

# PERFORMANCE NOTE: AGENCY FORM

# HB150

Short Title: **Science, Technology, Engineering and Mathematics (STEM) Action Center**

Joint Rule 4-2-404 requires a Performance Review Note anytime the legislature significantly increases funding for:

New agency  New services or benefits  Serving a new or larger population

Due to the Fiscal Analyst: Wednesday, February 26, 2014

## CONTACT INFORMATION

RESPONDENT: John G Bell  
Title: Finance Manager II Agency: Governor's Office of Economic Development  
Cell: (801) 643-8650 Office: (801) 538-8877 email: [johnbell@utah.gov](mailto:johnbell@utah.gov)

### 1. HOW WILL THE PUBLIC BENEFIT?

1. What is the purpose and the duties of the new program, agency, services, or population served? JR4-2-404(4)(c)(i)

The STEM Action Center will coordinate best-in-class STEM education resources for Utah's public schools and provide teachers with professional learning opportunities. It will expand the scope of its math technology initiative. It will partner with USOE to create a STEM education endorsement and incentive program; along with a high quality professional development program. The STEM Action Center will also work on middle and high school applied science initiative.

2. What services are provided by the funding increase? JR4-2-404(4)(c)(ii)

The STEM Action Center will coordinate State-wide efforts to improve STEM education and provide STEM career opportunities to students. The Center will:

- expand the scope of its math technology initiative to reach kindergarten – 6<sup>th</sup> grades;
- partner with USOE to create a STEM education endorsement and incentive program while supporting development of a high quality professional development program;
- work on middle and high school applied science initiative;
- partner with Higher Ed to address college and career readiness through math retention initiatives; and
- continue to act as a research and development center for STEM education.

The STEM Action Center will enable GOED to better market the State's investment into its future workforce. The State's focused investment into its future workforce will be used as a marketing tool to recruit business to the state.

3. What are the expected outcomes of the new or expanded program and how will the public benefit? JR4-2-04(4)(c)(iii)

The state and public will benefit through better prepared and qualified individuals matriculating from the State's education programs. The emphasis on STEM should give graduates an edge in highly competitive job markets. The increase in STEM education and thus STEM career opportunities will increase high wage job options. Intended outcomes include:

- closing the opportunity and achievement gaps in under-represented populations within STEM;
- improved opportunities for leveraging and acquiring resources for STEM education;
- a STEM workforce that can support growth in Utah's STEM-based companies which will impact the State's overall economy;
- reducing the need for math remediation; and
- assist GOED in promoting state investment in Utah's future workforce and use that commitment to education as a marketing tool.

4. How will the bill be implemented and what resources are available to achieve the expected outcomes? JR4-2-404(4)(c)(iv)

The bill includes funding in the amount of \$23,500,000 (\$13,500,000 one time and \$10,000,000 ongoing).

The one time funds will be allocated:

- \$5,000,000 to provide STEM education high quality professional development;
- \$3,500,000 to fund the STEM education middle school applied science initiative; and
- \$5,000,000 to fund the high school STEM education initiative.

The ongoing funding will be allocated:

- \$5,000,000 for STEM Center math digital learning deployment to grades k -6 and related professional development to support mathematics instruction; and
- \$ 5,000,000 to develop the STEM education endorsement and related incentive program.

5. How will the proposed agency activities cause the expected outcomes and public benefit in 3?

The action center addresses a critical gap that has been identified by a large group of Utah STEM stakeholders in K-12 education, higher education, government, industry and community and cultural centers. The center will provide coordination and collaboration to create a more unified and strategic State-wide plan to support and improve STEM education. The action center will seek for and implement educational best practices; align public and higher educational STEM activities with industry, government and community and cultural STEM efforts; and provide professional development and other assistance to educators and students.

**2. PERFORMANCE MEASURES:**

What measures will managers and policymakers use to know if the new or expanded program is providing the expected outcomes and public benefits? Provide one, two, and three year goals or targets, actual results and measures if available to serve as a baseline, and outcomes.

Goal (public benefit):	Closing the opportunity and achievement gaps in k-12 populations within STEM				
Measure Title:	STEM academic and college readiness				
Description:	<p>The STEM Action Center will identify and promote best practices in STEM communication activities. The center will work with teachers, counselors, students and parents to determine more effective communication strategies to create awareness of the importance of academic achievement and how it relates to career opportunities in STEM.</p> <p>The STEM Action Center will assess current STEM performance; identify needs for increasing STEM subject retention through high school into college along with decreasing the need for math remediation and work to leverage resources (human and programmatic) where it will have the greatest effect.</p>				
Fiscal Year:	FY2014	FY2015	FY2016	FY2017	FY2018
Target or Benchmark:					
Baseline:					
How will program managers collect this performance information and ensure its reliability?					
The STEM Action Center Board, in collaboration with the State Board of Education and Higher Education will establish measurable criteria based explicitly on the language of the bill and will develop metrics.					

Goal (public benefit):	Improved opportunities for leveraging and acquiring resources for STEM education.				
Measure Title:	Best practices Initiative				
Description:	The STEM Action Center will collaborate with the State Board of Education and Higher Ed to improve instruction and student achievement in STEM education for grades k-12. The STEM Action Center will also work, in partnership with the agencies above, to ensure teachers are getting high quality STEM professional development.				
Fiscal Year:	FY2014	FY2015	FY2016	FY2017	FY2018
Target or Benchmark:					
Baseline:					
How will program managers collect this performance information and ensure its reliability?					
The STEM Action Center Board, in collaboration with the State Board of Education, will establish measurable criteria based explicitly on the language of the bill and will develop metrics.					

Goal (public benefit):	Work to build a pipeline for a STEM workforce that can support growth in Utah's STEM-based companies which will impact the State's overall economy and assist GOED in promoting state investment in Utah's future workforce and use that commitment to education as a marketing tool.				
Measure Title:	Private and public collaboration				
Description:	The STEM Action Center will assess current industry engagement; identify needs for increasing industry engagement and work to leverage resources (human and programmatic) where it will have the greatest effect.				
Fiscal Year:	FY2014	FY2015	FY2016	FY2017	FY2018
Target or Benchmark:					
Baseline:					
How will program managers collect this performance information and ensure its reliability?					
The STEM Action Center Board will establish measurable criteria based explicitly on the language of the bill and will develop metrics.					