Triangle Talent: Understanding the Skills Gap

Presenting Sponsor:

@raleighchamber
@raleighwake
#TriangleTalent
The same people. The same name.
And all the resources of being a division of TowneBank!

Paragon Bank is now part of a larger regional banking company.
Which means we have more resources and can offer more services than ever.
So we're everything you've come to expect, backed by more bank than ever,
for an even more Extraordinary Client Experience.

Paragon Bank Perfect Partnership
Silver Sponsor

City of Raleigh
This initiative was a partnership between WAKE, Capital Area Workforce Development, and The City of Raleigh.

Contact Ashley Cagle at acagle@raleighchamber.org for more information or visit our website here.
Regional Workforce Skills Analysis

#TriangleTalent

Prepared by RTI for Wake County Economic Development, Capital Area Workforce Board, City of Raleigh

Michael Hogan, Sara Lawrence, and Alice Brower
4,905 Staff Members Worldwide

90 Languages
250 Degree Fields
100 Nationalities

Staff By Region

3,236 United States and Canada
137 Latin America and the Caribbean
951 Africa
425 Asia
92 Europe
55 Middle East and North Africa
3 Australia

#TriangleTalent
Our Research Approach
RTI, Wake County Economic Development, Capital Area Workforce Development, and the City of Raleigh partnered with over 50 organizations including city governments, economic development offices, industry associations, and education institutions to develop and share a survey. Our goal was **to understand the areas of highest growth and skills needs in the Research Triangle region of North Carolina.**

**Data Notes**

- The data is presented for the region as a whole, not one specific county or city.
- All responses are treated equally based on size of business
  - Ex: Many small (1-5) professional services firms alongside fewer large (1,000+) health care firms

Survey participation was voluntary and the sample is not meant to be statistically significant.
RTI and partners reached out to businesses in a 15-county region that represented the broad commuting shed for Wake County. (see map)

The team reached over **4,000** contacts via targeted email, in addition to social media and industry association and regional partners.

RTI received **525** unique responses from businesses of all sizes, sectors, and counties.
Thank you to our partners
Takeaways
Responses represent a mix of industries and business types.

Data represents 10 different industry sectors across 13 counties, and ranges from small (1-5 employee) to large businesses with over 1,000 employees.

Responses:
60% from Wake County, 40% from others.

- Data treated as regional, not county-specific.

### Respondents Profile: County

![Map showing respondents from different counties]

### Respondents Profile: Industry

<table>
<thead>
<tr>
<th>Industry</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional and technical services</td>
<td>132</td>
<td>25%</td>
</tr>
<tr>
<td>Restaurant, lodging and hospitality services</td>
<td>91</td>
<td>17%</td>
</tr>
<tr>
<td>Public sector and education</td>
<td>71</td>
<td>14%</td>
</tr>
<tr>
<td>Construction and skilled trades</td>
<td>53</td>
<td>10%</td>
</tr>
<tr>
<td>IT, software, and analytics</td>
<td>46</td>
<td>9%</td>
</tr>
<tr>
<td>Health care and social assistance</td>
<td>44</td>
<td>8%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>33</td>
<td>6%</td>
</tr>
<tr>
<td>Energy, utilities, and clean tech</td>
<td>23</td>
<td>4%</td>
</tr>
<tr>
<td>Life sciences and bioscience</td>
<td>20</td>
<td>4%</td>
</tr>
<tr>
<td>Logistics, transportation, and warehousing</td>
<td>12</td>
<td>2%</td>
</tr>
</tbody>
</table>

### Respondents Profile: Size of Business

<table>
<thead>
<tr>
<th>Business Size</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5 employees</td>
<td>82</td>
<td>15.7%</td>
</tr>
<tr>
<td>5 to 9 employees</td>
<td>68</td>
<td>13.1%</td>
</tr>
<tr>
<td>10 to 19 employees</td>
<td>76</td>
<td>14.6%</td>
</tr>
<tr>
<td>20 to 49 employees</td>
<td>58</td>
<td>11.1%</td>
</tr>
<tr>
<td>50 to 99 employees</td>
<td>71</td>
<td>13.6%</td>
</tr>
<tr>
<td>100 to 249 employees</td>
<td>26</td>
<td>5.0%</td>
</tr>
<tr>
<td>250 to 499 employees</td>
<td>21</td>
<td>4.0%</td>
</tr>
<tr>
<td>500 to 999 employees</td>
<td>63</td>
<td>12.1%</td>
</tr>
<tr>
<td>1,000 or more employees</td>
<td>63</td>
<td>12.1%</td>
</tr>
</tbody>
</table>
Businesses are looking to expand

Of those surveyed, nearly 74% expect to grow in the next three years. The companies that are most likely to grow are in:

- IT, Software and Analytics (87%)
- Life Sciences and Bioscience (85%)
- Construction & Skilled Trades (84%)

Expectations of growth are commensurate to the size of the business.
- Stated hiring expectations for all companies surveyed range between 22,000 and 36,700 new jobs in the region. (in the next 3 years)

Projections of Growth
Source: RTI Survey
Industry respondents rated the quality of the talent pipeline as a **3.14** out of 5.

- STEM businesses tended to have, on average, the highest evaluation of the talent available (3.4 and above)
- Construction, logistics, and manufacturing had a more critical evaluation of the local talent pipeline (2.7 and below)
Companies value 4 year degrees, but note a need for more technical education

Companies most frequently look for workers with a college degree (49% of all respondents).

However, respondents in construction & skilled trades, manufacturing, and restaurant & hospitality were more likely to cite professional certifications, community colleges, and apprenticeships as education expectations.

“Balance of mainly 4 year engineering degrees and lack of technician community college graduates makes recruiting experienced techs difficult.”

- Manager, manufacturing company

<table>
<thead>
<tr>
<th>Education Expectations for Hiring: All Industries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Companies could select more than one.</td>
</tr>
<tr>
<td>Source: RTI Survey</td>
</tr>
<tr>
<td>4-year colleges and universities</td>
</tr>
<tr>
<td>259</td>
</tr>
<tr>
<td>Professional certifications and training</td>
</tr>
<tr>
<td>212</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
Specific Challenges
### Networks are the most important tool for sourcing talent

#### Where do you most often source your talent?

Source: RTI Survey

<table>
<thead>
<tr>
<th></th>
<th>Small businesses (1-49)</th>
<th>Medium-sized businesses (50-249)</th>
<th>Large businesses (250+)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong></td>
<td>Friends and networks (139)</td>
<td>Online job portals (indeed, monster, etc.) (66)</td>
<td>Internal employee references (29)</td>
</tr>
<tr>
<td><strong>2</strong></td>
<td>Online job portals (indeed, monster, etc.) (86)</td>
<td>Friends and networks (60)</td>
<td>4-year universities (29)</td>
</tr>
<tr>
<td><strong>3</strong></td>
<td>Internal employee references (79)</td>
<td>Internal employee references (54)</td>
<td>Online job portals (29)</td>
</tr>
</tbody>
</table>

Most businesses sourced their talent from existing networks, employee references, and online tools. In regards to recruiting, respondents noted:

- "Lack of diversity in age and social economic groups"
- "As the millennial generation becomes a large sector of the workforce, finding ways to connect and engage them will be the biggest success factor."
  - Professional services company CEOs
- "Managers [need to be] able to understand multi-cultural workforce"
  - Restaurant, hospitality, and lodging HR manager
Companies struggle to find employees that can take initiative and think critically.

Across all industries, **taking initiative, critical thinking, and self-discipline** were the soft skills most difficult to find in the workforce.

“My industry will have a new name by the time K12 reaches graduation. Teach fundamentals - synthesis, analysis, deductive reasoning, inductive reasoning, communication skills, etc. Things that are market segment agnostic. Need balance of STEM and non-STEM.”

-Small business CEO

Qualities (Soft Skills) Difficult to Find in the Workforce

Source: RTI Survey
Hiring challenges exist for many reasons across industries (1)

Industry growth, supply and demand
“The demand for qualified hospitality driven applicants in the hospitality industry will far exceed the supply.”
- HR manager, hospitality industry

“Insufficient provider base to meet future needs; Health care economics make it very difficult to appropriately staff for our growing patient population”
- Health center administrator

Interest gap
“Lack of interest in working with hands, lack of experience with tools, lack of experience in the industry or willing to learn”
- CEO, Manufacturing company

Skills
“Agility with changing workforce needs, lean manufacturing influence on workforce requiring greater agility of skilled workforce”
- HR director, manufacturing
Hiring challenges exist for many reasons across industries (2)

Education Offerings

“We need educators with industry job skills who can help students make connections to what they’re learning. A strong combination of teachers from colleges of education along with those from the private sector will benefit our students and the overall workforce development pipeline.”

- Director of Academics, Public Sector & Education

Professional Experience

“I believe we have successfully retained talent coming from universities which provides a lot of cheap early career (in-experienced) talent. I'm concerned especially in our startup communities there is a severe shortage of experience mid-late stage talent with a desire to work at companies with fewer than ~500 people. A lot more can be done to recruit more people back to area from Silicon Valley or Boston or Seattle.”

- CEO, IT Startup
Companies value apprenticeships, but are less likely to plan to implement them.

Of respondents,
- **39% (203)** cited apprenticeships and internships as a valuable tool to expose students to industry, but only
- **22% (113)** expressed interest in hiring apprentices as a tool for training the future workforce
- **15% (80)** planned to use them to strengthen the existing workforce.

Construction and manufacturing companies were more likely to value apprenticeships.

**Ways to expose K-12 students to industry**
Source: RTI Survey
Construction companies are among the most likely to grow, but have a low evaluation of the talent pipeline

Over 84% of construction companies expected to grow (3rd highest), but ranked the talent pipeline as 2.5 out of 5 (lowest).

“Need more skilled trades and education about career opportunities in construction”

“There are not enough skilled Project Managers who know construction and want to work in the field anymore. Most have changed fields due to the economic downturn.”

“Just that there aren't enough folks learning the trades. It's extremely hard finding quality plumbers.”

-Construction & Skilled Trades Industry Respondents

Construction Industry Summary

Source: RTI Survey
Final Takeaways
Key Takeaways

- Businesses expect to grow!
- There is a wide range of demand for skilled workers, both for technical and university level
- Networks are still the most important tool for sourcing talent
- The Triangle’s labor market has a mix of strengths and challenges

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Businesses expect to hire thousands of new employees, across sizes and sectors.</td>
<td>Companies struggle to find workers with initiative, critical thinking, self-discipline.</td>
</tr>
<tr>
<td>STEM businesses value the talent pipeline in the region.</td>
<td>There is an interest in apprenticeships, but a need for leadership.</td>
</tr>
<tr>
<td></td>
<td>Construction and hospitality express hiring challenges.</td>
</tr>
</tbody>
</table>

- Skills gaps exist due to several reasons, including supply & demand, interest, skills, education offerings, and professional experience.
Contact

Michael Hogan  
*Project Lead*  
mhogan@rti.org

Sara Lawrence  
*Sr. Manager, Economic Development*  
slawrence@rti.org

Alice Brower  
*Research Assistant*  
abrower.contractor@rti.org
Triangle Talent: Understanding the Skills Gap
EVEN MORE EXTRAORDINARY

The same people. The same name. And all the resources of being a division of TowneBank!

Paragon Bank is now part of a larger regional banking company. Which means we have more resources and can offer more services than ever. So we've everything you've come to expect, backed by more bank than ever, for an even more Extraordinary Client Experience.

Paragon Bank Perfect Partnership
Silver Sponsor

City of Raleigh