May 8, 2019

MEMORANDUM

TO:        State Board of Regents
FROM:      David L. Buhler
SUBJECT:   Technology Initiative Advisory Board – Funding Allocations from the 2019 Legislative Session

Issue

This item requests approval to allocate $5,000,000 of Utah’s Engineering and Computer Technology Initiative funding that was appropriated by the 2019 Legislature. In accordance with state statute, institutional allocations of new Engineering and Computer Technology Initiative appropriations are recommended by the Technology Initiative Advisory Board (TIAB) and approved by the Board of Regents.

Background

The 2001 legislature approved SB61: Enhancements to the State Systems of Public and Higher Education. This legislation established an Engineering and Computer Technology Initiative within the Utah System of Higher Education (USHE) to increase the number of students graduating from engineering, computer science, and related technology programs. During the last 18 years, the Engineering and Computer Technology Initiative has been successful in increasing the number of graduates in these areas within USHE. Key provisions of SB61 and a list of the TIAB members are included in the attachment.

The TIAB, appointed by the Governor, was established to recommend funding allocations to the Board of Regents. During the 2019 legislative session, $5,000,000 of on-going funds were appropriated to the initiative for distribution to USHE institutions commencing with the 2019-2020 fiscal year (FY20).

The following table provides a summary of funding over the life of the initiative (FY02 through FY18):

<table>
<thead>
<tr>
<th>Year</th>
<th>Ongoing</th>
<th>One time</th>
<th>Loan Forgiveness*</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001-02</td>
<td>1,000,000</td>
<td>2,500,000</td>
<td>500,000</td>
</tr>
<tr>
<td>2002-03</td>
<td>2,000,000</td>
<td>1,000,000</td>
<td>0</td>
</tr>
<tr>
<td>2003-04</td>
<td>500,000</td>
<td>0</td>
<td>50,000</td>
</tr>
</tbody>
</table>
In 2001, SB 61 established a loan forgiveness fund to assist students in obtaining degrees in engineering and computer science. In 2009, SB105 changed the loan forgiveness program to a scholarship program for the purpose of recruiting, retaining, and training engineering and computer science and related technology students. Scholarship funds were part of the $2,500,000 appropriation during the 2012 legislative session.

Since the initiative’s inception, over 37,000 degrees targeted by the initiative have been awarded by institutions within USHE. According to the most recent data available, the following degree completions show growth at key points in time.

<table>
<thead>
<tr>
<th>Degree Category</th>
<th>FY00- Prior to Initiative</th>
<th>FY18- Last Funding Appropriation (effective FY18)</th>
<th>FY18- Latest Year Graduation Data Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td>862</td>
<td>1626</td>
<td>1730</td>
</tr>
<tr>
<td>Computer Science</td>
<td>513</td>
<td>1312</td>
<td>1553</td>
</tr>
<tr>
<td>Total</td>
<td>1375</td>
<td>2938</td>
<td>3283</td>
</tr>
</tbody>
</table>

In making the current $5,000,000 appropriation recommendation, the TIAB followed statutory language. As such, the TIAB gave consideration to requests to hire and retain faculty, purchase equipment, and fund new engineering and/or computer technology programs. Institutional contributions to additional graduates was also a factor. Requests from institutions exceeded the amount of available funds.

Given the considerations indicated above, the TIAB made a unanimous recommendation that funding from the 2019 Legislature be allocated and distributed to the institutions effective FY20 as follows:
### Policy Issues

The process to recommend funding allocations has been followed consistent with state statute.

### Commissioner’s Recommendation

The Commissioner recommends the Board of Regents approve the allocation of Engineering and Computer Technology Initiative funds appropriated by the 2019 Legislature as recommended by the Technology Initiative Advisory Board and that these funds be distributed to institutions effective with the 2019-2020 fiscal year with expectation that funds are expended and matched in accordance with Utah Code 53B-6-105 and 53B-6-105.9.

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David L. Buhler  
Commissioner of Higher Education

DLB/BKC  
Attachment
Key provisions of SB61:

1. Established a goal to triple the number of graduates from USHE institutions in engineering, computer science, and related technology.
2. Directed the Regents to establish rules providing the criteria for those fields of study that qualify as “related technology.”
3. Provided supplemental funds for equipment purchases to improve the quality of instructional programs in engineering, computer science, and related technologies.
4. Established a student scholarship to encourage enrollment in programs included in the initiative.
5. Provided funding for USHE institutions to hire and retain qualified faculty to teach in initiative programs.
6. Increased program capacity by funding new and renovated capital facilities, and funding for new engineering and computer technology programs.
7. Created a Technology Initiative Advisory Board to make recommendations to the Board of Regents in its administration of the initiative. Required that the advisory board be composed of individuals appointed by the Governor from business and industry who have expertise in the areas of engineering, computer science, and related technologies.

Technology Initiative Advisory Board Members

- John Sutherland (Chair)  Brigham Young University
- Susan Johnson (Co-Chair)  Futura Industries (Retired)
- Reed Brown  Mathnasium
- Vance Checketts  Dsco.io
- Roland Christensen  Applied Composite Technology
- Ed Ekstrom  Chateau Grande
- Ed Esper  Utah Capital Investment Corporation
- Mark Ripke  Boeing
- Chuck Taylor  SyberJet Aircraft
- J. Howard VanBoerum  VanBoerum & Frank