Part I – Agency Profile

Agency Overview
Idaho is facing a crisis: citizens are not entering the STEM (Science, Technology, Engineering, and Mathematics) pipeline at a rate that will meet the current and future workforce needs of Idaho employers to sustain Idaho’s economic development and secure future prosperity. The Idaho Department of Labor reports that Idaho will fall significantly short in the number of individuals needed to fill projected STEM positions, and the consequence to our state’s economy in lacking this STEM-trained workforce is costly. In 2018 alone, over 6,300 STEM-related jobs remained unfilled. As a result, Idahoans lost nearly $413 million in unclaimed personal income, and $22 million went unrealized in state tax revenue. The Idaho STEM Action Center (STEM AC) functions as an agency whose mission is to engineer and implement lasting solutions to this growing economic crisis. STEM AC defines STEM to be integrated and cross-disciplinary, mirroring the real-life practices of STEM professionals. STEM AC also defines STEM broadly, encompassing the 184 occupations listed by the Idaho Department of Labor that require STEM and computer science (CS) skills, including the traditional STEM and Career & Technical Education (CTE) disciplines, as well as healthcare, economics, accounting, and psychology.

Numerous research studies, including those produced by Idaho Business for Education, the Idaho Department of Labor, and the Georgetown Center for Education and the Workforce, demonstrate that more than 60% of available jobs will require a college degree or certificate beyond a high school diploma. STEM AC supports the recommendations of the Idaho Task Force for Improving Education, the Higher Education Task Force, the Workforce Development Task Force, and the State Board of Education’s STEM Strategic Plan, including the state’s goal of achieving 60% of Idaho’s high school graduates continuing onward to gain a post-secondary degree or certificate. According to a recent CompTIA report, Idaho’s technology sector is the second fastest growing in the nation, and STEM AC also seeks to support this economic segment. Through these collaborative efforts, we will meet the workforce needs of Idaho business and industry.

Because of these coordinated statewide efforts, Idaho will become a STEM business destination. Idaho will have a citizenry that not only recognizes the importance of STEM but also possesses the necessary STEM skills for the workforce. A highly skilled STEM workforce will lead to increased investment and business opportunities throughout Idaho. Educators will be equipped with the necessary STEM skills and tools for engaging students. Students will possess both the technical STEM skills and the 21st century skills that employers require: critical thinking, problem solving, collaboration, and innovation. As a result of this multi-tiered approach, Idaho will experience an increase in the number of STEM-focused businesses throughout the state which will translate into an increase in the number of STEM jobs available for Idahoans. Having a citizenry available and prepared to accept existing and future jobs will bolster Idaho’s economy, leading to long-term economic prosperity for the state and its citizens.

Core Functions and Idaho Code
The requirements and objectives of the STEM Action Center include: state-level coordination of STEM-related activities; promotion of STEM through best practices in education; support of high-quality professional development and grants for educators; facilitation of STEM-related competitions, fairs, camps, and student programs; and engagement of private industry in the development, implementation, and sustainability of STEM Action Center programs [Section 67-823, Idaho Code]. Progress in these areas is accomplished by offering grant and professional development opportunities to educators, communities, and students, and by measuring outcomes from these activities. Moreover, many STEM AC projects require evidence of Project-Based Learning (PBL). PBL has been shown to connect classroom learning to real-world experiences by providing students with opportunities to formulate solutions for real-world issues by interacting with professionals and solving problems that are relevant to them and their communities.

STEM AC has also been involved in partnering with other state agencies and businesses to bring forth new STEM legislation. In 2016, the Computer Science Initiative was passed (Idaho Code 33-1633). This legislation directs STEM AC to focus on critical training and educational needs to help populate Idaho’s growing demand for a tech-savvy workforce. These efforts will continue to be driven by the needs of Idaho’s industry and will be developed in
partnership with industry, the Office of the State Board of Education (OSBE), Career & Technical Education (CTE), the State Department of Education (SDE), administrators, educators, and local communities. The goal is to secure industry participation in and funding for the state’s CS Initiative which will serve to enhance the state’s investment in CS education. Public-private partnerships have allowed the CS Initiative to expand more rapidly than with state funding alone.

In 2017, STEM AC worked collaboratively with OSBE to pass legislation which allows Idaho schools to apply for STEM School Designation (Idaho Code 33-4701). This designation is formally recognized by OSBE and the Office of the Governor. The first four designated schools were identified in FY 2019 and more are actively applying for the FY 2020 designation cycle.

In 2018, STEM AC worked collaboratively with various educational and industry groups to pass legislation that would require all Idaho high schools to offer at least one computer science course by 2020 (Idaho Code 33-1634). In addition, all Idaho schools can now offer a STEM diploma for students who have taken STEM course work that is significantly more advanced than state graduation requirements (Idaho Code 33-523).

By partnering with education and industry groups, STEM AC continues to ensure that Idaho employers will have access to the workforce they need—a workforce that possesses the skills necessary for a successful transition from school to employment. Moreover, STEM AC serves as a representative on the Workforce Development Council. This partnership ensures that there is significant collaboration without duplication. STEM AC continues to actively seek engagement from Idaho businesses and industries. This is currently accomplished through sponsorships of student competitions, integration of collaborative industry-educator projects funded via grants and professional development, the creation of a virtual mentorship platform, and through various workforce development initiatives. Finally, the Idaho STEM Action Center Foundation was created to more effectively engage with a broader network of businesses. These partnerships serve to enhance state funding and expand the reach of STEM AC throughout the state while bolstering educator training and student awareness of STEM+CS workforce opportunities throughout Idaho.

**Mission Statement:** Engineering innovative opportunities for educators, students, communities, and industry to build a competitive Idaho workforce and economy through STEM and computer science education.

**Vision Statement:** A diverse, equitable, thriving ecosystem for a prosperous, STEM-literate Idaho.

### Revenue and Expenditures

<table>
<thead>
<tr>
<th></th>
<th>FY 2016</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
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<tbody>
<tr>
<td><strong>Revenue</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>General Fund</td>
<td>547,300</td>
<td>2,420,700</td>
<td>4,489,500</td>
<td>2,575,900</td>
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<tr>
<td>Dedicated</td>
<td>100,000</td>
<td>2,204,578</td>
<td>2,100,300</td>
<td>2,100,700</td>
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<tr>
<td><strong>Total</strong></td>
<td>647,300</td>
<td>4,625,278</td>
<td>6,589,800</td>
<td>4,676,600</td>
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<tr>
<td><strong>Expenditure</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Personnel Costs</td>
<td>183,200</td>
<td>329,335</td>
<td>390,185</td>
<td>482,169</td>
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<tr>
<td>Operating Expenditures</td>
<td>312,800</td>
<td>3,266,449</td>
<td>3,603,507</td>
<td>4,966,057</td>
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<tr>
<td>Capital Outlay</td>
<td>62,200</td>
<td>32,477</td>
<td>7,054</td>
<td>11,437</td>
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<td>Trustee and Benefit Payments</td>
<td>N/A</td>
<td>N/A</td>
<td>2,018,994</td>
<td>N/A</td>
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<td><strong>Total</strong></td>
<td>558,200</td>
<td>3,624,261</td>
<td>6,019,740</td>
<td>5,459,663</td>
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### Profile of Cases Managed and/or Key Services Provided

<table>
<thead>
<tr>
<th>Cases Managed and/or Key Services Provided</th>
<th>FY 2016</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student interactions through competitions, camps, and classroom opportunities</td>
<td>10,428</td>
<td>204,000</td>
<td>406,239</td>
<td>442,318</td>
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<tr>
<td>Educator engagements through professional</td>
<td>1,200</td>
<td>4,800</td>
<td>12,633</td>
<td>35,768</td>
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Red Tape Reduction Act

Each agency shall incorporate into its strategic plan a summary of how it will implement the Red Tape Reduction Act, including any associated goals, objectives, tasks, or performance targets. This information may be included as an addendum.

<table>
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<tr>
<th>Performance Measure</th>
<th>FY 2016</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
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<tbody>
<tr>
<td><strong>Goal 1:</strong> Advance equitable access to high-quality STEM+CS opportunities for educators, students, and communities</td>
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</tbody>
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1. **Number of student interactions**
   - **Actual:** 10,428
   - **Target:** N/A

2. **Number of educator engagements**
   - **Actual:** 1,200
   - **Target:** N/A

3. **Total number of grant opportunities offered**
   - **Actual:** 3
   - **Target:** N/A

4. **Percentage of applicants receiving funding via grant opportunities**
   - **Actual:** 22%
   - **Target:** N/A

**Goal 2:** Align STEM education and workforce needs throughout Idaho

5. **Value of industry contributions, grants, and donations (as cash, in-kind, and cash equivalent)**
   - **Actual:**
     - Cash: $72,000
     - Cash + In-kind: $205,000
     - Cash + In-kind equivalent: $736,928
     - Cash + In-kind equivalent and in-kind: $1,340,500
   - **Target:**
     - Cash: $0
     - Cash + In-kind: $0
     - Cash + In-kind equivalent: $0
     - Cash + In-kind equivalent and in-kind: $0

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State of Idaho
## Performance Measure Explanatory Notes

In FY 2020, STEM AC received $1 million for the CS Initiative (Idaho Code 33-1633). This funding represents a smaller cash appropriation than was received in FY 2017 – FY 2019 for this legislation. While STEM AC raised more than $1 million through external funding, it should be noted that industry and grant funding was not intended to supplant state funding for CS. In addition, 99% of the funds received from external sources were restricted funds, directed at a specific program, event, or activity. Restricted funds do not allow STEM AC to meet all the statewide mandates in the CS Initiative. As a result of the change in the cash appropriation, STEM AC is expecting a significant decrease in the number of educators, students, and communities it can serve. Since the
$1 million cash appropriation reduction represents 25% of our total operating expenditures, it is anticipated that there will be a 25% reduction in our impact numbers and a 50% reduction in our CS impact number. This will delay Idaho’s ability to expand statewide access to and awareness of CS and will slow the effort to prepare a STEM-literate workforce.

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