



Legislative Council Staff
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Memorandum

January 25, 2024

TO: Joint Technology Committee
FROM: Samantha Falco, Research Analyst, 303-866-3446
SUBJECT: FY 2023-24 Department of Higher Education Supplemental (Cybersecurity Incident Remediation Funding Request)

Summary

The Colorado Department of Higher Education (DHE) is requesting state funding to address a cybersecurity incident and enhance the department's IT infrastructure.

In June 2023, the DHE was the victim of a cybersecurity ransomware incident impacting the network systems. The incident remains under criminal investigation. DHE confirms that data, including some personally identifiable information (PII) data, was copied. In addition, the Student Unit Record Data System was encrypted, making the system inaccessible. DHE is continually working to remediate and take necessary steps toward a solution regarding this incident. Cybersecurity insurance has covered much of the costs, but DHE states additional funding is necessary.

If funded, the request would allow the department to make improvements to meet IT infrastructure and data governance best practices. This includes engaging with an external managed service provider to implement best practices and leverage a security operations center capable of assisting with monitoring, notification, and remediation. In addition, the request will fund IT subscription services to address storage and one-time funding for contractors to help with data integration, database architecture, PII data reduction, and data governance.

The project will also fund the necessary staff in order to achieve these standards. This includes 4.0 FTE: Data Security Manager, Data Support Professional, Data Integration Manager, and System Administrator.

The department consulted multiple Colorado state agencies, higher education coordinating and governing bodies in Colorado and other states, federal higher education agencies, and multiple outside data security experts to determine best practices. While DHE is not officially supported by OIT, the department has overhauled its data policies to align with the Office of Information Technology (OIT) and the Colorado Government Data Advisory Board.

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Project Justification and Cost

DHE is responsible for a significant amount of data through institutions of higher education, students attending those institutions, and the Colorado Department of Education. DHE currently only has 2.0 FTE in their IT department responsible for IT infrastructure, security, HelpDesk inquiries, employee training, user account creation and maintenance, network traffic monitoring, and to act as a liaison to other agencies. In addition, DHE has 1.5 FTE to build, structure, and manage two database servers containing 26 individual databases with sensitive information. DHE is not supported by OIT.

Cost. DHE is requesting a combination of one-time and ongoing funding. The following is a project cost breakdown provided by the department:

FY 2023-34 supplemental

- Upgrading IT infrastructure: \$204,625
- Subscription partnership with a Managed Service Provider: \$294,360
- Implementation of Government Data Advisory Board industry standards: \$920,000
- Personnel costs: \$219,000
- **Total: \$1,637,985**

Operating costs (beginning FY 2024-25)

- Ongoing subscription costs: \$294,360
- 4.0 FTE: \$476,378

Options for Committee Action

The JTC has three options for committee action when it reviews a supplemental and makes a recommendation to the JBC. The JTC can:

- recommend the request to the JBC for funding with no concerns;
- recommend the request to the JBC for funding with concerns; or
- not recommend the request for funding.