



Council Meeting: April 8, 2008

SUBJECT: Authorization for NOVA to Apply to U.S. Department of Labor for Science, Technology, Engineering, and Mathematics (STEM) Initiative Funding in an Amount not to Exceed \$2 Million

REPORT IN BRIEF

The U.S. Department of Labor (DOL) has announced the availability of funds and released a grant solicitation for its Science, Technology, Engineering, and Mathematics (STEM) Initiative. The purpose of the initiative is to develop and enhance the STEM capabilities of the regions and better prepare workforce system participants for STEM careers. Staff recommends that the Sunnyvale City Council, on behalf of the NOVA seven-city consortium, concur with the NOVA Workforce Board and authorize the submission of a proposal to the U.S. Department of Labor for a STEM initiative grant in an amount not to exceed \$2 million.

BACKGROUND

There is broad consensus that the long-term key to continued U.S. competitiveness and growth in an increasingly global economic environment is the adequate supply of qualified Science, Technology, Engineering, and Mathematics (STEM) workers. According to the National Science Foundation, scientific innovation has produced roughly half of all U.S. economic growth in the last fifty years, and the STEM fields, including those who work in them, are critical engines of that innovation and growth. According to one recent estimate, while only five percent of the U.S. workforce is employed in STEM fields, the STEM workforce accounts for more than fifty percent of the nation's sustained growth.

However, American pre-eminence in STEM will not be secured without addressing the education and workforce pipeline challenges that have become a growing national concern. The STEM challenges are multi-faceted and include: an increasing number of high school graduates with insufficient grounding in STEM, waning enrollment in technical studies, impending retirement of a large portion of the existing STEM workforce, and difficulty attracting and retaining highly qualified STEM teaching professionals.

As part of a federal response to STEM challenges, the Employment and Training Administration of the U.S. Department of Labor has announced the availability of approximately \$10 million in grant funds for the Science, Technology, Engineering, and Mathematics (STEM) Opportunities in the Workforce System Initiative. Grants will be awarded to expand and align current and new STEM workforce education and training strategies, activities, and resources in One Stop Career Centers to promote, attract, and prepare disadvantaged youth and dislocated workers for STEM careers, while simultaneously enhancing the competitive position of local and regional employers.

Grant applicants must be individual Workforce Investment Boards (WIBs), representing a regional consortium of WIBs. It is expected that the average award will range from \$1.5 million to \$2 million for up to a 36-month grant term.

EXISTING POLICY

The proposed activities are consistent with the City of Sunnyvale's Socio-Economic Goal 5.1F: Provide job training and employment services within constraints of operative, federal regulations and available federal funding, to address the locally-determined employment and training needs of economically disadvantaged residents and others with special needs.

DISCUSSION

Perhaps nowhere else in the nation is the impact of STEM capacity felt more strongly than in Silicon Valley, home to a great number of STEM-related companies and known worldwide for its innovation and productivity. The region's future success is highly dependent upon access to a skilled workforce knowledgeable in the STEM areas, yet we are facing alarming trends in terms of a rising high school dropout rate and a low percentage of students who meet requirements for entrance to the state's four-year universities.

Many individual organizations within the region have undertaken efforts to resolve the current and anticipated lack of workers with STEM-related skills and knowledge. To date, however, there has been limited coordination among these various efforts to develop a regional approach. NOVA proposes a collaboration of three regional workforce boards (NOVA, San Mateo, Santa Cruz) and partners from business, education, and the nonprofit sector to tie these efforts together and to model several key features that DOL believes will lead to achieving the objectives of the STEM initiative:

STEM Center of Excellence

The CONNECT! Job Seeker Center is the natural home for the STEM Center of Excellence. By leveraging the collaborative's existing strategic partnerships, we will become a focal point of STEM-related knowledge and resources for employers and job seekers throughout the three-county region. These efforts include working with business to identify workforce needs and to develop internship opportunities; working with education to create a more efficient pipeline of workers; and working more closely with dislocated workers and youth to assess STEM skills and identify viable career paths.

STEM Coaches

STEM Coaches will forge ties to STEM employers and link program participants to STEM employment and educational opportunities. The collaborative will staff 1.5 STEM Coach positions to provide in-depth support to job seekers, conduct outreach to employers, provide training to other one stop staff, and coordinate the development of work experience opportunities and the recruitment of mentors. In addition to these STEM Coaches, the San Mateo WIB recently created an Education Liaison position, funded by the County and dedicated to strengthening the pathways between the K-12 and post-secondary systems and local employers.

STEM Mentors

The STEM grant requires STEM Mentors, who will clarify and identify career development opportunities for STEM job seekers and those participating in training. The STEM Coaches will use industry connections to recruit STEM Mentors.

The Santa Cruz WIB will lead an effort to develop a STEM program for disadvantaged youth. A staff position will be developed to coordinate the recruitment and training of youth mentors through Cabrillo College and UC Santa Cruz, as well as from more than 60 local employers already supporting youth efforts. The staff person will also develop work experience opportunities.

Career Blueprint

Grantees in the STEM Initiative will develop and test the concept of a "career blueprint," which is an intentional career development framework and map for advancement along a STEM career pathway. The San Mateo WIB will take the lead on the blueprint, building on its success in creating career pathways in biotechnology. The blueprint will contain an assessment strategy, designed in

collaboration with local industry, that enables workers to clearly match their skills and interests to STEM career opportunities and understand where skills gaps may exist.

At its March 26, 2008 meeting, the NOVA Workforce Board approved the submission of a proposal to the U.S. Department of Labor.

FISCAL IMPACT

The source of funds for this project is grant funding targeted for STEM activities. These funds would be awarded to NOVA and the City of Sunnyvale through a competitive application process. As such there is sufficient funding to accomplish the required work, and the funding cannot be used for any purposes not in the original proposal. There is no negative fiscal impact on the City of Sunnyvale.

PUBLIC CONTACT

Public contact was made through posting of the Council agenda on the City's official notice bulletin board and at the Senior Center and Community Center, posting of the agenda and report on the City's Web site, publication of the Council agenda in the *San Jose Mercury News*, and the availability of the report in the Library and the Office of the City Clerk. Copies of this report were also shared with each of the City's Boards and Commissions.

ALTERNATIVES

1. Council authorizes the submission of a proposal to the U.S. Department of Labor for a STEM initiative grant in an amount not to exceed \$2 million.
2. Council does not authorize submission of a proposal.
3. Other action as determined by Council.

RECOMMENDATION

It is recommended by staff that the Sunnyvale City Council, on behalf of the NOVA seven-city consortium and in concurrence with the NOVA Workforce Board, adopt Alternative 1: Council authorizes the submission of a proposal to the U.S. Department of Labor for a STEM initiative grant in an amount not to exceed \$2 million.

Reviewed by:

Michael J. Curran, Director, Department of Employment Development
Prepared by: Jeanette Langdell, Employment Training Manager

Approved by:

Amy Chan
City Manager