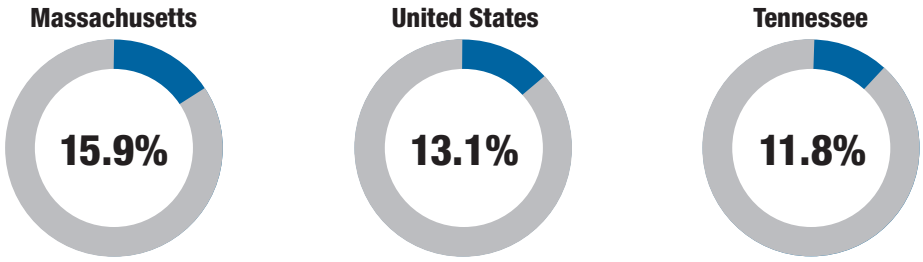
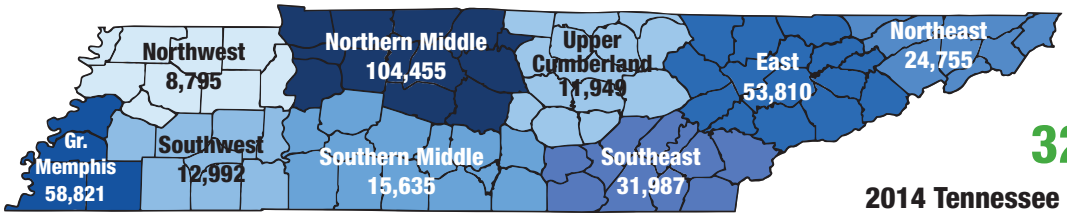
Tennessee STEM

Percent of STEM Occupations in Total Jobs



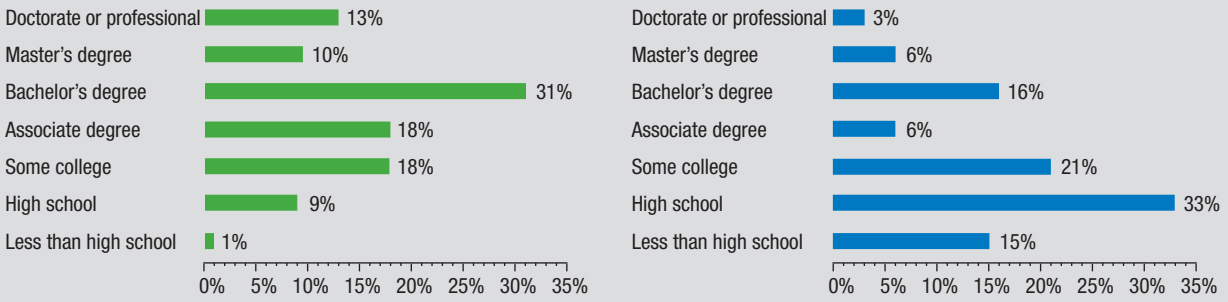
Regional Distribution of STEM jobs in Tennessee



324,328
2014 Tennessee STEM jobs

Biggest Problem Facing STEM Occupations in Tennessee: Skill Gap

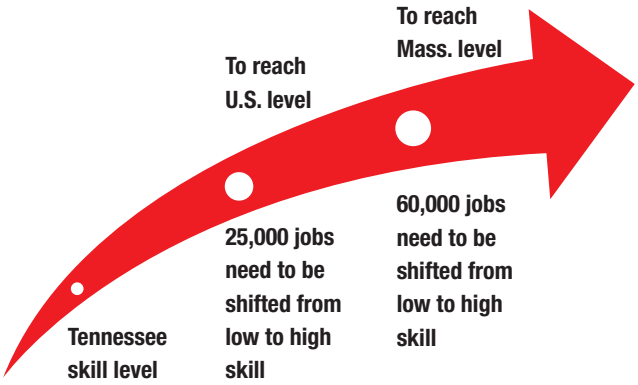
Educational Attainment Required—STEM vs. Total Industry Occupations



Largest Occupational Skill Gaps in Tennessee

- Marine engineers, naval architects—35%
- Computer network architects—33%
- Miscellaneous social scientists, related workers—31%

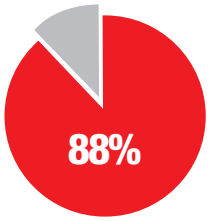
Closing the Skill Gap in Tennessee and aligning STEM concentration with the U.S. level would create an economic impact of nearly $4.5 billion and an additional 16,000 new jobs.



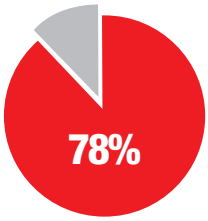
Tennessee STEM Workforce Challenges

Lack of rigor, interest, ability, emphasis on STEM subjects, knowledge about programs

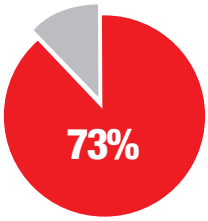
Responses from Community Stakeholders to BERC's 2015 STEM Survey



Tennessee does not produce enough well-prepared workers.



Students are not graduating with proper skills for STEM jobs.



Tennessee workforce will not meet advanced technology demands.

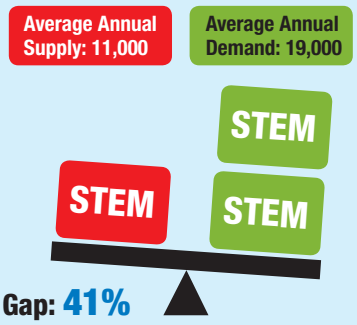
Government. Should fund STEM, promote it, provide incentives, and increase awareness, respondents say

Recommendations:

- Connecting educational institutions with workforce needs
- Aligning and coordinating STEM resources across the state

Business. Challenges leading to slow business growth, nonlocal workforce:

- **Recruiting workforce.** Low skill set, finances, location, awareness
- **Job unfufillment.** Increased training cost, nonlocal recruiting, relocation



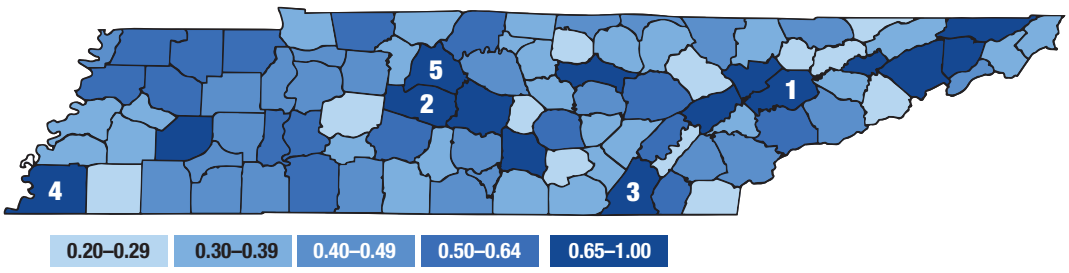
Workforce Supply-to-Demand Ratio: 0.59 **Local Unmet Demand Gap: 41%**

BERC STEM Exposure Index

Indicators Evaluated

- STEM jobs as a percent of total county jobs
- STEM jobs as a percent of Tennessee STEM jobs
- Average ACT math score
- Average ACT science score
- College-going rate (%)
- Patents per 1,000 employees (2004–2013)

County Name	STEM Index	Rank
Knox	0.942	1
Williamson	0.937	2
Hamilton	0.904	3
Shelby	0.886	4
Davidson	0.874	5



MIDDLE TENNESSEE STATE UNIVERSITY

JONES COLLEGE OF BUSINESS

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with TSBDC and Mind2Marketplace