Aligning Opportunities in Northeast Ohio

2020 REPORT / **Executive Summary**

A Resource to Aid in Addressing the Demand and Supply Imbalance in the Region's Workforce

aligning OPPORTUNITIES

PREPARED BY **Team NEO**

IN PARTNERSHIP WITH **Delta Dental**

WITH GENEROUS SUPPORT BY

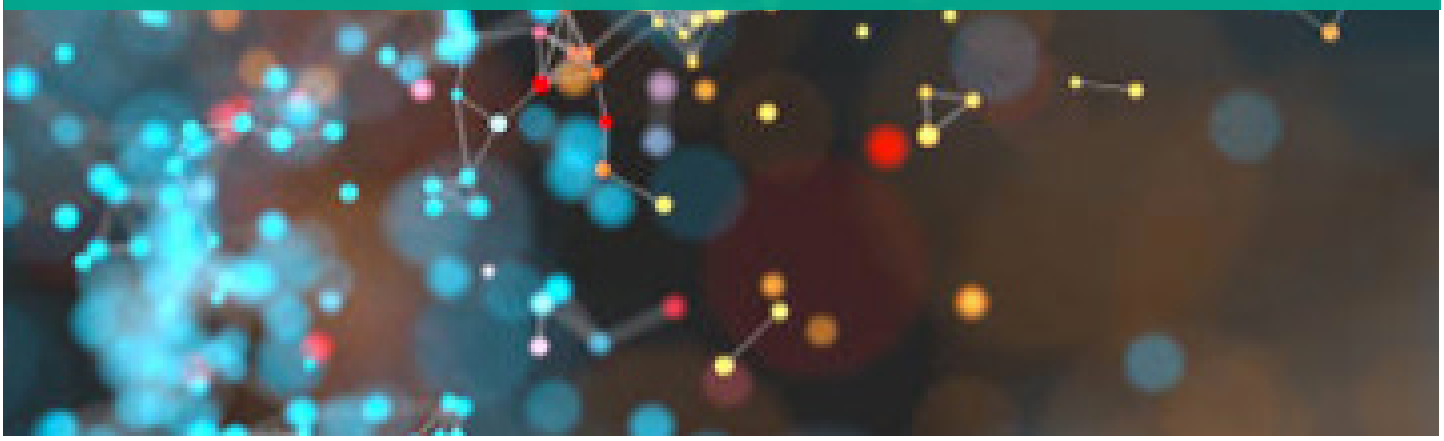
SHERWIN-WILLIAMS.

Alliance Solutions Group

What's **new** in the 2020 Report

1. **A deeper look** at equity as it relates to labor force opportunities
2. **An updated snapshot** of the talent supply and demand mismatch
3. **Fresh insights** into emerging high-potential careers
4. **New case studies** illustrating how **Aligning Opportunities** is being used around the region

This report is the 4th edition of Aligning Opportunities. Like the previous editions, it shares data representing a snapshot in time — in this instance, the pre-COVID-19 labor market. The methodologies of this report are consistent with past versions and represent a common way of looking at a series of workforce issues affecting Northeast Ohio. Its findings are consistent as well: there continues to be a great need for skilled talent in the region's in-demand job areas.



from Delta Dental

Dear Northeast Ohio Leaders:

Together with our customers and partners, Delta Dental of Ohio is committed to helping Northeast Ohio build healthy, smart, vibrant communities.

We don't know yet what the economic impact of the COVID-19 pandemic will be, but we do know that the workforce we retain, retrain and recruit will be critical to rebooting our businesses in the short and long term.

That's why we are proud to once again sponsor the distribution and discussion of Team NEO's Aligning Opportunities report. The 2020 edition offers an in-depth, one-of-a-kind look at the supply and demand of talent in our region, with a special focus on the coronavirus and its profound effects on business.

We are in uncharted territory.

Most of us are making the best of the crisis, changing the way we communicate and reviewing business priorities, strategies and goals. Many of us are also likely advancing technology projects, discovering innovations and efficiencies, and looking forward to becoming better, smarter and more adaptive companies on the other side.

The economy will likely change, but the need for a talented workforce will not. Aligning Opportunities is a unique tool that can focus us on what the in-demand jobs will be in manufacturing, health care and IT in this unprecedented time and beyond.

We believe the data in this report are more important than ever before.

Please join Delta Dental in using this year's edition as a launching pad for a yearlong focus on creating pathways to successful people. This effort will include events and conversations designed to engage the business community as well as educators and students in grades 6-12 and higher education.

You know Delta Dental as one of the region's largest dental benefits companies. We provide a high-value, cost-effective employee benefit that helps you maintain a healthy workforce, which is perhaps more important than ever before given our current circumstances.

We look forward to partnering with Team NEO and you to keep our region strong and competitive.

Sincerely,

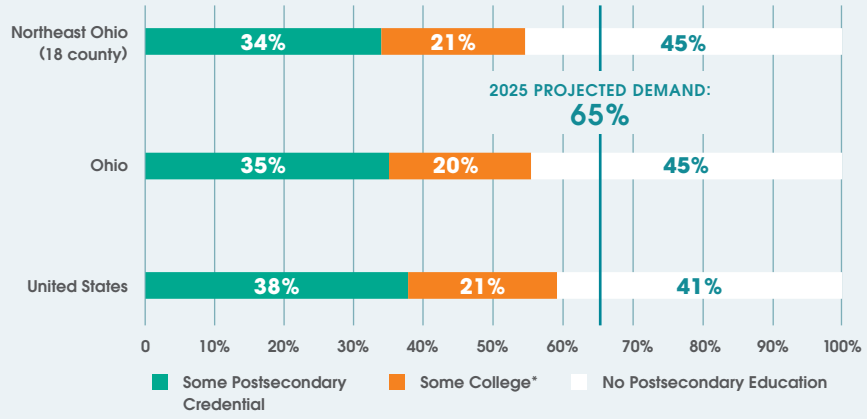
MIKE LOEFFLER
Region Director, Delta Dental of Ohio

The Problem

Education, Demographics

By 2025, 65% of Ohio's workforce will need to have a 2- or 4-year degree, or certified marketable skill. Today, the level of educational attainment in Northeast Ohio falls well short of that mark, with only 34% of the region's population having received a 2- or 4-year degree and another 21% having some training but no degree or certificate to show for it. Although postsecondary educational attainment has grown 1% since the 2017 Aligning Opportunities report, a more aggressive pace is necessary if the region is to meet its 65% goal by 2025.

Gap Between Education Required by 2025 & Educational Attainment of Population 2018



*"Some College" includes both those who have started, but not completed, a college degree program and those who may hold a certificate or other training credential that is not a degree.

Alignment of credentials with in-demand jobs is critical. Meeting the needs of the 2025 market means boosting educational attainment across the region.

Compounding this challenge are overall declines in population and in the total size of the region's labor force.

2001 – 2018 IN NORTHEAST OHIO

Population dropped by 155,000 to 4.278 million

Labor force dropped by 146,000 to 2.111 million

Looking Ahead

The post-COVID-19 economy will demand even more credentialed workers.

With fewer workers but increasing demand, Northeast Ohio faces a growing need to ***educate*** and ***train*** people to fill the jobs of the future.

SOURCE: EMSI 2020; Population 25 years and over

Successful Solutions

Closing the Equity Gap

As in many other places across America, systemic racial exclusion has largely separated minority communities and people of color from mainstream economic participation in the Northeast Ohio economy. Notably, this exclusion has concentrated workers of color into traditionally low-paying occupations, disconnected minority neighborhoods from nearby job opportunities and perpetuated disparities in wages along racial lines.

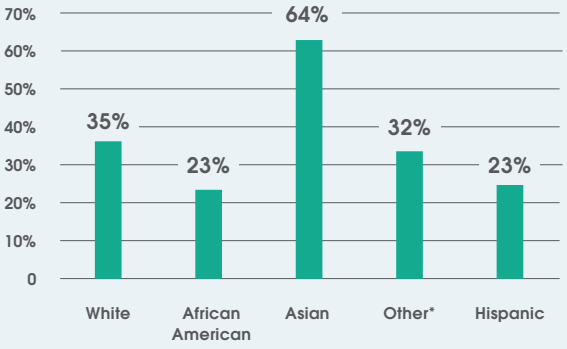
Creating more opportunity for people of color could be key to helping Northeast Ohio reach its full potential. Ongoing efforts aimed at closing the educational attainment, employment and wealth gaps across races are necessary to driving more inclusive economic growth.

African Americans, Hispanics and other minority groups have ***lower levels of educational attainment and higher unemployment rates, and are more likely to work in lower-wage occupations, and earn a lower median household income*** than white and Asian populations.

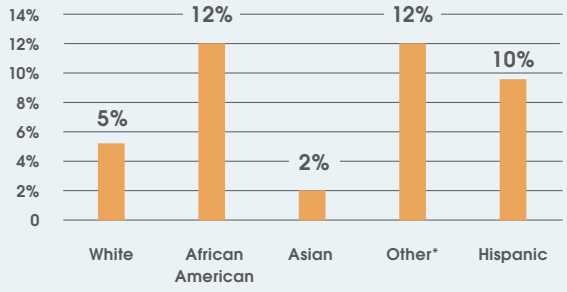
Access to inclusive educational opportunities is **vital.**

SOURCE: U.S. Census Bureau, 2014-2018 American Community Survey 5-Year Estimates

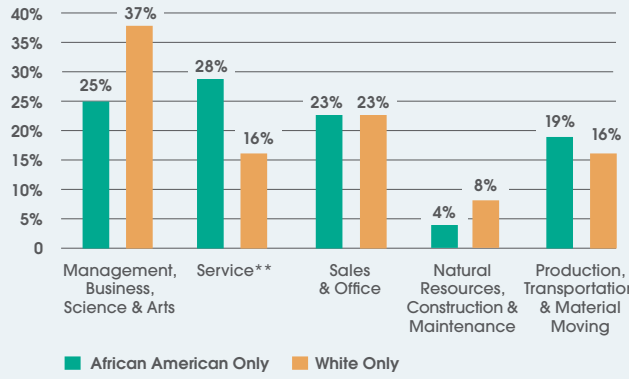
Percentage of Population with a Bachelor's Degree or Above



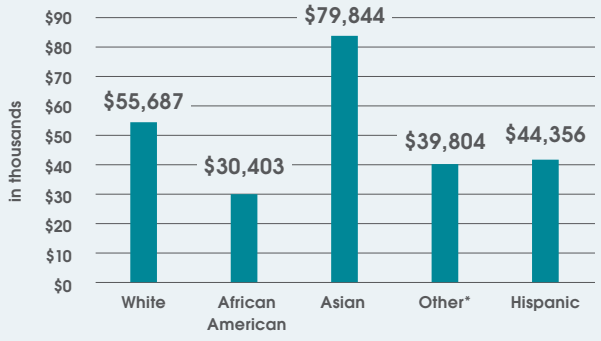
Unemployment Rate



Occupation by Race



Median Household Income



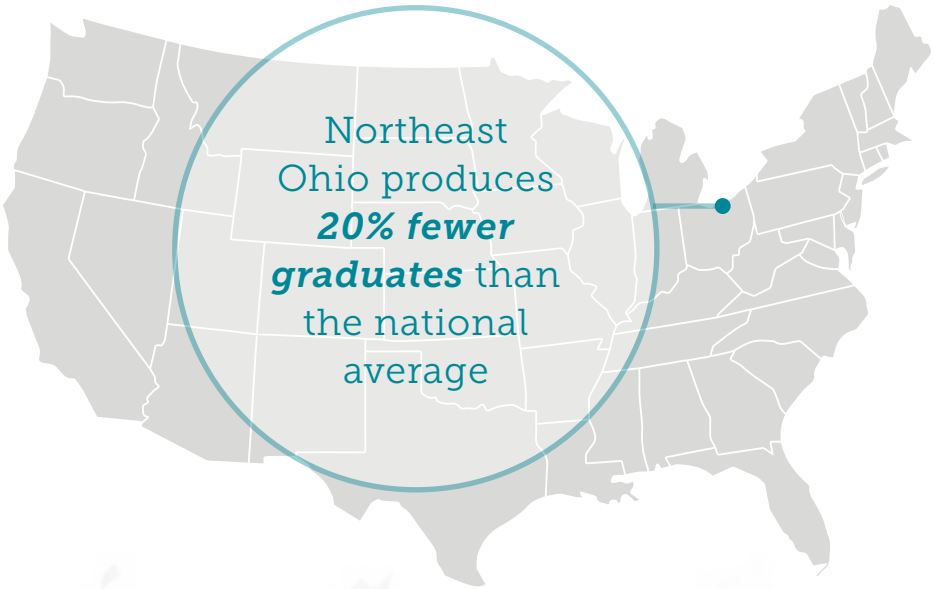
* American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, Some Other Race and Two or More Races

** Food preparation and serving, personal care and service, health care support, building and grounds cleaning and maintenance, and protective services.

Successful Solutions

Graduate Pipeline & Retention

To close the talent gap, it is imperative to increase the pipeline of credentials awarded and connect graduates to jobs within Northeast Ohio. Work-based learning experiences, such as internships or apprenticeships that lead to on-the-job skills development or full-time employment, are one solution for increasing graduate retention.



Northeast Ohio retains ***less than 47%*** of its graduates. This translates to only **14,608 graduates annually.**

If Northeast Ohio **grew retention to 57% annually**, the region could retain:

3,130 more total BA+ grads

445 more Health Care BA+ grads

162 more IT BA+ grads

263 more Architecture & Engineering BA+ grads

SOURCE: EMSI 2019

NOTE: Estimated 2017 Retention in white inside bars of "Overall BA+ Graduate Retention"

Demand-Supply Alignment

The **Summary Chart** inside shows a high-level picture of demand-supply alignment across several key occupational areas. It is a useful starting point for discussion with businesses, institutions, and philanthropic and civic leaders in Northeast Ohio.

At A Glance / DEMAND-SUPPLY ALIGNMENT

	Occupation Group	Total Demand 2019	Entry-Level Demand 2019
IT	Computer & IT Workers	17,442	6,457
Manufacturing	Metal & Plastic Workers	5,979	2,546
	Installation, Maintenance & Repair Occupations	6,901	2,659
	Skilled Production Workers	9,478	5,189
Health Care	Health Diagnosing & Treating Practitioners	19,857	8,071
	Health Technologists & Technicians	9,562	5,566
	Health Care Therapist Aides & Support Workers	1,094	338
	Nursing, Psychiatric & Home Health Aides	5,503	1,456
Life Sciences/ Education/ Engineering	Architects & Engineering Technicians	3,383	1,436
	Education	10,406	1,919
	Engineers	4,661	1,925
	Life Science Workers	2,295	821
Finance & Business Services	Financial Clerks	6,198	3,324
	Financial Specialists	6,260	2,541
	Information & Record Clerks	12,987	4,954
	Secretaries & Administrative Assistants	6,305	2,406
Management	Managers, Professional & Health	12,666	4,146
	Supervisors of Skilled Workers	4,497	2,299

SOURCE: Burning Glass Labor Insight/Jobs, EMSI 2020, Ohio Department of Job and Family Services, Team NEO Calculations

NOTE: Our demand supply model does not accurately capture every pathway to employment, i.e., non-registered apprenticeships, temp agencies, etc. The academic pathway and state registered apprenticeships have been our focus. The connection to some jobs we selected, like construction, include many non-academic pathways.

Credentials Awarded 2018	Alignment	Entry-Level Alignment
2,208	(15,234)	(4,249)
161	(5,818)	(2,385)
519	(6,382)	(2,140)
1,423	(8,055)	(3,776)
6,735	(13,122)	(1,336)
2,778	(6,784)	(2,788)
539	(555)	201
590	(4,913)	(866)
1,828	(1,555)	392
8,209	(2,197)	6,290
2,177	(2,484)	252
6,105	3,810	5,284
162	(6,036)	(3,162)
2,118	(4,142)	(423)
220	(12,767)	(4,734)
413	(5,892)	(1,993)
10,965	(1,701)	6,819
190	(4,307)	(2,109)

This chart provides a quick view of how Northeast Ohio's demand for workers in key occupational categories is or is not being met. Credentials have been growing since 2017, but not enough to meet the needs of in-demand occupations.

There is more demand than supply of credentials

Demand and supply appear in relative balance

There is more supply of credentials than demand

Top 20 Occupations / BY THE NUMBERS

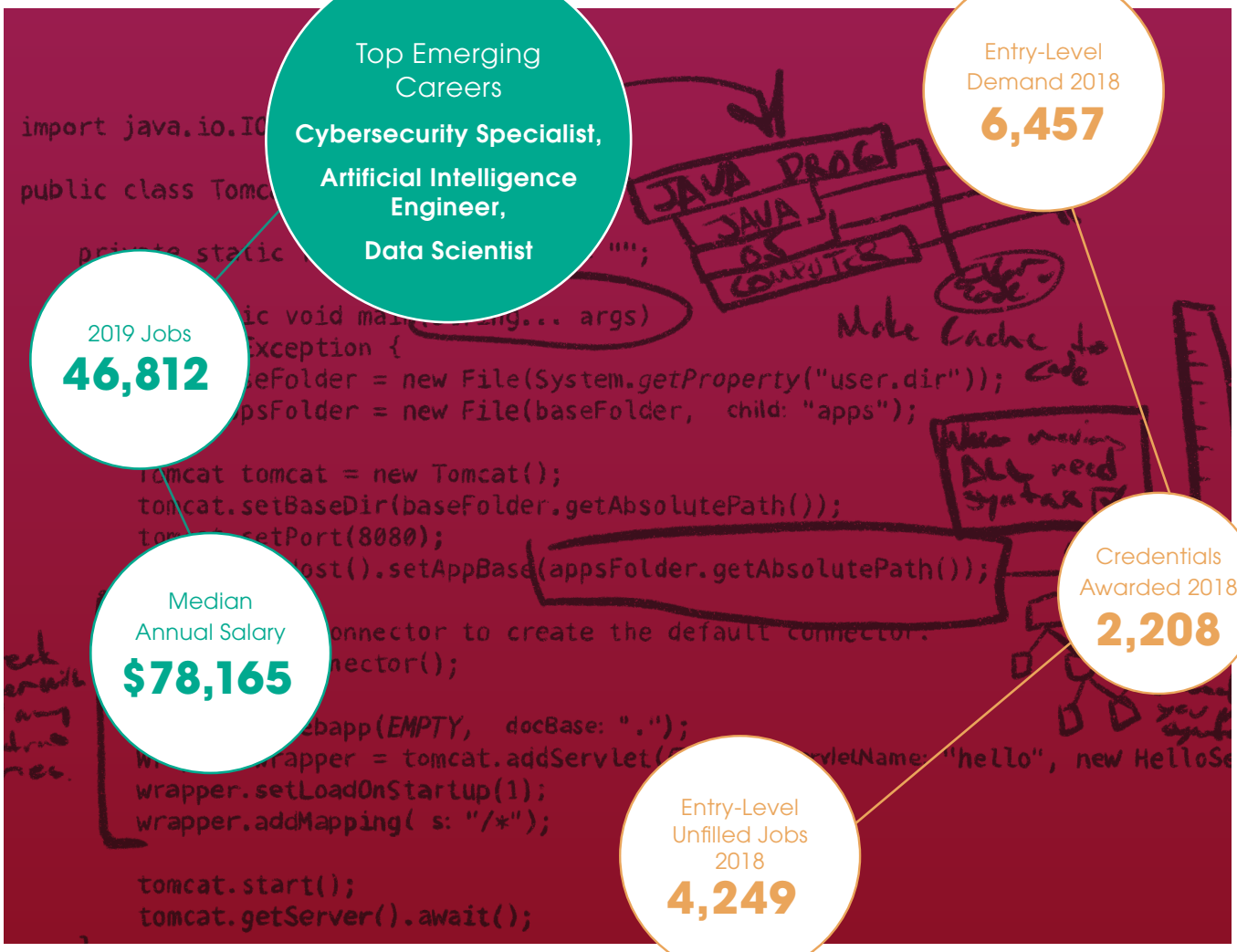
These **top 20** occupations depict good jobs offering family-sustaining wages and low risk of automation.

Occupation Title	Median Annual Salary	Total Job Demand 2019	Total Jobs 2019	2019 - 2024 % Job Growth	Education Most Preferred	Minimum Education Required
Registered Nurses	$66,031	10,678	46,106	4%	Bachelor's	Associate
Software Application Developers	$79,155	5,067	10,340	10%	Bachelor's	Skills Training
Computer Occupations[1]	$75,738	4,260	3,433	5%	Bachelor's	Skills Training
Managers, Emerging Fields[2]	$71,545	4,027	10,163	3%	Bachelor's	Bachelor's
General & Operations Managers	$93,542	2,542	22,918	3%	Bachelor's	Bachelor's
Medical & Health Services Managers	$90,329	2,425	5,374	5%	Bachelor's	Bachelor's
Financial Managers	$118,813	1,747	6,994	6%	Bachelor's	Bachelor's
Management Analysts	$77,833	1,666	8,402	6%	Bachelor's	Bachelor's
Marketing Managers	$116,365	1,026	2,300	3%	Bachelor's	Bachelor's
Financial Analysts	$68,847	1,005	3,192	2%	Bachelor's	Bachelor's
Physical Therapists	$86,646	896	3,142	9%	Master's	Master's
Web Developers	$53,560	879	1,416	7%	Bachelor's	Skills Training
Business Operations Specialists[3]	$65,215	877	11,165	3%	Bachelor's	Associate
Nurse Practitioners	$101,541	805	2,684	10%	Master's	Master's
Database Administrators	$78,165	715	1,165	2%	Bachelor's	Skills Training
Occupational Therapists	$86,229	686	2,128	6%	Master's	Master's
Information Security Analysts	$86,384	591	1,120	12%	Bachelor's	Skills Training
Human Resources Managers	$107,945	542	169	2%	Bachelor's	Associate
Operations Research Analysts	$77,117	511	94	11%	Bachelor's	Associate
Training & Development Specialists	$58,192	492	408	3%	Bachelor's	Associate

SOURCE: Burning Glass Labor Insight/Jobs, EMSI 2020, Team NEO Calculations

NOTES: **1.** Computer-savvy professionals working to design video games, develop computer solutions, build geospatial programs or analyze data.
2. Managers working on organizational compliance, risk, supply chain, investments and security, often in the green economy.
3. Business professionals working on energy audits, security assessments, international or online commerce, sustainability and disaster recovery.
Family-sustaining wage is based on a wage calculation of a family of four (two adults and two children) with only one working adult.

Computer & IT Careers / BY THE NUMBERS



Top Technical Certifications

- IT Infrastructure Library (ITIL)
- Project Management Certification
- Certified Information Systems Security Professional (CISSP)
- Cisco Certified Network Associate (CCNA)
- Certified A+ Technician

Top Software & Programming Skills

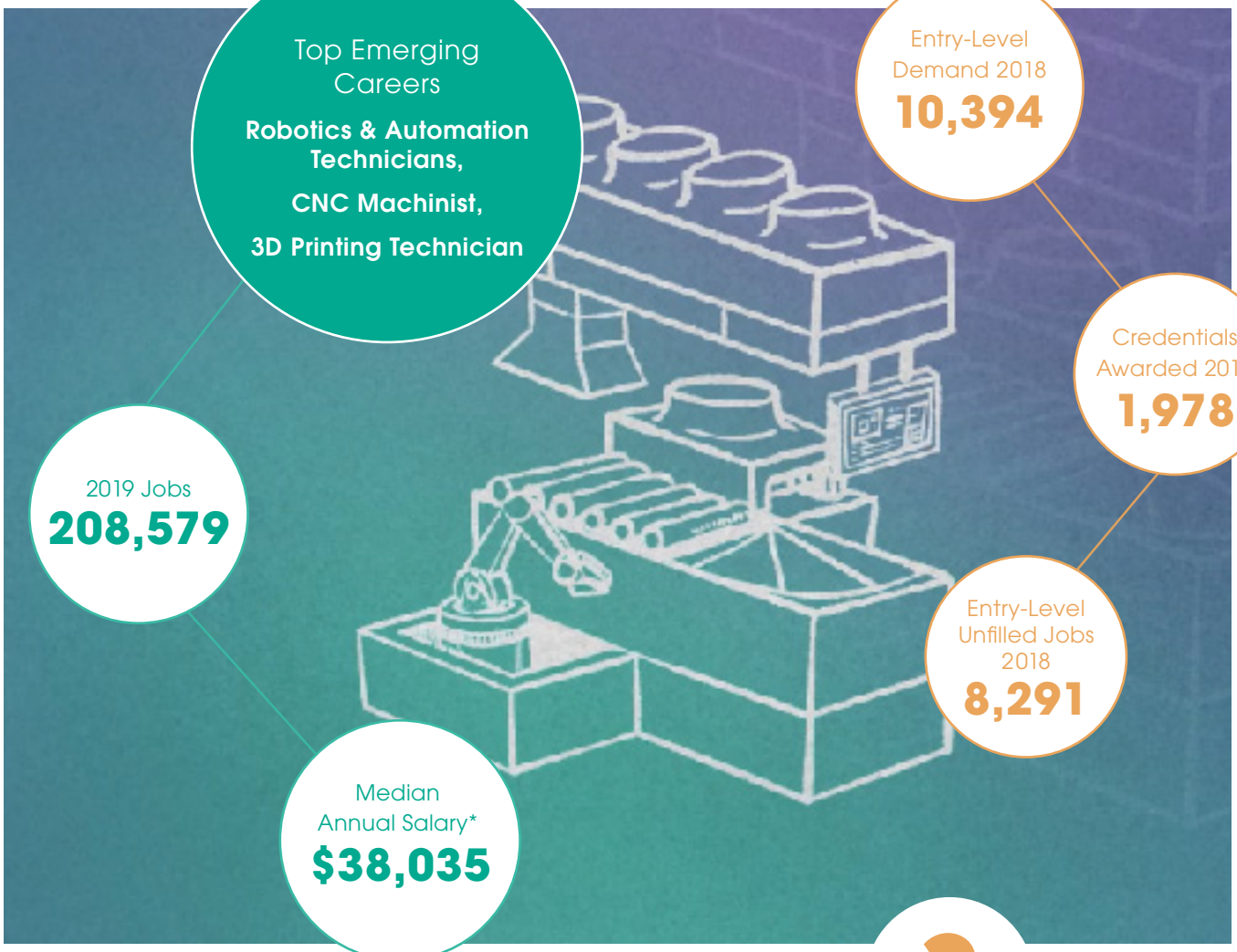
- Java
- SQL
- Oracle
- Microsoft C#
- Linux

DID YOU KNOW?

Many Northeast Ohio computer companies are eliminating a bachelor's degree requirement in favor of finding candidates with relevant skills and experience.

SOURCE: Burning Glass Labor Insight/Jobs, EMSI 2020, Team NEO Calculations
NOTE: SOC 15-1100

Manufacturing Careers / BY THE NUMBERS



Top Emerging Careers

Robotics & Automation Technicians,

CNC Machinist,

3D Printing Technician

Entry-Level Demand 2018
10,394

Credentials Awarded 2018
1,978

2019 Jobs
208,579

Entry-Level Unfilled Jobs 2018
8,291

Median Annual Salary*
$38,035

Top Certifications Requested

- EPA CFC/HCFC Certification
- Forklift Operator Certification
- Welding Certification
- CDL Class A
- CNC Certification

Top Skills Requested

- Repair
- Plumbing
- HVAC
- Hand Tools
- Machinery

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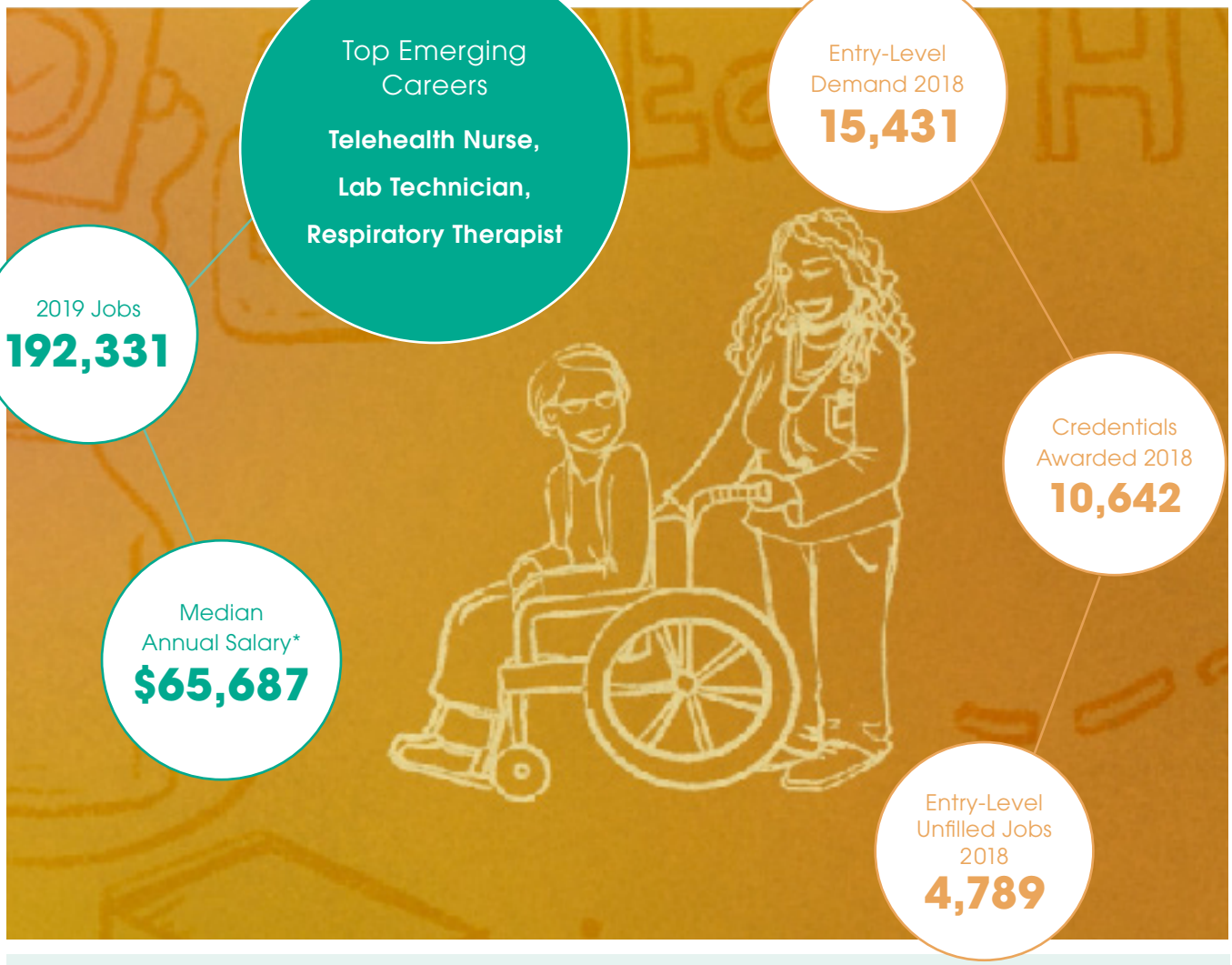
DID YOU KNOW?

Northeast Ohio has 278 registered apprenticeship programs!

SOURCE: Burning Glass Labor Insight/Jobs, EMSI 2020, Team NEO Calculations

NOTE: SOCs: 49-2000, 49-9000, 51-2000, 51-4000, 51-8000, 51-9000 * Median Annual Salary reflects the median of occupation salaries at the 5-digit SOC level

Health Care Careers / BY THE NUMBERS



Top Emerging Careers

Telehealth Nurse, Lab Technician, Respiratory Therapist

2019 Jobs
192,331

Median Annual Salary*
$65,687

Entry-Level Demand 2018
15,431

Credentials Awarded 2018
10,642

Entry-Level Unfilled Jobs 2018
4,789

Top Certifications Requested

- Registered Nurse (RN)
- Advanced Cardiac Life Support (ACLS) Certification
- Basic Life Saving (BLS)
- First Aid/CPR/AED
- Licensed Practical Nurse (LPN)

Top Skills Requested

- Patient Care
- Treatment Planning
- Personal Protective Equipment (PPE)
- Life Support
- Manual Dexterity

?

DID YOU KNOW?

Health care represents the industry with the most jobs and job openings in Northeast Ohio. These jobs may be either clinical or business-related.

SOURCE: Burning Glass Labor Insight/Jobs, EMSI 2020, Team NEO Calculations

NOTE: SOCs: 29-1000, 29-2000, 29-9000, 31-1000, 31-2000 * Median Annual Salary reflects the median of occupation salaries at the 5-digit SOC level

Aligning Opportunities Report

Team NEO, in partnership with Delta Dental, provides this Aligning Opportunities report with data-driven regional insights to inform decisions related to addressing Northeast Ohio's talent gap.

We focus on exploring solutions to this demand-supply misalignment with the goals of strengthening our economy, improving the quality of life for all residents and continuing to attract new businesses to the region.

Northeast Ohio organizations offer exciting programs such as these to engage and encourage students and workers to drive toward excellence in their education, training and careers. Read how they are utilizing this report to advance their efforts:

Junior Achievement of Greater Cleveland

Junior Achievement of Greater Cleveland seeks to help young people identify, prepare for and ultimately connect with their future careers. Research compiled in the Aligning Opportunities publication was critical in helping the organization ensure it is focusing on growth sectors in Greater Cleveland. Specifically, the board of directors and staff utilized the data to create JA Inspire, a new student capstone experience launched in 2020. JA Inspire offers several hundred high school students the opportunity to interact with regional members of the corporate community representing the six sectors detailed in Team NEO's report. Junior Achievement's hope is that by creating connectivity between industry and students, the organization can serve as the leading youth economic development engine in Greater Cleveland.

College Now

Founded in 1967, College Now Greater Cleveland works toward increasing postsecondary educational attainment through college and career access advising, financial aid counseling, and scholarship and retention services. College Now is committed to developing Greater Cleveland's talent and working to fill the talent gap by counseling students and educating them on the pathways that will lead to in-demand careers in our region.

College Now developed the Managing Advancement Programs (MAP) Database, a clearinghouse of training and education programs that helps students and adults find the best program leading to a good job. Using Aligning Opportunities as a foundation, MAP enables students to compare various programs so they can get started on a well-informed career path.

College Now also supports closing the talent gap through (Re)Connect to College, which works to reenroll students who left a university without completing their degree and offers support to help those students succeed.

Be sure to visit **aligningopportunities.teamneo.org** to read the new addition to Team NEO's annual Aligning Opportunities report, *Misaligned Opportunities: How Racial Inequities Lead to Skills Gaps in Northeast Ohio.*

aligning OPPORTUNITIES