

## Data Story:

# RI's College to Career Landscape



### Essential Question:

How do the fields of study of recent URI, RIC, and CCRI graduates relate to their place in the state's employment landscape?

Data Sources: U.S. Census Bureau, Rhode Island Office of the Postsecondary Commissioner, Rhode Island Department of Labor and Training

URL: <http://ridatahub.org/datastories/ris-college-to-career-landscape>

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## Aligning the workforce with jobs

Even as the U.S. economy continues to recover, the number of job seekers outpaces available jobs.\* In Rhode Island, the unemployment rate is falling, but has not returned to a pre-recession level. Job growth remains a challenge.

Might RI's economy be bolstered if the knowledge and capabilities of our workforce were better-aligned with jobs? In this story, we examine an important part of this question. We review workers who recently graduated from URI, RIC, and CCRI, and the relationship of their areas of study to RI's current and future employment landscape.

*\*In December, 2014, the [BLS](#) reported 8.7 million [unemployed](#) people, but only 5 million [job openings](#).*

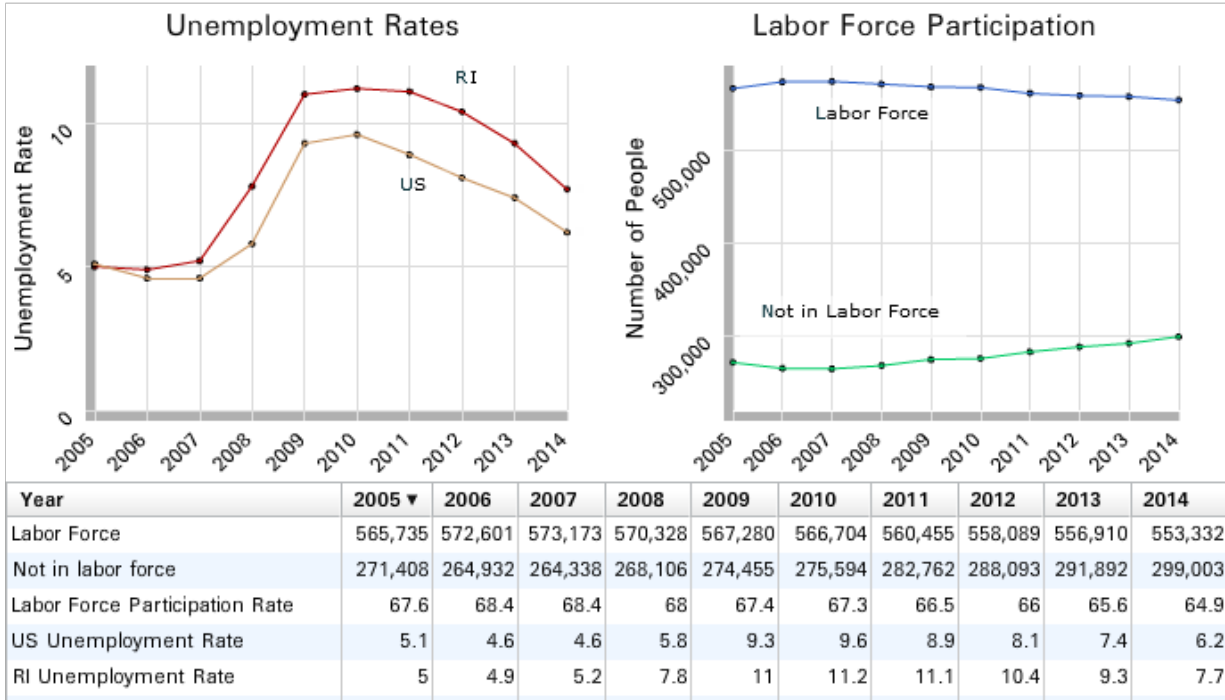
*Data Story Page RI's College to Career Landscape: Page 1 of 10*

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### RI Unemployment, Pre- and Post-Recession



*As of the spring of 2015, Rhode Island's economy had yet to fully recover in the aftermath of the Great Recession. Although the unemployment rate is falling, it remains higher than the national level. Moreover, the falling rate is not entirely due to a recovering economy.*

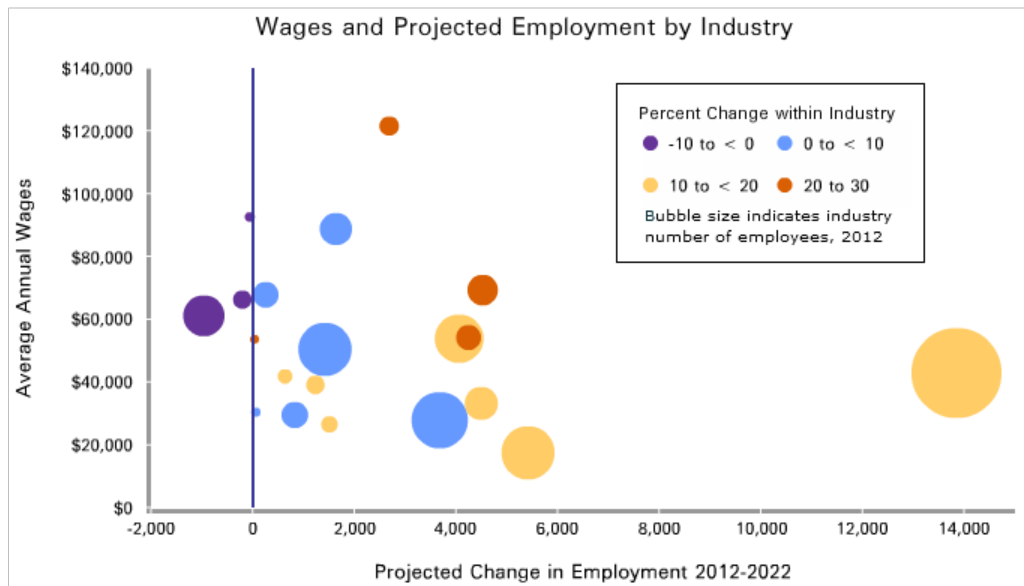
*The official measure of unemployment is based on a "labor force" that only includes the unemployed who are still actively seeking work. Because Rhode Island's labor force has lost over 20,000 people since its peak in 2007, the unemployment rate appears lower than if the size of the labor force had remained steady.*

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### The Landscape of RI Industries



The chart above shows each of RI's industries, including information on average wages, the current number of jobs, and the projected change in number of jobs.

Some highlights:

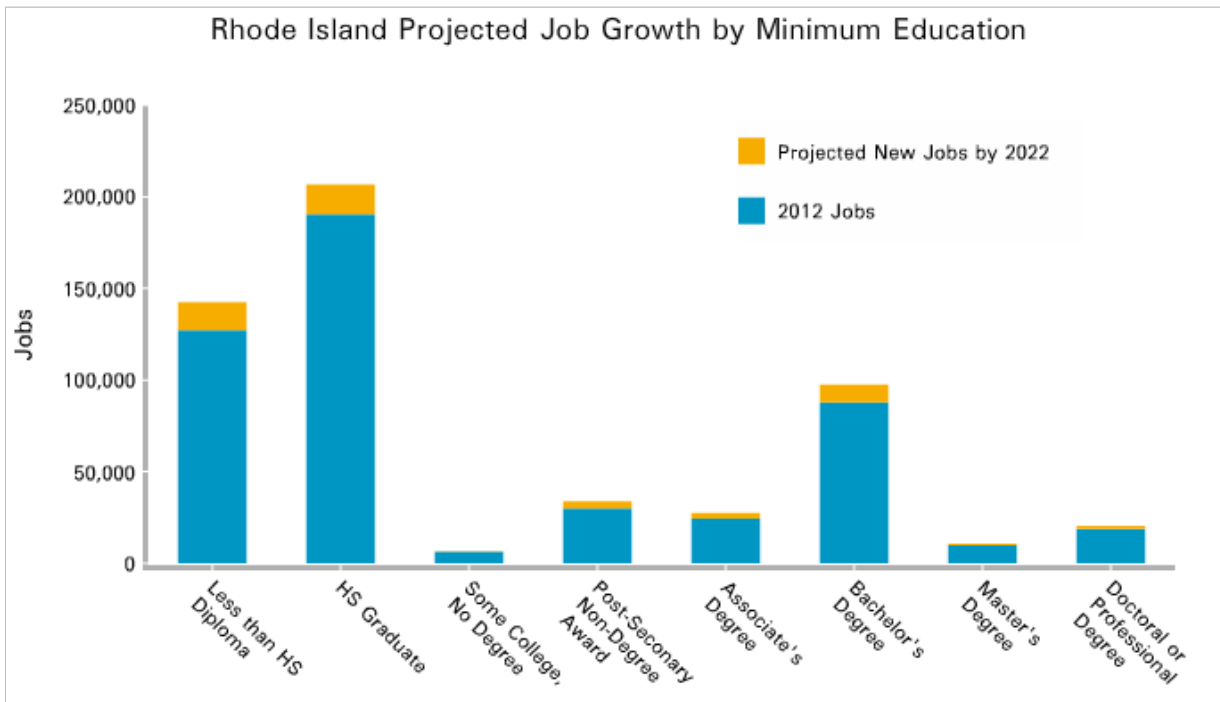
- *Healthcare and Social Assistance is a stand-out. It employs a large share of RI's workers, has decent average wages, and is likely to encompass the greatest number of new jobs in coming years.*
- *Nearly all sectors are projected to grow between now and 2022. Among growing industries, Finance & Insurance and Management of Companies & Enterprises have the highest average wages.*
- *The chart's sparse high-wage/high-growth quadrant represents both an economic gap and a policy target area: developing workforce capacity in smart ways can boost growth of higher-wage industries. Manufacturing as well as Professional, Scientific, & Technical Services are industries at the intersection of size, growth, and wage potential. Projected growth and respectable wages make these industries to consider in developing the education-to-workforce pipeline.*

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### Educational Requirements of Tomorrow's Jobs



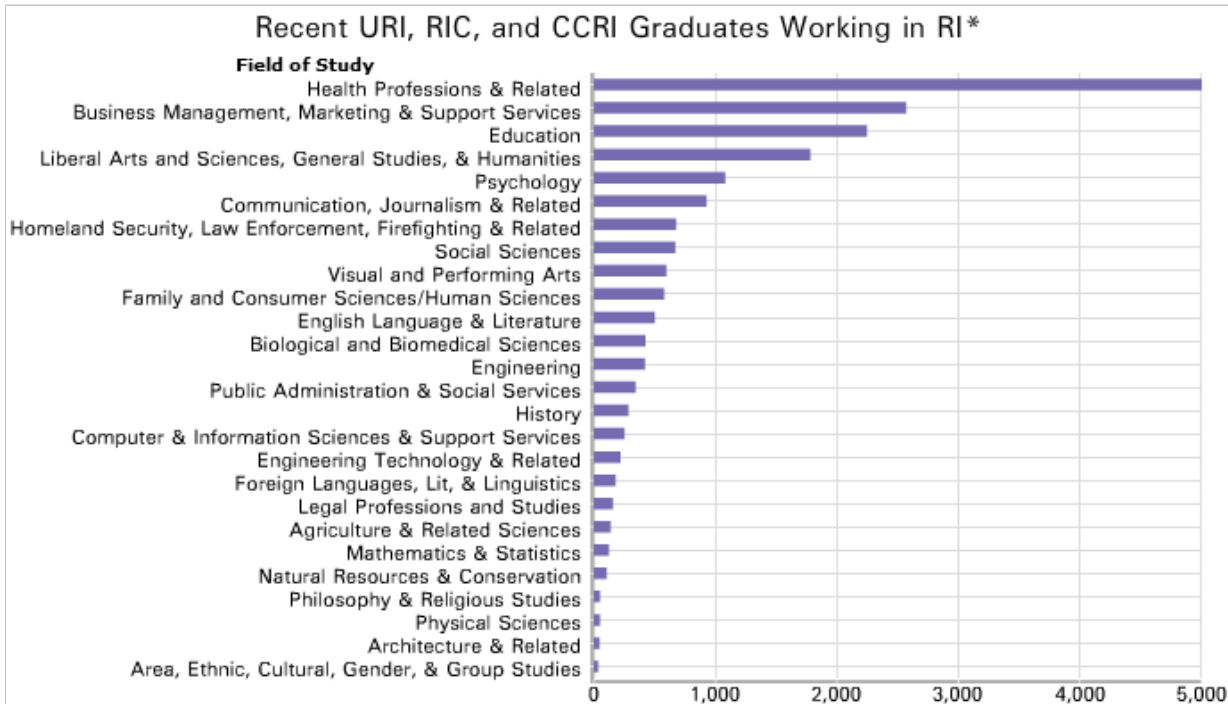
Projections based on state and national trends indicate that most new jobs in RI in coming years will require a high school diploma or less. New jobs for workers at any education level are certainly welcome. However, these projections are not set in stone. It is possible for the state's educational pipeline to influence growth of higher-skilled, higher-wage jobs, since a workforce with the right education can encourage employers to start up, relocate, or grow here.

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### Certificates and Degrees at Work: Fields of Study



To probe our question on fields of study and the employment landscape, we examined RI workers who received degrees or certificates from URI, RIC, and CCRI in the past 10 years. The chart above displays their fields of study.

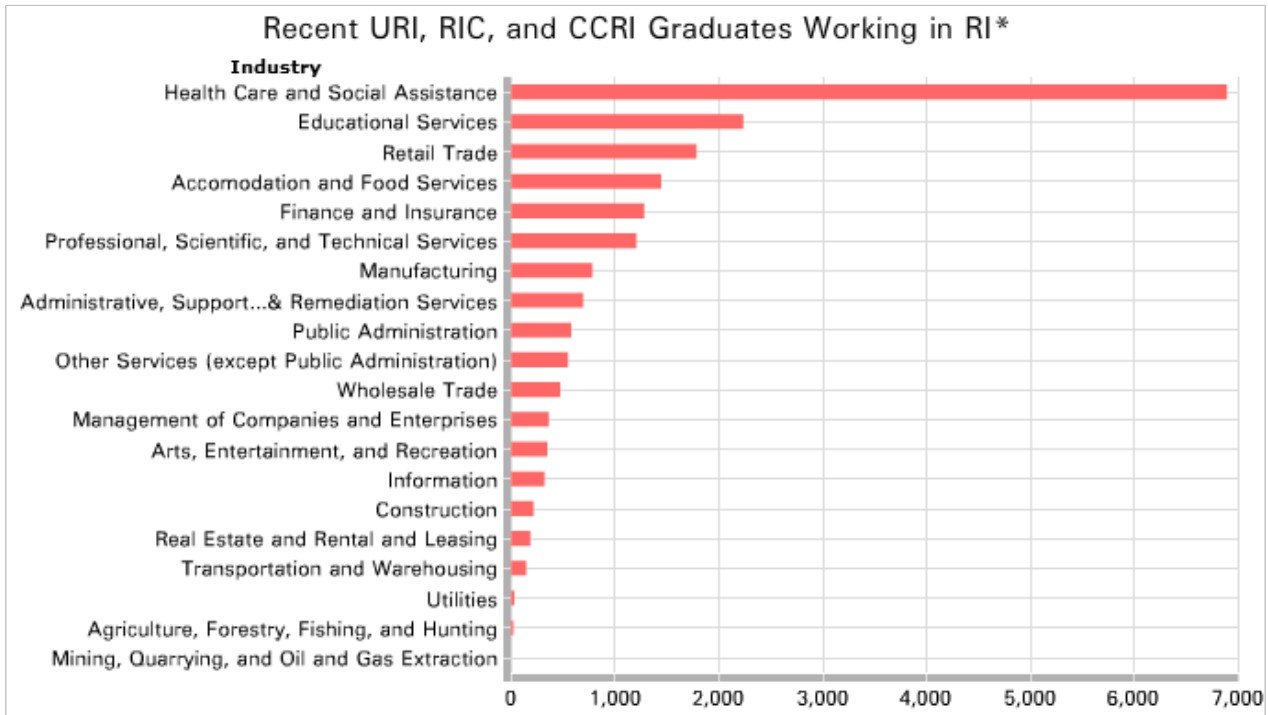
About one quarter studied in a health-related field. "Business Management, Marketing, & Support Services" is next most common, representing about 13% of the total. Education is a close third, studied by just under 12% of recent graduates. A small percentage studied in technical fields including: Engineering; Computer & Information Sciences; and Engineering Technology. These areas may represent an opportunity for growth at both ends of the college-to-career pipeline.

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### Certificates and Degrees at Work: Industries



This chart provides a different view of the RI workers who received degrees or certificates from URI, RIC, and CCRI in the past 10 years, examining their industry of employment.

Health Care & Social Assistance employs by far the largest number of recent graduates. This is in keeping with overall workforce and field of study numbers.

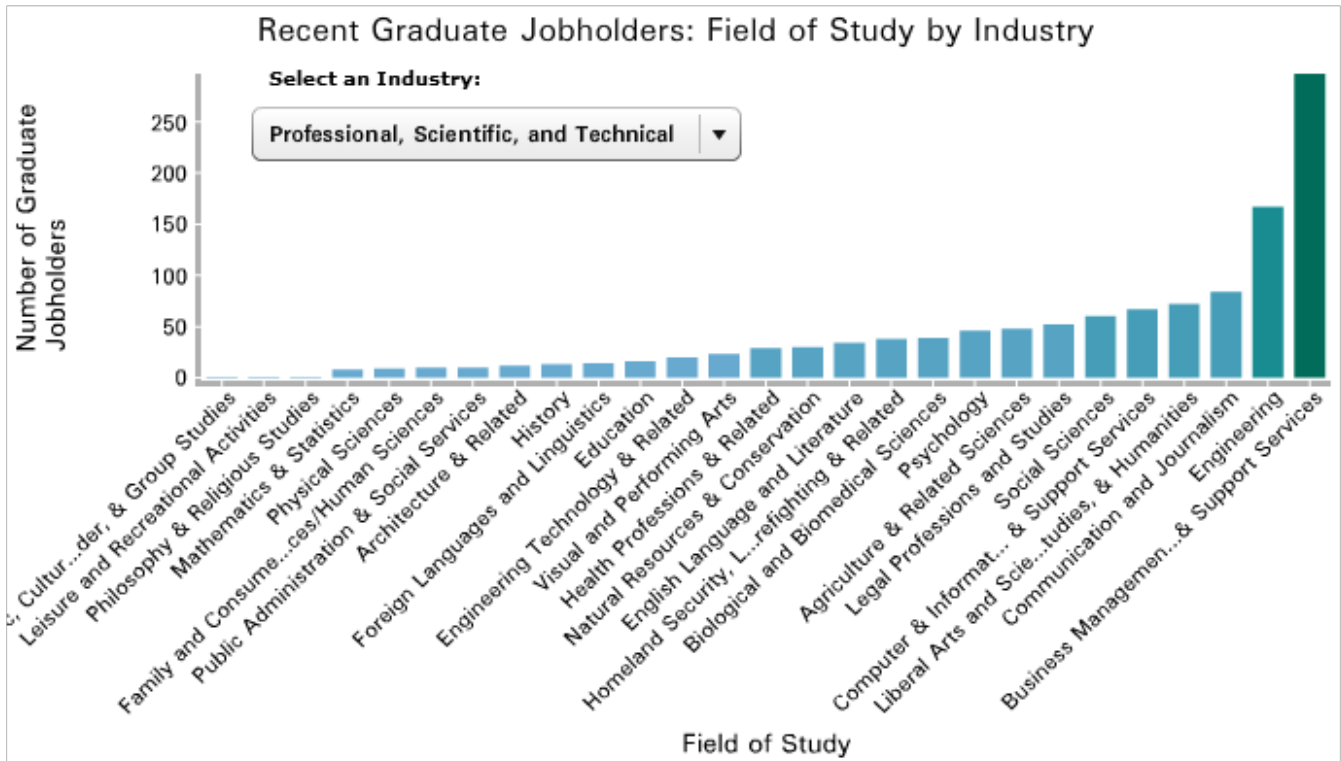
Industries not largely associated with jobs requiring higher education degrees and certificates (Retail Trade, Accommodation and Food Services) employ large numbers of graduates.

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### Certificates and Degrees by Industry



The chart above displays the field of study of recent URI, RIC, and CCRI graduates working in RI, viewable by their industries of employment. Though a small portion of RI's total workforce, examining the intersection of their education and employment offers insight into the fields of study valued by employers in each industry.

Some highlights:

- Several industries (e.g., Health Care & Social Assistance; Education; Finance & Insurance) draw heavily from graduates with closely related fields of study, with some hiring graduates almost exclusively from just one or two fields (e.g., Utilities, and Wholesale Trade). Employment in such industries seems to require a highly directed educational path.
- Industries hiring from a variety of fields may have demand for less-specific training or credentials (e.g., Retail Trade, Accommodation & Food Services), or, perhaps, for a broader array of expertise. The Information sector draws from Engineering Technology, Communication & Journalism, and Business Management. Surprisingly,



*manufacturing firms employ graduates from backgrounds including Visual & Performing Arts!*

- *The high-wage Professional, Scientific, & Technical industry employs more recent graduates from Business Management backgrounds than from Engineering and Computer & Information Sciences combined. This highlights both the versatility of business-oriented credentials and potential unmet demand for graduates of technical fields of study.*

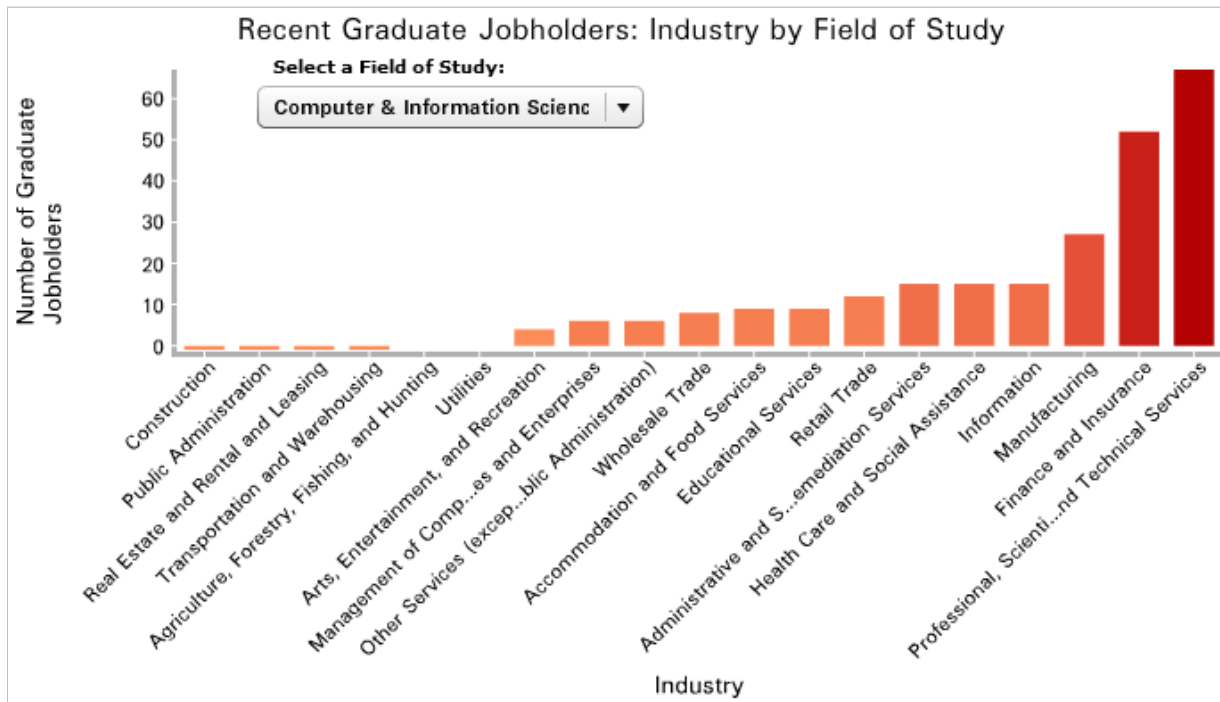
*Data Story Page RI's College to Career Landscape: Page 7 of 10*

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### Industries by Field of Study



The chart above displays the industry of employment recent URI, RIC, and CCRI graduates working in RI, viewable by their field of study. This is a different view of the same information as in the chart on the previous slide. Some highlights:

- Graduates of some fields of study may be found in a variety of higher-wage industries, suggesting that employers consider their credentials to be versatile and valuable. For example, graduates in Computer & Information Sciences are most commonly employed in the Professional, Scientific, & Technical Services industry, but also work in Finance & Insurance and Manufacturing.
- Some fields of study offer a direct route to jobs in related sectors, including Health Professions, Engineering, and Education. Other fields of study (e.g., Liberal Arts & Sciences, Mathematics & Statistics) are less obviously aligned with specific industries. These fields may offer more versatility in terms of employment.

- *Graduates in other fields are dispersed among a wide range of industries. Among both Social Sciences and Communication & Journalism graduates, areas of employment range from higher-wage sectors (Health Care, Finance & Insurance) to some of the lowest-wage sectors (Retail Trade, Accommodation & Food Services).*

*Data Story Page RI's College to Career Landscape: Page 8 of 10*

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### Summary & Highlights

- *Over the next several years, RI's still-struggling economy is projected to see job growth, but primarily in jobs requiring minimal education. A key question is how to spark growth in higher-skilled, higher-wage jobs.*
- *Examination of recent URI, RIC, and CCRI graduates working in-state provides insight into our educational and employment landscape. Certain technical fields may be under-represented among graduates in our workforce. Degree and certificate holders are also commonly employed in industries that usually require lower levels of attainment. Some fields of study seem to render their graduates versatile and valued in the workforce, in other cases the college-to-career connection is indirect.*
- *Given the variety of wage and employment profiles among Rhode Island's industries, further industry-specific research may be valuable. The healthcare industry in particular stands out in a number of ways, including its current size, its growth potential, and the high concentration of workers with health-related degrees.*

Data Story Page RI's College to Career Landscape: Page 9 of 10

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### **Moving Forward...**

- *DELVING DEEPER – Further linkage and study of workforce and education data will allow us to examine workforce-related questions in greater depth and breadth. Future research may incorporate more specific information on earnings, occupations, degrees, and certificates.*
- *ADJUSTING THE GROWTH PIPELINE – To shed light on ways to attract and meet the demands of tomorrow's industries, forthcoming research will explore employer demand and our higher education pipeline.*
- *PUTTING KNOWLEDGE TO WORK – We hope the information presented here inspires further questions, thoughts, and ideas. As we continue this line of research, the knowledge produced can help policy makers, education leaders, students, and employers make decisions that can drive future prosperity.*

*Published April 29, 2015*

*Data Story Page RI's College to Career Landscape: Page 10 of 10*

## Data Sources and Notes

### Confidentiality:

In all charts, a "-1" indicates a value that is not reported to protect individual confidentiality.

### Employment Data:

- Source for Unemployment and Labor Force Participation data: [U.S. Bureau of Labor Statistics, Current Population Survey](#).
- The labor force participation rate is the percentage of the population that is either employed or unemployed (either working or actively seeking work). It does not include children, members of the military, or institutionalized individuals.

### Degree and Certificate Data:

Source: RI Office of the Postsecondary Commissioner.

Degrees and certificates reported here only include:

- those with a field of study recorded;
- the most recently-earned certificate or degree for each graduate;
- primary field of study;
- degrees and certificates from RI in-state public institutions;
- students who graduate in a term in which they were registered (a small number do not).

### Wage Data:

- Source: [RI Department of Labor and Training, Labor Market Information Office, Quarterly Census of Employment and Wages 2013-2014](#).
- Average annual wages are calculated from four consecutive quarters of wage data, Q3 2013 through Q2 2014.

### Employment Projections:

Source: RI Department of Labor & Training, Labor Market Information Office:

- [2012 - 2022 Occupational Projections by Education & Training Requirements](#)
- [2022 Industry Outlook](#)

The number of jobs by industry reported on slide 3 include RI jobs for all workers other than those classified as "self-employed and unpaid family workers".

### Industry Information for Degree and Certificate Holders:

- Source: RI Department of Labor and Training, Unemployment Insurance System Wage Data.
- Information based on Q3 2014 employment records.
- For individuals with more than one employer, the industry is only counted for the employer paying the most wages (in total) during the quarter.
- This data set does not include employment information for military jobs, federal government jobs, jobs outside of RI, and jobs at the limited number of employers that do not participate in the Unemployment Insurance system.
- Note that this data story examines industries, but not specific professions. For example, nursing is a specific profession within the Healthcare and Social Assistance industry. The profession faces an employment situation that is distinct from other professions (such as pharmacist or physician) within the industry.

### Cohort Information (slides 5-8):

The cohort is comprised of approximately 19,500 individuals who:

- earned a known degree or certificate from a RI public institution of higher education from the spring term of 2005 through spring term of 2014, inclusive; and
- worked a job in Rhode Island in the third quarter of 2014 (regardless of state of residence).

According to the Longitudinal Employer-Household Dynamics, a program available through a partnership between state LMI Divisions and the U.S. Census Bureau, there were an estimated 89,180 workers employed at RI businesses in 2014 who were between the ages of 25 and 34. According to the U.S. Census Bureau American Community Survey, there were approximately 86,000 individuals with at least some college in a comparable age range living in the state in 2013 (regardless of employment status). These are the best figures available and only approximations, but allow us to conclude that our cohort of 19,500 is accurate, accounting for about 20% of the relevant population. This represents about 4% of the total number of individuals working in Rhode Island (about 475,000 people).

# APPENDIX

## RI's College to Career Landscape

story link: <http://ridatahub.org/datastories/ris-college-to-career-landscape>

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### Data Sources



U.S. Census Bureau  
<http://www.census.gov/>



Rhode Island Office of the Postsecondary Commissioner  
<http://www.ribghe.org/>



Rhode Island Department of Labor and Training  
<http://www.dlt.state.ri.us/>

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### Related Terms

- **KEYWORDS**
    - Workforce, Education
  - **Tags**
    - wages, workforce, Economy, education, jobs, Work
- 

### Related Data Stories



[Adult Education: Improving Rhode Island's Workforce](http://ridatahub.org/datastories/adult-education-and-ris-workforce/1/)

<http://ridatahub.org/datastories/adult-education-and-ris-workforce/1/>



[Health Care and Social Assistance In Rhode Island's Economy](http://ridatahub.org/datastories/54/1/)

<http://ridatahub.org/datastories/54/1/>



[Young Adults in RI's Education-to-Career Pipeline](http://ridatahub.org/datastories/education-career/1/)

<http://ridatahub.org/datastories/education-career/1/>

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