THE FUTURE OF WORK ON THE NORTH SHORE – JUNE 22, 2017
We put the North Shore to work!

18 month project to research and listen to stakeholders across the North Shore about their thoughts and ideas on the Future of Work. Ultimately, this study is based on three primary questions:

• What does the Future of Work on the North Shore look like?

• Are we ready for it?

• How can the region effectively prepare for what’s ahead?
Supply Side Data – North Shore Region

<table>
<thead>
<tr>
<th></th>
<th>Oct 2007</th>
<th>Jan 2010</th>
<th>April 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of lowest unemployment rate pre-recession</td>
<td></td>
<td>3.80%</td>
<td>9.20%</td>
</tr>
<tr>
<td>Height of the recession</td>
<td></td>
<td></td>
<td>3.6%</td>
</tr>
<tr>
<td>Most recent month available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of employed residents</td>
<td>206,137</td>
<td>195,871</td>
<td>231,840</td>
</tr>
<tr>
<td>Number of Unemployed</td>
<td>8,135</td>
<td>17,448</td>
<td>8,369</td>
</tr>
</tbody>
</table>

- We have recovered from the recession and then some
### North Shore Supply by Age

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>342,130</td>
<td>5,479,502</td>
<td>11,955,631</td>
<td>251,221,309</td>
<td></td>
</tr>
<tr>
<td>16 to 19 years</td>
<td>6.5%</td>
<td>7.0%</td>
<td>6.9%</td>
<td>6.8%</td>
</tr>
<tr>
<td>20 to 24 years</td>
<td>8.3%</td>
<td>8.9%</td>
<td>8.5%</td>
<td>9.0%</td>
</tr>
<tr>
<td>25 to 44 years</td>
<td>30.0%</td>
<td>32.1%</td>
<td>30.8%</td>
<td>33.3%</td>
</tr>
<tr>
<td>45 to 54 years</td>
<td>19.1%</td>
<td>18.2%</td>
<td>18.6%</td>
<td>17.5%</td>
</tr>
<tr>
<td>55 to 64 years</td>
<td>15.3%</td>
<td>15.9%</td>
<td>16.6%</td>
<td>15.7%</td>
</tr>
<tr>
<td>65 to 74 years</td>
<td>10.9%</td>
<td>9.8%</td>
<td>10.2%</td>
<td>10.0%</td>
</tr>
<tr>
<td>75 years and over</td>
<td>10.0%</td>
<td>8.2%</td>
<td>8.4%</td>
<td>7.8%</td>
</tr>
</tbody>
</table>


- Our workforce is “older” – we need to pay attention to the needs of mature workers.
- Our youth are very important to our future
### North Shore Supply by Education

<table>
<thead>
<tr>
<th>Population 25 yrs. and over</th>
<th>North Shore</th>
<th>Massachusetts</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than a High School Graduate</td>
<td>9.6%</td>
<td>10.2%</td>
<td>13.4%</td>
</tr>
<tr>
<td>High School Diploma (includes equivalency)</td>
<td>26.9%</td>
<td>25.4%</td>
<td>27.8%</td>
</tr>
<tr>
<td>Some College or Associate’s Degree</td>
<td>25.9%</td>
<td>23.9%</td>
<td>29.1%</td>
</tr>
<tr>
<td>Bachelor's Degree or Higher</td>
<td>37.6%</td>
<td>40.5%</td>
<td>29.8%</td>
</tr>
<tr>
<td><strong>Percent High School Graduate or Higher</strong></td>
<td><strong>94.1%</strong></td>
<td><strong>89.8%</strong></td>
<td><strong>86.7%</strong></td>
</tr>
</tbody>
</table>

*U.S Census Bureau, 2011-2015 American Community Survey, [www.census.gov](http://www.census.gov)*

- **The North Shore and Massachusetts labor supply is highly educated when compared to the US, but not all jobs require a college level education.**
**North Shore Supply by Age by Gender, Nativity Status and Race-Ethnicity**

<table>
<thead>
<tr>
<th></th>
<th>North Shore</th>
<th>Mass.</th>
<th>New England</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>419,939</td>
<td>6,705,586</td>
<td>14,727,584</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>47.7%</td>
<td>48.5%</td>
<td>48.7%</td>
</tr>
<tr>
<td>Female</td>
<td>52.3%</td>
<td>51.5%</td>
<td>51.3%</td>
</tr>
<tr>
<td><strong>Nativity Status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. Born</td>
<td>83.7%</td>
<td>83.8%</td>
<td>85.1%</td>
</tr>
<tr>
<td>Foreign Born</td>
<td>16.3%</td>
<td>16.1%</td>
<td>14.9%</td>
</tr>
<tr>
<td>Foreign Born entered</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>since 2010</td>
<td>19.5%</td>
<td>19.7%</td>
<td>18.7%</td>
</tr>
<tr>
<td><strong>Race-Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>78.3%</td>
<td>74.3%</td>
<td>77.2%</td>
</tr>
<tr>
<td>Black, non-Hispanic</td>
<td>4.0%</td>
<td>6.5%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>12.2%</td>
<td>10.6%</td>
<td>9.9%</td>
</tr>
<tr>
<td>Other, non-Hispanic</td>
<td>2.1%</td>
<td>2.6%</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

*U.S Census Bureau, 2015 American Community Survey, www.census.gov*

While small in percent, foreign-born populations often require workforce preparation.
Demand Side Data –
North Shore Region

NORTH SHORE
Establishments: 12,821
Employment: 152,426
Weekly Wage: $980
Pop: 417,194
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**Top 10 Industries of Private Sector Employment on the North Shore**

- *Total Employment in 2015 was 152,426*

*Other Services, Information, Arts, Entertainment, and Recreation, Education Services, Transportation and Warehousing, Real Estate and Rental and Leasing, Management of Companies and Enterprises, Utilities, Agriculture, Forestry Fishing, & Hunting, Mining*
Critical Industry Employment

North Shore

The critical industries account for 38.3% of the North Shore's private sector employment with a workforce of 58,366.

Essex County

The critical industries account for 40.7% of Essex County's private sector employment with a workforce of 113,266.

Massachusetts

The critical industries account for 35.2% of the Massachusetts's private sector employment with a workforce of 1,066,022.
Top North Shore Online Critical Occupations Job Postings from the past year

<table>
<thead>
<tr>
<th>Occupation</th>
<th># of Job Postings</th>
<th>Prior Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registered Nurses</td>
<td>560</td>
<td>-4.60%</td>
</tr>
<tr>
<td>Social and Human Service Assistants</td>
<td>267</td>
<td>+10.79%</td>
</tr>
<tr>
<td>Industrial Engineers</td>
<td>222</td>
<td>-29.75%</td>
</tr>
<tr>
<td>Mental Health and Substance Abuse Social Workers</td>
<td>165</td>
<td>-7.30%</td>
</tr>
<tr>
<td>Medical and Health Services Managers</td>
<td>103</td>
<td>-1.90%</td>
</tr>
<tr>
<td>First-Line Supervisors of Production and Operating Workers</td>
<td>102</td>
<td>-12.07%</td>
</tr>
<tr>
<td>Medical Assistants</td>
<td>102</td>
<td>+5.15%</td>
</tr>
<tr>
<td>Nursing Assistants</td>
<td>97</td>
<td>-3.00%</td>
</tr>
<tr>
<td>First-Line Supervisors of Office and Administrative Support Workers</td>
<td>95</td>
<td>+15.85%</td>
</tr>
<tr>
<td>Medical Secretaries</td>
<td>91</td>
<td>-39.33%</td>
</tr>
<tr>
<td>Tellers</td>
<td>83</td>
<td>-55.14%</td>
</tr>
<tr>
<td>Securities, Commodities, and Financial Services Sales Agents</td>
<td>82</td>
<td>-12.77%</td>
</tr>
<tr>
<td>Customer Service Representatives</td>
<td>81</td>
<td>-37.69%</td>
</tr>
<tr>
<td>Electrical and Electronic Equipment Assemblers</td>
<td>77</td>
<td>+175.00%</td>
</tr>
<tr>
<td>Marketing Managers</td>
<td>72</td>
<td>-4.00%</td>
</tr>
<tr>
<td>Total Top 15</td>
<td>2,199</td>
<td></td>
</tr>
<tr>
<td>Total Online Postings</td>
<td>4,955</td>
<td></td>
</tr>
</tbody>
</table>

- **Top 15 Occupations account for 44.4% of all online postings**
We put the North Shore to work!

THE FUTURE OF WORK SURVEY!
### WHO WE HEARD FROM -

<table>
<thead>
<tr>
<th>Category</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elected Official or City/Town Manager</td>
<td>18</td>
</tr>
<tr>
<td>Business</td>
<td>504</td>
</tr>
<tr>
<td>Student (K-12, Post-Secondary and Adult Learner)</td>
<td>512</td>
</tr>
<tr>
<td>Veteran</td>
<td>24</td>
</tr>
<tr>
<td>Economic Development Professional</td>
<td>23</td>
</tr>
<tr>
<td>Educational Leader</td>
<td>82</td>
</tr>
<tr>
<td>Social Service and Community Leader</td>
<td>134</td>
</tr>
<tr>
<td>Housing Expert</td>
<td>12</td>
</tr>
<tr>
<td>Job Seeker</td>
<td>416</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1668</strong></td>
</tr>
</tbody>
</table>
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WHAT WE HEARD WHILE LISTENING -

“Companies do not have the skilled labor they need…”

“Transportation continues to be the biggest barrier to employment I see…”

“Health care is ever evolving”

“Ability to think creatively…”

“Technology fluency is key to acquiring a new job as well as keeping it…”

“Technology may eliminate some jobs….it will also create new positions that focus on special job duties”
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*Demand Side Responses – North Shore Businesses*
**WHAT DO YOU THINK?**

What are the future skill sets your business/industry needs? Please choose all that apply

- Better math skills
- Technology fluency
- Ability/willingness to learn
- Ability to work with diverse colleagues
- Ability to speak a foreign language
- Other
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**WHAT DID BUSINESS TELL US -**

What are the future skill sets your business/industry needs? Please choose all that apply

- Better math skills
- Technology fluency
- Ability/willingness to learn
- Ability to work with diverse colleagues
- Ability to speak a foreign language
- Other

**Survey Comments**

- **Willingness to keep learning...**
- **Ability to think creatively**
- **Improvement in customer service and interpersonal skills (e.g. talking on the phone)**
- **Professional presentation skills and improved writing skills**
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**RESULTS from Chamber Surveys - What are the future skill sets your business/industry needs? (Same survey – distributed via chambers mailing list)**

Lynn Chamber

- Ability/Willingness to learn
- Ability to work with diverse colleagues
- Technology Fluency
- Ability to speak a foreign language
- Better math skills

North Shore Chamber

- Ability/Willingness to learn
- Ability to work with diverse colleagues
- Technology Fluency
- Ability to speak a foreign language
- Better math skills

Salem Chamber

- Ability/Willingness to learn
- Ability to work with diverse colleagues
- Technology Fluency
- Ability to speak a foreign language
- Better math skills
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**WHAT DID BUSINESS TELL US -**

What changes does your company/industry anticipate over the next several years? Please choose all that apply.

- Fewer jobs needed
- New jobs created
- Expansion of markets
- Different business models/Ways of doing business
- Greater Efficiency due to technology
- Other

---

**Survey Comments**

- While technology increases may be eliminating some jobs/positions...it will also create new positions that focus on special job duties
- The high cost of unskilled labor and benefits in MA will lead us to invest in equipment to reduce labor required to do unskilled or minimum wage jobs.
- We plan on expanding our international footprint which will lead to new jobs being created.
- Replacement jobs for retiring workers
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WHAT DID BUSINESS TELL US -

*If new jobs will be created, what will these new jobs be called?*

- Universal Banker
- Social Media Manager
- Network Security Technician
- Customer Experience Analyst
- IT Developer
- Digital Marketing
- Autism Specialist
WHAT DID BUSINESS TELL US -

What current jobs will increase in demand?

-Machinists
-Engineers/Programmers
-CAD Technicians
-Plumbers, Electricians and HVAC
-Nurses
-CDL Drivers
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**WHAT DID BUSINESS TELL US -**

What will make a community more attractive and competitive for your business/industry sector? Please choose all that apply.

- Stronger workforce
- More public transportation
- Less expensive housing/More workforce housing
- Excellent quality of life
- Improve tax Incentives
- Other

**Survey Comments**

- Better qualified workforce. We're in the manufacturing industry and it is difficult to find qualified employees.
- Noted that in Lynn a bus route on weekends has had some considerable cuts with less travel.
- Better public transportation would be a great advantage as many people do not have a car.
WHAT BUSINESS LEADERS TELL US IN FOCUS GROUPS – AIM

- People working longer (past previous retirement age), resulting in less openings
- “No job now is truly unskilled” – while not every job is highly-skilled, nowadays every job requires some level of basic math skills, basic computer skills, and/or basic social skills
- Meeting compliance and regulation requirements is a challenge
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**WHAT BUSINESS LEADERS TELL US IN FOCUS GROUPS – Tourism Group**

- Technology could have great benefits for tourism, from great use of ride-sharing apps to reduce commuting for both employees and tourists, easy to market online interface
- Tendency of industry is to hire part-time, temporary contractors, this allows for a large pool of applicants to choose from but re-training costs remain consistent issue
- Customer Service is essential, how to incentivize teens to work at minimum wage and provide adequate services
WHAT BUSINESS LEADERS TELL US IN FOCUS GROUPS – North Shore LINK (formerly, Aging and Disability Resource Consortium of the North Shore)

• Transportation is a large issue, tied with high cost of housing

• Employers need to work on employee growth, development and investment in an effort to improve employee retention; acceptance of the “new work environment” as the new normal if retention is to be improved (expanded cell phone usage, flexible work schedules, casual dress, etc.).

• Many care provider roles have historically been back-filled through immigrant workers, new tough regulation on immigrants is making these workers harder to employ

• Shortage of personal care workers, already some elder customers who can't be served due to shortage of staff, only the beginning of the aging boom
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Supply Side Responses – North Shore Job Seekers and Students
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WHAT DID YOUTH/STUDENTS TELL US -

What are your hopes and dreams for the future, or what are those for your child? Please choose all that apply.

- A career that is fulfilling
- A career that pays a high salary
- To have more than one career
- To be my own boss
- To help people
- Other

Survey Comments

- I wish one day to become something that will help my fellow citizen.
- I want to make lots of money
- Entertain People
- I would rather be happy in my job than crazy rich
- Want to own a house, a few trucks, a boat, and a couple classic cars
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**WHAT DID YOUTH/STUDENTS TELL US -**

What can be added to the educational experience to help achieve these goals? Please choose all that apply.

<table>
<thead>
<tr>
<th>Option</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>More information about careers/more career classes</td>
<td>60%</td>
</tr>
<tr>
<td>More internships</td>
<td>40%</td>
</tr>
<tr>
<td>Classes on how to start your own business</td>
<td>30%</td>
</tr>
<tr>
<td>Job shadowing experiences</td>
<td>50%</td>
</tr>
<tr>
<td>Online training videos and skills testing</td>
<td>30%</td>
</tr>
<tr>
<td>Other</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Survey Comments**

- **Scholarships/money for college (147 times)**
- **Classes that teach more of how to use certain equipment for current jobs**
- **I want to know all of my options before I start choosing colleges.**
- **Entrepreneurial encouragement**
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**WHAT DID YOUTH/STUDENTS TELL US -**

How likely are you to pursue employment in each of the following industries?

- 1 = Definitely Not
- 2 = Not Very Likely
- 3 = Somewhat Likely
- 4 = Very Likely
- 5 = Yes Definitely

1 = Healthcare 2 = Construction 3 = Financial Services 4 = Manufacturing 5 = Food Services 6 = Retail 7 = Education 8 = Administration 9 = Arts & Entertainment 10 = Professional & Technical Services

- **Survey Comments**
  - **Pharmacist**, x-ray technician, or Bank teller
  - I would like to do something with computers
  - Biotech/Pharma/Medical Device
  - Pilot, Computer/Technical Engineer, Video/ TV, Legal/ Political

- **We need to get them more information on our critical industries**

- **Youth seem to know what they don’t want to pursue**
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WHAT DID JOB SEEKERS TELL US -

What types of employment are you currently looking for? Please choose all that apply.

- Full-Time Employment
- Part-Time Employment
- Remote employment/ Tele-commuting
- Internships
- Other
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WHAT DID JOB SEEKERS TELL US -

What have you encountered as barriers to employment? Please choose all that apply.

- Not understanding where jobs are or how to find them
- Not having the right skills for the local jobs
- Would like to go back to school
- Need resume help
- Not enough career guidance
- Other

Survey Comments
- I am Overqualified
- Most jobs are specialized "Niche" Job
- I need a Job specific to my experience
- Age & Salary
- Not able to match salary requirements with offers on the market
- Lack of openings in my areas of expertise. Also my age
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Intermediary Responses – North Shore Educators, Social Service Leaders, and Economic Development Professionals
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**WHAT DO YOU THINK?**

What do you need to help meet college and career readiness standards for your students, or to keep students actively and successfully engaged in post-secondary education? Please choose all that apply.

| Exposure to business representatives outside classroom hours |
| Internships for students |
| Externships for teachers to work at companies |
| Career fairs |
| Improved educational technology |
| Other |
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**WHAT DID EDUCATORS TELL US -**

What do you need to help meet college and career readiness standards for your students, or to keep students actively and successfully engaged in post-secondary education? Please choose all that apply.

- Exposure to business representatives outside classroom hours
- Internships for students
- Externships for teachers to work at companies
- Career fairs
- Improved educational technology
- Other

**Survey Comments**

- **Networking Opportunities**
- **Expanded Voc. Tech Programs**
- **83% of our students work, working in a chosen career path is the challenge**
**WHAT DID EDUCATORS TELL US -**

What challenges do your faculty face in keeping up with the new and changing skill requirements of today's global economy? Please choose all that apply.

- Lack of communication from industry
- Strict regulations governing the development and enhancement of...
- Lack of resources to develop new courses
- Lack of engagement by student body
- Lack of resources for technological improvements
- Other

**Survey Comments**

- *We have advisory committees with employers but need more interaction with curriculum development*
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**WHAT DID ECONOMIC DEVELOPMENT LEADERS TELL US -**

What are the strengths of the workforce and economic systems on the North Shore? Please choose all that apply

- Access to Career Centers
- Community Colleges
- Affordability of higher education
- Eager and engaged individuals who want to learn and grow
- Diversity of available industries and jobs
- Other

**Survey Comments**

- No public transportation anywhere off the rail lines
- Access is problem
- Transportation...
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**WHAT DID ECONOMIC DEVELOPMENT LEADERS TELL US -**

What can we do to make the North Shore more 'business friendly'? Please choose all that apply.

- Improved access to services
- Improve quality and efficiency of services
- Lower health care cost
- Lower property taxes
- Other

**Survey Comments**

- Better regional planning
- Transportation infrastructure improvements
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**WHAT DID ECONOMIC DEVELOPMENT LEADERS TELL US -**

How helpful would each of the following initiatives or tools be for you as you develop the economy of your town or city?

- Federal or state tax incentives/credits
- Local tax incentives (i.e. TIFs, abatements)
- Zoning that encourages a mix of uses, smart growth, and affordable housing...
- Transportation funding
- Support and activity of local economic development organizations (i.e. Chamber...)
- Business Improvement Districts (BIDs)

Survey Comments

- Focus on the town/city to too big...we need to think regionally
WHAT DID SOCIAL SERVICE AND COMMUNITY LEADERS TELL US -

What are the biggest barriers that are keeping your constituents from finding and keeping fulltime employment? Please choose all that apply.

- Lack of skills
- Transportation/Lake of access to well-paying jobs
- Inadequate access to day care
- Weak understanding of new businesses and technologies
- Other
- Family health issues

Survey Comments

- Transportation is huge barrier both financially and lack of access
- Many low and limited income individuals juggle not just one but many barriers
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WHAT DID SOCIAL SERVICE AND COMMUNITY LEADERS TELL US -

What responses work best - or would work best - to move your constituents successfully into employment? Please choose all that apply.

- More workplace apprenticeships
- More on-the-job learning opportunities
- More freelance cost transportation
- More Internships with employers
- Online resources for training/career exploration
- Other

Survey Comments

- *Exposure to the variety of jobs that are out there*
- *Job Shadowing, mentoring and coaching while in High School*
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**WHAT DID WE LEARN?**

**Overall -**

1. Ability and Willingness to be a constant learner!
2. Technology Skill set and proficiency is a MUST
3. Various Communication Skills are necessary
4. Diversity in the workplace and in customers

**Emerging Workforce -**

1. Is not interested in North Shore career opportunities (Is this an awareness issue?)
2. Different from current workforce in priorities and modes of operating
3. Wants fulfillment in a career on their own terms
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**SUMMARY of OUR PLAN**

1. **Support Innovative Ways of Learning for Current Workforce**
   - Online anytime/anyplace
   - Quicker curriculum design and roll-out
   - Advocate for alternative funding mechanisms for public colleges
     - Help Academia change
     - Help Business Understand /relate to academia
   - Other?

2. **Support Innovative programming to bring employers and students together**
   - Internships
   - Company tours
   - Career Information
   - Other?

3. **Support Innovative programming to bring employers and educators together**
   - Teacher Externships
   - Educator/Business Conferences
   - Other?

4. **Ensure technological literate and communicative workforce**

5. **Promote Diversity**
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Next Steps:

1. **Deeper dive into this data, particularly more in-depth conversations with the FOW stakeholders on what is behind their responses, and strategy development for addressing the challenges each stakeholder is facing either individually or with other stakeholders.**

2. **Updating of the North Shore WIB/North Shore Alliance Strategic Plans that include goals and activities around these challenges.**

3. **Development of new Northeast Regional Strategic Plan, including the workforce, education, and economic development leaders from the North Shore, Merrimack Valley and Greater Lowell regions, basing goals and activities on this and other Future of Work data.**
We put the North Shore to work!

*Quote from Student and future worker:*

“I'd like to be able to avoid face to face communication, Customer Service, for example, would be nice.”

*Quote from Business:*

“Teenagers have to learn how to talk on the phone”