

ABSTRACT SUMMARY

Applicant Name/Project Title. The Eastern Connecticut Workforce Investment Board requests \$5,000,000 for the *Eastern-South Central Connecticut STEM Careers Partnership*.

Applicant Region. The Partnership targets the Eastern and South Central Connecticut Workforce Investment Areas (WIAs), which hold 1,133,358 residents, of whom 614,435 work. The regional labor force grew during the past four years (gaining 2,623 jobs while the other state WIAs lost more than 24,000). Our region features institutions (e.g., Yale) and corporations (e.g., Pfizer) that command global name recognition, and contains all the critical components of a (potentially) robust and globally-competitive economic engine. Manufacturing remains an important industry across our region, and health care employment concentrations are high. However, creation of lower wage service jobs and the steady decline of high-wage manufacturing jobs produce the lowest per capita annual average wages in the state (\$43,448 v. \$57,258 for the balance of Connecticut).¹

One critical “difference maker” will diversify our region’s economy: developing knowledge workers and supporting businesses in industry clusters related to **Science, Technology, Engineering, and Math (STEM)**. Nearly half of the State’s 60 fastest-growing occupations require a solid math/science education.² The Connecticut Business and Industry Association found that nearly 20% of Connecticut manufacturers have “extreme difficulty” in filling engineering vacancies.

Partnership. The Eastern Connecticut Workforce Investment Board (EWIB) and its partners have been working together to strengthen the regional economy through various efforts, including the Governor’s Commission for the Economic Diversification of Southeastern Connecticut. The Commission includes a Housing and Workforce Subcommittee to implement affordable housing solutions, create regional STEM Councils and STEM Leadership Schools, develop career pathways for low-wage workers, and increase the capacity of the workforce investment system to match the

¹ “Information for Workforce Investment Planning: 2006,” Connecticut Department of Labor, Office of Research.

² Source: *Connecticut Workforce Demands and the Implications for Education*, Connecticut Department of Labor, July 2003.

skills of transitioning workers to cluster growth within the region. Declining STEM skills also led Governor Rell to launch CONNvene, “a statewide initiative to inspire and encourage Connecticut students’ interest and achievement in science, technology, engineering and mathematics.”

Our Partnership engages the region’s workforce development, education, economic development and industry leaders, and strengthens partnerships with media and philanthropy. EWIB will serve as the lead agency and fiscal agent, and will work with Workforce Alliance (the South Central WIB) to spearhead workforce issues. Sub-regional economic development bodies (SouthEastern Connecticut Enterprise Region; Regional Growth Partnership; Northeast Alliance) will accelerate implementation of regional Comprehensive Economic Development Strategies and work with the Connecticut Economic Resource Center to improve the capacity of small businesses in the region to access the resources needed to compete. The Connecticut Academy for Math, Science, and Technology will provide technical assistance and informational resources to support K-16 STEM efforts. Two (2) public school districts (New London; New Haven) will host STEM Institutes that serve as points of collaboration and access to resources for supporting STEM curriculum and enrichment efforts. Connecticut Public Broadcasting, Inc. will use a variety of media strategies to promote STEM careers to young people. The University of Connecticut (UConn) Tech-Knowledge Portal will increase efforts to connect UConn to regional industry. State partners include the Departments of Labor, Economic Development, Education, and Higher Education, and the State Office for Workforce Competitiveness.

Overview of Strategies. Our strategies will benefit key industries that rely on STEM skills, including defense contractors, manufacturing, health care, utilities, bioscience, technology, nanotechnology, and alternative energy. Recent findings demonstrate that employers across numerous industries need workers with basic and advanced STEM skills.³

³ CT Office for Workforce Competitiveness, “A Talent-Based Strategy to Keep Connecticut Competitive in the 21st Century,” 2007.

The Partnership identifies three (3) goals:

Goal 1 - Create a central regional infrastructure to oversee Science, Technology, Engineering, and Math (STEM) activities. Our proposal creates a *Regional STEM Council* to oversee regional STEM efforts and set STEM-related priorities for the region; and a *Virtual STEM Center* to drive the implementation of our key strategies. This organizing structure will coordinate efforts to develop the K-16 STEM talent pipeline (*Goal 2*) and make regional workforce and economic development systems more responsive to the needs of STEM-related businesses (*Goal 3*).

Goal 2 - Develop the K-16 pipeline for high skill/technical jobs in STEM areas. Two (2) *Regional STEM Institutes* will serve as centers for STEM curriculum and enrichment efforts across all school districts, state-level organizations, and higher education partners in the region. STEM Institutes will provide technical assistance to school districts; connect education and business; coordinate professional development; enhance teacher recruitment; and expand higher education partnerships. A *multimedia campaign* will raise awareness of high-wage STEM careers among guidance counselors, students, and parents. The Regional STEM Council will work with colleges and universities to recruit area corporations to expand *STEM higher education scholarships* in return for hiring commitments.

Goal 3 - Equip the regional workforce and economic development systems to be more responsive to the needs of STEM-related businesses. Our proposal develops *micro- and macro-level STEM skills assessment tools* to better understand the skills of the current and future workforce in relation to projected growth sectors and occupations. Improvements in assessment will inform education and workforce investments. *Streamlining the regional economic development infrastructure* will facilitate access to the resources and supports STEM-related businesses need to compete and maximize the impact of our investments in STEM talent.