Dear Colleagues,

Employment as an IT professional in Northeast Ohio is growing and offers an excellent career path and income. Regional companies are increasing investments in information technology and there is a strong demand for IT employees that far exceeds the currently available talent pipeline. While this is a significant challenge for employers, it can be an outstanding opportunity for our region.

Since our inception, RITE has demonstrated a commitment to understanding the IT talent needs of regional employers to help focus individual and collective efforts to close the gaps between IT demand and supply. As Northeast Ohio’s IT Workforce Alliance and the tech talent arm of the Greater Cleveland Partnership, we offer this Talent Bulletin as a supplement to reports produced by Team NEO including Quarterly Economic Reviews, Aligning Opportunities and the new Misaligned Opportunities. In addition, this Bulletin serves as a platform to share insights generated through an employer survey collaboration we undertook with ConxusNEO.

This survey, combined with other data, provides valuable future-looking insights into a variety of questions. For example,

• Where are employers investing their IT dollars?
• What skills are most in-demand and hard to find?
• Are educational requirements shifting in the recruiting process?

Never before has it been so challenging to predict the future. But having information like this will help us build a system that meets the needs of employers and job seekers alike.

Where is the puck going? We need your help to answer the question.

Join us.

Courtney DeOreo
Executive Director, RITE
Sr. Director, Tech Talent, Greater Cleveland Partnership
Every Company is a Tech Company

No matter what product or service a company may provide, technology has become a critical component of business strategy and execution. Embracing technology as fundamental to their competitive advantage, companies are using technology to differentiate themselves and capture market share. Whether a company is in the business of technology or uses technology to drive its business, it needs to attract the right IT talent.

The IT workforce in Northeast Ohio (NEO), an 18 county region as defined by Team NEO, grew by 18% from 2016-2019 from approximately 39,500 to nearly 47,000.

Tech Talent Trendlines

The entry-level gap is large and has been for the last three years.

- Demand overall for each of the four years has averaged over 14,000 positions.
- For the same time period, just over 54% are for entry-level positions — an average of 7,700 positions.
- Yet only 3,300 related IT credentials have been awarded by local institutions — less than 45% of the entry-level demand!

Closing the gap provides a dual opportunity: bolstering the regional economy and advancing economic inclusion.

- At a median salary of $69,000, filling 35% of these open IT positions (5,000) would generate over $345,000,000 in annual payroll leading to expanded city, county, and state tax revenues.
- Raising the salary of Hispanic residents from their current median ($44,356) to median for IT jobs ($69,000) drives up household income.
- Postsecondary credentials for computer and IT occupations awarded to black graduates lag white graduates 13:1

Source: Team NEO Research Insights & Misaligned Opportunities
Companies are investing in IT. Regional investments in IT projects now and over the next five years are strong and growing in complexity and potential positive impact on business competitiveness and profitability.

![Figure 6: Current and forecasted IT projects in the next 1–5 years (no. of respondents)](chart)

<table>
<thead>
<tr>
<th>IT Project</th>
<th>Current</th>
<th>1–2 years</th>
<th>3–5 years</th>
</tr>
</thead>
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<tr>
<td>Cybersecurity</td>
<td>49</td>
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<td>1</td>
</tr>
<tr>
<td>Data and IT asset security</td>
<td>48</td>
<td>3</td>
<td>0</td>
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<tr>
<td>Business Intelligence</td>
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<td>6</td>
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<td>Migration to cloud</td>
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<td>5</td>
<td>2</td>
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<tr>
<td>Data warehousing</td>
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<tr>
<td>Data integrity</td>
<td>31</td>
<td>1</td>
<td>1</td>
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<td>Social media</td>
<td>30</td>
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<tr>
<td>E-marketing</td>
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<tr>
<td>Dev Ops improvements</td>
<td>39</td>
<td>6</td>
<td>3</td>
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<tr>
<td>Mobile applications</td>
<td>27</td>
<td>7</td>
<td>2</td>
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<tr>
<td>Data center consolidation</td>
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<td>5</td>
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<td>0</td>
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<tr>
<td>Manuf./distr/ops. automation</td>
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<td>9</td>
<td>2</td>
</tr>
<tr>
<td>Sensor-based applications (IoT)</td>
<td>14</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Blockchain</td>
<td>5</td>
<td>11</td>
<td>10</td>
</tr>
</tbody>
</table>

Source: 2019 RITE / ConxusNEO IT Employer Survey

**Experience is critical.** For four of the top IT roles in demand, 76% to 90% of the openings require three or more years of experience. Anecdotal input from employers indicates this requirement is closer to five or more years of experience.

![Most Popular IT Postings – Years of Experience Required](chart)

**Network Engineer**
- % of Postings with Years Experience Required 0–2: 16
- % of Postings with Years Experience Required 3 to 5: 62
- % of Postings with Years Experience Required over 5: 32

**Systems Analyst**
- % of Postings with Years Experience Required 0–2: 24
- % of Postings with Years Experience Required 3 to 5: 55
- % of Postings with Years Experience Required over 5: 21

**IT Project Manager**
- % of Postings with Years Experience Required 0–2: 12
- % of Postings with Years Experience Required 3 to 5: 55
- % of Postings with Years Experience Required over 5: 35

**Customer Support Specialist**
- % of Postings with Years Experience Required 0–2: 65
- % of Postings with Years Experience Required 3 to 5: 30
- % of Postings with Years Experience Required over 5: 5

**Software Developer**
- % of Postings with Years Experience Required 0–2: 23
- % of Postings with Years Experience Required 3 to 5: 54
- % of Postings with Years Experience Required over 5: 23

Source: Burning Glass Technologies
Insufficient skills adversely impact employer costs and opportunities. Lack of sufficient skills and experiences forces employers to utilize more expensive consulting and contractor resources or miss important revenue and profit generation opportunities.

Degree Requirements Are Changing:

- Degree requirements in postings are often inflated as compared to those degrees that the current IT workforce has attained.
- Among the most prevalent IT jobs, over 40% and as much as 50%+ of all IT postings do not specify degree requirements—this has remained relatively consistent over the past 4 years.
- 84% of respondents to the 2019 IT Employer Survey indicate that Computer Science and Computer Engineering degrees are only somewhat important (63%) or not important at all (21%).

Source: Team NEO Research Insights
Shaping the Future of the IT Workforce

A Unifying Force for Regional Employers

The Greater Cleveland Partnership (GCP) is focused on driving the economic vitality for Northeast Ohio. That work includes bridging the region’s talent gaps for employers. In its ForwardCle strategic plan, GCP set a goal of establishing a deep competency in the area of IT talent development.

In 2019, RITE became a part of GCP providing a robust platform and integrated structure to channel industry leadership and engagement, better connect IT employers to talent solutions, and more aggressively address the region’s most critical IT talent gaps through systems-change endeavors.

In this spirit, RITE’s mission remains unchanged. We accelerate the development of a diverse, highly-skilled IT workforce by:

• Mobilizing employers—leadership, involvement and support—to influence IT talent development.
• Optimizing regional efforts through collaboration, performance accountability and shared resources.
• Delivering programming that builds the interest, skills, knowledge, experience and connections students and job seekers need to pursue IT Careers in Northeast Ohio.

RITE celebrates 10 years of success as an enduring force in IT talent development. Over the 2010—2019 timeframe, RITE has engaged more than 129 regional employers, 29 strategic alliances and program partners that include eight institutions of higher education, and over 209 high schools—impacting nearly 6,000 students across the region.

Strategic Insights Inform Action

Using labor market data from the U.S. Bureau of Labor Statistics (BLS), job postings and other real-time data sources to drive action has been in our DNA since inception. While job postings and reports provide rich information, it is engagement with employers and thought partners who are on the front lines of the IT talent shortage and skills gap that leads to actionable insights. This is the role of RITE’s unique HR IT Roundtable.

During the past five months, the HR IT Roundtable has served an especially critical role by helping us understand the impact a massive shift to remote work will have on the future of IT roles within their companies. Going forward, Roundtable members will not only continue to provide thought leadership but work even more closely to build a more diverse, highly skilled IT workforce in our region.

Workforce Connect IT Sector Partnership

GCP RITE was recently chosen to serve as the intermediary for the Workforce Connect IT Sector Partnership. This work—focused exclusively on building on-ramps to IT careers for workforce bound high school graduates, women, people of color, veterans and other people with barriers—kicks off this fall and provides a platform to amplify our mission and work. If you are an employer, an educator, or workforce service provider interested in joining in this work, please contact Courtney DeOreo at cdeooreo@OhioRITE.com.
Acknowledgements

Partners
RITE and its stakeholders across the system need to understand the IT labor market to drive programs and initiatives. RITE is pleased to be partnered with the following entities who play a leadership role with RITE in bringing this valuable information to Northeast Ohio:

Sponsors

Support also provided by BrandMuscle, MCPc and NASA John H. Glenn Research

Help shape the future of the IT Workforce for Northeast Ohio. To learn more and become engaged, visit ohioRITE.com.