuals, workforce career counseling staff, other staff and business customers in developing pathway-focused training and worker preparation activities.

Work-based learning activities are outlined specifically in Chapter 3, Section D, immediately below. The Region is strongly focused on delivering a broad array of work-based training initiatives in conjunction with Regional and local businesses.

The Accelerating Opportunity initiative helped Illinois implement ICAPS, The Integrated Career and Academic Preparation System, which moves Adult Basic Education from a system focusing on attainment of the GED or equivalency to one that transitions students to post-secondary education credentialed programs. ICAPS is a partnership between Adult Education and Career & Technical Education. It integrates technical training and basic skills education in a team taught environment, leading to industry-recognized credentials and opportunities to continue on a career pathway. The NEEDR WIOA partners will work to support expansion of ICAPS. Additionally, the WIOA partners will work within the local areas to develop or expand work experience, internship, and employment opportunities for adults and youth, including those with barriers to employment. In general, many of the local areas have been moving away from individualized training accounts toward on-the-job training and work-based learning and/or blending on-the-job training and internships with ITAs and will continue this trend under WIOA.

In Lake County, the Lake County Workforce Development Board is working to expand the current on-the-job training program, which will be used to move employees up the career ladder. The idea is to create openings in entry-level positions and work with employers to fill those openings. The Region will also work to coordinate incumbent worker trainings across counties so that employers interested in particular trainings can take advantage of nearby trainings in another local area.

The Region is working with IMEC, the local Manufacturing Extension Partnership (MEP) on a significant project to move students onto career pathways in manufacturing including the region's Apprenticeship Expansion grant in which IMEC serves as the regional Navigator. And as outlined in more detail below in Chapter 3, Section D, the Region is implementing a wide range of Apprenticeship initiatives both region-wide and in individual areas that support moving a diverse population through career pathways using the apprenticeship model.

The Universal Technical Institute in Lisle (DuPage County) hosted a Ford Motor Service Tech Training, which 35 students from Ford dealerships across the 10-county Region participated in 15 weeks of training. This is duly noted because it was the first incumbent worker training project the WPMC worked together to develop and fund. And in Chicagoland, the Medical Assistant Pathway Program (MAPP) offers a unique opportunity for current full-time healthcare employees to complete a Medical Assistant (MA) certification program at Malcom X College on Chicago's West Side over the span of 18 months. Members of the cohort will participate in a 160-hour externship to provide additional training and experience.

Regional workforce leaders going forward will now explore flexibility in their current policies that can better support advancing industry specific career pathways. One example shared among the group is where the current training/testing policy prevented a participant to timely industry training program enrollment due to a testing center being closed during the pandemic.

The participant did not have access to any other testing center in order to test out to meet enrollment criteria. Thus, causing the participant to drop out of the health care occupational training program. A Regional assessment of current policies will aid the regional workforce leaders to look at which policies can better support building a skilled workforce in a timely manner, including a global pandemic. As the pandemic recedes, the workforce leaders will explore a regional work group to begin to assess and inventory policies that need to be modified to further support regional workforce successes for businesses and enrolled participants.

Strategy 4: Expand service integration

This strategy integrates and enhances the career services now received through education and workforce funding streams and programs especially for populations facing multiple barriers to employment. The Region will implement state policies on how to integrate the delivery of enhanced career services resulting in individualized plans and coordination of case management services based on these plans. The Region will use career services and case management guides and training provided by the state and follow the direction of the state to implement integrated case management systems across applicable core programs that allow data sharing between multiple service providers and programs.

The NEEDR will work with partners throughout the Region to participate in the IWIB Integrated Service Delivery Team and begin to coordinate and implement strategies that have reported measurable outcomes.

The NEEDR has a history of successfully conducting referrals among counties, especially for customers who are located near the county border. Rapid response activities have required the LWIAs to work collectively as one Region to serve those affected. The LWIAs are committed to serving customers across the Region in a seamless manner and have developed the awareness of who to contact in neighboring counties for referrals. A common Customer Relationship Management (CRM) tool has been proposed across the NEEDR, however costs and security concerns have delayed those activities.

The NEEDR and the NIWC have partnered to provide career guidance and career skill classes to the Illinois Workforce Partnership (IWP). The NIWC has expanded its in-district tuition models for WIOA customers receiving tuition vouchers. This integrated model streamlines the class selection and enrollment process for WIOA customers and reduces the administrative burden for the local areas and community colleges within the Region.

As part of overall service integration across the Region, priority activities will include:

- Regional Business Service Team – Building on the work done already by the Regional Business Team and the Region’s wider Service Integration goals, the Region will continue to develop the Regional BST through activities both in terms of breadth (inclusion of more partners) and depth (more integrated activities). The Region has piloted several innovative activities that will be continued and expanded in coming years. The Regional BST has worked together on numerous rapid response activities as

well as demand-side projects where a Regional employer has a major hiring need that demands the efforts of the entire Region to identify, prepare and refer large numbers of workers to fill a critical need.

- Front-Line Staff: Career Planner/Career Coach development and training: The Region is working to build on the BST model to more formally bring together Career Planners to share best practices, identify innovative ways to encourage and support partner integration, and to conduct cross training and program information/resources across all programs provided in the One-Stop Centers. This will be conducted through regular round-tables and other information-sharing methods.
- One-Stop Operator Development and Training – Similarly, we have begun to bring together the One-Stop Operators from all seven LWIAs to give them a larger context for the work they do and provide them with an avenue to share information and receive exposure to Regional activities.
- Northeastern Illinois Workforce Coalition (NIWC) – Seven Local Workforce Development Areas and twelve community colleges in Northeast Illinois have long partnered to provide career guidance and career skills classes to its customers. They have collaborated on special grants, such as the Health Professions Opportunity Grant (HPOG), and the Accelerated Training for Illinois Manufacturing (ATIM). These training grants and the community colleges agreed to in-district tuition for the WIOA grant-supported students. NIWC has continued to expand this in-district tuition model for WIOA customers receiving tuition vouchers.

As noted elsewhere in the Plan and immediately below, the Region would benefit from a common customer relationship management (CRM) system to better support the work of service integration system-wide.

Coordination with Wagner-Peyser and Unemployment Insurance programs is described below in Strategy 7.

During the COVID 19 pandemic, the region noted that business operations shifted initially at the onset of COVID-19 pandemic to that of survival to complete daily tasks and manage operations during COVID rather than sharing best practices or integrating/partnering with others. A few boards elaborated on their experience noting difficulties with workforce shortages, short-staffing, and overall stress on the unemployment system during COVID further hindering service integration. Regional workforce leaders were directed to accommodate the high priority service towards the unemployment insurance program in order for these UI claimants to have direct access to the public workforce system. The State assistance in implementing an online 24/7 WIOA participant application aided the program. The UI system did require access to the WIOA data system which aided the pandemic situation of serving UI claimants. The regional workforce leaders are looking forward to opportunities from the State that will serve helpful for more engagement and solutions in serving UI claimants.

While this shift in urgency to maintain day to day operations for all programs, a positive pandemic outcome to the overall state of strategy implementation shared during the COVID-

19 pandemic was the implementation of accelerated use of technology in the delivery of program services and it reemphasized the importance of working together as a system. The region is seeing virtual meetings occurring more so to expedite and to expand service integration which have allowed them to move forward with outreaching more community-based organizations that may have not been active participants in the past.

The regional workforce leaders will explore WIOA program and partner program policies in collecting data on referrals made among the programs in order to identify gaps that need to be addressed as well as further establish equitable access to all programs. This will apply to follow-up services back to the referral program in order for appropriate case management actions to be taken. One specific example was shared:

Job Center of Lake County's UNIFY Referral System –

In collaboration and support of the consortium and the Lake County Workforce Development Board, the internal partner Unify webpage was designed and launched in July 2021. The Unify webpage includes snapshots of each of the 14 Job Center partners and an electronic referral system. This internal partner webpage will increase understanding about partner programs among frontline staff members of each organization and facilitate referrals. Unify will also create a seamless process for our customers to receive a broader array of services in a more all-in-one manner. The success of this referral system was realized quickly with 240 customers being referred in the first 6 months between 13 partners. The One-Stop Operator for the Job Center of Lake County presented and shared the specifics of Unify with the regional partners. Since then, Job Centers across the region are now duplicating Unify and are implementing this process within their local area. This demonstrated the success in the focus on human experiences over processes.

Strategy 5: Promote improved data driven decision making

The Northeast Economic Development Region seeks to more aggressively use data (workforce intelligence) from a range of sources and at the qualitative and quantitative levels to better drive decision-making and support the state and Regional commitment to workforce development and job creation.

The Region will work to better capture labor market information that will allow employers and job-seekers to promote and access job openings, review changing labor market trends and opportunities, identify funding opportunities and find education, training and support services.

This strategy supports employers by establishing and managing Regional sector partnerships using talent pipeline management tools and resources. The region will provide easier access to career guidance and planning information for the delivery of enhanced career services, including information on career pathways within critical sectors of in-demand industries. It also will provide better information to employers on how to promote career opportunities and job openings and access business services, education, training resources and services.

All LWIAs in the Region have access to and purchase a variety of privately developed labor market information systems. These include: EMSI, Chmura (JobsEQ), Help Wanted online, and Burning Glass among others. The utilization of a combination of secondary data and real-time data for both employers and job-seekers has ensured a much richer perspective on the labor market, labor force needs, and future skill requirements.

The Region regularly collects and publishes key workforce intelligence by sector and posts it on the Regional website. Data mirrors the types of data that were gathered in preparation for this Plan development and included in Chapter 1 and is updated quarterly. More extensive detailed data is gathered and shared among the Regional Business Services Team and used by the LWIAs in identifying new initiatives, re-focusing the targeting of industries and in-demand occupations, and making other data-informed decisions. Data is shared with economic development partners and those entities also share their data with the local areas and the WPMC.

By sharing and expanding access to workforce intelligence of various types and levels, the NEEDR was able several years ago to successfully identify the TDL sector as a critically in-demand sector and request grant funds that supported career pathways in the industry. These career pathways have placed an emphasis on incumbent worker training, upskilling the talent in TDL.

The NEEDR will look at promising practices from among the partners throughout the Region on how to use and expand access to workforce intelligence. The Workforce Partners of Metro Chicago received a grant to develop robust tools and user-friendly information about Regional key industry sectors and local high demand occupations. The tools bring together key, most up to date labor market data to assist job seekers in being better informed in making employment choices, career decisions, and researching training opportunities.

As noted elsewhere in the Plan, the Region would benefit from a common customer relationship management (CRM) system as noted in the section immediately below. for both job-seeker and business customer case management, across all partners. Some local areas have their own systems using proprietary or off-the-shelf systems (Salesforce, others), but all seek a more comprehensive solution across partners and hope for such a solution at the state level.

The region is data rich and will place emphasis on how to use the data, identify where the data gaps are and address those gaps with actionable strategies. Regional leaders will learn from partner programs data reporting and analysis to see if there are opportunities to further collaborate to improve upon policies and referral processes to ensure expanded and equitable access to all the programs.

Another area of importance that the pandemic has caused is many programs have seen a decrease in program enrollments and/or access in certain target populations during the pandemic. Cross pollination of the various program data taken during the pandemic will aid the region to address service gaps based on target population demographics. The regional workforce leaders will explore ways for the partner programs to collectively work on sharing

aggregate data in order to address partner program access, service gaps, and needs.

Strategy 6: Increase coordination between workforce development and economic development

Each of the Region’s local areas will work closely with their respective economic development organizations, as outlined above in Chapter 2, Section C, in a variety of activities. The region will in particular work with economic development to identify the value add of specific employer driven programs, such as on-the-job training and incumbent worker training. The local WDBs will work to create expanded relationships with Chambers of Commerce on a range of activities around partnering with businesses, supporting employment at firms moving into the Region or expanding, and growing small businesses as noted above.

Workforce development business service teams have sponsored round tables with economic development partners and the Region plans to expand this practice to include additional core partners and to span across local areas. For example, in Lake County the public/private economic development organization, Lake County Partners, and the Lake County Workforce Development Board engage in formal quarterly meetings and other communication with the economic development departments in each municipality and local chambers of commerce to share information about new and growing businesses, technology incubators, and small business start-ups.

The NEEDR will gather information on promising practices of collaboration with economic development entities throughout the Region, including many efforts referenced in Chapter 2, Section C, above, and leverage these practices.

While the pandemic availed and continues to do so with various federal and state pandemic funding sources, regional workforce leaders are continuing to outreach to their regional leaders to access these funding sources in order to aid the local public workforce system to serve more, train more and become a more equitable workforce delivery model. A few local boards have outreached, and to date have been unsuccessful in attaining funding partnerships with local economic development, county and municipal organizations. Regional workforce leaders will continue to explore national best practices where regional efforts representing several local workforce boards have been successful in attaining a funding source to support implementation of regional workforce efforts. One example is the Connecticut displaced workers job training program, with funding made available through the CARES Act where the state Governors Workforce Council (GWC) partnered with their five regional workforce boards, employers, nonprofits, and the community college system to fund 19 workforce programs for displaced workers. They prioritized jobs with family supporting wages and strong career pathways, primarily in Healthcare, IT, and Manufacturing. This funding opportunity served 1,100 participants making available training and employment opportunities, access to childcare and transportation as well as a training stipend.

Strategy 7: Strengthen linkages between the One-Stop delivery system and unemployment programs

Wagner-Peyser staff are co-located in the One-Stop centers providing employment services to all job seekers. Title I and Wagner-Peyser (Title III) staff work together on joint business service committees, coordinating outreach to businesses at the policy level as well as participating together on individual business service teams and the regional BST. Efforts to further coordinate business services will be expanded. The NEEDR will work with partners to implement strategies and practices noted by the IWIB Integrated Business Services Team.

The Illinois Department of Employment Security (IDES) has integrated the UI system's Reemployment Services and Eligibility Assessment (RESEA) initiative into the One-Stops in the region. The RESEA program provides access to reemployment services through formula-based funding and a series of requirements intended to increase the use and availability of evidence-based reemployment interventions and strategies. The permanent RESEA program has four purposes:

1. Reduce UI duration through improved employment outcomes;
2. Strengthen UI program integrity;
3. Promote alignment with the vision of WIOA; and
4. Establish RESEA as an entry point to other workforce system partners.

Through the RESEA profiling process, UI claimants most likely to exhaust benefits are targeted and required to receive assistance with their reemployment efforts. IDES RESEA Workshops which are delivered at the start of services to each RESEA participant include Workforce Services-Title 1B staff presenting the WIOA Application and program eligibility information and orientations to other partner programs and services. Completing a WIOA Application is part of the RESEA Workshops in the region.

The State assistance in implementing an online 24/7 WIOA participant application aided access and participation into the program for new pandemic related UI claimants. The UI system did require access to the WIOA data system which also served well during the pandemic situation of serving UI claimants. The regional workforce leaders are looking forward to opportunities from the State that will serve helpful for higher levels of engagement and solutions in better serving UI claimants. Equitable engagement with partners, stakeholders, and the public is at the heart of building an inclusive and thriving region. The pandemic underscored disparities as well as common needs across our communities and partner programs.

CMAP and Choose Chicago brought together city and suburban leaders, industry experts, researchers, training and education providers, and nonprofits, among others. This included partnering with organizations whose communities face barriers to participating in the public process, including residents of color, low-income populations, people with disabilities, and those with limited English proficiency. Members shared insights through quarterly meetings, breakout discussions, small groups, surveys, and more. This process focused on immediate and long-term actions to accelerate a range of private and public initiatives already underway.

D. Describe Regional strategies that will increase apprenticeship and other work-based learning opportunities.

Apprenticeship

As noted above, WPMC received a grant from the Illinois Department of Commerce and Economic Opportunity (DCEO) to hire and support Regional Apprenticeship Navigators. Working primarily in the Healthcare, Manufacturing, and Transportation, Distribution and Logistics sectors (and the technology occupations within all these sectors), the Navigators are working with local business service teams or resource teams to identify employers interested in establishing or expanding apprenticeship programs, including pre-apprenticeship and youth apprenticeship programs.

The Illinois Community College board (ICCB) received a USDOL grant to expand apprenticeship programs in IT, a project active in the region. A number of other competitive Apprenticeship grants have been secured by Regional partners that continue to expand access to apprenticeship and expand the scope and diversity of industries in which apprenticeship is delivered. Apprenticeship projects in the area include multiple DCEO Apprenticeship Intermediary grants and the Chicago Cook Workforce Partnership’s ConstructionWorks project in conjunction with the Illinois Tollway.

The 2019 regional grant mentioned in Chapter 2 of this plan ultimately served the region in engaging additional businesses for opportunities in apprenticeships and other business services offered. By the end of the grant, the navigators had engaged 204 new businesses, completed four newly registered apprenticeships with 13 more paused due to COVID, and enhanced three existing apprenticeships with five more paused due to COVID. A number of in-person scheduled meetings were canceled due to COVID, but it was possible to conduct some meetings virtually. Businesses became less engaged with the project as the impact of the pandemic became apparent. As a result of this project, the navigators WPMC were able to identify multiple businesses interested in partnering with the region to establish or enhance registered apprenticeship programs. The region was awarded a grant to cover part of the cost for three of the apprenticeship projects submitted. The three companies were Otto Engineering from Kane County, FSGI from DuPage County, and VO-TECH from McHenry County. In total, these companies will graduate 14-15 apprentices.

There was a significant impact from COVID on this project. Many company leaders decided they needed to put off employee training and focus on their core business as a result of the pandemic. One of the activities included in the grant was the creation of an Apprenticeship Advisory Council. Originally it was intended to have a mix of educational institutions, workforce development agencies, employer association and others. The WPMC, with input from the navigators, decided the council should just be representatives from businesses from across the

region because their input was the most important for the project. The meetings were held at business sites of the representatives on the council. COVID impacted the council's ability to continue to meet at business sites and share information, apprenticeship ideas, programming and site tours.

Other Work-Based Learning

The Region's broad array of work-based learning activities are referenced above. All are built in close conjunction with employers and industry organizations and as partnerships between WIOA Title I and local community colleges and in particular their CTE programs. Some examples include:

- The Nicor Gas Career Academy is a six-week job-readiness program designed to prepare participants for entry-level work in the utility industry with a focus on natural gas.
- The WEL (Work, Earn, and Learn) Program delivered by Lake County Workforce Development provides an opportunity to complete a curriculum-based work experience with a local employer. The participants learn new skills from industry professionals. The work experience provides the opportunity for participants to earn industry-based credentials during or after the work experience. The purpose of the WEL Program is to improve an employer's strategy for hiring a skilled workforce and create a talent pipeline into hard-to-fill positions. Some of the most recent WEL programs include Transportation (Flagger, CDL, Forklift Operator, OSHA, CPR, and First Aid), Diesel Mechanics, Warehouse Management, and Graphic Design.
- Edward-Elmhurst Health and Northwestern Medicine, who sit on the DuPage WIB, have discussed critical hiring needs and identified Medical Assistant (MA) and Patient Care Technicians (PCT) as most in-demand positions. Together with the Board, a Healthcare Talent Pipeline was developed to steer clients from the local workforce system towards these occupations. Edward-Elmhurst Health utilized Incumbent Worker Training funds to further upskill current employees.
- DuPage County partnered with the College of DuPage to provide CNA training to existing Edward Elmhurst employees to address the shortage of patient care technicians (PCT) across the region. The County utilized IWT dollars to fund the training.

As the region's businesses and educational partners reopen and further explore how new enhanced work-based learning opportunities can grow, the regional workforce leaders will support to collaborate and assist anyway they can aid them with these new offerings in order for the WIOA program participants to engage in. Mentioned earlier in the chapter, some employers along with their education providers are exploring virtual work-based learning models such as utilization of the oculus occupational training simulators in order for students to retain and complete their career pathways. Regional workforce leaders also support taking a data-driven approach to implement long-standing priorities like work-based training and barrier reduction for target populations — efforts that will expand opportunity while reinvesting in the region's human capital.

E. Describe initiatives to shorten the time from credential to employment and address how

the area will work with the education system to begin putting training opportunities in place to meet this strategy.

Education Partners realize the value and significance of shortening the time from credential to employment. A range of activities are in place region-wide. All work-based learning activities (OJT, pre-apprenticeship, apprenticeship, and incumbent worker training) are geared toward moving workers into employment more quickly and effectively.

The Regional and Local Business Service teams, which include the community colleges, listen to employer needs and work to better understand employer training needs. Insights from these dialogues is shared to the local high schools in order to identify CTE and other programs focusing on short-term credentials that be built into dual-credit programs.

Community colleges across the Region have partnered with high schools to offer dual credit programs, which help students quickly complete their degree and enter the workforce, while saving money along the way. The community colleges in the Region are also working with four-year universities to ensure credits are recognized and accepted.

Community colleges are exploring a range of non-credit programs in conjunction with businesses, which often facilitate industry-recognized credentials more quickly than traditional course timelines, especially when these are interim credentials that would normally be part of a longer college course or program. Workers retain the value from these interim steps in themselves and should more easily be able to later take additional credentials that can be stacked toward college degrees.

McHenry County College, for instance, offers Fast Track, a program for students to earn professional certificate and degrees in 8-week sessions or shorter. MCC incorporates apprenticeships, internships, or other work experience into the student experience to support the learning and demonstration of employability skills.

F. Describe the steps that will be taken to support the state’s efforts to align and integrate education, workforce, and economic development, including:

- Fostering the improvement and expansion of employer-driven Regional sector partnerships to increase the focus on critical in-demand occupations in key sectors
- Expanding career pathway opportunities through more accelerated and work-based training and align and integrate programs of study leading to industry-recognized credentials and improved employment and earnings.
- Expanding information for employers and jobseekers to access services by improving the Illinois public-private data infrastructure to support the alignment and integration of economic development, workforce development, and education initiatives for supporting sector partnerships and career pathways.

Sector Partnerships

As detailed in Chapter 1, LWIAs in the NEEDR have worked in recent years to expand its sector

initiatives, including several sector centers in Chicago as well as sector partnerships throughout the Region and sector-based career pathway programs at the community colleges.

Regional initiatives will be guided by the development of a statewide policy framework that defines the goals and guiding principles of employer-driven partnerships and how state and Regional resources can be used to launch, expand and support them. The state has developed a statewide guide for business and industry associations to work with education, workforce and economic development in establishing and managing these partnerships to achieve and promote economic growth and economic advancement. This Region will work to align and integrate business services among the core programs along with Regional economic development partners. The Region will explore how to integrate funding and resources from core programs and economic development to support employer-driven sector initiatives, including leveraging rapid response and layoff aversion for business retention. Additionally, the NEEDR will work to share demand occupation information and develop common marketing and outreach materials around key industry sectors and demand occupations.

The Region will continue to promote opportunities that lead to career and economic advancement in critical and in-demand industries.

- As described above, the Region will support expansion of ICAPS programs.
- The Region is also interested in replicating the ATIM program in other parts of the NEEDR and in other sectors.
- Local partners are working to offer new career pathway programs. For example, the College of Lake County (CLC) is developing a career pathway that will be initially focusing on attainment of the CNA credential. The Adult Education Division of CLC has been working to gain approval of this program. CLC is also exploring accelerated training in IT which would include short-term, certificate based training based on employer needs and address the dislocated worker skill gap.

Another new work-based career pathway program is underway at Harper College. Harper College received a \$2.5 million grant to support Apprenticeships on Demand, a new initiative that aims to integrate technical instruction and on-the-job learning to train workers in high-growth and high-demand fields including insurance, IT and manufacturing. The U.S. Department of Labor awarded a total of \$175 million to 46 applicants through its American Apprenticeship grant competition, the single largest investment to date to expand U.S. apprenticeships.

- Especially innovative is the partnership between Harper and Zurich, which recently teamed to launch a first-of-its-kind apprenticeship program for the insurance industry. The program, which will foster the next generation of underwriters and claims professionals, will emulate the longtime successful dual education model in Switzerland. The first cohort began in January 2016. All apprentices are hired by Zurich into entry-level positions. They attend classes at Harper two days a week pursuing an Applied Associate of Science degree in Business Administration, with a concentration in Insurance. The course pathway includes several industry-recognized credentials. Tuition

and fees are paid by Zurich. Zurich also provides incremental increases in pay to the apprentices as they progress through the program. Harper College and Zurich worked collaboratively to design the curriculum pathway for this program.

- Additionally, the College will offer apprenticeships in manufacturing, including Industrial Maintenance Technician, Computer Numeric Control Operator and Supply Chain Assistant. Apprentices are paid employees who pursue formal coursework at Harper College focused on the Applied Associate of Science degree in Manufacturing. Apprentices follow the traditional earn and learn model where they apply the concepts learned in the classroom to on-the-job experiences. The course pathway includes several industry recognized credentials. Tuition and fees are paid by the employer and apprentices receive pay increases regularly, as they progress through the program. Employers provide input into curriculum design.

Career Pathways

As described above, the Region has been expanding career pathway offerings throughout the workforce development system through the ICAPS program. ICAPS includes comprehensive academic and social student supports (e.g., tutoring, childcare, transportation, access to public benefits, subsidized jobs), making the program ideal for many populations with barriers to employment. In the NEEDR, ICAPS is offered at City Colleges of Chicago, Prairie State College, McHenry County College, Elgin Community College, College of DuPage, College of Lake County, Joliet Junior College, Waubensee Community College, Kishwaukee College, South Suburban Community College and Harper College. Efforts are underway to develop and expand other career pathway initiatives in the Region to serve populations with barriers. For example, McHenry County is coordinating with Vocational Rehab for an on-the-job training and evaluation program for people with disabilities and is also working on plans to coordinate career pathways and career service delivery with McHenry Community College.

The Region's providers will advocate that the ICAPS model be expanded to include non-credit programs, which are currently not allowable under the model. Improved coordination between core partners through the MOU negotiation process, co-location of services within One-Stops, and adult education's involvement on the Local Workforce Boards should make referral into these programs a reality. Additionally, local programs will explore ways to better leverage TANF, SNAP, CSBG and CDBG for support services for participants facing multiple barriers.

Bridge Programs

Bridge programs prepare adults with limited academic or limited English skills to enter and succeed in post-secondary education and training that leads to career path employment in skilled jobs. While there is not a dedicated federal or state level source for bridge funding, the Illinois Community College Board and Commerce have expanded and continue to expand these programs within their existing workforce and education programs. The Illinois Community College Board recently released their RFP for adult education. The RFP puts focus on coordination under WIOA, bridge programs, and accelerated learning strategies for lower-skilled adults and ESL learners.

The Career Foundations curriculum is a tool to educate low-skilled adults on career pathways and support transitions to sector-focused bridge programs and post-secondary education and training at community colleges or community-based providers. The curriculum exposes students and job seekers to local career pathways programming options, assists with creating a plan to transition to advance to post-secondary education or training, and encourages job seekers to not only focus on the immediate job, but plan for how they could advance along a career pathway. Currently, Career Foundations is being implemented across the seven City Colleges of Chicago within the Adult Education department. Additionally, there are a number of community-based adult education and workforce providers (including WIOA Affiliate sites) in LWIA 7 are implementing the curriculum within their workforce or adult education programs.

Expanding information for employers and jobseekers to access services by improving public-private data infrastructure.

Local areas and the Region will work to implement any state-led initiatives to improve the public-private data infrastructure. Given the diversity of data systems between partners in the system, it will be necessary to have leadership from the state to allow for comprehensive integration.

The State of Illinois currently provides multiple platforms for clients to access services through technology.

- Illinois workNet, managed by the Department of Commerce and Economic Opportunity (DCEO), is a client-facing website that includes listings of all WIOA Title I providers including approved ITA training providers and programs. The site also includes links to the websites of all the other state agencies that provide services under the other WIOA titles.
- Illinois JobLink, managed by the Department of Employment Security (DES), serves as the state's labor exchange site. Employers post job openings search candidates. Jobseekers post resumes and search for and apply to the posted jobs. Unemployment Insurance recipients are required to post a resume on JobLink to maintain their benefits. JobLink also includes links to the websites of the other WIOA titles and partners.
- The Department of Human Services' (DHS) website includes an on-line web referral for Title IV Rehabilitation Services. The simple form feeds directly into the Rehabilitation Service's case management data system and is assigned to an RS case manager based on zip code.

A variety of agencies provide workforce services to regional residents, using a variety of public and private funding sources, including those listed above but also others led by other state and local partners. Agencies use multiple data systems and spreadsheets to track participants and outcomes for each program. As a result, neither service providers nor funders have a holistic view of the workforce system's impact. To address this issue, The Partnership created Career Connect, an integrated workforce information system for the Chicago/Cook area. Career Connect has served as the front-end data system for the area's workforce service providers to

track job seeker clients across programs and funding streams.

Career Connect includes both business service and case management functions. Career Connect allows The Partnership and its network of workforce service providers to conduct WIOA Title I eligibility, case management, and performance management; track participation and outcomes in non-WIOA grants, including tracking co-enrollment in WIOA; create an individualized employment plan for each job seeker customer; post job orders on behalf of employer clients; rack services provided to employers; easily pull reports to track job seeker and employer status and outcomes

All WIOA data entered in Career Connect transfers to the State's Illinois Workforce Development System (IWDS) where it is compiled for WIOA Title I federal reporting and performance management.

In March 2018, the Chicago Citywide Literacy Coalition (CCLC) launched a Career Pathway Navigator initiative. The navigator is housed at the Near West Side WorkNet Center and connects clients with WIOA Title I and Title II services offered by 13 agencies in Chicago's Pilsen neighborhood. In summer 2019, CCLC began using Career Connect to track client referrals across the 13 partners. With minimal data entry partners can refer clients to services at any one of the 13 agencies and track the status and outcomes of those referrals. CCLC plans to expand the Navigator model to two other workNet Centers in the next year, and the other sites will also use Career Connect to track referrals.

In 2020, The Partnership plans to pilot a similar referral process at one or two of its workNet Centers to track referrals across the WIOA mandated and required partners. Due to the lack of a unified state data system, workNet Centers primarily use paper forms to refer clients to partner services, making it difficult to track referral outcomes. Career Connect will provide a tracking and follow-up tool for both the agency making the referral and the agency accepting the referred customer. All participating agencies will be able to run real-time reports on the status of referrals.

The Partnership is working with the City of Chicago to create an online resource to connect people with disabilities to workforce services and other resources. The site will also help employers understand and meet accommodation requirements.

In times of crisis, as the region leaders are learning during the COVID-19 pandemic, access to human and social services can help workers hold on to high-quality work. COVID-19 exposed the need for reassessing supportive services under current funding and improving how residents connect with available resources.

The Regional Economic Recovery Task Force members identified opportunities for swift, joint action to address significant regional issues. Given the scale and scope of COVID-19's impacts, these initiatives prioritized lasting partnerships that would help to put available resources to work — both now and over the long term.

G. As part of the 2022 modification, if needed, describe the impact of the pandemic on how the Local Workforce Board(s) will coordinate the regional workforce, education and economic development activities with regional activities that are carried out in the local areas not covered in the above sections. Include what steps, to the extent known, that will be taken over the next two years to adapt to the impact of the pandemic regarding how the Local Workforce Board(s) efforts for regional coordination.

NEEDR plans to continue learning about the circumstances surrounding COVID-19 and abiding by federal, state, and local recommendations and guidelines. Regional workforce leaders at the local board level will continue to engage with community and program partners to further explore ways they can collaborate to better the public workforce system and meet the high demand for skilled workers the pandemic has caused. This includes exploring current policies, partnerships and funding opportunities to aid community leaders to better serve their businesses, and eligible program participants.

The above plan modifications noted several examples of regional efforts, work groups and economic recovery task force, where workforce leaders and partners remain to serve on and further support to aid the region in immediate and long term actions to accelerate equitable recovery initiatives.

H. As part of the 2022 modification, describe how a *workforce equity lens* is or will be incorporated in the implementation of regional workforce, education, and economic development strategies.

As noted earlier in the chapter of this plan modification, regional workforce leaders have and continue to work together in building consensus for a regional equity lens definition in order for each local board to support and collectively operate from: *We actively work to expand access and eliminate disparities people experience, especially those from marginalized communities, by providing a customized service approach to all clients.* Through the modified strategies stated and the sharing of partner aggregate program data, regional leaders will begin to identify the equity gaps that require attention and action. Regional workforce leaders support sharing of data in order to make data informed decisions to better serve and increase access for all populations within the region.

ATTACHMENT A

MANUFACTURING									
INDUSTRIES FOR PRINCIPAL OCCUPATIONS IN THE NORTHEAST REGION									
NAICS	Description	Pathway	SOC Code	SOC Title	Average Annual Job Openings	Annual Occupation Openings in Industry	2022 Percent of Occupation that is in this Industry	2022 Percent of Employment in this Industry that is this Occupation	
311	Food Manufacturing	Manufacturing Production Process Development	11Y3051	Industrial Production Managers**	93	6	6.6	0.8	
312	Beverage and Tobacco Product Manufacturing					1	1	0.9	
313	Textile Mills					1	0.6	1.2	
321	Wood Product Manufacturing					2	1.9	0.8	
322	Paper Manufacturing					2	2.6	1.3	
323	Printing and Related Support Activities					2	2.5	1	
324	Petroleum and Coal Products Manufacturing					1	0.8	1.2	
325	Chemical Manufacturing					7	7.1	1.6	
326	Plastics and Rubber Products Manufacturing					4	4.5	1.3	
327	Nonmetallic Mineral Product Manufacturing					3	2.9	1.2	
331	Primary Metal Manufacturing					3	2.8	1.3	
332	Fabricated Metal Product Manufacturing					10	11	1.2	
333	Machinery Manufacturing					6	6.8	1.1	
334	Computer and Electronic Product Manufacturing					5	5.7	1	
335	Electrical Equipment, Appliance, and Component Manufacturing					2	2.1	1.1	
336	Transportation Equipment Manufacturing	8	8.9	1					
337	Furniture and Related Product Manufacturing	2	1.9	0.9					
339	Miscellaneous Manufacturing	3	3.1	1					
311	Food Manufacturing	Logistics & Inventory Control	11Y3071	Transportation, Storage & Distribution Managers**	120	3	2.3	0.2	
312	Beverage and Tobacco Product Manufacturing					1	0.6	0.3	
322	Paper Manufacturing					1	0.6	0.2	
325	Chemical Manufacturing					2	1.4	0.2	
326	Plastics and Rubber Products Manufacturing					1	0.9	0.2	
333	Machinery Manufacturing					1	0.5	0.1	
334	Computer and Electronic Product Manufacturing					1	0.6	0.1	
336	Transportation Equipment Manufacturing	1	0.9	0.1					
324	Petroleum and Coal Products Manufacturing	Manufacturing Production Process Development	11Y9041	Engineering Managers**	151	1	0.4	0.8	
325	Chemical Manufacturing					3	1.8	0.5	
326	Plastics and Rubber Products Manufacturing					1	0.8	0.3	
327	Nonmetallic Mineral Product Manufacturing					1	0.4	0.2	
331	Primary Metal Manufacturing					1	0.4	0.2	
332	Fabricated Metal Product Manufacturing					3	2.1	0.3	
333	Machinery Manufacturing					6	4.1	0.8	
334	Computer and Electronic Product Manufacturing					17	11.5	2.5	
335	Electrical Equipment, Appliance, and Component Manufacturing					2	1.2	0.8	
336	Transportation Equipment Manufacturing					10	6.5	0.9	
339	Miscellaneous Manufacturing	2	1.4	0.5					
311	Food Manufacturing	Logistics & Inventory Control	11Y9199	Managers, All Other (incl Logistics Analysts)**	1,489	1	0.1	0.1	
324	Petroleum and Coal Products Manufacturing					1	0.1	0.9	
325	Chemical Manufacturing					6	0.4	0.5	
326	Plastics and Rubber Products Manufacturing					1	0.1	0.1	
332	Fabricated Metal Product Manufacturing					3	0.2	0.1	
333	Machinery Manufacturing					3	0.2	0.2	
334	Computer and Electronic Product Manufacturing					4	0.3	0.3	
336	Transportation Equipment Manufacturing	6	0.4	0.2					
339	Miscellaneous Manufacturing	3	0.2	0.3					
311	Food Manufacturing	Logistics & Inventory Control	13Y1081	Logisticians**	101	1	1.3	0.1	
322	Paper Manufacturing					1	0.5	0.2	
325	Chemical Manufacturing					2	2.3	0.5	
332	Fabricated Metal Product Manufacturing					1	0.9	0.1	
333	Machinery Manufacturing					1	1.4	0.2	
334	Computer and Electronic Product Manufacturing					4	3.6	0.6	
335	Electrical Equipment, Appliance, and Component Manufacturing					1	0.5	0.3	
336	Transportation Equipment Manufacturing					11	10.6	1.1	
339	Miscellaneous Manufacturing	1	0.6	0.2					
325	Chemical Manufacturing	Logistics & Inventory Control	13Y1111	Management Analysts (incl Logistics Analysts)**	956	2	0.2	0.3	
332	Fabricated Metal Product Manufacturing					1	0.1	0	
333	Machinery Manufacturing					2	0.2	0.1	
334	Computer and Electronic Product Manufacturing					6	0.6	0.5	
335	Electrical Equipment, Appliance, and Component Manufacturing					1	0.1	0.3	
336	Transportation Equipment Manufacturing					9	0.9	0.5	
339	Miscellaneous Manufacturing	1	0.1	0.2					
323	Printing and Related Support Activities	Manufacturing Production Process Development	15Y1132	Software Developers, Applications**	812	1	0.1	0.1	
325	Chemical Manufacturing					2	0.2	0.2	
332	Fabricated Metal Product Manufacturing					1	0.1	0	
333	Machinery Manufacturing					6	0.7	0.5	
334	Computer and Electronic Product Manufacturing					28	3.5	2.8	
335	Electrical Equipment, Appliance, and Component Manufacturing					1	0.1	0.3	
336	Transportation Equipment Manufacturing					9	1.1	0.6	
339	Miscellaneous Manufacturing	2	0.3	0.4					
333	Machinery Manufacturing	Manufacturing Production Process Development	15Y1133	Software Developers, Systems Software**	467	2	0.5	0.2	
334	Computer and Electronic Product Manufacturing					50	10.8	5.6	
336	Transportation Equipment Manufacturing					14	3	1	
339	Miscellaneous Manufacturing					1	0.2	0.1	

323	Printing and Related Support Activities	Manufacturing Production Process Development	15Y1199	Computer Occupations, All Other**	312	1	02	01
325	Chemical Manufacturing					1	04	01
333	Machinery Manufacturing					1	04	01
334	Computer and Electronic Product Manufacturing					3	09	02
336	Transportation Equipment Manufacturing					2	05	01
339	Miscellaneous Manufacturing	1	03	01				
332	Fabricated Metal Product Manufacturing	Manufacturing Production Process Development	17Y2071	Electrical Engineers**	94	1	06	01
333	Machinery Manufacturing					4	43	07
334	Computer and Electronic Product Manufacturing					17	18	33
335	Electrical Equipment, Appliance, and Component Manufacturing					3	35	19
336	Transportation Equipment Manufacturing					5	5	06
333	Machinery Manufacturing	Manufacturing Production Process Development	17Y2072	Electronics Engineers, exc Computer**	94	1	14	02
334	Computer and Electronic Product Manufacturing					17	18	28
335	Electrical Equipment, Appliance, and Component Manufacturing					1	14	06
336	Transportation Equipment Manufacturing					2	2	02
311	Food Manufacturing					3	15	02
313	Textile Mills	1	03	07				
321	Wood Product Manufacturing	Manufacturing Production Process Development	17Y2112	Industrial Engineers**	184	1	07	04
322	Paper Manufacturing					2	13	09
324	Petroleum and Coal Products Manufacturing					1	06	13
325	Chemical Manufacturing					8	42	13
326	Plastics and Rubber Products Manufacturing					6	33	13
327	Nonmetallic Mineral Product Manufacturing					3	14	08
331	Primary Metal Manufacturing					3	16	11
332	Fabricated Metal Product Manufacturing					10	56	09
333	Machinery Manufacturing					13	69	16
334	Computer and Electronic Product Manufacturing					22	122	3
335	Electrical Equipment, Appliance, and Component Manufacturing					5	25	18
336	Transportation Equipment Manufacturing					32	176	28
337	Furniture and Related Product Manufacturing					2	12	08
339	Miscellaneous Manufacturing					6	35	16
322	Paper Manufacturing					Manufacturing Production Process Development	17Y2141	Mechanical Engineers**
324	Petroleum and Coal Products Manufacturing	1	03	07				
325	Chemical Manufacturing	4	17	06				
326	Plastics and Rubber Products Manufacturing	4	16	07				
327	Nonmetallic Mineral Product Manufacturing	1	02	01				
331	Primary Metal Manufacturing	2	07	05				
332	Fabricated Metal Product Manufacturing	16	62	11				
333	Machinery Manufacturing	32	123	33				
334	Computer and Electronic Product Manufacturing	16	63	18				
335	Electrical Equipment, Appliance, and Component Manufacturing	5	2	17				
336	Transportation Equipment Manufacturing	31	119	22				
337	Furniture and Related Product Manufacturing	1	02	01				
339	Miscellaneous Manufacturing	4	16	08				
322	Paper Manufacturing	Manufacturing Production Process Development	17Y2199	Engineers, All Other (Including Robotics Engineers)**	173	1	04	01
324	Petroleum and Coal Products Manufacturing					1	03	04
325	Chemical Manufacturing					4	22	04
326	Plastics and Rubber Products Manufacturing					1	03	01
332	Fabricated Metal Product Manufacturing					3	18	02
333	Machinery Manufacturing					6	32	04
334	Computer and Electronic Product Manufacturing					8	45	07
335	Electrical Equipment, Appliance, and Component Manufacturing					2	09	04
336	Transportation Equipment Manufacturing					11	61	06
337	Furniture and Related Product Manufacturing					1	03	01
339	Miscellaneous Manufacturing	2	11	03				
325	Chemical Manufacturing	Manufacturing Production Process Development	17Y3023	Electrical & Electronic Engineering Technicians**	89	1	09	02
333	Machinery Manufacturing					3	33	05
334	Computer and Electronic Product Manufacturing					20	222	34
335	Electrical Equipment, Appliance, and Component Manufacturing					2	28	13
336	Transportation Equipment Manufacturing					2	2	02
324	Petroleum and Coal Products Manufacturing	Manufacturing Production Process Development	17Y3029	Engineering Techs, exc Drafters, All Other**	56	1	19	12
325	Chemical Manufacturing					1	2	02
326	Plastics and Rubber Products Manufacturing					1	1	01
332	Fabricated Metal Product Manufacturing					1	16	01
333	Machinery Manufacturing					2	33	02
334	Computer and Electronic Product Manufacturing					2	37	03
335	Electrical Equipment, Appliance, and Component Manufacturing					1	1	02
336	Transportation Equipment Manufacturing					3	46	02
339	Miscellaneous Manufacturing	1	12	02				
324	Petroleum and Coal Products Manufacturing	Manufacturing Production Process Development	19Y2031	Chemists**	83	1	1	09
325	Chemical Manufacturing					22	27	34
334	Computer and Electronic Product Manufacturing					1	09	01
311	Food Manufacturing	Manufacturing Production Process Development	19Y4031	Chemical Technicians**	69	1	12	01
324	Petroleum and Coal Products Manufacturing					1	21	14
325	Chemical Manufacturing					16	23	22
331	Primary Metal Manufacturing					1	08	01
325	Chemical Manufacturing	Manufacturing Production Process Development	41Y4011	Sales Reps, Whls/Mfg, Tech/Sci Prods**	489	7	14	08
332	Fabricated Metal Product Manufacturing					2	04	01
333	Machinery Manufacturing					8	17	07
334	Computer and Electronic Product Manufacturing					19	39	17
335	Electrical Equipment, Appliance, and Component Manufacturing					2	05	07

396	Transportation Equipment Manufacturing					2	04	01
339	Miscellaneous Manufacturing					6	12	1
311	Food Manufacturing					16	1	11
312	Beverage and Tobacco Product Manufacturing					10	06	52
313	Textile Mills					2	01	15
314	Textile Product Mills					3	02	3
315	Apparel Manufacturing					2	01	21
321	Wood Product Manufacturing					10	06	24
322	Paper Manufacturing					8	05	23
323	Printing and Related Support Activities					20	12	44
324	Petroleum and Coal Products Manufacturing					2	01	12
325	Chemical Manufacturing					11	07	14
326	Plastics and Rubber Products Manufacturing					11	07	2
327	Nonmetallic Mineral Product Manufacturing					11	07	29
331	Primary Metal Manufacturing					5	03	14
332	Fabricated Metal Product Manufacturing					33	2	21
333	Machinery Manufacturing					23	14	23
334	Computer and Electronic Product Manufacturing					10	06	09
335	Electrical Equipment, Appliance, and Component Manufacturing					5	03	16
336	Transportation Equipment Manufacturing					11	07	08
337	Furniture and Related Product Manufacturing					8	05	23
339	Miscellaneous Manufacturing					11	07	22
327	Nonmetallic Mineral Product Manufacturing	Logistics & Inventory Control	41Y4012	Sales Reps/Wholesale/Mfg, Ex Tech/Scientific**	1,625	5	22	12
311	Food Manufacturing					4	19	04
312	Beverage and Tobacco Product Manufacturing					1	03	05
313	Textile Mills					1	03	1
315	Apparel Manufacturing					1	03	13
321	Wood Product Manufacturing					1	06	05
322	Paper Manufacturing					2	09	08
323	Printing and Related Support Activities					3	15	1
325	Chemical Manufacturing					5	26	11
326	Plastics and Rubber Products Manufacturing					3	15	07
327	Nonmetallic Mineral Product Manufacturing	Logistics & Inventory Control	43Y5061	Production, Planning & Expediting Clerks**	201	1	06	04
331	Primary Metal Manufacturing					2	11	09
332	Fabricated Metal Product Manufacturing					8	4	08
333	Machinery Manufacturing					7	34	1
334	Computer and Electronic Product Manufacturing					7	35	11
335	Electrical Equipment, Appliance, and Component Manufacturing					2	11	1
336	Transportation Equipment Manufacturing					12	58	12
337	Furniture and Related Product Manufacturing					2	08	07
339	Miscellaneous Manufacturing					3	15	09
311	Food Manufacturing					18	26	13
312	Beverage and Tobacco Product Manufacturing					1	02	08
313	Textile Mills					2	03	19
314	Textile Product Mills					1	02	17
315	Apparel Manufacturing					2	03	28
316	Leather and Allied Product Manufacturing					1	01	25
321	Wood Product Manufacturing					3	05	09
322	Paper Manufacturing					6	09	19
323	Printing and Related Support Activities					9	13	21
324	Petroleum and Coal Products Manufacturing					1	01	08
325	Chemical Manufacturing	Logistics & Inventory Control	43Y5071	Shipping Receiving & Traffic Clerks**	682	13	19	18
326	Plastics and Rubber Products Manufacturing					12	17	2
327	Nonmetallic Mineral Product Manufacturing					3	04	08
331	Primary Metal Manufacturing					5	07	14
332	Fabricated Metal Product Manufacturing					27	39	18
333	Machinery Manufacturing					17	25	17
334	Computer and Electronic Product Manufacturing					10	15	11
335	Electrical Equipment, Appliance, and Component Manufacturing					5	08	18
336	Transportation Equipment Manufacturing					17	25	12
337	Furniture and Related Product Manufacturing					5	08	16
339	Miscellaneous Manufacturing					10	15	21
311	Food Manufacturing					5	16	05
312	Beverage and Tobacco Product Manufacturing					1	03	07
321	Wood Product Manufacturing					1	03	03
322	Paper Manufacturing					2	05	07
324	Petroleum and Coal Products Manufacturing					1	02	11
325	Chemical Manufacturing					3	1	06
326	Plastics and Rubber Products Manufacturing					2	06	05
327	Nonmetallic Mineral Product Manufacturing	Maintenance, Installation & Repair	49Y1011	1st Line Svcs/Mgrs, Mechanics/Installers**	330	1	04	05
331	Primary Metal Manufacturing					2	07	1
332	Fabricated Metal Product Manufacturing					3	09	03
333	Machinery Manufacturing					3	08	04
334	Computer and Electronic Product Manufacturing					1	03	02
335	Electrical Equipment, Appliance, and Component Manufacturing					1	02	03
336	Transportation Equipment Manufacturing					4	11	04
339	Miscellaneous Manufacturing					1	03	02
311	Food Manufacturing					37	91	24
312	Beverage and Tobacco Product Manufacturing					7	17	35
313	Textile Mills					4	09	38
314	Textile Product Mills					1	03	13

321	Wood Product Manufacturing				6	15	14	
322	Paper Manufacturing				14	34	37	
323	Printing and Related Support Activities				2	05	05	
324	Petroleum and Coal Products Manufacturing				5	12	42	
325	Chemical Manufacturing				22	53	27	
326	Plastics and Rubber Products Manufacturing	Maintenance, Installation & Repair	49Y9041	Industrial Machinery Mechanics**	406	14	34	21
327	Nonmetallic Mineral Product Manufacturing				7	17	16	
331	Primary Metal Manufacturing				15	38	4	
332	Fabricated Metal Product Manufacturing				18	45	11	
333	Machinery Manufacturing				20	5	19	
334	Computer and Electronic Product Manufacturing				4	11	05	
335	Electrical Equipment, Appliance, and Component Manufacturing				2	06	08	
336	Transportation Equipment Manufacturing				20	49	13	
337	Furniture and Related Product Manufacturing				2	06	06	
339	Miscellaneous Manufacturing				2	04	03	
311	Food Manufacturing				10	111	08	
312	Beverage and Tobacco Product Manufacturing				1	13	07	
313	Textile Mills				1	16	17	
321	Wood Product Manufacturing				2	22	06	
322	Paper Manufacturing				3	3	09	
324	Petroleum and Coal Products Manufacturing				1	08	07	
325	Chemical Manufacturing				4	42	06	
326	Plastics and Rubber Products Manufacturing	Maintenance, Installation & Repair	49Y9043	Maintenance Workers, Machinery**	91	5	6	1
327	Nonmetallic Mineral Product Manufacturing				2	23	06	
331	Primary Metal Manufacturing				4	4	11	
332	Fabricated Metal Product Manufacturing				7	77	05	
333	Machinery Manufacturing				2	2	02	
334	Computer and Electronic Product Manufacturing				1	15	02	
335	Electrical Equipment, Appliance, and Component Manufacturing				2	23	07	
336	Transportation Equipment Manufacturing				4	47	03	
339	Miscellaneous Manufacturing				1	1	02	
334	Computer and Electronic Product Manufacturing	Maintenance, Installation & Repair	49Y9052	Medical Equipment Repairers	55	1	13	01
339	Miscellaneous Manufacturing				1	21	02	
311	Food Manufacturing				21	23	23	
312	Beverage and Tobacco Product Manufacturing				2	02	18	
313	Textile Mills				1	01	24	
314	Textile Product Mills				1	01	13	
321	Wood Product Manufacturing				5	05	17	
322	Paper Manufacturing				5	05	22	
323	Printing and Related Support Activities				2	02	07	
324	Petroleum and Coal Products Manufacturing				1	01	15	
325	Chemical Manufacturing				11	12	24	
326	Plastics and Rubber Products Manufacturing	Maintenance, Installation & Repair	49Y9071	General Maintenance & Repair Workers**	909	8	09	23
327	Nonmetallic Mineral Product Manufacturing				5	05	19	
331	Primary Metal Manufacturing				10	11	44	
332	Fabricated Metal Product Manufacturing				13	14	14	
333	Machinery Manufacturing				8	09	13	
334	Computer and Electronic Product Manufacturing				4	04	07	
335	Electrical Equipment, Appliance, and Component Manufacturing				3	03	16	
336	Transportation Equipment Manufacturing				11	12	12	
337	Furniture and Related Product Manufacturing				3	03	11	
339	Miscellaneous Manufacturing				4	04	12	
311	Food Manufacturing				23	78	32	
312	Beverage and Tobacco Product Manufacturing				3	09	28	
313	Textile Mills				2	07	44	
314	Textile Product Mills				2	07	43	
315	Apparel Manufacturing				1	03	3	
321	Wood Product Manufacturing				7	25	37	
322	Paper Manufacturing				6	22	38	
323	Printing and Related Support Activities				8	29	39	
324	Petroleum and Coal Products Manufacturing				3	09	51	
325	Chemical Manufacturing	Production	51Y1011	1st Yr Line Svprvs/Mgrs, Prod & Operating Workers**	292	14	49	39
326	Plastics and Rubber Products Manufacturing				13	45	44	
327	Nonmetallic Mineral Product Manufacturing				7	23	33	
331	Primary Metal Manufacturing				8	28	45	
332	Fabricated Metal Product Manufacturing				32	111	43	
333	Machinery Manufacturing				17	57	33	
334	Computer and Electronic Product Manufacturing				9	31	19	
335	Electrical Equipment, Appliance, and Component Manufacturing				5	17	32	
336	Transportation Equipment Manufacturing				21	72	29	
337	Furniture and Related Product Manufacturing				7	25	41	
339	Miscellaneous Manufacturing				9	32	35	
332	Fabricated Metal Product Manufacturing	Production	51Y2022	Electric/Electronic Equipment Assemblers**	88	1	06	01
333	Machinery Manufacturing				5	61	11	
334	Computer and Electronic Product Manufacturing				40	458	89	
335	Electrical Equipment, Appliance, and Component Manufacturing				15	175	101	
336	Transportation Equipment Manufacturing				7	8	1	
339	Miscellaneous Manufacturing				2	22	08	
332	Fabricated Metal Product Manufacturing	Production	51Y2041	Structural Metal Fabricators & Fitters	87	43	491	28
333	Machinery Manufacturing				11	127	11	
335	Electrical Equipment, Appliance, and Component Manufacturing				2	26	07	

336	Transportation Equipment Manufacturing	Production	51Y2041	Structural Metal Fabricators & Fitters	87	10	11.8	0.7
337	Furniture and Related Product Manufacturing					1	0.6	0.1
339	Miscellaneous Manufacturing					5	5.7	0.9
311	Food Manufacturing	Production	51Y2092	Team Assemblers	1,322	33	2.5	1.9
312	Beverage and Tobacco Product Manufacturing					4	0.3	1.6
314	Textile Product Mills					3	0.2	2.9
316	Leather and Allied Product Manufacturing					1	0.1	3.8
321	Wood Product Manufacturing					44	3.3	9.1
322	Paper Manufacturing					8	0.6	1.9
323	Printing and Related Support Activities					5	0.4	1
324	Petroleum and Coal Products Manufacturing					3	0.2	1.9
325	Chemical Manufacturing					16	1.2	1.8
326	Plastics and Rubber Products Manufacturing					48	3.6	6.5
327	Nonmetallic Mineral Product Manufacturing					16	1.2	3.2
331	Primary Metal Manufacturing					9	0.7	2.2
332	Fabricated Metal Product Manufacturing					97	7.3	5.3
333	Machinery Manufacturing					132	10	10.7
334	Computer and Electronic Product Manufacturing					48	3.6	4.1
335	Electrical Equipment, Appliance, and Component Manufacturing	50	3.8	12.8				
336	Transportation Equipment Manufacturing	268	20.3	15.1				
337	Furniture and Related Product Manufacturing	44	3.3	9.9				
339	Miscellaneous Manufacturing	74	5.6	11.6				
311	Food Manufacturing	Production	51Y2099	Assemblers & Fabricators, All Other**	192	2	1.3	0.3
321	Wood Product Manufacturing					6	3.3	2.6
325	Chemical Manufacturing					1	0.7	0.3
326	Plastics and Rubber Products Manufacturing					3	1.6	0.8
327	Nonmetallic Mineral Product Manufacturing					2	1.1	0.8
332	Fabricated Metal Product Manufacturing					9	4.5	0.9
333	Machinery Manufacturing					7	3.9	1.2
334	Computer and Electronic Product Manufacturing					3	1.8	0.6
335	Electrical Equipment, Appliance, and Component Manufacturing					3	1.4	1.3
336	Transportation Equipment Manufacturing					32	16.8	3.5
337	Furniture and Related Product Manufacturing	5	2.5	2.1				
339	Miscellaneous Manufacturing	10	5.1	3				
311	Food Manufacturing	Production	51Y3092	Food Batchmakers	150	119	79.3	5.6
312	Beverage and Tobacco Product Manufacturing					2	1.4	0.8
311	Food Manufacturing	Production	51Y3093	Food Cooking Machine Operators & Tenders	53	39	74.3	1.7
326	Plastics and Rubber Products Manufacturing					12	4.5	1.2
331	Primary Metal Manufacturing					11	4	1.8
332	Fabricated Metal Product Manufacturing					104	39.3	4.2
333	Machinery Manufacturing					49	18.4	2.9
334	Computer and Electronic Product Manufacturing					13	5	0.9
335	Electrical Equipment, Appliance, and Component Manufacturing					10	3.7	1.8
336	Transportation Equipment Manufacturing					48	18.2	2
337	Furniture and Related Product Manufacturing					1	0.2	0.1
339	Miscellaneous Manufacturing					10	3.9	1.2
321	Wood Product Manufacturing	Production	51Y4031	Cutting, Punching & Press Machine Operators	80	1	1	0.4
322	Paper Manufacturing					1	1.2	0.6
326	Plastics and Rubber Products Manufacturing					6	7.6	2.2
331	Primary Metal Manufacturing					5	5.9	2.8
332	Fabricated Metal Product Manufacturing					25	31.5	3.6
333	Machinery Manufacturing					8	9.6	1.6
334	Computer and Electronic Product Manufacturing					2	2.5	0.4
335	Electrical Equipment, Appliance, and Component Manufacturing					2	3.1	1.6
336	Transportation Equipment Manufacturing					10	12.9	1.5
337	Furniture and Related Product Manufacturing					2	2.8	1.3
339	Miscellaneous Manufacturing	2	2.9	0.9				
326	Plastics and Rubber Products Manufacturing	Production	51Y4033	Grind/Polish Machine Tool Setters & Operators	57	2	3.8	0.4
327	Nonmetallic Mineral Product Manufacturing					1	1.5	0.2
331	Primary Metal Manufacturing					7	12	2.1
332	Fabricated Metal Product Manufacturing					22	38.8	1.6
333	Machinery Manufacturing					10	17.6	1.1
335	Electrical Equipment, Appliance, and Component Manufacturing					1	1.8	0.4
336	Transportation Equipment Manufacturing					7	11.8	0.5
339	Miscellaneous Manufacturing					3	6	0.7
311	Food Manufacturing	Production	51Y4041	Machinists**	649	1	0.1	0
313	Textile Mills					1	0.1	0.3
321	Wood Product Manufacturing					1	0.1	0.1
322	Paper Manufacturing					3	0.4	0.5
323	Printing and Related Support Activities					1	0.1	0.1
324	Petroleum and Coal Products Manufacturing					1	0.2	1
325	Chemical Manufacturing					5	0.7	0.4
326	Plastics and Rubber Products Manufacturing					10	1.5	1.1
327	Nonmetallic Mineral Product Manufacturing					5	0.7	0.8
331	Primary Metal Manufacturing					12	1.9	2.2
332	Fabricated Metal Product Manufacturing					228	35.1	10.2
333	Machinery Manufacturing					108	16.6	7
334	Computer and Electronic Product Manufacturing					19	3	1.4
335	Electrical Equipment, Appliance, and Component Manufacturing					10	1.6	2.2
336	Transportation Equipment Manufacturing					78	12	3.6
337	Furniture and Related Product Manufacturing	3	0.5	0.6				

339	Miscellaneous Manufacturing					18	27	23
326	Plastics and Rubber Products Manufacturing	Production	51Y4081	Multiple Machine Tool Setters & Operators**	58	6	10.1	1.3
331	Primary Metal Manufacturing					3	5.5	1.1
332	Fabricated Metal Product Manufacturing					16	27	1.3
333	Machinery Manufacturing					9	16.3	1.2
334	Computer and Electronic Product Manufacturing					1	1.8	0.1
335	Electrical Equipment, Appliance, and Component Manufacturing					3	5.6	1.3
336	Transportation Equipment Manufacturing					12	20.6	1.1
337	Furniture and Related Product Manufacturing					2	2.6	0.5
339	Miscellaneous Manufacturing					3	5.5	0.8
321	Wood Product Manufacturing	Production	51Y4121	Welders, Cutters, Solderers & Brazers**	262	1	0.3	0.3
326	Plastics and Rubber Products Manufacturing					1	0.2	0.1
327	Nonmetallic Mineral Product Manufacturing					3	1	0.9
331	Primary Metal Manufacturing					5	1.9	2
332	Fabricated Metal Product Manufacturing					64	24.3	6.2
333	Machinery Manufacturing					35	13.2	4.9
334	Computer and Electronic Product Manufacturing					4	1.6	0.6
335	Electrical Equipment, Appliance, and Component Manufacturing					3	1.1	1.3
336	Transportation Equipment Manufacturing					33	12.5	3.3
337	Furniture and Related Product Manufacturing	2	0.9	1				
339	Miscellaneous Manufacturing	2	0.8	0.6				
331	Primary Metal Manufacturing	Production	51Y4122	Welding/Soldering/Brazing Machine Setters & Operators**	92	1	1.1	0.2
332	Fabricated Metal Product Manufacturing					27	29.1	1.2
333	Machinery Manufacturing					18	20	1.3
334	Computer and Electronic Product Manufacturing					1	1.2	0.1
335	Electrical Equipment, Appliance, and Component Manufacturing					3	3.2	0.6
336	Transportation Equipment Manufacturing					25	27	1.2
337	Furniture and Related Product Manufacturing					2	1.8	0.3
339	Miscellaneous Manufacturing					2	2.4	0.3
313	Textile Mills					Production	51Y5112	Printing Press Operators & Job Printers**
314	Textile Product Mills	1	0.5	1				
322	Paper Manufacturing	12	8.5	4.2				
323	Printing and Related Support Activities	78	55.5	21.9				
326	Plastics and Rubber Products Manufacturing	4	3	0.9				
339	Miscellaneous Manufacturing	1	0.9	0.3				
322	Paper Manufacturing	Manufacturing Production Process Development	51Y8091	Chemical Plant & System Operators**	52	1	1.7	0.2
324	Petroleum and Coal Products Manufacturing					2	3.4	1.1
325	Chemical Manufacturing					48	91.5	4.2
311	Food Manufacturing	Production	51Y9011	Chemical Equipment Operators/Tenders	118	1	1	0
322	Paper Manufacturing					2	2	0.3
324	Petroleum and Coal Products Manufacturing					3	2.5	1.3
325	Chemical Manufacturing					94	79.3	5.6
326	Plastics and Rubber Products Manufacturing					5	4.4	0.4
331	Primary Metal Manufacturing					1	1.1	0.2
332	Fabricated Metal Product Manufacturing					1	0.9	0
336	Transportation Equipment Manufacturing					1	0.5	0
311	Food Manufacturing					Production	51Y9023	Mix/Blend Machine Setters, Operators & Tenders
312	Beverage and Tobacco Product Manufacturing	2	1.8	1.1				
313	Textile Mills	1	0.5	0.7				
322	Paper Manufacturing	2	2	0.7				
324	Petroleum and Coal Products Manufacturing	4	3	3.4				
325	Chemical Manufacturing	51	42.5	6.7				
326	Plastics and Rubber Products Manufacturing	7	6	1.2				
327	Nonmetallic Mineral Product Manufacturing	13	10.5	3				
332	Fabricated Metal Product Manufacturing	1	0.7	0.1				
336	Transportation Equipment Manufacturing	1	0.6	0				
339	Miscellaneous Manufacturing	1	0.7	0.2				
311	Food Manufacturing	Production	51Y9041	Extruding/Forming/Compacting Machine Operators	64	6	8.8	0.4
312	Beverage and Tobacco Product Manufacturing					1	1.5	0.6
321	Wood Product Manufacturing					1	1.9	0.3
322	Paper Manufacturing					3	4.1	0.8
325	Chemical Manufacturing					7	10.6	1
326	Plastics and Rubber Products Manufacturing					19	29.9	3.4
327	Nonmetallic Mineral Product Manufacturing					15	23.2	3.9
331	Primary Metal Manufacturing					1	1.7	0.3
332	Fabricated Metal Product Manufacturing					1	1.6	0.1
335	Electrical Equipment, Appliance, and Component Manufacturing					1	0.9	0.2
336	Transportation Equipment Manufacturing					1	0.8	0
339	Miscellaneous Manufacturing	3	4.5	0.6				
311	Food Manufacturing	Manufacturing Production Process Development	51Y9061	Inspectors, Testers, Sorters & Weighers	454	30	6.6	2.2
312	Beverage and Tobacco Product Manufacturing					3	0.7	1.9
313	Textile Mills					4	0.9	4.6
314	Textile Product Mills					2	0.4	2.4
315	Apparel Manufacturing					2	0.4	2.9
321	Wood Product Manufacturing					6	1.3	1.7
322	Paper Manufacturing					5	1.1	1.6
323	Printing and Related Support Activities					4	0.9	1.1
324	Petroleum and Coal Products Manufacturing					1	0.3	1.2
325	Chemical Manufacturing					22	4.8	3.2
326	Plastics and Rubber Products Manufacturing					25	5.6	4.7
327	Nonmetallic Mineral Product Manufacturing					8	1.8	2.1

331	Primary Metal Manufacturing				10	2.3	3.2					
332	Fabricated Metal Product Manufacturing				40	8.9	2.9					
333	Machinery Manufacturing				21	4.7	2.3					
334	Computer and Electronic Product Manufacturing				25	5.4	2.8					
335	Electrical Equipment, Appliance, and Component Manufacturing				9	2	3					
336	Transportation Equipment Manufacturing				45	10	3.4					
337	Furniture and Related Product Manufacturing				5	1	1.3					
339	Miscellaneous Manufacturing				13	2.9	2.7					
311	Food Manufacturing	Production	51Y9111	Packaging & Filling Machine Operators & Tenders	420	127	30.3	7.8				
312	Beverage and Tobacco Product Manufacturing					22	5.2	10.3				
313	Textile Mills					1	0.3	1.3				
314	Textile Product Mills					1	0.2	0.8				
321	Wood Product Manufacturing					3	0.6	0.6				
322	Paper Manufacturing					8	1.9	2.1				
323	Printing and Related Support Activities					4	0.9	0.8				
324	Petroleum and Coal Products Manufacturing					2	0.4	1.5				
325	Chemical Manufacturing					50	11.8	6				
326	Plastics and Rubber Products Manufacturing					15	3.6	2.2				
327	Nonmetallic Mineral Product Manufacturing					5	1.3	1.2				
331	Primary Metal Manufacturing					3	0.6	0.6				
332	Fabricated Metal Product Manufacturing					7	1.6	0.4				
335	Electrical Equipment, Appliance, and Component Manufacturing					2	0.4	0.5				
336	Transportation Equipment Manufacturing					2	0.4	0.1				
337	Furniture and Related Product Manufacturing					1	0.3	0.4				
339	Miscellaneous Manufacturing					7	1.6	1.1				
311	Food Manufacturing					Production	51Y9199	Production Workers, All Other	570	62	10.9	2
312	Beverage and Tobacco Product Manufacturing									2	0.3	0.5
313	Textile Mills									1	0.1	0.4
314	Textile Product Mills	1	0.1	0.4								
315	Apparel Manufacturing	1	0.1	0.2								
316	Leather and Allied Product Manufacturing	1	0.2	2.1								
321	Wood Product Manufacturing	10	1.7	1.1								
322	Paper Manufacturing	14	2.4	1.8								
323	Printing and Related Support Activities	5	0.9	0.5								
324	Petroleum and Coal Products Manufacturing	1	0.2	0.5								
325	Chemical Manufacturing	20	3.5	1.2								
326	Plastics and Rubber Products Manufacturing	14	2.4	1								
327	Nonmetallic Mineral Product Manufacturing	12	2.1	1.3								
331	Primary Metal Manufacturing	10	1.7	1.2								
332	Fabricated Metal Product Manufacturing	22	3.8	0.7								
333	Machinery Manufacturing	17	2.9	0.7								
334	Computer and Electronic Product Manufacturing	7	1.3	0.4								
335	Electrical Equipment, Appliance, and Component Manufacturing	8	1.4	1.1								
336	Transportation Equipment Manufacturing	27	4.8	0.9								
337	Furniture and Related Product Manufacturing	4	0.7	0.5								
339	Miscellaneous Manufacturing	16	2.8	1.4								

MANUFACTURING

INDUSTRIES FOR PRINCIPAL OCCUPATIONS IN THE NORTHEAST REGION

Pathway	SOC Code	SOC Title	Average Annual Job Openings	2022 Percent of Employment in this Industry			Median Annual	Education Entry Level	Experience Entry Level	Training Entry Level																
				Annual Occupations in Industry	Occupations that are in this Industry	Percent of Employment in this Industry																				
Manufacturing Production Process Development	11E3051	Industrial Production Managers**	93	6	0.6	0.8	\$90,892	Bachelor's degree	1 to 5 years	None																
				1	1	0.9																				
				1	0.6	1.2																				
				2	1.9	0.8																				
				2	2.6	1.3																				
				2	2.5	1																				
				1	0.8	1.2																				
				7	7.1	1.6																				
				4	4.5	1.3																				
				3	2.9	1.2																				
				3	2.8	1.3																				
				10	11	1.2																				
				6	6.8	1.1																				
				5	5.7	1																				
				2	2.1	1.1																				
Logistics & Inventory Control	11E9071	Transportation, Storage & Distribution Managers**	120	8	8.9	1	\$81,823	High school diploma or equivalent	More than 5 years	None																
				2	1.9	0.9																				
				3	3.1	1																				
				3	2.3	0.2																				
				1	0.6	0.3																				
				1	0.6	0.2																				
				2	1.4	0.2																				
				1	0.9	0.2																				
				1	0.5	0.1																				
				1	0.6	0.1																				
				1	0.9	0.1																				
				Manufacturing Production Process Development	11E9041	Engineering Managers**					151	3	0.4	0.8	\$123,223	Bachelor's degree	More than 5 years	None								
												3	1.8	0.5												
												1	0.8	0.3												
												1	0.4	0.2												
1	0.4	0.2																								
3	2.1	0.3																								
6	4.1	0.8																								
17	11.5	2.5																								
2	1.2	0.8																								
10	6.5	0.9																								
2	1.4	0.5																								
Logistics & Inventory Control	11E9199	Managers, All Other (incl. Logistics Analysts)**	1,469				1	0.1	0.1	\$99,701		High school diploma or equivalent	1 to 5 years	None												
							1	0.1	0.9																	
							6	0.4	0.5																	
							1	0.1	0.1																	
				3	0.2	0.1																				
				3	0.2	0.2																				
				4	0.3	0.3																				
				6	0.4	0.2																				
				3	0.2	0.3																				
				Logistics & Inventory Control	13E1061	Logisticians**	101	1	1.3		0.1				\$65,953	Bachelor's degree	1 to 5 years	None								
								1	0.5		0.2															
								2	2.3		0.5															
								1	0.9		0.1															
								1	1.4		0.2															
								4	3.6		0.6															
1	0.5	0.3																								
11	10.6	1.1																								
1	0.6	0.2																								
Logistics & Inventory Control	13E1111	Management Analysts (incl. Logistics Analysts)**	956					2	0.2	0.3	\$86,330	Bachelor's degree	1 to 5 years	None												
								1	0.1	0																
								2	0.2	0.1																
								6	0.6	0.5																
								1	0.1	0.3																
								9	0.9	0.5																
				1	0.1	0.2																				
				Manufacturing Production Process Development	15E1132	Software Developers, Applications**	812	1	0.1	0.1					\$87,544	Bachelor's degree	None	None								
								2	0.2	0.2																
								1	0.1	0																
								6	0.7	0.5																
								28	3.5	2.8																
								1	0.1	0.3																
								9	1.1	0.6																
								2	0.3	0.4																
Manufacturing Production Process Development	15E1133	Software Developers, Systems Software**	467					2	0.5	0.2	\$97,363	Bachelor's degree	None	None												
								50	10.8	5.6																
								14	3	1																
								1	0.2	0.1																
								Manufacturing Production Process Development	15E1199	Computer Occupations, All Other**									312	1	0.2	0.1	\$88,096	Bachelor's degree	None	None
																				1	0.4	0.1				
																				1	0.4	0.1				
				3	0.9	0.2																				
				2	0.5	0.1																				
				1	0.3	0.1																				
				Manufacturing Production Process Development	17E2071	Electrical Engineers**	94								1	0.6	0.1	\$91,445		Bachelor's degree	None	None				
															4	4.3	0.7									
															17	18	3.3									
															3	3.5	1.9									
															5	5	0.6									
1	1.4	0.2																								

Manufacturing Production Process Development	17E2072	Electronics Engineers, exc Compute**	94	17 18 5 2 8 1 14 0 6 2 2 0 2 3 15 0 2 1 0 3 0 7 1 0 7 0 4 2 1 3 0 9 1 0 6 1 3 8 4 2 1 3 6 3 3 1 3 3 1 4 0 8 3 1 6 1 1 10 5 6 0 9 13 6 9 1 6 22 12 2 3 5 2 5 1 8 32 17 6 2 8 2 1 2 0 8 6 3 5 1 6	\$88 723	Bachelor's degree	None	None
Manufacturing Production Process Development	17E2112	Industrial Engineers**	184	1 0 4 0 3 1 0 3 0 7 4 1 7 0 6 4 1 6 0 7 1 0 2 0 1 2 0 7 0 5 16 6 2 1 1 32 12 3 3 3 16 6 3 1 8 5 2 1 1 7 31 11 9 2 2 1 0 2 0 1 4 1 6 0 8	\$77,526	Bachelor's degree	None	None
Manufacturing Production Process Development	17E2141	Mechanical Engineers**	257	1 0 4 0 1 1 0 3 0 4 4 2 2 0 4 1 0 3 0 1 3 1 8 0 2 6 3 2 0 4 8 4 5 0 7 2 0 9 0 4 11 6 1 0 6 1 0 3 0 1 2 1 1 0 3	\$78 333	Bachelor's degree	None	None
Manufacturing Production Process Development	17E2199	Engineers, All Other (including Robotics Engineers)**	173	1 0 9 0 2 3 3 3 0 5 20 22 2 3 4 2 2 8 1 3 2 2 0 2	\$89 765	Bachelor's degree	None	None
Manufacturing Production Process Development	17E3023	Electrical & Electronic Engineering Technicians**	89	1 1 9 1 2 1 2 0 2 1 1 0 1 1 1 6 0 1 2 3 3 0 2 2 3 7 0 3 1 1 0 2 3 4 6 0 2 1 1 2 0 2	\$60 196	Associate's degree	None	None
Manufacturing Production Process Development	17E3029	Engineering Techs, exc Drafters, All Other**	56	1 1 1 0 9 22 27 3 4 1 0 9 0 1 1 1 2 0 1 1 2 1 1 4 16 23 1 2 2 1 0 8 0 1	\$60 259	Associate's degree	None	None
Manufacturing Production Process Development	19E2031	Chemists**	83	7 1 4 0 8 2 0 4 0 1 8 1 7 0 7 19 3 9 1 7 2 0 5 0 7 2 0 4 0 3 6 1 2 1	\$80 340	Bachelor's degree	None	None
Manufacturing Production Process Development	19E4031	Chemical Technicians**	69	16 1 1 1 1 10 0 6 5 2 2 0 1 1 5 3 0 2 3 2 0 1 2 1 10 0 6 2 4 8 0 5 2 3 20 1 2 4 4 2 0 1 1 2 11 0 7 1 4 11 0 7 2 11 0 7 2 9 5 0 3 1 4 33 2 2 1 23 1 4 2 3 10 0 6 0 9 5 0 3 1 6 11 0 7 0 8 8 0 5 2 3 11 0 7 2 2	\$46 897	Associate's degree	None	Moderate term on the job training
Manufacturing Production Process Development	41E4011	Sales Reps, Whls/Mfg, Tech/Sci Prods**	489	16 1 1 1 1 10 0 6 5 2 2 0 1 1 5 3 0 2 3 2 0 1 2 1 10 0 6 2 4 8 0 5 2 3 20 1 2 4 4 2 0 1 1 2 11 0 7 1 4 11 0 7 2 11 0 7 2 9 5 0 3 1 4 33 2 2 1 23 1 4 2 3 10 0 6 0 9 5 0 3 1 6 11 0 7 0 8 8 0 5 2 3 11 0 7 2 2	\$56 304	Bachelor's degree	None	Moderate term on the job training
Manufacturing Production Process Development	41E4012	Sales Reps/Wholesale/Mfg Ex Tech/Sci Prods**	1625	16 1 1 1 1 10 0 6 5 2 2 0 1 1 5 3 0 2 3 2 0 1 2 1 10 0 6 2 4 8 0 5 2 3 20 1 2 4 4 2 0 1 1 2 11 0 7 1 4 11 0 7 2 11 0 7 2 9 5 0 3 1 4 33 2 2 1 23 1 4 2 3 10 0 6 0 9 5 0 3 1 6 11 0 7 0 8 8 0 5 2 3 11 0 7 2 2	\$59 725	High school diploma or equivalent	None	Moderate term on the job training
Logistics & Inventory Control	43E5032	Dispatchers**	207	5 2 2 1 2 4 1 9 0 4	\$42 520	High school diploma or equivalent	None	Moderate term on the job training

Logistics & Inventory Control	43E5061	Production, Planning & Expediting Clerks**	201	1	03	05	\$46,716	High school diploma or equivalent	None	ModerateTerm onEtheJob training
				1	03	1				
				1	03	13				
				1	06	05				
				2	09	08				
				3	15	1				
				5	26	11				
				3	15	07				
				1	06	04				
				2	11	09				
				8	4	08				
				7	34	1				
				7	35	11				
				2	11	1				
				12	58	12				
				2	08	07				
				3	15	09				
Logistics & Inventory Control	43E5071	Shipping Receiving & Traffic Clerks**	682	18	26	13	\$50,693	High school diploma or equivalent	None	ShortEterm onEtheJob training
				1	02	08				
				2	03	19				
				1	02	17				
				2	03	28				
				1	01	25				
				3	05	09				
				6	09	19				
				9	13	21				
				1	01	08				
				13	19	18				
				12	17	2				
				3	04	08				
				5	07	14				
				27	39	18				
				17	25	17				
				10	15	11				
5	08	18								
17	25	12								
5	08	16								
10	15	21								
Maintenance, Installation & Repair	49E1011	1stPLine Spurs/Mgrs, Mechanics/Installers**	330	5	16	05	\$70,566	High school diploma or equivalent	1 to 5 years	None
				1	03	07				
				1	03	03				
				2	05	07				
				1	02	11				
				3	1	06				
				2	06	05				
				1	04	05				
				2	07	1				
				3	09	03				
				3	08	04				
				1	03	02				
				1	02	03				
				4	11	04				
				1	03	02				
				37	91	24				
				Maintenance, Installation & Repair	49E9041	Industrial Machinery Mechanics**				
4	09	38								
1	03	13								
6	15	14								
14	34	37								
2	05	05								
5	12	42								
22	53	27								
14	34	21								
7	17	16								
15	38	4								
18	45	11								
20	5	19								
4	11	05								
2	06	08								
20	49	13								
2	06	06								
2	04	03								
Maintenance, Installation & Repair	49E9043	Maintenance Workers, Machinery**	91	10	11	08	\$47,703	High school diploma or equivalent	None	ModerateTerm onEtheJob training
				1	13	07				
				1	16	17				
				2	22	06				
				3	3	09				
				1	08	07				
				4	42	06				
				5	6	1				
				2	23	06				
				4	4	11				
				7	77	05				
				2	2	02				
				1	15	02				
				2	23	07				
				4	47	03				
				1	1	02				
				Maintenance, Installation & Repair	49E9062	Medical Equipment Repairers				
1	21	02								
21	23	23								
				2	02	18				
				1	01	24				

Maintenance, Installation & Repair	49E2071	General Maintenance & Repair Workers**	909	<table border="1"> <tbody> <tr><td>1</td><td>01</td><td>13</td></tr> <tr><td>5</td><td>05</td><td>17</td></tr> <tr><td>5</td><td>05</td><td>22</td></tr> <tr><td>2</td><td>02</td><td>07</td></tr> <tr><td>1</td><td>01</td><td>15</td></tr> <tr><td>11</td><td>12</td><td>24</td></tr> <tr><td>8</td><td>09</td><td>23</td></tr> <tr><td>5</td><td>05</td><td>19</td></tr> <tr><td>10</td><td>11</td><td>44</td></tr> <tr><td>13</td><td>14</td><td>14</td></tr> <tr><td>8</td><td>09</td><td>13</td></tr> <tr><td>4</td><td>04</td><td>07</td></tr> <tr><td>3</td><td>03</td><td>16</td></tr> <tr><td>11</td><td>12</td><td>12</td></tr> <tr><td>3</td><td>03</td><td>11</td></tr> <tr><td>4</td><td>04</td><td>12</td></tr> </tbody> </table>	1	01	13	5	05	17	5	05	22	2	02	07	1	01	15	11	12	24	8	09	23	5	05	19	10	11	44	13	14	14	8	09	13	4	04	07	3	03	16	11	12	12	3	03	11	4	04	12	\$41,111	High school diploma or equivalent	None	Moderate term on the job training												
1	01	13																																																																		
5	05	17																																																																		
5	05	22																																																																		
2	02	07																																																																		
1	01	15																																																																		
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10	11	44																																																																		
13	14	14																																																																		
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11	12	12																																																																		
3	03	11																																																																		
4	04	12																																																																		
Production	51E1011	1st Line Svcs/Mgrs, Prod & Operating Workers**	292	<table border="1"> <tbody> <tr><td>23</td><td>78</td><td>32</td></tr> <tr><td>3</td><td>09</td><td>28</td></tr> <tr><td>2</td><td>07</td><td>44</td></tr> <tr><td>2</td><td>07</td><td>43</td></tr> <tr><td>1</td><td>03</td><td>3</td></tr> <tr><td>7</td><td>25</td><td>37</td></tr> <tr><td>6</td><td>22</td><td>38</td></tr> <tr><td>8</td><td>29</td><td>39</td></tr> <tr><td>3</td><td>09</td><td>51</td></tr> <tr><td>14</td><td>49</td><td>39</td></tr> <tr><td>19</td><td>45</td><td>44</td></tr> <tr><td>7</td><td>23</td><td>33</td></tr> <tr><td>8</td><td>28</td><td>45</td></tr> <tr><td>32</td><td>111</td><td>43</td></tr> <tr><td>17</td><td>57</td><td>33</td></tr> <tr><td>9</td><td>31</td><td>19</td></tr> <tr><td>5</td><td>17</td><td>32</td></tr> <tr><td>21</td><td>72</td><td>29</td></tr> <tr><td>7</td><td>25</td><td>41</td></tr> <tr><td>9</td><td>32</td><td>35</td></tr> </tbody> </table>	23	78	32	3	09	28	2	07	44	2	07	43	1	03	3	7	25	37	6	22	38	8	29	39	3	09	51	14	49	39	19	45	44	7	23	33	8	28	45	32	111	43	17	57	33	9	31	19	5	17	32	21	72	29	7	25	41	9	32	35	\$56,877	Postsecondary non-degree award	1 to 5 years	None
23	78	32																																																																		
3	09	28																																																																		
2	07	44																																																																		
2	07	43																																																																		
1	03	3																																																																		
7	25	37																																																																		
6	22	38																																																																		
8	29	39																																																																		
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19	45	44																																																																		
7	23	33																																																																		
8	28	45																																																																		
32	111	43																																																																		
17	57	33																																																																		
9	31	19																																																																		
5	17	32																																																																		
21	72	29																																																																		
7	25	41																																																																		
9	32	35																																																																		
Production	51E2022	Electric/Electronic Equipment Assemblers**	88	<table border="1"> <tbody> <tr><td>1</td><td>06</td><td>01</td></tr> <tr><td>5</td><td>61</td><td>11</td></tr> <tr><td>40</td><td>458</td><td>89</td></tr> <tr><td>15</td><td>175</td><td>101</td></tr> <tr><td>7</td><td>8</td><td>1</td></tr> <tr><td>2</td><td>22</td><td>08</td></tr> </tbody> </table>	1	06	01	5	61	11	40	458	89	15	175	101	7	8	1	2	22	08	\$27,642	High school diploma or equivalent	None	Short term on the job training																																										
1	06	01																																																																		
5	61	11																																																																		
40	458	89																																																																		
15	175	101																																																																		
7	8	1																																																																		
2	22	08																																																																		
Production	51E2041	Structural Metal Fabricators & Fitters	87	<table border="1"> <tbody> <tr><td>43</td><td>491</td><td>28</td></tr> <tr><td>11</td><td>127</td><td>11</td></tr> <tr><td>7</td><td>26</td><td>07</td></tr> <tr><td>10</td><td>118</td><td>07</td></tr> <tr><td>1</td><td>06</td><td>01</td></tr> <tr><td>5</td><td>57</td><td>09</td></tr> </tbody> </table>	43	491	28	11	127	11	7	26	07	10	118	07	1	06	01	5	57	09	\$37,088	High school diploma or equivalent	None	Moderate term on the job training																																										
43	491	28																																																																		
11	127	11																																																																		
7	26	07																																																																		
10	118	07																																																																		
1	06	01																																																																		
5	57	09																																																																		
Production	51E2092	Team Assemblers	1322	<table border="1"> <tbody> <tr><td>33</td><td>25</td><td>19</td></tr> <tr><td>4</td><td>03</td><td>16</td></tr> <tr><td>3</td><td>02</td><td>29</td></tr> <tr><td>1</td><td>01</td><td>38</td></tr> <tr><td>44</td><td>33</td><td>91</td></tr> <tr><td>8</td><td>06</td><td>19</td></tr> <tr><td>5</td><td>04</td><td>1</td></tr> <tr><td>3</td><td>02</td><td>19</td></tr> <tr><td>16</td><td>12</td><td>18</td></tr> <tr><td>48</td><td>36</td><td>65</td></tr> <tr><td>16</td><td>12</td><td>32</td></tr> <tr><td>9</td><td>07</td><td>22</td></tr> <tr><td>97</td><td>73</td><td>53</td></tr> <tr><td>132</td><td>10</td><td>107</td></tr> <tr><td>48</td><td>36</td><td>41</td></tr> <tr><td>50</td><td>38</td><td>128</td></tr> <tr><td>268</td><td>203</td><td>151</td></tr> <tr><td>44</td><td>33</td><td>99</td></tr> <tr><td>74</td><td>56</td><td>116</td></tr> </tbody> </table>	33	25	19	4	03	16	3	02	29	1	01	38	44	33	91	8	06	19	5	04	1	3	02	19	16	12	18	48	36	65	16	12	32	9	07	22	97	73	53	132	10	107	48	36	41	50	38	128	268	203	151	44	33	99	74	56	116	\$24,913	High school diploma or equivalent	None	Moderate term on the job training			
33	25	19																																																																		
4	03	16																																																																		
3	02	29																																																																		
1	01	38																																																																		
44	33	91																																																																		
8	06	19																																																																		
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16	12	18																																																																		
48	36	65																																																																		
16	12	32																																																																		
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97	73	53																																																																		
132	10	107																																																																		
48	36	41																																																																		
50	38	128																																																																		
268	203	151																																																																		
44	33	99																																																																		
74	56	116																																																																		
Production	51E2099	Assemblers & Fabricators, All Other**	192	<table border="1"> <tbody> <tr><td>2</td><td>13</td><td>03</td></tr> <tr><td>6</td><td>33</td><td>26</td></tr> <tr><td>1</td><td>07</td><td>03</td></tr> <tr><td>3</td><td>16</td><td>08</td></tr> <tr><td>2</td><td>11</td><td>08</td></tr> <tr><td>9</td><td>45</td><td>09</td></tr> <tr><td>7</td><td>39</td><td>12</td></tr> <tr><td>3</td><td>18</td><td>06</td></tr> <tr><td>3</td><td>14</td><td>13</td></tr> <tr><td>32</td><td>168</td><td>35</td></tr> <tr><td>5</td><td>25</td><td>21</td></tr> <tr><td>10</td><td>51</td><td>3</td></tr> </tbody> </table>	2	13	03	6	33	26	1	07	03	3	16	08	2	11	08	9	45	09	7	39	12	3	18	06	3	14	13	32	168	35	5	25	21	10	51	3	\$22,106	High school diploma or equivalent	None	Moderate term on the job training																								
2	13	03																																																																		
6	33	26																																																																		
1	07	03																																																																		
3	16	08																																																																		
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3	18	06																																																																		
3	14	13																																																																		
32	168	35																																																																		
5	25	21																																																																		
10	51	3																																																																		
Production	51E3092	Food Batchmakers	150	<table border="1"> <tbody> <tr><td>119</td><td>793</td><td>56</td></tr> <tr><td>2</td><td>14</td><td>08</td></tr> </tbody> </table>	119	793	56	2	14	08	\$27,699	High school diploma or equivalent	Less than 1 year	Short term on the job training																																																						
119	793	56																																																																		
2	14	08																																																																		
Production	51E3093	Food Cooking Machine Operators & Tenders	53	<table border="1"> <tbody> <tr><td>39</td><td>743</td><td>17</td></tr> <tr><td>12</td><td>45</td><td>12</td></tr> </tbody> </table>	39	743	17	12	45	12	\$25,038	High school diploma or equivalent	Less than 1 year	Short term on the job training																																																						
39	743	17																																																																		
12	45	12																																																																		
Production	51E4011	Computer Controlled Machine Tool Operators**	264	<table border="1"> <tbody> <tr><td>11</td><td>4</td><td>18</td></tr> <tr><td>104</td><td>393</td><td>42</td></tr> <tr><td>49</td><td>184</td><td>29</td></tr> <tr><td>13</td><td>5</td><td>09</td></tr> <tr><td>10</td><td>37</td><td>18</td></tr> <tr><td>48</td><td>182</td><td>2</td></tr> <tr><td>1</td><td>02</td><td>01</td></tr> <tr><td>10</td><td>39</td><td>12</td></tr> </tbody> </table>	11	4	18	104	393	42	49	184	29	13	5	09	10	37	18	48	182	2	1	02	01	10	39	12	\$37,203	High school diploma or equivalent	None	Moderate term on the job training																																				
11	4	18																																																																		
104	393	42																																																																		
49	184	29																																																																		
13	5	09																																																																		
10	37	18																																																																		
48	182	2																																																																		
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10	39	12																																																																		
				<table border="1"> <tbody> <tr><td>1</td><td>1</td><td>04</td></tr> <tr><td>1</td><td>12</td><td>06</td></tr> </tbody> </table>	1	1	04	1	12	06																																																										
1	1	04																																																																		
1	12	06																																																																		

Production	51E4031	Cutting, Punching & Press Machine Operators	80	6 5 25 8 2 2 10 2 2 2	76 59 31.5 9.6 2.5 3.1 12.9 2.8 2.9 3.8	2.2 2.8 3.6 1.6 0.4 1.6 1.5 1.3 0.9 0.4	\$27,777	High school diploma or equivalent	None	ModerateTerm onEthetheJob training
Production	51E4033	Grind/Polish Machine Tool Setters & Operators	57	2 1 7 22 10	3.8 1.5 1.2 38.8 17.6	0.4 0.2 2.1 1.6 1.1	\$32,119	High school diploma or equivalent	None	ModerateTerm onEthetheJob training
Production	51E4041	Machinists**	649	1 1 1 3 1 1 5 10 5 12 228 108 19 10 78 3 18	0.1 0.1 0.1 0.4 0.1 0.1 0.7 1.5 0.7 1.9 35.1 16.6 3 1.6 1.2 0.5 2.7	0 0.3 0.1 0.5 0.1 1 0.4 1.1 0.8 2.2 10.2 7 1.4 2.2 3.6 0.6 2.3	\$37,522	High school diploma or equivalent	None	LongTerm onEthetheJob training
Production	51E4081	Multiple Machine Tool Setters & Operators**	58	6 3 16 9 1 3 12 2 3	10.1 5.5 2.7 16.3 1.8 5.6 20.6 1.6 5.5	1.3 1.1 1.3 1.2 0.1 1.3 1.1 0.5 0.8	\$39,952	High school diploma or equivalent	None	ModerateTerm onEthetheJob training
Production	51E4121	Welders, Cutters, Solderers & Brazers**	262	1 1 3 5 64 35 4 3 33 2 2	0.3 0.2 1 1.9 24.3 13.2 1.6 1.1 12.5 0.9 0.8	0.3 0.1 0.9 2 6.2 4.9 0.6 1.3 3.3 1 0.6	\$35,479	High school diploma or equivalent	Less than 1 year	ModerateTerm onEthetheJob training
Production	51E4122	Welding/Soldering/Brazing Machine Setters & Operators**	92	1 27 18 1 3 25 2 2	1.1 29.1 20 1.2 3.2 2.7 1.8 2.4	0.2 1.2 1.3 0.1 0.6 1.2 0.3 0.3	\$29,783	High school diploma or equivalent	None	ModerateTerm onEthetheJob training
Production	51E5112	Printing Press Operators & Job Printers**	141	1 1 17 78 4 1	0.6 0.5 8.5 55.5 3 0.9	1.1 1 4.2 21.9 0.9 0.3	\$40,042	High school diploma or equivalent	None	ModerateTerm onEthetheJob training
Manufacturing Production Process Development	51E9091	Chemical Plant & System Operators**	52	1 2 48	1.7 3.4 91.5	0.2 1.1 4.2	\$55,725	High school diploma or equivalent	None	LongTerm onEthetheJob training
Production	51E9011	Chemical Equipment Operators/Tenders	118	1 2 3 94 5 1 1 1	1 2 7.5 79.3 4.4 1.1 0.9 0.5	0 0.3 1.3 5.6 0.4 0.2 0 0	\$45,301			
Production	51E9023	Mix/Blend Machine Setters, Operators & Tenders	121	18 2 1 2 4 51 7 13 1 1 1	15 1.8 0.5 2 3 42.5 6 10.5 0.7 0.6 0.7	1.2 1.1 0.7 0.7 3.4 5.7 1.2 3 0.1 0 0.2	\$34,186	High school diploma or equivalent	None	ModerateTerm onEthetheJob training
				6 1 1	8.8 1.5 1.9	0.4 0.6 0.3				

Production	S1E90A1: Extruding/Forming/Compacting Machine Operation	64	3	4.1	0.8	High school diploma or equivalent	None	Moderate/EI term on the job training
			7	10.6	1			
			19	29.9	3.4			
			15	23.2	3.9			
			1	1.7	0.3			
			1	1.6	0.1			
			1	0.9	0.2			
			1	0.8	0			
			3	4.5	0.6			
			30	6.6	2.2			
			3	0.7	1.9			
			4	0.9	4.6			
			2	0.4	2.4			
			2	0.4	2.9			
			6	1.3	1.7			
			5	1.1	1.6			
			4	0.9	1.1			
			1	0.3	1.2			
			22	4.8	3.2			
			25	5.6	4.7			
			8	1.8	2.1			
			10	2.3	3.2			
			40	8.9	2.9			
			21	4.7	2.3			
			25	5.4	2.8			
			9	2	3			
			45	10	3.4			
			5	1	1.3			
			13	2.9	2.7			
			327	30.3	7.8			
			22	5.2	10.3			
			1	0.3	1.3			
			1	0.2	0.8			
			3	0.6	0.6			
			8	1.9	2.1			
			4	0.9	0.8			
			2	0.4	1.5			
			50	11.8	6			
			15	3.6	2.2			
			5	1.3	1.2			
			3	0.6	0.6			
			7	1.6	0.4			
			2	0.4	0.5			
			2	0.4	0.1			
			1	0.3	0.4			
			7	1.6	1.1			
			62	10.9	2			
			2	0.3	0.5			
			1	0.1	0.4			
			1	0.1	0.4			
			1	0.1	0.2			
			1	0.2	2.1			
			20	1.7	1.1			
			14	2.4	1.8			
			5	0.9	0.5			
			1	0.2	0.5			
			20	3.5	1.2			
			14	2.4	1			
			12	2.1	1.3			
			10	1.7	1.2			
			22	3.8	0.7			
			17	2.9	0.7			
			7	1.3	0.4			
			8	1.4	1.1			
			27	4.6	0.9			
			4	0.7	0.5			
			15	2.8	1.4			
Production	S1E90A1: Packaging & Filling Machine Operators & Tenders	420	3	4.1	0.8	High school diploma or equivalent	None	Moderate/EI term on the job training
			7	10.6	1			
			19	29.9	3.4			
			15	23.2	3.9			
			1	1.7	0.3			
			1	1.6	0.1			
			1	0.9	0.2			
			1	0.8	0			
			3	4.5	0.6			
			30	6.6	2.2			
			3	0.7	1.9			
			4	0.9	4.6			
			2	0.4	2.4			
			2	0.4	2.9			
			6	1.3	1.7			
			5	1.1	1.6			
			4	0.9	1.1			
			1	0.3	1.2			
			22	4.8	3.2			
			25	5.6	4.7			
			8	1.8	2.1			
			10	2.3	3.2			
			40	8.9	2.9			
			21	4.7	2.3			
			25	5.4	2.8			
			9	2	3			
			45	10	3.4			
			5	1	1.3			
			13	2.9	2.7			
			327	30.3	7.8			
			22	5.2	10.3			
			1	0.3	1.3			
			1	0.2	0.8			
			3	0.6	0.6			
			8	1.9	2.1			
			4	0.9	0.8			
			2	0.4	1.5			
			50	11.8	6			
			15	3.6	2.2			
			5	1.3	1.2			
			3	0.6	0.6			
			7	1.6	0.4			
			2	0.4	0.5			
			2	0.4	0.1			
			1	0.3	0.4			
			7	1.6	1.1			
			62	10.9	2			
			2	0.3	0.5			
			1	0.1	0.4			
			1	0.1	0.4			
			1	0.1	0.2			
			1	0.2	2.1			
			20	1.7	1.1			
			14	2.4	1.8			
			5	0.9	0.5			
			1	0.2	0.5			
			20	3.5	1.2			
			14	2.4	1			
			12	2.1	1.3			
			10	1.7	1.2			
			22	3.8	0.7			
			17	2.9	0.7			
			7	1.3	0.4			
			8	1.4	1.1			
			27	4.6	0.9			
			4	0.7	0.5			
			15	2.8	1.4			
Production	S1E90B9: Production Workers, All Other	570	3	4.1	0.8	High school diploma or equivalent	None	Moderate/EI term on the job training
			7	10.6	1			
			19	29.9	3.4			
			15	23.2	3.9			
			1	1.7	0.3			
			1	1.6	0.1			
			1	0.9	0.2			
			1	0.8	0			
			3	4.5	0.6			
			30	6.6	2.2			
			3	0.7	1.9			
			4	0.9	4.6			
			2	0.4	2.4			
			2	0.4	2.9			
			6	1.3	1.7			
			5	1.1	1.6			
			4	0.9	1.1			
			1	0.3	1.2			
			22	4.8	3.2			
			25	5.6	4.7			
			8	1.8	2.1			
			10	2.3	3.2			
			40	8.9	2.9			
			21	4.7	2.3			
			25	5.4	2.8			
			9	2	3			
			45	10	3.4			
			5	1	1.3			
			13	2.9	2.7			
			327	30.3	7.8			
			22	5.2	10.3			
			1	0.3	1.3			
			1	0.2	0.8			
			3	0.6	0.6			
			8	1.9	2.1			
			4	0.9	0.8			
			2	0.4	1.5			
			50	11.8	6			
			15	3.6	2.2			
			5	1.3	1.2			
			3	0.6	0.6			
			7	1.6	0.4			
			2	0.4	0.5			
			2	0.4	0.1			
			1	0.3	0.4			
			7	1.6	1.1			
			62	10.9	2			
			2	0.3	0.5			
			1	0.1	0.4			
			1	0.1	0.4			
			1	0.1	0.2			
			1	0.2	2.1			
			20	1.7	1.1			
			14	2.4	1.8			
			5	0.9	0.5			
			1	0.2	0.5			
			20	3.5	1.2			
			14	2.4	1			
			12	2.1	1.3			
			10	1.7	1.2			
			22	3.8	0.7			
			17	2.9	0.7			
			7	1.3	0.4			

TRANSPORTATION, DISTRIBUTION & LOGISTICS									
INDUSTRIES FOR PRINCIPAL OCCUPATIONS IN THE NORTHEAST REGION									
NAICS	DESCRIPTION	Pathway	SOC Code	SOC Title	Average Annual Job Openings	Annual Occupational Openings in Industry	2022 Percent of occupation	2022 Percent of Industry	
423	Merchant Wholesalers, Durable Goods	Logistics Planning and Management Services	1103061	Purchasing Managers**	78	5	5.9	0.1	
424	Merchant Wholesalers, Nondurable Goods					4	4.6	0.2	
425	Wholesale Electronic Markets and Agents and Brokers					1	1.3	0.1	
423	Merchant Wholesalers, Durable Goods	Warehousing and Distribution Center Operations	1103071	Transportation, Storage & Distribution Managers**	120	7	6.2	0.2	
424	Merchant Wholesalers, Nondurable Goods					10	8.6	0.5	
425	Wholesale Electronic Markets and Agents and Brokers					2	1.4	0.1	
481	Air Transportation					3	2.2	0.6	
482	Rail Transportation					5	3.8	1.9	
483	Water Transportation					1	0.5	0.7	
484	Truck Transportation					12	10	0.7	
485	Transit and Ground Passenger Transportation					1	1.2	0.3	
488	Support Activities for Transportation					6	5.2	0.8	
492	Couriers and Messengers					4	3.1	0.7	
493	Warehousing and Storage	11	9.1	1.3					
424	Merchant Wholesalers, Nondurable Goods	Health, Safety and Environmental Management	1301041	Compliance Officers**	94	1	1	0.1	
424	Merchant Wholesalers, Nondurable Goods					1	1	0.1	
423	Merchant Wholesalers, Durable Goods	Logistics Planning and Management Services	1301081	Logisticians**	101	4	3.6	0.2	
424	Merchant Wholesalers, Nondurable Goods					2	2.3	0.2	
425	Wholesale Electronic Markets and Agents and Brokers					1	1.2	0.2	
481	Air Transportation					1	0.6	0.2	
484	Truck Transportation					1	1.2	0.1	
488	Support Activities for Transportation					2	1.6	0.3	
492	Couriers and Messengers					1	0.5	0.1	
493	Warehousing and Storage					2	2.1	0.4	
423	Merchant Wholesalers, Durable Goods	Warehousing and Distribution Center Operations	1702112	Industrial Engineers (Supply Chain Engineer)	184	3	1.8	0.1	
424	Merchant Wholesalers, Nondurable Goods					1	0.5	0.1	
425	Wholesale Electronic Markets and Agents and Brokers					1	0.3	0.1	
492	Couriers and Messengers					1	0.3	0.2	
493	Warehousing and Storage	1	0.7	0.2					
423	Merchant Wholesalers, Durable Goods	Transportation Systems/Infrastructure Planning, Mgt. an	1703023	Electrical & Electronic Engineering Technicians**	89	5	5.2	0.3	
425	Wholesale Electronic Markets and Agents and Brokers					1	0.7	0.1	
423	Merchant Wholesalers, Durable Goods	Logistics Planning and Management Services	4301011	1st/InLine Supvr/Mgrs, Office & Adm. Support Wkrs**	1,086	27	2.5	1.3	
424	Merchant Wholesalers, Nondurable Goods					17	1.6	1.2	
425	Wholesale Electronic Markets and Agents and Brokers					9	0.8	1.2	
481	Air Transportation					7	0.6	2.3	
482	Rail Transportation					1	0.1	0.5	
484	Truck Transportation					7	0.6	0.6	
485	Transit and Ground Passenger Transportation					2	0.2	0.6	
488	Support Activities for Transportation					11	1	2.3	
492	Couriers and Messengers					7	0.6	2.1	
493	Warehousing and Storage					8	0.7	1.3	
481	Air Transportation					38	58.2	17.2	
483	Water Transportation					1	0.9	1.5	
485	Transit and Ground Passenger Transportation					3	3.9	0.9	
487	Scenic and Sightseeing Transportation	1	1	3.9					
488	Support Activities for Transportation	3	4.9	0.9					
424	Merchant Wholesalers, Nondurable Goods	Sales and Service	4305011	Cargo & Freight Agents (Route Planners)	226	1	0.4	0.1	
425	Wholesale Electronic Markets and Agents and Brokers					1	0.3	0.1	
481	Air Transportation					21	9.5	2.1	
482	Rail Transportation					1	0.3	0.1	
483	Water Transportation					3	1.2	1.5	
484	Truck Transportation					19	8.3	0.5	
488	Support Activities for Transportation					144	63.6	8.4	
492	Couriers and Messengers					17	7.6	1.4	
493	Warehousing and Storage	5	2.1	0.2					
423	Merchant Wholesalers, Durable Goods	Transportation Operations	4305032	Dispatchers**	207	6	2.9	0.2	
424	Merchant Wholesalers, Nondurable Goods					4	1.9	0.2	
425	Wholesale Electronic Markets and Agents and Brokers					1	0.4	0.1	
481	Air Transportation					2	0.8	0.4	
482	Rail Transportation					3	1.4	1.4	
484	Truck Transportation					37	17.9	2.6	
485	Transit and Ground Passenger Transportation					16	7.8	3.2	
488	Support Activities for Transportation					16	7.9	2.4	
492	Couriers and Messengers					6	3.1	1.3	
493	Warehousing and Storage					2	1.2	0.3	
42	Wholesale Trade	Warehousing and Distribution Center Operations	4305061	Production, Planning, & Expediting Clerks**	201	17	8.3	0.4	
423	Merchant Wholesalers, Durable Goods					8	4	0.4	
424	Merchant Wholesalers, Nondurable Goods					6	3.1	0.4	
425	Wholesale Electronic Markets and Agents and Brokers					2	1.2	0.3	
481	Air Transportation					1	0.6	0.4	
484	Truck Transportation					1	0.7	0.1	
488	Support Activities for Transportation					3	1.4	0.6	
492	Couriers and Messengers					1	0.5	0.3	
493	Warehousing and Storage	4	2.1	0.8					
423	Merchant Wholesalers, Durable Goods	Warehousing and Distribution Center Operations	4305071	Shipping, Receiving, & Traffic Clerks**	682	92	13.5	3.2	
424	Merchant Wholesalers, Nondurable Goods					53	7.8	2.7	
425	Wholesale Electronic Markets and Agents and Brokers					18	2.7	1.7	
481	Air Transportation					1	0.1	0.2	
483	Water Transportation					1	0.1	0.5	
484	Truck Transportation					6	0.9	0.4	
488	Support Activities for Transportation	12	1.8	1.8					

492	Couriers and Messengers					34	5	7.2				
493	Warehousing and Storage					32	4.7	4.1				
423	Merchant Wholesalers, Durable Goods	Facility and Mobile Equipment Maintenance	4903011	Aircraft Mechanics & Service Technicians	91	1	0.7	0				
481	Air Transportation					22	23.7	7.3				
488	Support Activities for Transportation					32	34.7	6.3				
492	Couriers and Messengers					3	3.6	0.9				
423	Merchant Wholesalers, Durable Goods	Facility and Mobile Equipment Maintenance	4903021	Automotive Body & Related Repairers	165	2	1.5	0.1				
425	Wholesale Electronic Markets and Agents and Brokers					1	0.6	0.1				
484	Truck Transportation					1	0.5	0.1				
423	Merchant Wholesalers, Durable Goods					11	1.7	0.4				
424	Merchant Wholesalers, Nondurable Goods	Facility and Mobile Equipment Maintenance	4903023	Automotive Service Technicians & Mechanics**	667	1	0.1	0				
425	Wholesale Electronic Markets and Agents and Brokers					2	0.3	0.2				
484	Truck Transportation					3	0.5	0.2				
485	Transit and Ground Passenger Transportation					3	0.4	0.6				
488	Support Activities for Transportation	5	0.8	0.9								
492	Couriers and Messengers	1	0.2	0.3								
493	Warehousing and Storage	1	0.1	0.1								
423	Merchant Wholesalers, Durable Goods	Facility and Mobile Equipment Maintenance	4903031	Bus & Truck Mechanics & Diesel Eng Specialists**	197	21	10.6	1				
424	Merchant Wholesalers, Nondurable Goods					5	2.4	0.3				
425	Wholesale Electronic Markets and Agents and Brokers					1	0.7	0.2				
481	Air Transportation					1	0.3	0.2				
482	Rail Transportation	2	0.9	1.2								
484	Truck Transportation	37	18.6	3.5								
485	Transit and Ground Passenger Transportation	10	5	2.6								
488	Support Activities for Transportation	3	1.6	0.6								
492	Couriers and Messengers	4	1.8	1								
493	Warehousing and Storage	2	0.8	0.9								
482	Rail Transportation	Facility and Mobile Equipment Maintenance	4903043	Rail Car Repairers	52	28	53.5	5.2				
488	Support Activities for Transportation					15	28.3	0.9				
423	Merchant Wholesalers, Durable Goods					2	2.5	0.1				
484	Truck Transportation					1	1.3	0.1				
423	Merchant Wholesalers, Durable Goods	Facility and Mobile Equipment Maintenance	4903053	Tire Repairers & Changers	99	8	2.7	0.5				
424	Merchant Wholesalers, Nondurable Goods					4	1.5	0.4				
425	Wholesale Electronic Markets and Agents and Brokers					1	0.4	0.2				
486	Pipeline Transportation					1	0.2	3.9				
488	Support Activities for Transportation	1	0.3	0.3								
493	Warehousing and Storage	1	0.5	0.4								
423	Merchant Wholesalers, Durable Goods	Warehousing and Distribution Center Operations	5101011	1stNLine Supvrs/Mgrs, Prod/Operating Workers**	292	20	8.6	0.5				
424	Merchant Wholesalers, Nondurable Goods					23	9.9	0.9				
425	Wholesale Electronic Markets and Agents and Brokers					4	1.6	0.3				
481	Air Transportation					1	0.4	0.2				
484	Truck Transportation	11	4.9	0.6								
488	Support Activities for Transportation	8	3.5	0.9								
492	Couriers and Messengers	22	9.6	3.6								
493	Warehousing and Storage	32	13.7	3.2								
42	Wholesale Trade	Warehousing and Distribution Center Operations	5301021	1stNLine Supvrs/Mgrs, Helpers & Laborers	232	18	14.5	0.5				
423	Merchant Wholesalers, Durable Goods					6	4.7	0.3				
424	Merchant Wholesalers, Nondurable Goods					11	8.9	0.9				
425	Wholesale Electronic Markets and Agents and Brokers					1	1	0.2				
481	Air Transportation	1	0.9	0.5								
482	Rail Transportation	2	1.4	1.4								
484	Truck Transportation	18	14.6	2.2								
485	Transit and Ground Passenger Transportation	6	4.6	1.9								
488	Support Activities for Transportation	5	4.1	1.3								
492	Couriers and Messengers	6	4.6	2								
493	Warehousing and Storage	6	4.7	1.3								
481	Air Transportation	Transportation Operations	5302011	Airline Pilots, Copilots, Flight Engineers	267	231	86.5	13.2				
488	Support Activities for Transportation					3	1.7	0.1				
481	Air Transportation					Transportation Operations	5302031	Flight Attendants	290	285	98.2	19.1
488	Support Activities for Transportation									1	0.5	0.1
485	Transit and Ground Passenger Transportation	Transportation Operations	5303021	Bus Drivers, Transit & Intercity	196					83	42.3	15.1
487	Scenic and Sightseeing Transportation									5	2.8	16.4
485	Transit and Ground Passenger Transportation					Transportation Operations	5303022	School Bus Drivers	459	189	41.2	41.1
423	Merchant Wholesalers, Durable Goods									41	3.2	2
424	Merchant Wholesalers, Nondurable Goods	100	7.9	7.3								
425	Wholesale Electronic Markets and Agents and Brokers	6	0.5	0.8								
484	Truck Transportation	Transportation Operations	5303032	Truck Drivers, Heavy & Tractor Trailer**	1,270	588	46.3	59.7				
486	Pipeline Transportation					1	0.1	2.8				
488	Support Activities for Transportation					39	3.1	8.5				
492	Couriers and Messengers					19	1.5	5.6				
493	Warehousing and Storage	28	2.2	5.3								
423	Merchant Wholesalers, Durable Goods	Transportation Operations	5303033	Truck Drivers, Light & Delivery Services	692	58	8.4	2.5				
424	Merchant Wholesalers, Nondurable Goods					53	7.6	3.2				
425	Wholesale Electronic Markets and Agents and Brokers					12	1.8	1.4				
482	Rail Transportation					1	0.1	0.5				
484	Truck Transportation	42	6.1	3.6								
488	Support Activities for Transportation	8	1.7	1.5								
492	Couriers and Messengers	118	17.1	30.5								
493	Warehousing and Storage	13	1.9	2.1								
482	Rail Transportation	Transportation Operations	5304031	Railroad Conductors & Yardmasters	63	57	90.1	17.3				
488	Support Activities for Transportation					1	1.3	0.1				

TRANSPORTATION, DISTRIBUTION & LOGISTICS
INDUSTRIES FOR PRINCIPAL OCCUPATIONS IN THE NORTHEAST REGION

Industry	SOC Code	SOC Title	Average Annual Job Openings	Annual Occupational Openings in Industry	1997 Percent of Industry	2012 Percent of Industry	Median Annual	Education/Entry Level	Experience Entry Level	Training/Entry Level
Logistics Planning and Management Services	1173061	Purchasing Managers *	78	5 4 3 7 10 2 3 5	9.9 4.6 7.3 6.2 8.6 1.4 2.3 3.8	0.1 0.2 0.1 0.2 0.5 0.1 0.6 1.9	\$59,907	Bachelor's degree	More than 5 years	None
Warehousing and Distribution Center Operations	1173071	Transportation, Storage & Distribution Managers**	120	1 12 1 6 4 11	0.5 10 1.2 5.2 2.1 9.1	0.7 0.7 0.3 0.8 0.7 1.3	\$81,823	High school diploma or equivalent	More than 5 years	None
Health, Safety and Environmental Management	1371041	Compliance Officers *	91	1 3 4 2 1 1 2	1 1 3.4 2.3 1.2 0.6 2.1	0.1 0.1 0.2 0.2 0.2 0.2 0.4	\$77,236	Bachelor's degree	None	Moderate term on the job training
Logistics Planning and Management Services	1371091	Logisticians**	101	1 1 2 1 3 1	0.6 1.2 1.6 0.5 1.4 0.5	0.2 0.1 0.3 0.1 0.1 0.4	\$68,953	Bachelor's degree	1 to 5 years	None
Warehousing and Distribution Center Operations	1772112	Industrial Engineers (Supply Chain Engineer)	184	1 1 5	0.5 0.5 0.7	0.1 0.1 0.3	\$77,526	Bachelor's degree	None	None
Transportation Systems/Infrastructure Planning, Mgt. and	1773023	Electrical & Electronic Engineering Technicians**	89	5 1	2.2 0.7	0.3 0.1	\$60,196	Associate's degree	None	None
Logistics Planning and Management Services	4371011	1st/2nd Line Supervisors/Managers, Office & Admin Support Workers**	1,086	27 17 9 7 1 11 7 8	2.5 1.6 0.8 0.6 0.1 1 0.6 0.7	1.3 1.2 1.2 2.3 0.5 2.3 2.1 1.3	\$53,109	High school diploma or equivalent	1 to 5 years	None
Sales and Service	4374181	Reservation/Ticket Agents & Travel Clerks	65	38 1 3 1 3	58.2 0.9 3.9 1 4.9	17.2 1.5 0.9 1.9 0.07	\$40,914	High school diploma or equivalent	None	Short term on the job training
Sales and Service	4375011	Cargo & Freight Agents (Route Planners)	225	1 21 1 3 18 144 17 5	0.3 9.5 0.3 1.2 8.3 63.6 7.6 2.1	0.1 2.1 0.1 1.5 0.5 8.4 1.4 0.2	\$44,745	High school diploma or equivalent	None	Short term on the job training
Transportation Operators	4375021	Dispatchers**	207	6 4 1 2 37 16 16 6 2	2.9 1.9 0.4 1.4 17.9 7.6 7.9 3.2 1.2	0.2 0.2 0.1 0.4 2.6 3.2 2.4 1.3 0.3	\$42,520	High school diploma or equivalent	None	Moderate term on the job training
Warehousing and Distribution Center Operations	4375061	Production, Planning, & Expediting Clerks**	201	17 8 6 2 1 3 1 4	8.3 4 3.1 1.2 0.7 1.4 0.5 2.1	0.4 0.4 0.4 0.3 0.1 0.6 0.3 0.6	\$46,716	High school diploma or equivalent	None	Moderate term on the job training
Warehousing and Distribution Center Operations	4375071	Shipping, Receiving, & Traffic Clerks *	682	97 53 18 1 1 6 12 34 32	19.5 7.8 2.7 0.1 0.1 0.9 1.8 5 4.7	3.2 2.7 1.7 0.2 0.2 0.4 1.8 2.2 3.1	\$30,683	High school diploma or equivalent	None	Short term on the job training
Factory and Mobile Equipment Maintenance	4931011	Aircraft Mechanics & Service Technicians	91	1 31 32 3	0.1 33.7 34.7 3.6	0 7.3 8.3 0.9	\$67,122	Postsecondary non-degree award	None	None
Factory and Mobile Equipment Maintenance	4933021	Automotive Body & Related Repairers	165	2 1 1	1.5 0.6 0.5	0.1 0.1 0.1	\$51,224	High school diploma or equivalent	None	Moderate term on the job training
Factory and Mobile Equipment Maintenance	4933023	Automotive Service Technicians & Mechanics**	667	11 1 2 3 3 5 1 1	1.7 0.1 0.3 0.5 0.4 0.8 0.2 0.1	0.4 0 0.2 0.2 0.6 0.9 0.3 0.1	\$41,509	High school diploma or equivalent	None	Long term on the job training
Factory and Mobile Equipment Maintenance	4933031	Bus & Truck Mechanics & Diesel Eng. Specialists**	197	21 5 1 1 1 2 37 10 3	10.6 2.4 0.7 0.3 0.9 1.2 18.6 3 1.6	1 0.1 0.2 0.2 0.3 1.2 3.5 2.6 0.6	\$50,482	High school diploma or equivalent	None	Long term on the job training

				4	1.8	1					
				2	0.8	0.3					
Facility and Mobile Equipment Maintenance	49F3043	Rail Car Repairers	52	28	53.5	5.2			High school diploma or equivalent	None	Long term on the job training
				15	28.3	0.9					
Facility and Mobile Equipment Maintenance	49F3091	Tire Repairers & Changers	99	2	2.5	0.1	\$15,224		High school diploma or equivalent	None	Moderate term on the job training
				1	1.3	0.1					
				8	2.7	0.5					
				4	1.5	0.4					
Warehousing and Distribution Center Operations	51F1011	Int'l Line Supvrs/Mgrs Prod/Operating Workers**	292	1	0.4	0.2	\$58,877		Postsecondary non-degree award	1 to 5 years	None
				1	0.2	1.0					
				1	0.3	0.3					
				1	0.5	0.4					
				20	8.6	0.5					
				23	9.9	0.0					
				4	1.6	0.3					
Warehousing and Distribution Center Operations	53F1031	Int'l Line Supvrs/Mgrs Helpers & Laborers	231	1	0.4	0.2	\$51,041		High school diploma or equivalent	1 to 5 years	None
				11	4.9	0.4					
				6	3.5	0.5					
				22	9.6	3.8					
				32	13.7	3.3					
				18	14.5	0.5					
				6	4.7	0.3					
				11	8.8	0.9					
				1	1	0.2					
				1	0.9	0.5					
Warehousing and Distribution Center Operations	53F1031	Int'l Line Supvrs/Mgrs Trans Machine Operators**	122	2	1.4	1.4	\$60,964		High school diploma or equivalent	1 to 5 years	None
				18	14.6	2.2					
				6	4.6	1.9					
				5	4.1	1.3					
				6	4.6	2					
				6	4.7	1.3					
Transportation Operations	53F2011	Airline Pilots, Copilots, Flight Engineers	287	231	86.5	13.2	\$110,629		High school diploma or equivalent	1 to 5 years	Long term on the job training
				3	1.2	0.1					
Transportation Operations	53F2031	Flight Attendants	290	285	98.2	19.1	\$17,732		High school diploma or equivalent	None	Moderate term on the job training
				1	0.5	0.1					
Transportation Operations	53F3021	Bus Drivers Transit & Intercity	196	83	43.3	15.1	\$44,049		High school diploma or equivalent	None	Moderate term on the job training
				5	2.8	16.4					
Transportation Operations	53F3022	School Bus Drivers	459	189	41.2	41.3	\$30,483		High school diploma or equivalent	None	Moderate term on the job training
				41	3.2	2					
				100	7.8	7.3					
				6	0.5	0.8					
Transportation Operations	53F3031	Truck Drivers, Heavy & Tractor Trailer**	1,270	588	46.3	59.2	\$45,349		High school diploma or equivalent	1 to 5 years	Short term on the job training
				1	0.1	2.8					
				39	3.2	8.5					
				19	1.5	5.4					
				28	2.3	9.3					
				58	8.4	2.5					
				53	7.6	3.2					
				32	1.8	1.4					
Transportation Operations	53F3031	Truck Drivers, Light & Delivery Services	892	1	0.2	0.2	\$34,141		High school diploma or equivalent	None	Short term on the job training
				40	6.2	3.6					
				8	1.2	1.5					
				118	17.1	30.5					
				33	1.9	2.1					
Transportation Operations	53F4031	Railroad Conductors & Yardmasters	63	57	90.1	17.3			High school diploma or equivalent	None	Moderate term on the job training
				1	1.3	0.1					

HEALTH CARE

INDUSTRIES FOR PRINCIPAL OCCUPATIONS IN THE NORTHEASTERN REGION

NAICS	Description	Pathway	SOC Code	SOC Title	Average Annual Job Openings	Annual Occupation Openings in Industry	2022 Percent of Occupation that is in this Industry	2022 Percent of Employment in this Industry that is in this Occupation
621	Ambulatory Health Care Services	Health Informatics	11J3011	Administrative Services Managers **	281	17	5.9	0.2
622	Hospitals					17	6	0.3
623	Nursing and Residential Care Facilities					7	2.5	0.2
624	Social Assistance					5	1.7	0.2
622	Hospitals	Support Services	11J9051	Food Service Managers**	176	1	0.6	0
623	Nursing and Residential Care Facilities					4	2.2	0.2
624	Social Assistance					1	0.3	0
621	Ambulatory Health Care Services	Health Informatics	11J9111	Medical & Health Services Managers	299	90	30	1.3
622	Hospitals					109	36.4	2.1
623	Nursing and Residential Care Facilities					32	10.8	1.1
624	Social Assistance					6	1.9	0.2
621	Ambulatory Health Care Services	Support Services	21J1011	Substance Abuse/Bhvr Dsrdr Counslrs**	58	17	29.1	0.4
622	Hospitals					5	8.4	0.1
623	Nursing and Residential Care Facilities					13	22	0.7
624	Social Assistance					9	15.1	0.5
621	Ambulatory Health Care Services	Support Services	21J1014	Mental Health Counselors**	135	41	30.4	0.6
622	Hospitals					14	10	0.3
623	Nursing and Residential Care Facilities					24	17.6	0.7
624	Social Assistance					27	20.1	0.9
622	Hospitals	Support Services	21J1015	Rehabilitation Counselors	84	2	2.8	0.1
624	Social Assistance					38	45.7	1.8
621	Ambulatory Health Care Services	Support Services	21J1022	Medical Health Social Workers	106	27	25.1	0.5
622	Hospitals					30	28.4	0.8
623	Nursing and Residential Care Facilities					16	15.1	0.7
624	Social Assistance					15	14.6	0.7
621	Ambulatory Health Care Services	Support Services	21J1093	Social & Human Services Assistants**	263	21	8	0.4
622	Hospitals					8	3.1	0.2
623	Nursing and Residential Care Facilities					45	17.1	2
624	Social Assistance					107	40.7	5.1
621	Ambulatory Health Care Services	Support Services	21J1094	Community Health Workers	55	10	18.3	0.1
622	Hospitals					4	7.7	0.1
623	Nursing and Residential Care Facilities					3	5.7	0.1
624	Social Assistance					16	28.7	0.4
621	Ambulatory Health Care Services	Support Services	21J1099	Community/Social Services Specialists, All Other	115	5	4.4	0.1
622	Hospitals					4	3.2	0.1
623	Nursing and Residential Care Facilities					4	3.8	0.1
624	Social Assistance					30	25.9	0.9
621	Ambulatory Health Care Services	Therapeutic Services	29J1011	Chiropractors	66	46	69.4	0.4
622	Hospitals					1	0.8	0
621	Ambulatory Health Care Services	Therapeutic Services	29J1041	Optometrists	69	53	76.3	0.4
622	Hospitals					1	0.9	0
621	Ambulatory Health Care Services	Therapeutic Services	29J1051	Pharmacists	250	11	4.2	0.2
622	Hospitals					63	25.3	1.3
623	Nursing and Residential Care Facilities					1	0.2	0
621	Ambulatory Health Care Services	Therapeutic Services	29J1071	Physician Assistants	73	52	71.4	1
622	Hospitals					14	19.6	0.4
621	Ambulatory Health Care Services	Therapeutic Services	29J1122	Occupational Therapists	109	43	39.9	0.7
622	Hospitals					29	26.2	0.6
623	Nursing and Residential Care Facilities					10	9	0.3
624	Social Assistance					4	3.9	0.2
621	Ambulatory Health Care Services	Therapeutic Services	29J1123	Physical Therapists	399	225	56.3	1.8
622	Hospitals					100	25	1
623	Nursing and Residential Care Facilities					27	6.7	0.5
624	Social Assistance	5	1.2	0.1				
621	Ambulatory Health Care Services	Therapeutic Services	29J1126	Respiratory Therapists	61	5	7.6	0.1
622	Hospitals					49	79.8	1.7
623	Nursing and Residential Care Facilities					3	4.1	0.1
621	Ambulatory Health Care Services	Therapeutic Services	29J1127	Speech/Language Pathologists	163	46	28.4	0.5
622	Hospitals					22	13.6	0.3
623	Nursing and Residential Care Facilities					8	4.9	0.2
624	Social Assistance					7	4.2	0.2
621	Ambulatory Health Care Services	Therapeutic Services	29J1141	Registered Nurses	2400	482	20.1	7.4
622	Hospitals					1,421	59.2	28.9
623	Nursing and Residential Care Facilities					168	7	5.8
624	Social Assistance					22	0.9	0.8
621	Ambulatory Health Care Services	Therapeutic Services	29J1171	Nurse Practitioners	109	68	62	1
622	Hospitals					28	25.4	0.6
623	Nursing and Residential Care Facilities					3	2.4	0.1
624	Social Assistance					1	0.8	0

621	Ambulatory Health Care Services					33	32.3	0.7
622	Hospitals	Diagnostic Services	29J2011	Med & Clinical Lab Technologists	101	58	57	1.6
621	Ambulatory Health Care Services					79	44.3	1.1
622	Hospitals	Diagnostic Services	29J2012	Medical & Clinical Lab Technicians	178	74	41.4	1.3
623	Nursing and Residential Care Facilities					1	0.5	0
621	Ambulatory Health Care Services					204	97.4	2.8
622	Hospitals	Therapeutic Services	29J2021	Dental Hygienists	209	1	0.3	0
621	Ambulatory Health Care Services					26	39.9	0.4
622	Hospitals	Diagnostic Services	29J2032	Diagnostic Medical Sonographers	65	36	55.8	0.7
621	Ambulatory Health Care Services					41	36.7	1
622	Hospitals	Diagnostic Services	29J2034	Radiologic Technologists/Technicians	113	64	56.9	2.1
621	Ambulatory Health Care Services					179	55	1.8
622	Hospitals	Therapeutic Services	29J2041	Emergency Medical Techs & Paramedics	326	50	15.2	0.7
621	Ambulatory Health Care Services					11	3.5	0.2
622	Hospitals	Therapeutic Services	29J2052	Pharmacy Technicians	301	49	16.2	1
623	Nursing and Residential Care Facilities					1	0.2	0
621	Ambulatory Health Care Services					205	28.9	3
622	Hospitals	Therapeutic Services	29J2061	Licensed Practical Nurses	710	116	16.3	2.3
623	Nursing and Residential Care Facilities					278	39.1	9.1
624	Social Assistance					10	1.4	0.4
621	Ambulatory Health Care Services					73	35.4	0.9
622	Hospitals	Health Informatics	29J2071	Med Records & Health Info Technicians	206	77	37.6	1.3
623	Nursing and Residential Care Facilities					18	8.9	0.5
624	Social Assistance					1	0.4	0
621	Ambulatory Health Care Services					69	53.4	0.5
621	Ambulatory Health Care Services					69	53.4	0.5
622	Hospitals	Health Informatics	29J2081	Opticians, Dispensing	129	1	0.4	0
622	Hospitals					1	0.4	0
621	Ambulatory Health Care Services					20	30.3	0.1
621	Ambulatory Health Care Services					20	30.3	0.1
622	Hospitals	Health Informatics	29J9091	Athletic Trainers**	67	8	12.6	0.1
622	Hospitals					8	12.6	0.1
621	Ambulatory Health Care Services					134	9	1.8
622	Hospitals	Therapeutic Services	31J1014	Nursing Assistants	1491	364	24.4	6.6
623	Nursing and Residential Care Facilities					804	53.9	24.4
624	Social Assistance					28	1.9	1
621	Ambulatory Health Care Services					31	50.8	0.2
622	Hospitals	Therapeutic Services	31J2011	Occupational Therapist Assistants	61	11	17.8	0.1
623	Nursing and Residential Care Facilities					13	20.5	0.2
624	Social Assistance					2	3.1	0
621	Ambulatory Health Care Services					73	61.2	0.7
622	Hospitals	Therapeutic Services	31J2021	Physical Therapist Assistants	119	27	22.9	0.3
623	Nursing and Residential Care Facilities					14	12.1	0.3
624	Social Assistance					1	0.7	0
621	Ambulatory Health Care Services					72	67.9	0.5
622	Hospitals	Therapeutic Services	31J2022	Physical Therapist Aides	106	22	21	0.2
623	Nursing and Residential Care Facilities					8	7.3	0.1
621	Ambulatory Health Care Services					37	24.6	0.5
621	Ambulatory Health Care Services					37	24.6	0.5
622	Hospitals	Health Informatics	31J9011	Massage Therapists	152	1	0.6	0
622	Hospitals					1	0.6	0
621	Ambulatory Health Care Services					236	95.4	4.1
622	Hospitals	Therapeutic Services	31J9091	Dental Assistants	247	2	0.7	0
621	Ambulatory Health Care Services					383	79.7	6.6
622	Hospitals	Health Informatics	31J9092	Medical Assistants	481	60	12.4	1.4
623	Nursing and Residential Care Facilities					10	2	0.4
621	Ambulatory Health Care Services					39	58.9	0.9
621	Ambulatory Health Care Services					39	58.9	0.9
622	Hospitals	Health Informatics	31J9097	Phlebotomists	66	24	36.9	0.7
622	Hospitals					24	36.9	0.7
621	Ambulatory Health Care Services					49	22.5	0.3
622	Hospitals	Health Informatics	31J9099	Healthcare Support Workers, All Other	217	74	33.9	0.6
623	Nursing and Residential Care Facilities					18	8.5	0.3
624	Social Assistance					3	1.6	0.1
622	Hospitals					11	1.2	0.2
623	Nursing and Residential Care Facilities	Support Services	35J1012	1stOLine Surs/Mgrs, Food Prep/Serv ** USE EMP	877	24	2.7	0.7
624	Social Assistance					4	0.5	0.1
621	Ambulatory Health Care Services					55	11.8	0.6
622	Hospitals	Health Informatics	43J3011	Bill and Account Collectors**	468	22	4.6	0.3
623	Nursing and Residential Care Facilities					4	0.8	0.1
624	Social Assistance					1	0.2	0
621	Ambulatory Health Care Services					368	40.6	5.3
622	Hospitals	Health Informatics	43J4171	Receptionists & Information Clerks **	907	34	3.7	0.6
623	Nursing and Residential Care Facilities					26	2.9	0.8
624	Social Assistance					18	2	0.6

HEALTH CARE

INDUSTRIES FOR PRINCIPAL OCCUPATIONS IN THE NORTHEASTERN REGION

Pathway	SOC Code	SOC Title	Average Annual Job Openings	Annual Occupation Openings in Industry	2022 Percent of Occupation that is in this Industry	2022 Percent of Employment in this Industry that is in this Occupation	Median Annual	Education Entry Level	Experience Entry Level	Training Entry Level
Health Informatics	1193011	Administrative Services Managers **	281	17	5.9	0.2	\$70,845	High school diploma or equivalent	1 to 5 years	None
				17	6	0.3				
				7	2.5	0.2				
				5	1.7	0.2				
Support Services	1199051	Food Service Managers**	176	1	0.6	0	\$48,164	High school diploma or equivalent	1 to 5 years	None
				4	2.2	0.2				
				1	0.3	0				
Health Informatics	1199111	Medical & Health Services Managers	299	90	30	1.3	\$100,758	Bachelor's degree	None	None
				109	36.4	2.1				
				32	10.8	1.1				
				6	1.9	0.2				
Support Services	2191011	Substance Abuse/Behavioral Disorder Counselors**	58	17	29.1	0.4	\$33,954	High school diploma or equivalent	None	Moderate term on the job training
				5	8.4	0.1				
				13	22	0.7				
				9	15.1	0.5				
Support Services	2191014	Mental Health Counselors**	135	41	30.4	0.6	\$39,378	Master's degree	None	Internship/residency
				14	10	0.3				
				24	17.6	0.7				
				27	20.1	0.9				
Support Services	2191015	Rehabilitation Counselors	84	2	2.8	0.1	\$34,975	Master's degree	None	None
				38	45.7	1.8				
Support Services	2191022	Medical Health Social Workers	106	27	25.1	0.5	\$53,590	Master's degree	None	None
				30	28.4	0.8				
				16	15.1	0.7				
				15	14.6	0.7				
Support Services	2191093	Social & Human Services Assistants**	263	21	8	0.4	\$30,257	High school diploma or equivalent	None	Short term on the job training
				8	3.1	0.2				
				45	17.1	2				
				107	40.7	5.1				
Support Services	2191094	Community Health Workers	55	10	18.3	0.1	\$35,788	High school diploma or equivalent	None	Short term on the job training
				4	7.7	0.1				
				3	5.7	0.1				
				16	28.7	0.4				
Support Services	2191099	Community/Social Services Specialists, All Other	115	5	4.4	0.1	\$37,798	Master's degree	None	None
				4	3.2	0.1				
				4	3.8	0.1				
				30	25.9	0.9				
Therapeutic Services	2991011	Chiropractors	66	46	69.4	0.4	\$50,005	Doctoral or professional degree	None	None
				1	0.8	0				
Therapeutic Services	2991041	Optometrists	69	53	76.3	0.4	\$90,843	Doctoral or professional degree	None	None
				1	0.9	0				
Therapeutic Services	2991051	Pharmacists	250	11	4.2	0.2	\$121,701	Doctoral or professional degree	None	None
				63	25.3	1.3				
				1	0.2	0				
Therapeutic Services	2991071	Physician Assistants	73	52	71.4	1	\$86,551	Master's degree	None	None
				14	19.6	0.4				
				43	39.9	0.7				
Therapeutic Services	2991122	Occupational Therapists	109	29	26.2	0.6	\$80,670	Master's degree	None	None
				10	9	0.3				
				4	3.9	0.2				
				225	56.3	1.8				
Therapeutic Services	2991123	Physical Therapists	399	100	25	1	\$80,679	Doctoral or professional degree	None	None
				27	6.7	0.5				
				5	1.2	0.1				
				5	7.6	0.1				
Therapeutic Services	2991126	Respiratory Therapists	61	49	79.8	1.7	\$56,178	Associate's degree	None	None
				3	4.1	0.1				
				46	28.4	0.5				
Therapeutic Services	2991127	Speech-Language Pathologists	163	22	13.6	0.3	\$72,907	Master's degree	None	None
				8	4.9	0.2				
				7	4.2	0.2				
				482	20.1	7.4				
Therapeutic Services	2991141	Registered Nurses	2400	1,421	59.2	28.9	\$71,914	Associate's or Bachelor's degree	None	None
				168	7	5.8				
				22	0.9	0.8				
				68	6.2	1				
Therapeutic Services	2991171	Nurse Practitioners	109	28	25.4	0.6	\$92,698	Master's degree	None	None
				3	2.4	0.1				
				1	0.8	0				
				33	32.3	0.7				
Diagnostic Services	2992011	Med & Clinical Lab Technologists	101	58	57	1.6	\$59,681	Bachelor's degree	None	None
				79	44.3	1.1				
Diagnostic Services	2992012	Medical & Clinical Lab Technicians	178	74	41.4	1.3	\$42,546	Associate's degree	None	None
				1	0.5	0				
				204	97.4	2.8				
Therapeutic Services	2992021	Dental Hygienists	209	1	0.3	0	\$73,703	Associate's degree	None	None

Diagnostic Services	2992032	Diagnostic Medical Sonographers	65	26	39.9	0.4	\$76,570	Associate's degree	None	None
				36	55.8	0.7				
Diagnostic Services	2992034	Radiologic Technologists/Technicians	113	41	36.7	1	\$62,511	Associate's degree	None	None
				64	56.9	2.1				
Therapeutic Services	2992041	Emergency Medical Techs & Paramedics	326	179	55	1.8	\$52,893	Postsecondary non-degree award	None	None
				50	15.2	0.7				
Therapeutic Services	2992052	Pharmacy Technicians	301	11	3.5	0.2	\$28,119	High school diploma or equivalent	None	Moderate term on the job training
				49	16.2	1				
				1	0.2	0				
Therapeutic Services	2992061	Licensed Practical Nurses	710	205	28.9	3	\$48,251	Postsecondary non-degree award	None	None
				116	16.3	2.3				
				278	39.1	9.1				
				10	1.4	0.4				
Health Informatics	2992071	Med Records & Health Info Technicians	206	73	35.4	0.9	\$37,419	Postsecondary non-degree award	None	None
				77	37.6	1.3				
				18	8.9	0.5				
				1	0.4	0				
Health Informatics	2992085	Opticians, Dispensing	129	69	53.4	0.5	\$33,556	High school diploma or equivalent	None	Long term on the job training
				1	0.4	0				
				1	0.4	0				
Health Informatics	2999091	Athletic Trainers**	67	20	30.3	0.1	\$42,663	Bachelor's degree	None	None
				20	30.3	0.1				
				8	12.6	0.1				
				8	12.6	0.1				
Therapeutic Services	3191014	Nursing Assistants	1491	134	9	1.8	\$24,449	Postsecondary non-degree award	None	None
				364	24.4	6.6				
				804	53.9	24.4				
				28	1.9	1				
Therapeutic Services	3192011	Occupational Therapist Assistants	61	31	50.8	0.2	\$61,757	Associate's degree	None	None
				11	17.8	0.1				
				13	20.5	0.2				
				2	3.1	0				
Therapeutic Services	3192021	Physical Therapist Assistants	119	73	61.2	0.7	\$55,267	Associate's degree	None	None
				27	22.9	0.3				
				14	12.1	0.3				
				1	0.7	0				
Therapeutic Services	3192022	Physical Therapist Aides	106	72	67.9	0.5	\$26,292	High school diploma or equivalent	None	Moderate term on the job training
				22	21	0.2				
				8	7.3	0.1				
Health Informatics	3199011	Massage Therapists	152	37	24.6	0.5	\$26,951	Postsecondary non-degree award	None	None
				37	24.6	0.5				
				1	0.6	0				
				1	0.6	0				
Therapeutic Services	3199091	Dental Assistants	247	236	95.4	4.1	\$37,044	Postsecondary non-degree award	None	None
				2	0.7	0				
Health Informatics	3199092	Medical Assistants	481	383	79.7	6.6	\$31,227	High school diploma or equivalent	None	Moderate term on the job training
				60	12.4	1.4				
				10	2	0.4				
Health Informatics	3199097	Phlebotomists	66	39	58.9	0.9	\$34,874	Postsecondary non-degree award	None	None
				39	58.9	0.9				
				24	36.9	0.7				
				24	36.9	0.7				
Health Informatics	3199099	Healthcare Support Workers, All Other	217	49	22.5	0.3	\$35,762	High school diploma or equivalent	None	Short term on the job training
				74	33.9	0.6				
				18	8.5	0.3				
				3	1.6	0.1				
Support Services	3591012	1st/PLine Svcs/Mgrs, Food Prep/Serv ** USE EMP	877	11	1.2	0.2	\$27,939	High school diploma or equivalent	1 to 5 years	None
				24	2.7	0.7				
				4	0.5	0.2				
Health Informatics	4393011	Bill and Account Collectors**	468	55	11.8	0.6	\$36,378	High school diploma or equivalent	None	Moderate term on the job training
				22	4.6	0.3				
				4	0.8	0.1				
				1	0.2	0				
Health Informatics	4394171	Receptionists & Information Clerks **	907	368	40.6	5.3	\$27,591	High school diploma or equivalent	None	Short term on the job training
				34	3.7	0.6				
				26	2.9	0.8				
				18	2	0.6				

INFORMATION TECHNOLOGY							
INDUSTRIES FOR PRINCIPAL OCCUPATIONS IN THE NORTHEAST REGION							
SOC Code	SOC Title	Average Annual Job Openings	RHSCE	DESCRIPTION	Annual Occupational Openings in Industry	2022 Percent of occupation	
1551121	Computer Systems Analysts	574		522	Credit intermediation and related activities	24	4.1
				524	Insurance carriers and related activities	47	8.2
				551	Management of companies and enterprises	42	7.3
				611	Educational services, state, local, and private	26	4.5
				5241	Insurance carriers	42	7.4
				5415	Computer systems design and related services	166	28.9
				5416	Management, scientific and technical consulting services	22	3.9
				9992	State government, excluding education and hospitals	21	3.6
1551122	Information Security Analysts	64		522	Credit intermediation and related activities	5	8.3
				523	Securities, commodity contracts, and other financial investments and	3	4.4
				524	Insurance carriers and related activities	2	3.9
				551	Management of companies and enterprises	4	6.7
				5221	Depository credit intermediation	4	5.9
				5231	Securities and commodity contracts intermediation and brokerage	2	3.8
				5415	Computer systems design and related services	21	32.1
				5416	Management, scientific and technical consulting services	4	6.3
1551131	Computer Programmers	718		524	Insurance carriers and related activities	26	3.6
				551	Management of companies and enterprises	25	3.5
				5112	Software publishers	39	5.4
				5415	Computer systems design and related services	292	40.6
				5613	Employment services	28	3.9
1551132	Software Developers Applications	812		334	Computer and electronic product manufacturing	28	3.5
				524	Insurance carriers and related activities	42	5.2
				551	Management of companies and enterprises	35	4.3
				5112	Software publishers	65	8.0
				5241	Insurance carriers	36	4.4
				5415	Computer systems design and related services	316	38.9
				5416	Management, scientific, and technical consulting services	33	4.1
1551133	Software Developers, Systems Software	467		334	Computer and electronic product manufacturing	50	10.8
				423	Merchant wholesalers, durable goods	17	3.7
				5112	Software publishers	32	6.9
				5413	Architectural, engineering, and related services	21	4.5
				5415	Computer systems design and related services	177	37.8
				5416	Management, scientific and technical consulting services	23	4.9
				5417	Scientific research and development services	16	3.5
1551134	Web Developers	110		519	Other information services	6	5.7
				611	Educational services, state, local, and private	6	5.2
				813	Religious, grantmaking, civic, professional and similar organizations	5	4.8
				5415	Computer systems design and related services	21	19.1
				5416	Management, scientific, and technical consulting services	5	4.1
1551141	Database Administrators	120		522	Credit intermediation and related activities	5	3.9
				524	Insurance carriers and related activities	8	6.7
				551	Management of companies and enterprises	8	6.6
				611	Educational services, state, local, and private	11	8.8
				5241	Insurance carriers	6	5.4
				5415	Computer systems design and related services	24	20.4
				5416	Management, scientific, and technical consulting services	5	4.4
				517	Telecommunications	11	3.9
1551142	Network & Computer Sys Administrators	284		524	Insurance carriers and related activities	12	4.4
				551	Management of companies and enterprises	15	5.2
				611	Educational services, state, local, and private	30	10.4
				5415	Computer systems design and related services	53	18.8
				5416	Management, scientific and technical consulting services	10	3.5
				517	Telecommunications	12	9.4
1551143	Computer Network Architects	129		518	Data processing, hosting and related services	5	3.9
				524	Insurance carriers and related activities	7	5.1
				551	Management of companies and enterprises	6	4.9
				611	Educational services, state, local, and private	5	3.9
				5171	Wired telecommunications carriers	9	6.6
				5241	Insurance carriers	6	4.6
				5413	Architectural, engineering, and related services	5	3.5
				5415	Computer systems design and related services	41	31.8
				5416	Management, scientific, and technical consulting services	6	5.0
				423	Merchant wholesalers, durable goods	26	5.2
1551151	Computer User Support Specialists	502		551	Management of companies and enterprises	22	4.4
				611	Educational services, state, local, and private	64	12.7
				5112	Software publishers	22	4.3
				5415	Computer systems design and related services	123	24.6
				5613	Employment services	18	3.6
				423	Merchant wholesalers, durable goods	4	4.3
1551152	Computer Network Support Specialists	103		517	Telecommunications	8	7.3
				551	Management of companies and enterprises	5	4.8
				611	Educational services, state, local, and private	7	7.0
				622	Hospitals, state, local, and private	4	3.7
				5171	Wired telecommunications carriers	5	5.1
				5415	Computer systems design and related services	26	25.2

MANUFACTURING

NORTHEAST REGION EDUCATIONAL SUPPLY DATA – TOP OCCUPATIONS WITH OPENINGS IN COMBINED INDUSTRIES

Occupation	Program Code (CIP)	Program Title	FY 2014 Completers	Degree Type
Team Assemblers	No Related Program of Study for This Occupation			
Machinists** ComputerControlled Machine Tool Operators**	48.0501	Machine Tool Technology		
	Community Colleges	College of Lake County	6	< 1Yr Cert
			1	Associate
		Elgin CC	2	112 Yr Cert
			1	Associate
		Kankakee CC	2	112 Yr Cert
		Prairie State College	2	112 Yr Cert
48.0503	Mach Shop Technology	No Programs in this EDR*		
Packaging & Filling Machine Operators & Tenders	No Related Program of Study for This Occupation			
Food Batchmakers	No Related Program of Study for This Occupation			
Software Developers, Systems Software**	11.0102	Artificial Intelligence	No Programs in this EDR*	
	11.0103	Information Technology		
	Community Colleges	CCC1Harold Washington College	4	Associate
		CCC1Truman College	6	Associate
		CCC1Kennedy1King College	4	Associate
		CCC1Olive Harvey College	7	Associate
		CCC1Daley College	3	Associate
		CCC_Wright College	6	Associate
		College of Lake County	3	Associate
		Kankakee CC	1	Associate
		McHenry County College	6	Associate
		Morton College	1	Associate
		Oakton CC	2	Associate
		Prairie State College	7	Associate
Public Universities	Northern IL University	36	Masters	

Independent Not For Profit Universities	DePaul University	24	Bachelor
	Elmhurst College	8	Bachelor
	IL Institute of Technology	24	Bachelor
	"	95	Masters
	Loyola University of Chicago	22	Masters
	Robert Morris of IL	32	Bachelor
	University of St Francis	5	Bachelor
Independent For Profit Universities	American Intercontinental University Online	220	Bachelor
		102	Masters
	Sanford Brown1Chicago	3	Associate
		5	Bachelor
11.0102	Artificial Intelligence	No Programs in this EDR*	
11.0201	Computer Programming, General		
Community Colleges	Harper College	25	< 1 Yr Cert
	Joliet Junior College	10	Associate
	Kishwaukee College	1	< 1 Yr Cert
	McHenry County College	1	112 Yr Cert
	Moraine Valley CC	7	< 1 Yr Cert
	Oakton CC	1	Associate
	Prairie State College	3	< 1 Yr Cert
	Waubonsee CC	4	< 1 Yr Cert
3		< 1 Yr Cert	
Independent Not For Profit Universities	DePaul University	42	Bachelor
		10	Masters
Out of State Universities	University of Phoenix (AZ)	3	Bachelor
11.0202	Computer Programming, Specific Applications		
Community	College of DuPage	22	< 1 Yr Cert
		5	Associate
	College of Lake County	5	< 1 Yr Cert

Colleges	College of Lake County	2	Associate
	McHenry County College	2	< 1 Yr Cert
	Moraine Valley CC	11	< 1 Yr Cert
Independent Not For Profit Universities	DePaul University	1	Bachelor
		12	Masters
11.0401	Information Science/Studies		
Community Colleges	CCC1Washington College	27	< 1 Yr Cert
	CCC1Truman College	32	< 1 Yr Cert
		6	112 Yr Cert
	CCC1Kennedy1King College	17	< 1 Yr Cert
	CCC1MalcolmX College	3	< 1 Yr Cert
	CCC1Olive1Harvey College	17	< 1 Yr Cert
		6	112 Yr Cert
	CCC1Daley College	25	< 1 Yr Cert
	CCC1Wright College	39	< 1 Yr Cert
		6	112 Yr Cert
	Harper College	11	Associate
	Oakton CC	9	< 1 Yr Cert
	So. Suburban Coll of Cook County	27	< 1 Yr Cert
		4	Associate
	Triton College	2	< 1 Yr Cert
2		Associate	
Independent Not For Profit Universities	Benedictine University	4	Bachelor
	DePaul University	18	Bachelor
		154	Masters
	Elmhurst College	4	Bachelor
	National1Louis University	1	Bachelor
	Northwestern University	5	Bachelor
57		Masters	

	Oliver Nazarene University	5	Bachelor
	University of Illinois Chicago	33	Bachelor
11.0701	Computer Science		
Public Universities	Chicago State University	6	Bachelor
		18	Masters
	Governors State University	27	Bachelor
		10	Masters
	Northeastern IL University	49	Bachelor
		15	Masters
	Northern IL University	64	Bachelor
		62	Masters
	University of IL Chicago	73	Bachelor
		110	Masters
		11	Dr Research
	Independent Not For Profit	Aurora University	10
Benedictine University		3	Bachelor
DePaul University		56	Bachelor
		66	Masters
		4	Dr Research
Dominican University		9	Bachelor
Elmhurst College		9	Bachelor
IL Institute of Technology		26	Bachelor
		177	Masters
		3	Dr Research
Lake Forest College		5	Bachelor
Lewis University		24	Bachelor
Loyola University of Chicago		11	Masters
North Central College	13	Bachelor	
		29	Bachelor

		Northwestern University	45	Masters
			9	Dr Research
		Olivet Nazarene University	4	Bachelor
		Roosevelt University	24	Bachelor
			2	Masters
		St Xavier University	12	Bachelor
		Trinity Christian College	2	Bachelor
		University of Chicago	18	Bachelor
			76	Masters
			5	Dr Research
	University of St Francis	2	Bachelor	
	Wheaton College	1	Bachelor	
Software Developers, Systems Software**	14.0901	Computer Engineering, General		
	Public Universities	University of IL Chicago	22	Bachelor
	Independent Not For Profit Universities	IL Institute of Technology	31	Bachelor
			16	Masters
			2	Dr Research
		Northwestern University	15	Bachelor
			16	Masters
			2	Dr Research
	14.0903	Computer Software Engineering	<i>No Programs in this EDR*</i>	
	15.1204	Computer Software Technology		
Community Colleges	Oakton Community College	3	< 1 Yr Cert	
	Prairie State College	2	< 1 Yr Cert	
Chemical Plant & System Operators**	41.0301	Chemical Technology		
	Community Colleges	CCC1Truman College	1	Associate
Inspectors, Testers, Sorters & Weighers	15.0702	Quality Control Technology		
	Community Colleges	CCC1Daley College	2	< 1 Yr Cert
	47.0303	Industrial Mechanics & Maint Technology		

Industrial Machinery Mechanics**	Community Colleges	CCC1Daley College	1	< 1 Yr Cert
			3	Associate
		College of Lake County	1	< 1 Yr Cert
		Elgin Community College	39	< 1 Yr Cert
			2	Associate
		Joliet Junior College	6	< 1 Yr Cert
			6	112 Yr Cert
			7	Associate
		Kankakee CC	2	< 1 Yr Cert
			1	112 Yr Cert
		Moraine Valley CC	1	112 Yr Cert
		Prairie State College	5	112 Yr Cert
		Waubonsee Community College	36	< 1 Yr Cert
			1	112 Yr Cert
			1	Associate

Notes: Kankakee Community College overlaps with the East Central EDR

* Potential supply. College of Lake County, Elgin Community College, Kankakee Community College, Moraine Valley Community College, Oakton Community College, Prairie State College, So Suburban College of Cook County, Triton College, and Waubonsee College reported enrollment in 48 9999 (< 1 Yr Cert) of 130 students

** denotes occupations which occur in multiple clusters/pathways

TRANSPORTATION, DISTRIBUTION & LOGISTICS

NORTHEAST REGION EDUCATIONAL SUPPLY DATA -- TOP OCCUPATIONS WITH OPENINGS IN COMBINED INDUSTRIES

Occupation	Program Code (CIP)	Program Title	FY 2014 Completers	Degree Type	WIOA Eligible Training Providers
Truck Drivers, Heavy & Tractor Trailer**	49 0205	Truck/Bus Driver/Comm'l Vehicle Oper			
Truck Drivers, Light & Delivery Services School Bus Drivers	Community Colleges	CCC*Olive Harvey College	2,973*	< 1 Yr Cert	
		Elgin Community College	38	< 1 Yr Cert	
Flight Attendants	49 0106	Airline Flight Attendant	No Programs in this EDR		
Shipping, Receiving, & Traffic Clerks**	No Related Program of Study for This Occupation				
Cargo & Freight Agents (Route Planners)	52 0408	Gen'l Office Occs/Clerical Services			
	Community Colleges	Kishwaukee	11	1*2 Yr Cert	
		Morton	4	< 1 Yr Cert	
		Elgin CC	2	< 1 Yr Cert	
52.0410	Traffic/Customs/Transp Clerk/Tech	No programs in the EDR			

HEALTH CARE

NORTHEAST REGION EDUCATIONAL SUPPLY DATA – TOP OCCUPATIONS WITH OPENINGS IN COMBINED INDUSTRIES

Occupation	Program Code (CP)	Program Title	FY 2014 Completers	Degree Type	Program Code (CP)	Program Title	FY 2014 Completers	Degree Type	
Registered Nurses	51.3801	Registered Nursing				Related Programs			
		CCC Truman CoB	143	Associate		DePaul Univ			
		CCC Malcolm X	62	Associate	51.3804	Nurse Anesthetist	94	Masters	
		CCC Daley Coll	74	Associate	51.3805	Family Practice Nursing	10	Post Mstr Cert	
		CCC Wright Coll	45	Associate	51.3818	Nursing Practice	1	Dr Prof/Prac	
		Coll of DuPage	115	Associate		Elmhurst College			
		Coll of Lake County	85	Associate	51.3813	Clinical Nurse Specialist	62	Bachelor	
		Elgin CC	96	Associate	51.3820	Clinical Nurse Leader	24	Masters	
		Harpes College	101	Associate		Loyola Univ Chicago			
		Joblet Jr College	125	Associate	51.3802	Nurse Administration	12	Masters	
		Kankakee CC	49	Associate	51.3803	Adult Health Nursing	15	Masters	
		Kishwaukee College	66	Associate	51.3805	Family Practice Nursing	37	Masters	
		McHenry County College	35	Associate			6	Post Mstr Cert	
		Moraine Valley CC	82	Associate	51.3808	Nursing Science	5	Dr Research	
		Morton College	22	Associate	51.3818	Nursing Practice	3	Dr Research	
		Oakton CC	80	Associate	51.3813	Clinical Nurse Specialist	9	Masters	
		Prairie State College	60	Associate	51.3814	Critical Care Nursing	11	Masters	
		So. Suburban Coll of Cook Co.	29	Associate	51.3818	Women's Health Nursing	2	Masters	
		Tristram College	72	Associate	51.3822	Women's Health Nursing	2	Masters	
		Waubesaee CC	87	Associate	51.3899	Reg Nursing, Nursing Admin, Nursing	3	Post Mstr Cert	
				28	Bachelor	51.9999	Health Profs & Related Clinical Sciences Other	1	Masters
				1	Masters		Univ of St. Francis		
				66	Bachelor	51.3802	Nurse Administration	26	Masters
				227	Bachelor		Chamberlain Coll of Nursing		
				212	Bachelor	51.3818	Nursing Practice	2	Doctoral Other
				114	Bachelor		Governors State Univ		
				6	Masters	51.3805	Family Practice Nursing	10	Post Mstr Cert
				123	Bachelor	51.3806	Nursing Science	73	Masters
				0	Bachelor	51.3818	Nursing Practice	12	Dr Prof Practice
				94	Masters		Northern IL Univ		
				0	Bachelor	51.3806	Nursing Science	62	Masters
				208	Bachelor		Univ of IL Chicago		
				279	Bachelor			4	Post BA Cert
				9	Masters	51.3808	Nursing Science	193	Masters
				107	Bachelor			12	Dr Research
				191	Bachelor	51.3818	Nursing Practice	17	Dr Prof/Prac
				154	Masters	51.9999	Health Profs & Related Clinical Sciences, Other	32	Masters
				158	Bachelor	Lewis Univ			
				51	Masters	51.3803	Adult Health Nursing	1	Post Mstr Cert
				8	Associate		North Park Univ		
				128	Bachelor	51.3805	Family Practice Nursing	1	Post Mstr Cert
				40	Bachelor	51.3808	Nursing Science	18	Masters
				111	Bachelor	51.3811	Geriatric Nursing	1	Post Mstr Cert
				1	Post BA Cert	51.3808	Nursing Science	152	Masters
				62	Masters		Rosalind Franklin		
				38	Associate	51.3804	Nurse Anesthetist	22	Masters
				17	Associate	51.3805	Family Practice Nursing	16	Post Mstr Cert
			4 288	Bachelor	51.3808	Nursing Science	64	Masters	
			656	Masters		No Shores Hlth Sp Sch of Nurse Anesth			
			79	Associate	51.3804	Nurse Anesthetist	19	Post BA Cert	

* Chamberlain College of Nursing offers Illinois sites for a BSN 3 year program, online offerings include RN to BSN, MSN, and DNP programs

HEALTH CARE

NORTHEAST REGION EDUCATIONAL SUPPLY DATA -- TOP OCCUPATIONS WITH OPENINGS IN COMBINED INDUSTRIES

Occupation	Program Code (CIP)	Program Title	FY 2014 Completers	Degree Type	
Nursing Assistants	51.2601	Health Aide			
	Community Colleges	Coll of DuPage	47	< 1Yr Cert	
		Moraine Valley CC	14	< 1Yr Cert	
		Oakton CC	1	< 1Yr Cert	
	51.3902	Nurse Aide			
	Community Colleges	Coll of DuPage	334	< 1Yr Cert	
		Coll of Lake County	670	< 1Yr Cert	
		Elgin CC	57	< 1Yr Cert	
		Harper College	696	< 1Yr Cert	
		Joliet		4	< 1Yr Cert
				10	< 1Yr Cert
		Kankakee CC	37	1D2YrCert	
		Kishwaukee College	181	1D2YrCert	
		McHenry Co Coll	287	1D2YrCert	
		Morton College	39	1D2YrCert	
		Oakton CC	147	1D2YrCert	
		Prairie State College	104	1D2YrCert	
		Triton College	123	1D2YrCert	
	Waubonsee CC	279	1D2YrCert		
	Indep For Profit	Midwestern Career Coll	10	1D2YrCert	
Solex College		16	1D2YrCert		
51.0710	Med Office Asst/Specialist	No Programs in this EDR			
51.0712	Medical Reception/Receptionist.				
Community Colleges	Coll of Lake County	48	<1 Yr Cert		
	Morton College	9	<1 Yr Cert		
51 0713	Medical Insurance Coding Specialist/Coder				

Medical Assistants

Community Colleges	CCCDTruman College	40	<1 Yr Cert
	CCCDailey College	16	<1 Yr Cert
	College of DuPage	18	<1 Yr Cert
	Harper College	27	1D2YrCert
	Joliet Jr College	29	1D2YrCert
	Kankakee CC	16	1D2YrCert
	Kishwaukee College	4	<1 Yr Cert
	McHenry Co College	23	<1 Yr Cert
	Moraine Valley CC	25	1D2YrCert
	Oakton CC	19	<1 Yr Cert
	So. Suburban Coll of Cook Co	20	1D2YrCert
	Waubonsee CC	9	1D2YrCert
	51.0716	Med Admin/Exec Assistant & Med Secretary.	
Community Colleges	CCCDTruman College	3	<1 Yr Cert
	Harper College	12	<1 Yr Cert
		20	Associate
	Waubonsee CC	17	<1 Yr Cert
51.0801	Med/Clinical Assistant		
Community Colleges	CCCDOlive Harvey	23	<1 Yr Cert
	CCCDWright	12	1D2YrCert
	Coll of DuPage	13	1D2YrCert
	Coll of Lake County	18	1D2YrCert
		10	Associate
	Harper College	38	1D2YrCert
	Moraine Valley CC	25	1D2YrCert
	So Suburban Coll of Cook Co.	17	1D2YrCert
Waubonsee CC	6	1D2YrCert	
Indep Not For	Robert Morris Univ	66	Associate
	Coyne College	28	1D2YrCert

	Indep For Profit	Coyne College	33	Associate
		Fox College	1	1D2YrCert
			29	Associate
		Lincoln Coll of Technology	91	1D2YrCert
		Midwestern Career Coll	21	Associate
		Northwestern CollDChicago	21	Associate
		Northwestern CollDSouthwest	24	Associate
		Westwood CollDChicago Loop	49	1D2YrCert
		Westwood CollDDuPage	37	1D2YrCert
		Westwood CollDO'Hare	49	1D2YrCert
		Westwood CollDRiver Oaks	89	1D2YrCert
Out of State	Chicago ORT Tech Institute	16	<1 Yr Cert	
51.0809	Anesthesiologist Asst	No Programs in this EDR		
51.0813	Chiropractic Asst/Technician	No Programs in this EDR		
Licensed Practical Nurses	51.3901	Licensed Practical Nursing		
	Community Colleges	CCCDWright Coll	81	1D2YrCert
		Coll of DuPage	37	1D2YrCert
		Elgin CC	107	1D2YrCert
		Harper College	17	1D2YrCert
		Joliet Jr College	98	1D2YrCert
		Kankakee CC	18	1D2YrCert
		Moraine Valley CC	18	1D2YrCert
		Morton College	39	1D2YrCert
Indep For Profit	Ambria Coll of Nursing	95	1D2YrCert	
Receptionists & Information Clerks **	52.0406	Receptionist	No Programs in this EDR	