



The Middle-Skills Gap:

Ensuring an Adequate Supply of Skilled Labor in Northern and Southern New England

Connecticut Listening Tour

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Evidence suggests that the *middle-skill labor market* may face the greatest imbalance between supply and demand

- Middle-skill workers are defined as individuals with some college training or an Associate's degree
- Needed to fill critical jobs in healthcare (nurses, EMTs, therapists), office and administrative support (secretaries, assistants, clerks), education (teacher assistants), and other growing occupations

Overview:

- **Motivation**
- Has the supply of middle-skilled workers kept pace with demand in the past?
- What labor supply constraints will New England face in the future?
- What role can public policy play in addressing the gap?

Why do we care?

- Policymakers and business leaders are concerned with a current or future **shortage of labor** in New England
 - Slower population growth in the region
 - Higher net out-migration
 - The Baby Boom generation retiring
- Additionally, there are fears of a **mismatch** between worker skill levels and the skills demanded by employers
 - Structural changes in the economy towards knowledge-based industries
 - Technological advances within jobs favoring workers with greater education and training

Why do we care?

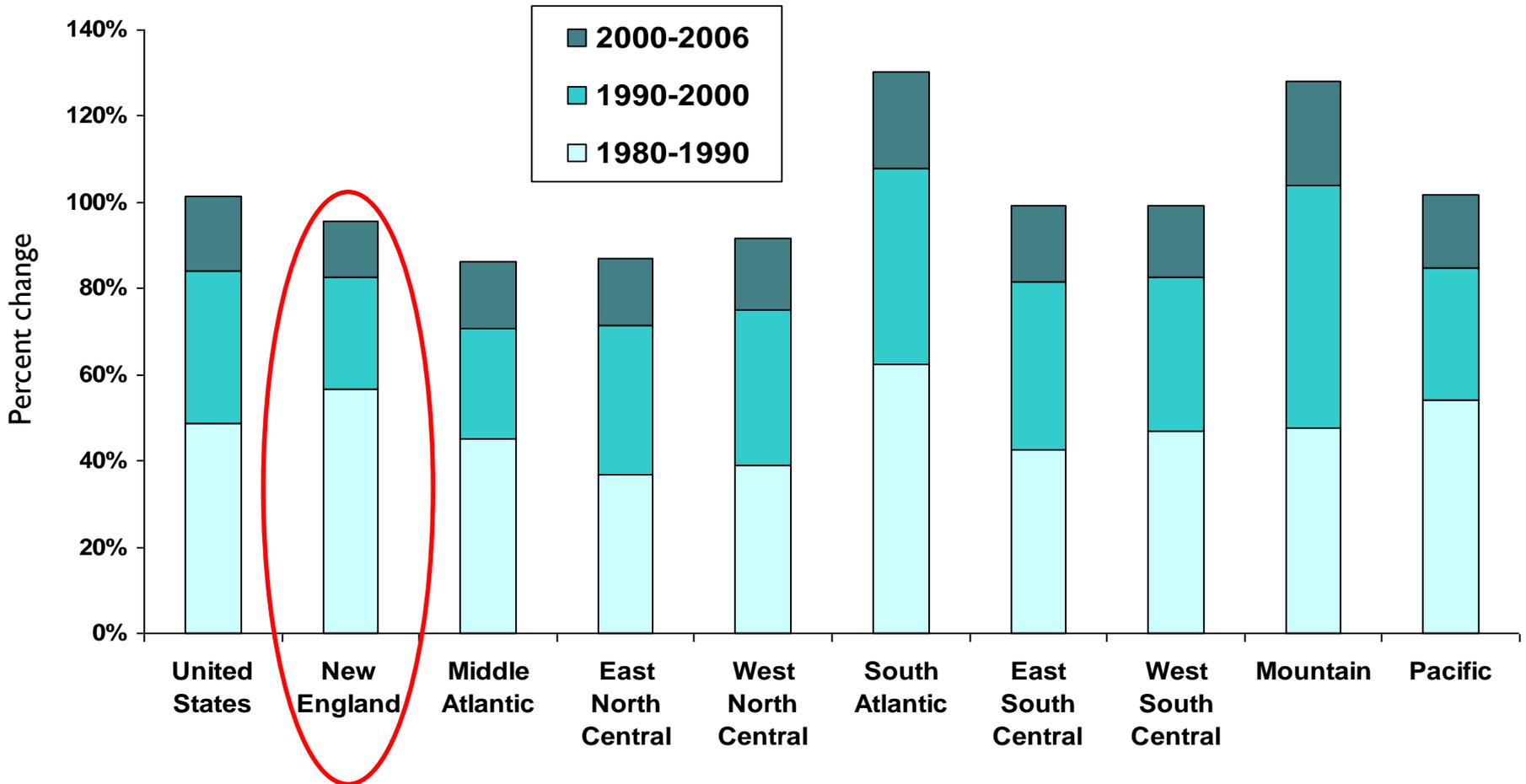
- To meet the needs of the region's economy, we need a **sufficient number of workers** with the **right mix of skills**
- Otherwise:
 - In the near term, an insufficient supply of skilled labor will make it difficult for employers to fill jobs, potentially slowing the region's recovery after the Great Recession
 - In the long run, a shortfall of skilled workers may create barriers for businesses looking to locate to or expand in New England, impeding economic growth

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Since 1990, the number of working-age adults in New England with any postsecondary education has been growing more slowly than in other regions of the country...

Individuals aged 25-64 years with a **Bachelor's degree or higher**

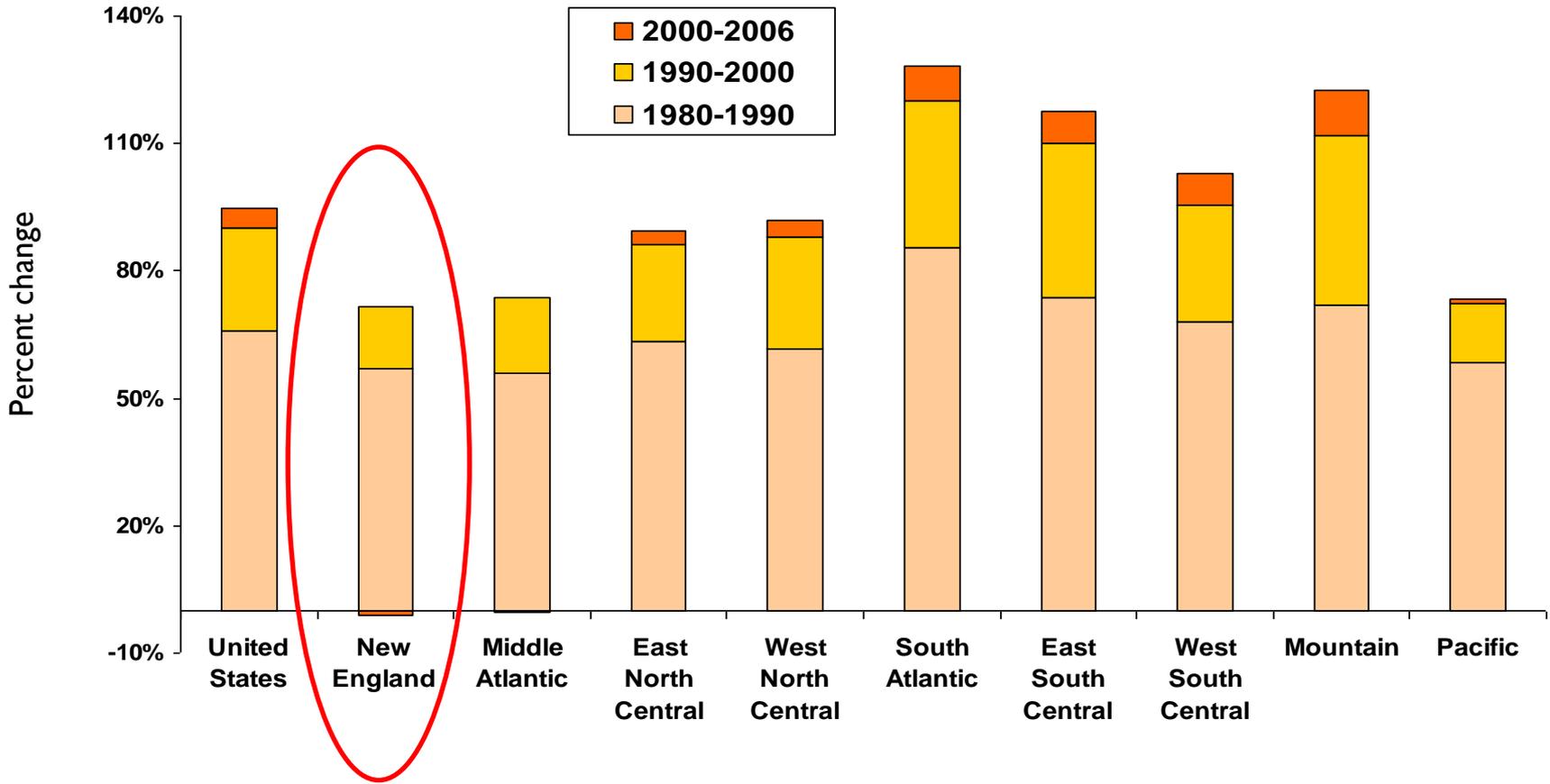


Source: Author's calculations based on the 1980, 1990, and 2000 decennial Census and the 2005-07 combined American Community Survey.

Note: Educational attainment in 1980 is defined by number of years of completed education and is not strictly comparable to that in 1990 and later years, which are based on degrees completed.

...particularly among middle-skill workers, where New England's growth rate has consistently been below that of the nation

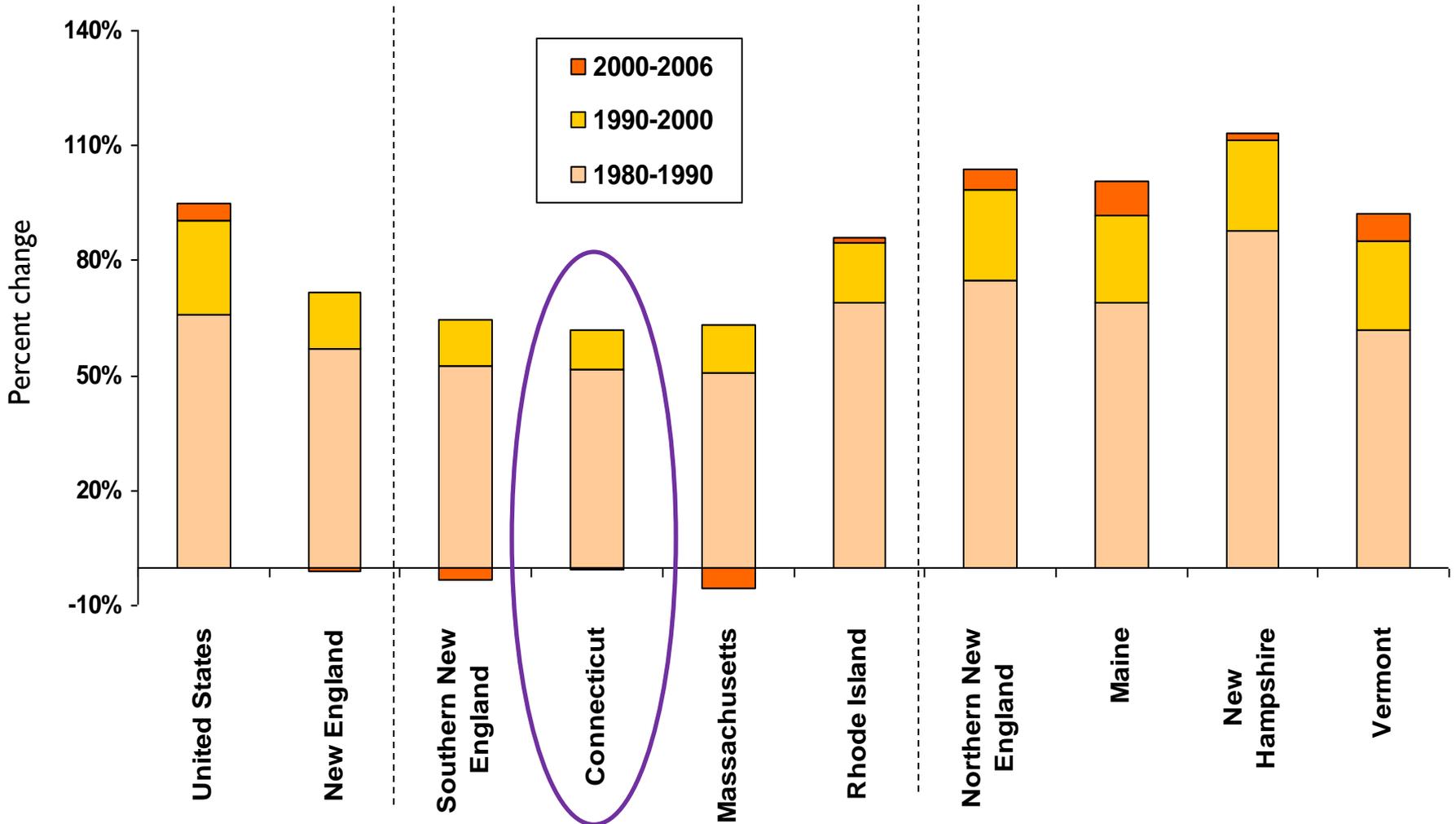
Individuals aged 25-64 years with **some college or an Associate's Degree**



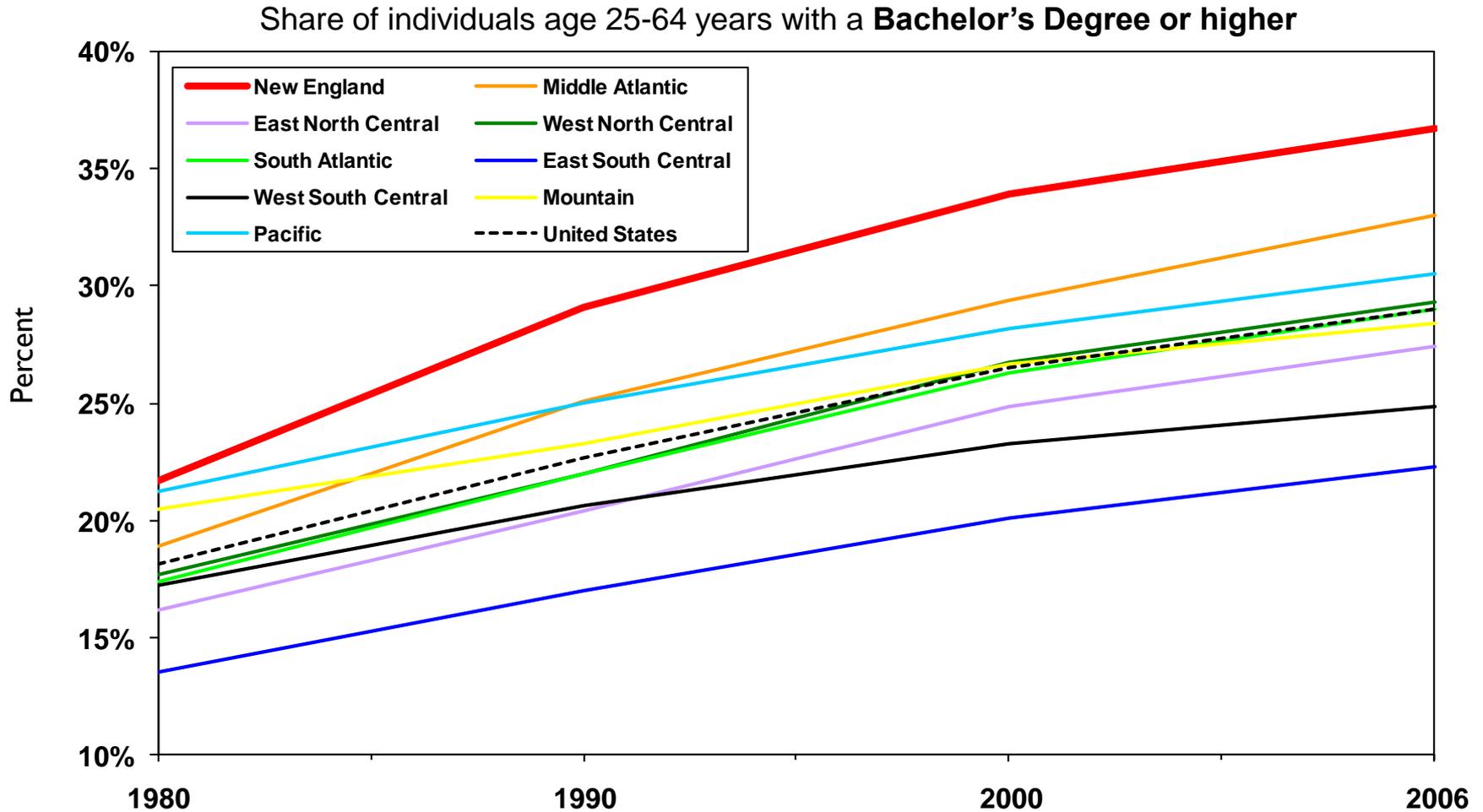
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In particular, the southern New England region has experienced a decline in the middle-skill population since 2000

Individuals aged 25-64 years with **some college or an Associate's degree**

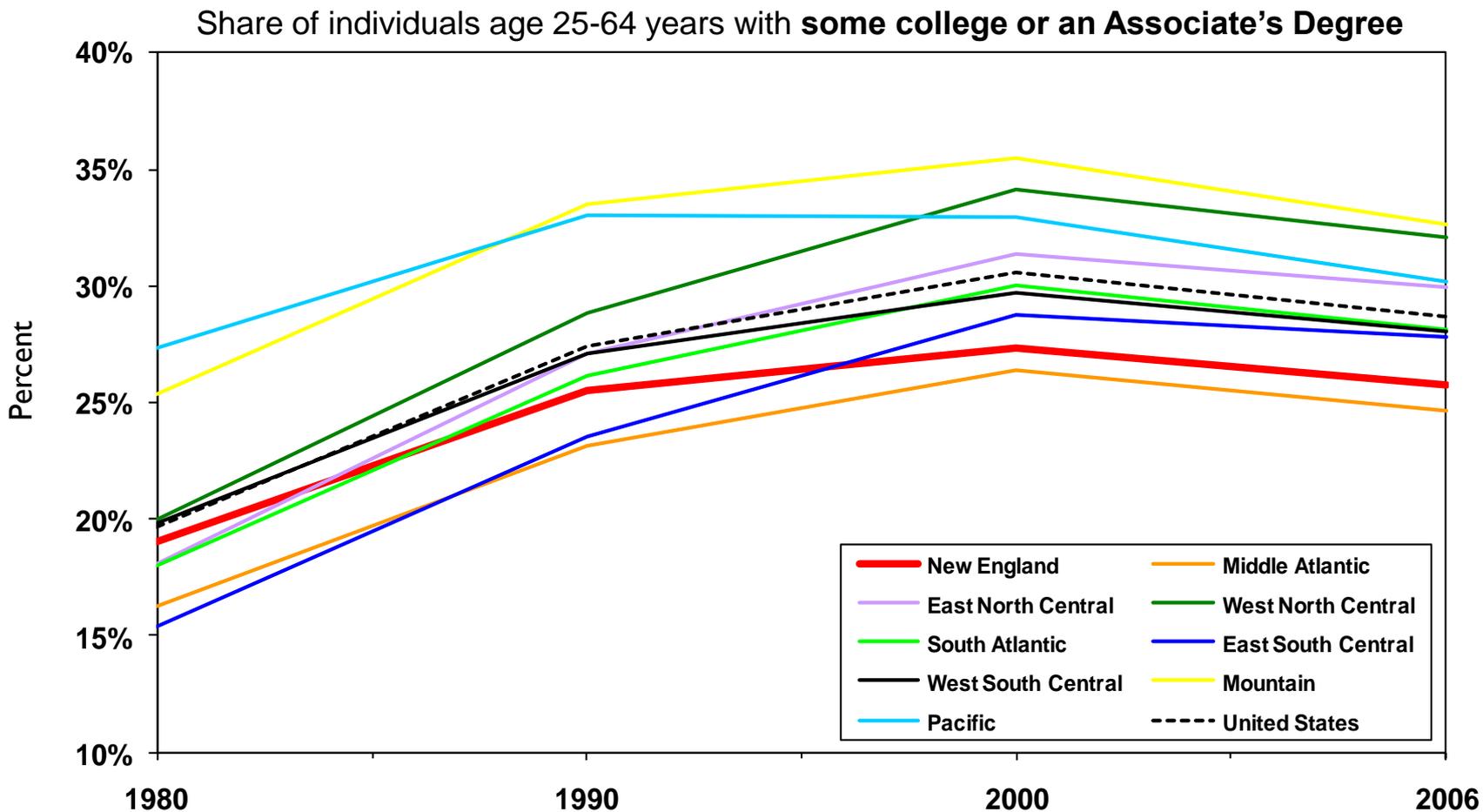


While the share of individuals with a Bachelor's degree has increased more rapidly in New England than elsewhere...



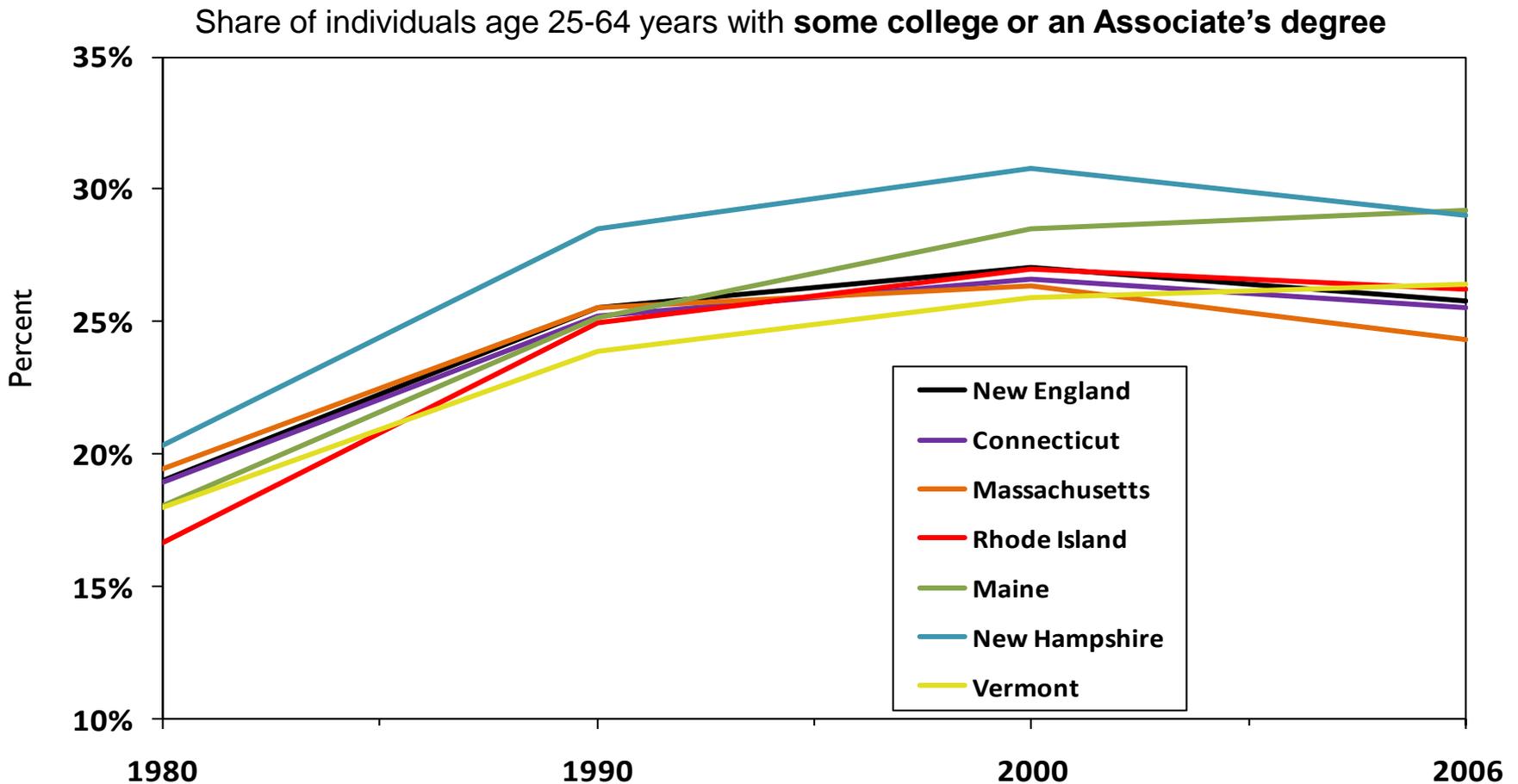
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...the share of individuals with some college or an Associate's degree lags behind that of most other regions



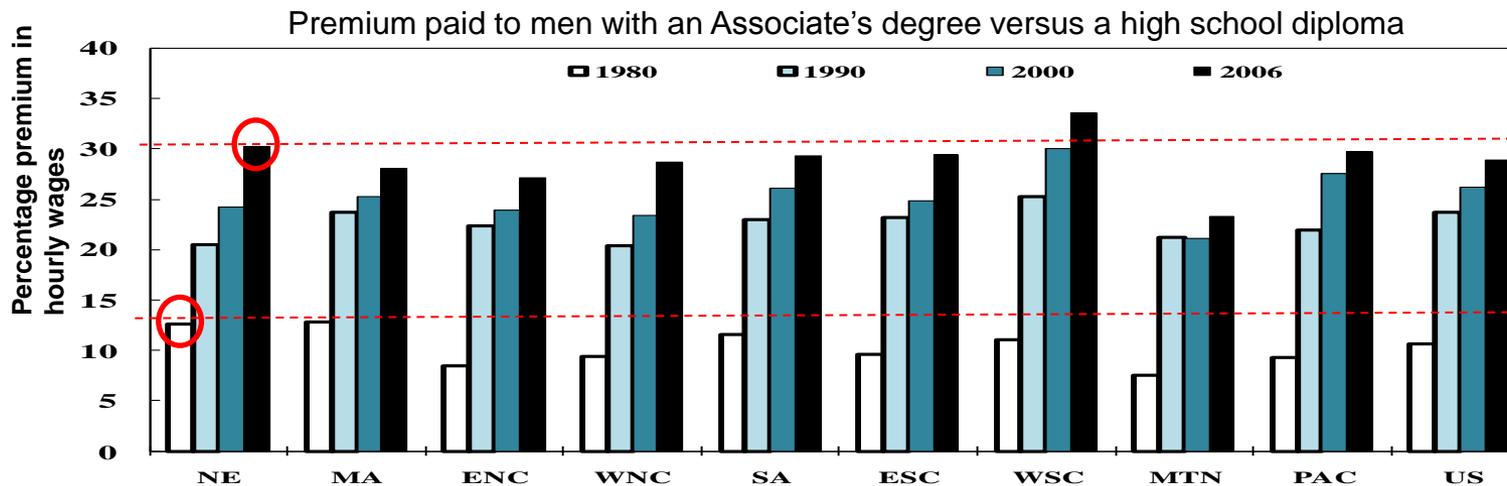
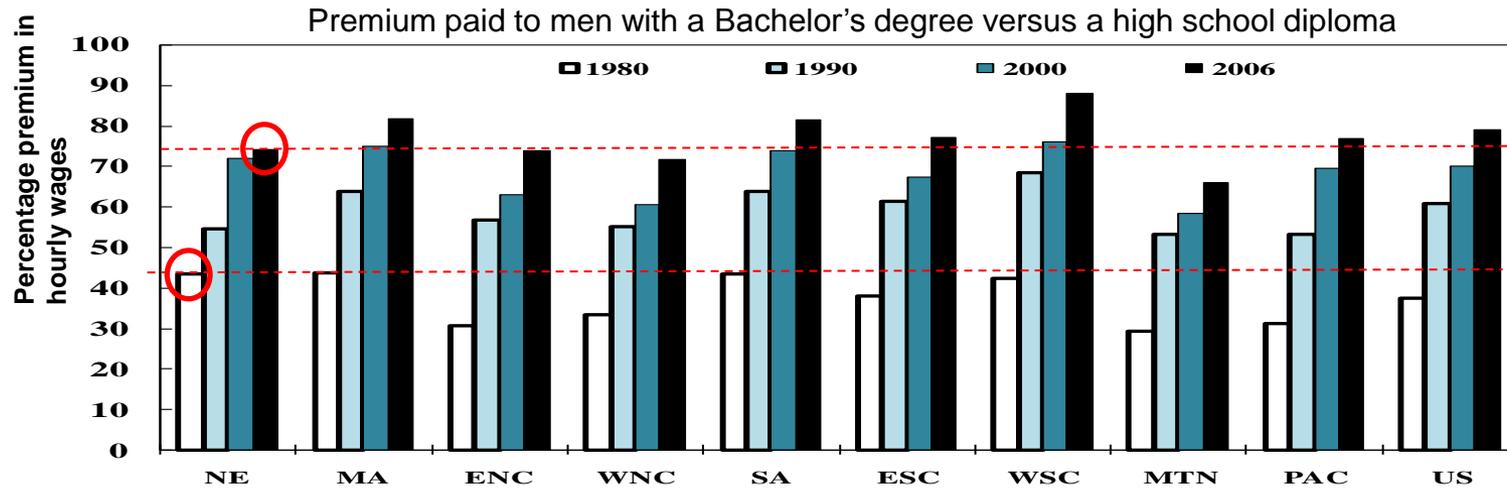
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Within the region, the southern New England states have the lowest shares of middle-skill workers



Source: Author's calculations based on the 1980, 1990, and 2000 decennial Census and the 2005-07 combined American Community Survey.
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Since 1980, the premium employers are willing to pay workers with a postsecondary degree relative to those with only a high school degree has been increasing



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The supply of middle-skill workers has not kept pace with demand in recent decades

- Particularly true in key sectors of the New England economy that employ middle-skill labor: healthcare, business and financial operations, computer and mathematical sciences, etc.
- Evidence suggests that most of the increased demand for skilled workers stems from shifts in employment within industries and occupations, as firms adopt new technologies

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Projections indicate that the size of the working-age population in New England will stagnate

Growth (percent change), individuals aged 25-64 years

	Total	Foreign-born	Native
2009-2019 - Projected			
United States	11.3	47.5	3.2
New England	2.2	31.9	-4.0
Southern New England	2.9	33.1	-4.8
Northern New England	1.3	20.7	0.1

Source: Author's calculations based on a cohort component model applied to data from the 2006-2008 combined American Community Survey.

The region's population will shift to include a greater share of minority and immigrant groups

Difference (percentage points), individuals aged 25-64 years

	White	African-American	Hispanic	Asian	Other
2009-2019 - Projected					
United States	-8.6	1.0	5.8	1.4	0.5
New England	-8.2	1.6	4.3	1.8	0.6
Southern New England	-9.6	1.8	5.2	2.0	0.6
Northern New England	-3.5	0.7	1.3	0.7	0.9

Source: Author's calculations based on a cohort component model applied to data from the 2006-2008 combined American Community Survey.

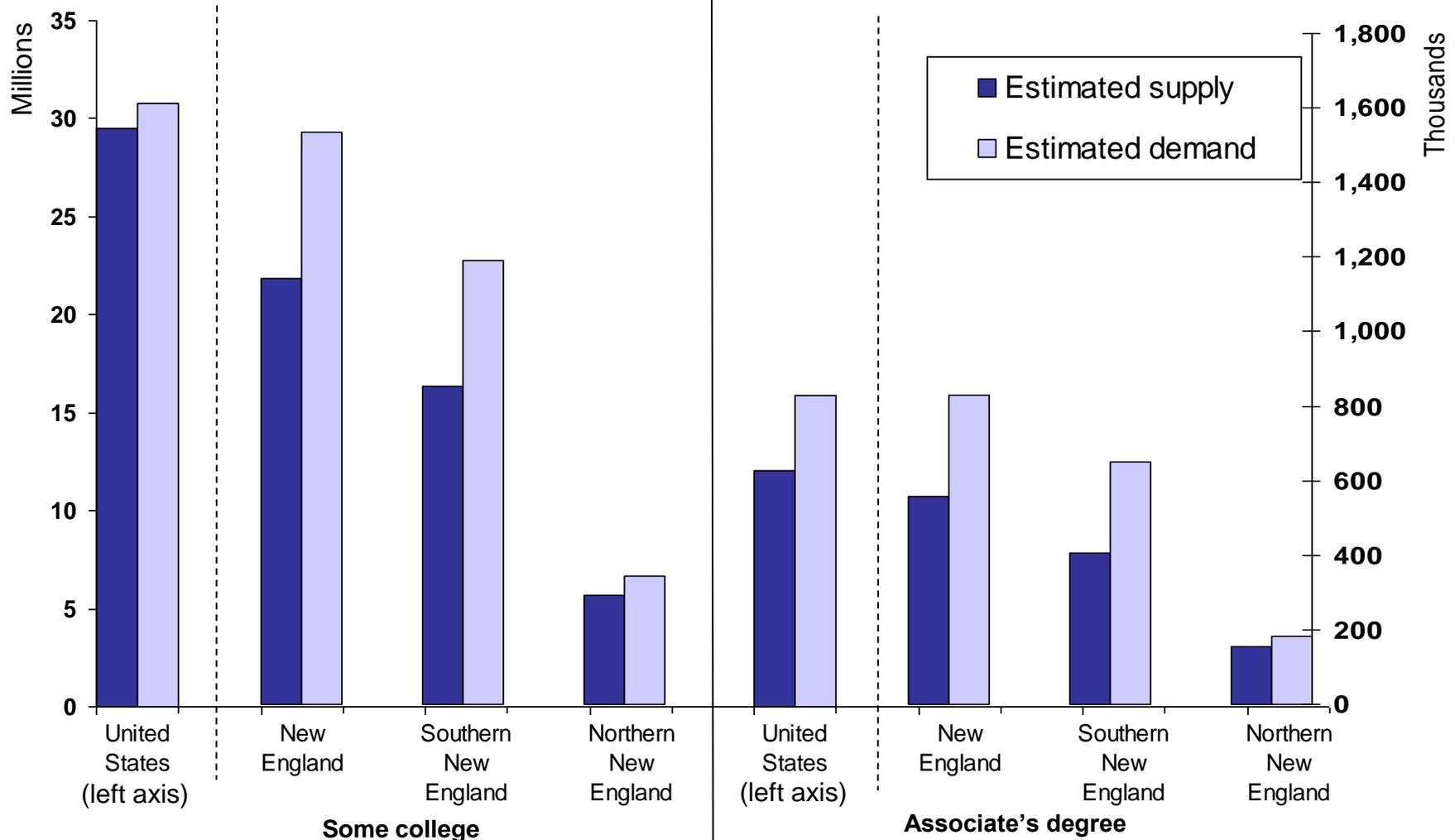
- This changing composition places downward pressure on the education distribution in New England
- As a result, the share of individuals with an Associate's degree is projected to decrease slightly by 2019

Future demand for middle-skill workers in New England is predicted to continue to outpace supply

- In 2019, middle-skill workers account for 27 percent of the labor force while middle-skill jobs make up 31 percent of the economy – a 4 percentage point shortfall of labor supply
- To eliminate this gap, the number of middle-skill workers would need to grow by nearly 30 percent over the next decade

Future demand for middle-skill workers in New England is predicted to continue to outpace supply

Number of labor force participants aged 25-64 years, 2019



Note: Supply projections are the author's calculations based on a cohort component model applied to data from the 2006-2008 combined American Community Survey. Demand projections are the author's calculations based on projected employment growth for 2008-2018 by the U.S. Bureau of Labor Statistics

The nature of the mismatch varies within the region

- In northern New England, the shortfall mainly reflects slowing population growth; a shortage in the number of workers
- In southern New England, the mismatch is primarily due to the population lacking the right mix of skills

There are likely to be some labor market adjustments over the next decade in response to any imbalance between supply and demand

- For example:
 - Younger workers are likely to respond by migrating into the area from other parts of the country
 - Older workers may choose to stay in the labor force longer, delaying retirement
 - New workers entering the labor force are likely to obtain more education and training in response to higher wage premiums
- Projections that adjust for market responses still find that the supply of middle-skill workers fall short of demand

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We cannot rely on market forces alone to fill the middle-skills gap

- Middle-skill workers have fewer resources to invest in training and have fewer mobility options than high-skill workers
- Private sector training investments by firms are often limited—particularly for middle-skill workers
- Demand is not likely to be met through additional automation or outsourcing on the part of firms
- Even if high-skill workers are able to perform jobs that require less education, it is unlikely that they would choose to do so unless there were no other options

Potential policy solutions point to growing our own talent

- Two-year institutions are the primary source of education and training for middle-skill workers
- The role of community colleges has expanded from providing relatively easy access to college coursework to providing a range of job skills training and other programs
- The region's higher education system seems skewed toward private institutions that produce bachelor degree holders
- Although college enrollment has been increasing, college completion rates have not—particularly at two-year institutions

Increasing middle-skill education and training would require overcoming a number of challenges

- Further gains in educational attainment would require significant investment in financial aid
- Community college students often face greater challenges to completion than those attending four-year institutions
- Middle-skill jobs often require specific skill sets rather than general knowledge, training needs to be career-oriented and provide skills demanded by employers

Policy implications vary for northern and southern New England

- Given northern New England's projected population decline, policymakers in these states have focused on attracting and retaining skilled workers
 - New Hampshire's 55% Initiative
 - Maine's Opportunity Tax Credit
- In southern New England, policymakers have focused on improving education and training within categories of expanding middle-skill jobs
 - SkillWorks has filed legislation in MA (Middle Skills Solutions Act, currently in Committee)

Research initiatives and policy efforts to address the middle-skill mismatch

- NEPPC economist Alicia Sasser Modestino serves as a member on the MA SkillWorks steering committee
- The Regional & Community Outreach group in the Boston Fed will be publishing an educational brochure on for-profit colleges
- *Filling the Workforce Gap in the Healthcare Industry*, Phil Moss, Yolanda Kodrzycki, and Alicia Sasser Modestino (forthcoming)
- *Regional Labor Market Profiles*, Robert Clifford and CommCorp (forthcoming)