# University of Idaho
# Strategic Plan and Process

# 2021 - 2025

**Base 10-year plan established for 2016 – 2025; approved by the SBOE June 2016**
**Reviewed and submitted March 2020 for 2020 - 2025**

**MISSION STATEMENT**

***The University of Idaho will shape the future through innovative thinking, community engagement and transformative education.***

*The University of Idaho is the state's land-grant research university. From this distinctive origin and identity, we will enhance the scientific, economic, social, legal and cultural assets of our state and develop solutions for complex problems facing our society. We will continue to deliver focused excellence in teaching, research, outreach and engagement in a collaborative environment at our residential main campus in Moscow, regional centers, extension offices and research facilities across Idaho. Consistent with the land-grant ideal, we will ensure that our outreach activities serve the state and strengthen our teaching, scholarly and creative capacities statewide.*

*Our educational offerings will transform the lives of our students through engaged learning and self-reflection. Our teaching and learning will include undergraduate, graduate, professional and continuing education offered through face-to-face instruction, technology-enabled delivery and hands-on experience. Our educational programs will strive for excellence and will be enriched by the knowledge, collaboration, diversity and creativity of our faculty, students and staff.*

**VISION STATEMENT**
*The University of Idaho will expand the institution's intellectual and economic impact and make higher education relevant and accessible to qualified students of all backgrounds.*

**GOAL 1: Innovate**
**Scholarly and creative work with impact**

***Scholarly and creative products of the highest quality and scope, resulting in significant positive impact for the region and the world.[1]***

**Objective A:** *Build a culture of collaboration that increases scholarly and creative productivity through interdisciplinary, regional, national and global partnerships.*

**Performance Measures:**
 I.    ***Research Expenditures ($ thousand)***
 **Benchmark: 115[2]**

**Objective B:** *Create, validate and apply knowledge through the co-production of scholarly and creative works by students, staff, faculty and diverse external partners.*

**Performance Measures:**
 I.    ***Terminal degrees in given field (PhD, MFA, etc.)***
 **Benchmark: 325[2]**

 II.    ***Number of Postdocs, and Non-faculty Research Staff with Doctorates***
 **Benchmark: 80[2]**

III. *Number of undergraduate and graduate students paid from sponsored projects (System wide metric)*
**Benchmark: 622 (UG) & 621 (GR), 1,268 Total[2]**

IV. *Percentage of students involved in undergraduate research (System wide metric)*
**Benchmark: 71%[2]**

**Objective C:** *Grow reputation by increasing the range, number, type and size of external awards, exhibitions, publications, presentations, performances, contracts, commissions and grants.*

*Performance Measures*
I. *Invention Disclosures*
**Benchmark: 30[2]**

**GOAL 2: Engage**
**Outreach that inspires innovation and culture**

***Suggest and influence change that addresses societal needs and global issues, and advances economic development and culture.***

**Objective A:** *Inventory and continuously assess engagement programs and select new opportunities and methods that provide solutions for societal or global issues, support economic drivers and/or promote the advancement of culture.*

**Performance Measures:**
I. *Go-On Impact[3]*
**Benchmark: 45%[4]**

**Objective B:** *Develop community, regional, national and/or international collaborations which promote innovation and use University of Idaho research and creative expertise to address emerging issues.*

**Performance Measures:**
I. *Percentage Faculty Collaboration with Communities (HERI)*
**Benchmark: 65[4]**

II. *Economic Impact ($ Billion)*
**Benchmark: 1.3[4]**

**Objective C:** *Engage individuals (alumni, friends, stakeholders and collaborators), businesses, industry, agencies and communities in meaningful and beneficial ways that support the University of Idaho's mission.*

**Performance Measures:**
I. *Number of Direct UI Extension Contacts*
**Benchmark: 370,000[4]**

**II.     NSSE Mean Service Learning, Field Placement or Study Abroad**
**Benchmark: 60%[4]**

**III.     Alumni Participation Rate[5]**
**Benchmark: 11%[4]**

**IV.     Dual credit (System wide metric) a) Total Credit Hours b) Unduplicated Headcount**
**Benchmark: 6,700 / 1,250[4]**


**GOAL 3: Transform**
**Educational experiences that improve lives**

***Increase our educational impact.***

**Objective A:** *Provide greater access to educational opportunities to meet the evolving needs of society.*

**Performance Measures:**
   **I.     Enrollment**
 **Benchmark: 13,000[2]**

**Objective B:** *Foster educational excellence via curricular innovation and evolution.*

**Performance Measures:**
   **I.     Retention – New Students (System wide metric)**
 **Benchmark: 84%[6]**

   **II.     Retention – Transfer Students (System wide metric)**
**Benchmark: 79%[4]**

   **III.     Graduates (All Degrees: IPEDS)[7], b)Undergraduate Degree (PMR), 6) Graduate / Prof Degree (PMR), d) % of enrolled UG that graduate (System wide metric), e) % of enrolled Grad students that graduate (System wide metric)**
**Benchmark: 3,000[2,] 1,850[2.] 800/150[4,] 20%[4,] 31%[4]**

   **IV.     NSSE High Impact Practices**
**Benchmark: 75%[4]**

   **V.     Remediation (System wide metric)  a) Number, b) % of first time freshman**
**Benchmark: 142/ 12%[4]**

   **VI.     Number of UG degrees/certificates produced annually (Source: IPEDS Completions 1st & 2nd Major)**
**Benchmark:** 2,000[4]

   **VII.     Percentage of UG degree seeking students taking a remedial course who complete a subsequent credit bearing course with a C or higher within one year of remedial enrollment**
**Benchmark: Math 56%[4,] ENGL 77%[4]**

*VIII.* *Percentage of first time UG degree seeking students completing a gateway math course within two years of enrollment.\**

**Benchmark: 74%[4]**

*\* Course meeting the Math general education requirement.*

*IX.* *Percentage of students completing 30 or more credits per academic year.*

**Benchmark: 40%[4]**

*X.* *Percentage of first-time, full-time UG degree/certificate seeking students who graduate within 100% of time.*

**Benchmark: 35%[4]**

*XI.* *Percentage of first-time, full-time UG degree/certificate seeking students who graduate within 150% of time (Source: IPEDS).*

**Benchmark: 58%[4]**

*XIII.* *Number of UG unduplicated degree/certificate graduates.*

**Benchmark: 2000[4]**

**<u>Objective C:</u>** *Create an inclusive learning environment that encourages students to take an active role in their student experience.*

**<u>Performance Measures:</u>**

*I.* *Equity Metric: First term GPA & Credits (% equivalent)*

**Benchmark: 90%/90%[4]**

**GOAL 4: Cultivate**
**A valued and diverse community**

***Foster an inclusive, diverse community of students, faculty and staff and improve cohesion and morale.***

**<u>Objective A:</u>** *Build an inclusive, diverse community that welcomes multicultural and international perspectives.*

**<u>Performance Measures:</u>**

*I.* *Multicultural Student Enrollment (heads)*

**Benchmark: 3,305[8]**

*II.* *International Student Enrollment (heads)*

**Benchmark: 1,100[4]**

*III.* *Percentage Multicultural a) Faculty and b) Staff*

**Benchmark: 22% / 15%[4]**

***Objective B:*** *Enhance the University of Idaho's ability to compete for and retain outstanding scholars and skilled staff.*

**Performance Measures:**
    *I.    Chronicle Survey Score: Job Satisfaction*
**Benchmark: Survey average in the 4th group of 5[9]**


    *II.    Full-time Staff Turnover Rate*
**Benchmark: 15%[10]**

***Objective C:*** *Improve efficiency, transparency and communication.*

**Performance Measures:**

    *I.    Cost per credit hour (System wide metric)*
**Benchmark: $377[11]**

    *II.    Efficiency (graduates per $100K) (System wide metric)*
**Benchmark: 1.37[4]**


**Key External Factors**
*Factors beyond our control that affect achievement of goals*

- *The general economy, tax funding and allocations to higher education.*
- *The overall number of students graduating from high school in Idaho and the region.*
- *Federal guidelines for eligibility for financial aid.*
- *Increased administrative burden increasing the cost of delivery of education, outreach and research activities.*

**Evaluation Process**
*A brief description of the evaluations or processes to be used in establishing or revising general goals and objectives in the future.*

The metrics will be reviewed annually to evaluate their continued appropriateness in assessing the various goals and processes. As the feedback from the annual review process is reviewed the effectiveness of the processes will be refined. These feedback cycles are in place for Strategic Plan Metrics, Program Prioritization Metrics, External Program Review Process as well as a continued examination of various elements of community need as well.

**Red Tape Reduction Act**
The State Board of Education, through the Office of the State Board of Education, runs all administrative rules governing the postsecondary institutions and special and health programs. The State Board of Education strategic plan outlines the reduction efforts for the public education system.

| ✔ | State Board of Education Goals | | | |
|---|---|---|---|---|
| **Institution/Agency Goals and Objectives** | *Goal 1: EDUCATIONAL SYSTEM ALIGNMENT* | *Goal 2: EDUCATIONAL ATTAINMENT* | *Goal 3: WORKFORCE READINESS* | |
| *GOAL 1: Innovate Scholarly and creative work with impact*  *Scholarly and creative products of the highest quality and scope, resulting in significant positive impact for the region and the world* | | | | |
| *Objective A:  Build a culture of collaboration that increases scholarly and creative productivity through interdisciplinary, regional, national and global partnerships.* | | ✔ | ✔ | |
| *Objective B: Create, validate and apply knowledge through the co-production of scholarly and creative works by students, staff, faculty and diverse external partners.* | ✔ | | ✔ | |
| *Objective C:  Grow reputation by increasing the range, number, type and size of external awards, exhibitions, publications, presentations, performances, contracts, commissions and grants.* | | | ✔ | |
| *GOAL 2: Engage Outreach that inspires innovation and culture*  *Suggest and influence change that addresses societal needs and global issues, and advances economic development and culture.* | | | | |
| *Objective A:  Inventory and continuously assess engagement programs and select new opportunities and methods that provide solutions for societal or global issues, support economic drivers and/or promote the advancement of culture .* | | ✔ | ✔ | |
| *Objective B:  Develop community, regional, national and/or international collaborations which promote innovation and use University of Idaho research and creative expertise to address emerging issues.* | | ✔ | ✔ | |

| | State Board of Education Goals | | | |
|---|:---:|:---:|:---:|:---:|
| ✓ | *Goal 1: EDUCATIONAL SYSTEM ALIGNMENT* | *Goal 2: EDUCATIONAL ATTAINMENT* | *Goal 3: WORKFORCE READINESS* | |
| *Objective C: Engage individuals (alumni, friends, stakeholders and collaborators), businesses, industry, agencies and communities in meaningful and beneficial ways that support the University of Idaho's mission.* | ✓ | ✓ | | |
| *GOAL 3: Transform Educational experiences that improve lives*<br><br>*Increase our educational impact.* | | | | |
| *Objective A: Provide greater access to educational opportunities to meet the evolving needs of society.* | | ✓ | | |
| *Objective B: Foster educational excellence via curricular innovation and evolution.* | | ✓ | ✓ | |
| *Objective C: Create an inclusive learning environment that encourages students to take an active role in their student experience.* | | ✓ | | |
| *GOAL 4: Cultivate A valued and diverse community*<br><br>*Foster an inclusive, diverse community of students, faculty and staff and improve cohesion and morale.* | | | | |
| *Objective A:  Build an inclusive, diverse community that welcomes multicultural and international perspectives.* | | ✓ | ✓ | |
| *Objective B: Enhance the University of Idaho's ability to compete for and retain outstanding scholars and skilled staff.* | | ✓ | ✓ | |
| *Objective C: Improve efficiency, transparency and communication.* | ✓ | | | |

# Metric and Data Definitions

**Guiding principle for metric selection and use.**

The core guiding principle used in selecting, defining and tracking the metrics used in the strategic plan is to focus on measures key to university success while remaining as consistent with the metrics used when reporting to state, federal, institutional accreditation other key external entities.  The desire is to report data efficiently and consistently across the various groups by careful consideration of the alignment of metrics for all these groups where possible. The order of priority for selecting the metrics used in the strategic plan is a) to use data based in the state reporting systems where possible, and b) then move to data based in federal and/or key national reporting bodies. Only then is the construction of unique institution metrics undertaken.

**Metrics for Goal 1 (Innovate):**

1.) **Terminal Degrees** in given field is the number of Ph.D., P.S.M., M.F.A., M.L.A., M.Arch, M.N.R., J.D., D.A.T., and Ed.D degrees awarded annually pulled for the IR Degrees Awarded Mult table used for reporting to state and federal constituents.  This data is updated regularly and will be reported annually.
2.) **Postdocs, and Non-faculty Research Staff with Doctorates** as reported annually in the Graduate Students and Postdoctorates in Science and Engineering Survey (http://www.nsf.gov/statistics/srvygradpostdoc/#qs).
3.) **Research Expenditures** as reported annually in the Higher Education Research and Development Survey (http://www.nsf.gov/statistics/srvyherd/).
4.) **Invention Disclosures** as reported annually in the Association of University Technology Mangers Licensing Activity Survey (http://www.autm.net/resources-surveys/research-reports-databases/licensing-surveys/).
5.) **Number of undergraduate and graduate students paid from sponsored projects:** This metric is a newly established SBOE metric. It is calculated by the Office of Research and reported annually.
6.) **Percent of students engaged in undergraduate research:** This is a metric from the PMR for the SBOE. These PMR data are pulled from the Graduating Senior Survey annually.

**Metrics for Goal 2 (Engage):**

1.) **Impact (UI Enrollment that increases the Go-On rate)**: The metric will rely on one or two items added to the HERI CIRP First Year Student Survey.  We will seek to estimate the number of new students that were not anticipating attending college a year earlier.  As the items are refined, baseline and reporting of the results will be updated.
2.) **Extension Contacts**:  Outreach to offices in relevant Colleges (CALS, CNR, Engineering, etc.) will provide data from the yearly report to the Federal Government on contacts.  This represents direct teaching contacts made throughout the year by recording attendance at all extension classes, workshops, producer schools, seminars and short courses.
3.) **Collaboration with Communities**: HERI Faculty Survey completed by undergraduate faculty where respondents indicated that over the past two years they had, "Collaborated with the local community in research/teaching." This survey is administered every three to five years.

4.) **NSSE Mean Service Learning, Field Placement or Study Abroad:** This is the average percentage of those who engaged in service learning (item 12 2015 NSSE), field experience (item 11a NSSE) and study abroad (item 11d) from the NSSE.

5.) **Alumni Participation Rate**:  This is provided annually by University Advancement and represents the percentage of alumni that are giving to UI.  It is calculated based on the data reported for the Voluntary Support of Education (VSE) report. ([http://cae.org/fundraising-in-education/](http://cae.org/fundraising-in-education/)).  It is updated annually.

6.) **Economic Impact:** This is taken from the EMSI UI report as the summary of economic impact.   This report is updated periodically and the data will be updated as it becomes available.

7.) **Dual Credit:**  These data are pulled from the PMR which is developed for the SBOE annually.


## Metrics for Goal 3 (Transform):

1.) **Enrollment:** This metric consists of headcounts from the data set used in reporting headcounts to the SBOE, IPEDS and the Common Data Set as of census date.  The data is updated annually.

2.) **Equity Metric:** This metric is derived from the census date data used for reporting retention and graduation rate which is updated annually.  The analysis is limited to first-time full-time students.  The mean term 1 GPA and semester hours completed for FTFT students is calculated for the all students combined and separately for each IPEDS race/ethnicity category.  The mean for the 8 groups are compared to the overall mean.  The eight groups identified here are American Indian or Alaska Native, Asian, Black or African American, Hispanic/Latino, International, Native Hawaiian or Other Pacific Islander, Two or More Races and White. If the mean for a group is below the overall mean by 1/3 or more of a standard deviation it is considered below expectations/equity.  The percentage of these 8 groups meeting the equity cut off is reported. So for example if 6 of the 8 groups meet equity it is reported as 75%.  As there are groups with low numbers the best method for selecting the cut off was based on the principle of effect size (i.e., [https://researchrundowns.wordpress.com/quantitative-methods/effect-size/](https://researchrundowns.wordpress.com/quantitative-methods/effect-size/)).

3.) **Retention:** This is reported as first-time full-time student retention at year 1 using the data reported to the SBOE, IPEDs and the Common Data set.  This is updated annually.  The final goal was selected based on the mean of the 2015-16 year for the aspiration peer group for first-year retention as reported in the Common Data Set.  This group includes Virginia Tech, Michigan State University and Iowa State University.

4.) **Graduates (all degrees):** This is reported from the annual data used to report for IPEDS and the Common Data set for the most recent year and includes certificates.

5.) **Degrees by level:** Items (a) to (c) under Graduates are pulled from the PMR established by the SBOE.  These numbers differ from IPEDs as they are aggregated differently and so the numbers do not sum to the IPEDs total.

6.) **NSSE High Impact Practices:** This metric is for overall participation of seniors in two or more High Impact Practices (HIP).  The national norms for 2015 from NSSE is saved in the NSSE folders on the IRA shared drive.  The norms for 2015 HIP seniors places UI's percentage at 67%, well above R1/DRU (64%) and RH (60%) as benchmarks.  The highest group (Bach. Colleges- Arts & Sciences) was 85%.  The goal is to reach at least this level by 2025.

7.) **Remediation:**  This metric comes from the PMR of the SBOE.  It is updated annually.


## Metrics for Goal 4 (Cultivate):

1.) **Chronicle Survey Score (Survey Average):** This metric is being baselined in spring 2016 and will utilize the "Survey Average" score. The desire is to reach the "Good" range (65%-74%), which is the 4th group of 5, or higher. The survey can be found here http://chroniclegreatcolleges.com/reports-services/.

2.) **Multicultural Student Enrollment**: The headcounts used for this metric will be derived from the data set used to report to the SBOE at fall census date. This is based on the categories used by IPEDS and the Common Data Set. The census date data is updated annually.

3.) **International Student Enrollment**: The headcounts used for this metric will be derived from the data set used to report to the SBOE at fall census date. This is based on the categories used by IPEDS and the Common Data Set. The census date data is updated annually.

4.) **Full-time Staff Turnover Rate** is obtained from UI Human Resources on an annual basis.

5.) **Percentage of Multicultural Faculty and Staff** is the percentage of full-time faculty and staff that are not Caucasian/Unknown from the IPEDS report. Full-time faculty is as reported in IPEDS HR Part A1 for full-time tenured and tenure track. Full-time staff is as reported in IPEDS B1 using occupational category totals for full-time non-instructional staff.

6.) **Cost per credit hour:** This metric is from the PMR for the SBOE and is update annually.

7.) **Efficiency:** This metric is from the PMR for the SBOE and is update annually.

# Information Security Overview and
# Critical Security Controls Assessment Report
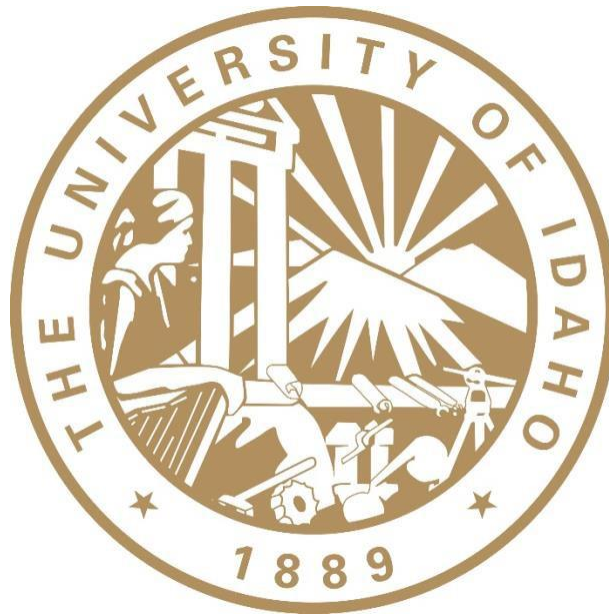
**Date: March 5, 2020**

**Status: FINAL**

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**TLP: GREEN**

# Contents

# Executive Summary

In response to the Idaho Governor's Executive Order 2017-02 issued January 16, 2017, UI ITS personnel initiated an assessment of the Center for Internet Security (CIS) Critical Security Controls (CSC) 1-5. This assessment was scored using the AuditScripts assessment tool recommended in 2018 by the State Office of the CIO. We continue to regularly re-assess our posture against the CSC using this tool.

Version 7.0 of the Critical Security Controls was released in early 2018. ITS last assessed our status in March 2020 based upon progress implementing controls. That assessment shows an increase from 0.39 to 0.56 (out of 1.0) for overall implementation of the first 5 controls. Between April 2018 and March 2019, our score increased from 0.48 to 0.50, and again to 0.56 by March 2020.

Our Maturity Rating for all 20 controls was improved from 2.00 to 2.45 (out of 5.0) between March 2019 and March 2020.

*CSC Version 7 – March 2020*
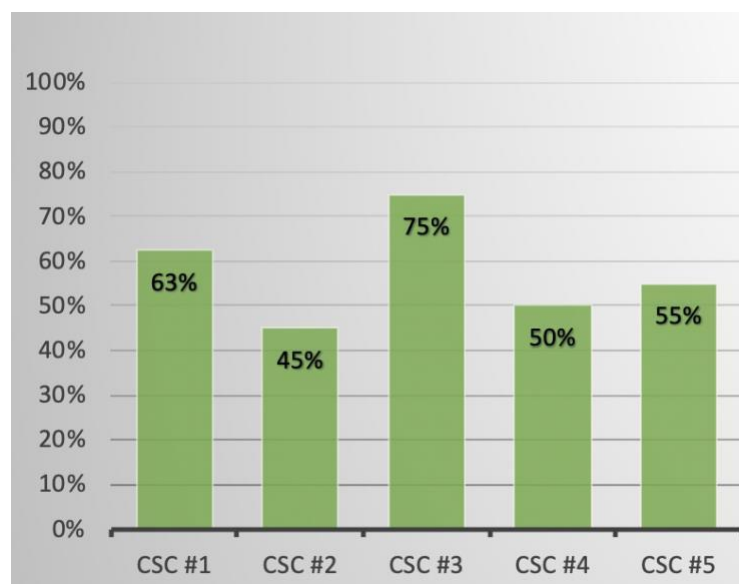


Overall completion for each control combines scoring for policy, implementation, automation and reporting. A 100% score could be achieved by approving the written policy, implementing and automating a control for all systems, and reporting it to the executive level. For some specific controls, 100% implementation will not be desirable or achievable on a university network. Prioritization, scope, and target percentage of specific controls are regularly assessed and prioritized.

In 2019, several improvements to controls and mitigations were planned as a result of annual security risk assessment. These risks were prioritized according to the IT Security Plan and utilizing the NIST Cybersecurity Framework (CSF). These mitigations include, but were not limited to:

1. Funding was requested and approved through the University Budget and Finance Committee (UBFC) to enhance email filtering technologies. This was implemented in 2019. CSF: PROTECT

2. Funding was requested and approved through the UBFC to find and mitigate sensitive Personally Identifiable Information on university laptops and desktops (data leakage protection, or DLP). *This project was put on hold indefinitely due to budget reductions*. CSF: DETECT

3. Funding requested through the UBFC to enhance multiple aspects of CSC 1-5, including vulnerability scanning, application whitelisting, security orchestration automation and response, and minimizing administrator privileges. *This was not funded after multiple UBFC requests, but enhanced vulnerability scanning is currently being implemented for high risk areas, using internal ITS funding*. CSF: PROTECT CSF: DETECT

4. Funding requested through the UBFC to implement Network Intrusion Prevention technology, including capability to detect and block malicious activity as a core and fundamental capability. *This has not yet been funded*. CSF: PROTECT CSF: DETECT

5. Funding was requested through the UBFC to implement a system to improve our IT Risk Assessment process and ability to cross-reference our various compliance needs across the institution. *This has not yet been approved or funded.* CSF: IDENTIFY

Risks identified against the updated CSC version 7 baseline will again be prioritized in the 2020 IT Security Risk Assessment and mitigations, where feasible or funded, will be addressed within the FY21 IT Security Plan. This will continue to move us towards our target profile under the NIST Cybersecurity Framework.

# Critical Security Controls

Using the AuditScripts tool, the following pages show the overall risk for each control. This assumes that any control not fully implemented has been implicitly, if not explicitly, accepted as a risk. Detailed answers on each control are not provided, but are on file in the ITS Information Security Office.

## CSC #1: Inventory and Control of Hardware Assets

### Total Implementation of CSC #1



| Risk Addressed: | 55% |
|---|---|
| Risk Accepted: | 45% |

| ID | Critical Security Control Detail |
|---|---|
| 1.1 | Utilize an active discovery tool to identify devices connected to the organization's network and update the hardware asset inventory. |
| 1.2 | Utilize a passive discovery tool to identify devices connected to the organization's network and automatically update the organization's hardware asset inventory. |
| 1.3 | Use Dynamic Host Configuration Protocol (DHCP) logging on all DHCP servers or IP address management tools to update the organization's hardware asset inventory. |
| 1.4 | Maintain an accurate and up-to-date inventory of all technology assets with the potential to store or process information. This inventory shall include all hardware assets, whether connected to the organization's network or not. |
| 1.5 | Ensure that the hardware asset inventory records the network address, hardware address, machine name, data asset owner, and department for each asset and whether the hardware asset has been approved to connect to the network. |
| 1.6 | Ensure that unauthorized assets are either removed from the network, quarantined or the inventory is updated in a timely manner. |

| | |
|---|---|
| **1.7** | Utilize port level access control, following 802.1x standards, to control which devices can authenticate to the network. The authentication system shall be tied into the hardware asset inventory data to ensure only authorized devices can connect to the network. |
| **1.8** | Use client certificates to authenticate hardware assets connecting to the organization's trusted network. |

## CSC #2: Inventory and Control of Software Assets

Total Implementation of CSC #2
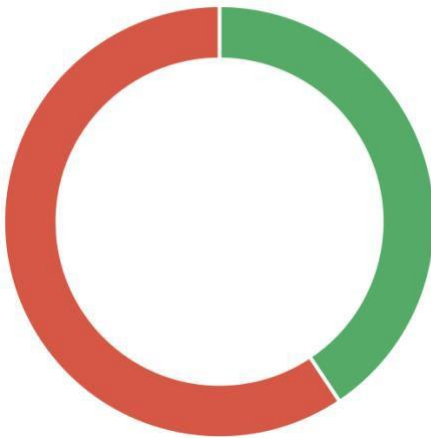


| Risk Addressed: | 41% |
|---|---|
| Risk Accepted: | 59% |

| ID | Critical Security Control Detail |
|---|---|
| **2.1** | Maintain an up-to-date list of all authorized software that is required in the enterprise for any business purpose on any business system. |
| **2.2** | Ensure that only software applications or operating systems currently supported by the software's vendor are added to the organization's authorized software inventory. Unsupported software should be tagged as unsupported in the inventory system. |
| **2.3** | Utilize software inventory tools throughout the organization to automate the documentation of all software on business systems. |
| **2.4** | The software inventory system should track the name, version, publisher, and install date for all software, including operating systems authorized by the organization. |

| 2.5 | The software inventory system should be tied into the hardware asset inventory so all devices and associated software are tracked from a single location. |
| 2.6 | Ensure that unauthorized software is either removed or the inventory is updated in a timely manner. |
| 2.7 | Utilize application whitelisting technology on all assets to ensure that only authorized software executes and all unauthorized software is blocked from executing on assets. |
| 2.8 | The organization's application whitelisting software must ensure that only authorized software libraries (such as *.dll, *.ocx, *.so, etc) are allowed to load into a system process. |
| 2.9 | The organization's application whitelisting software must ensure that only authorized, digitally signed scripts (such as *.ps1, *.py, macros, etc) are allowed to run on a system. |
| 2.10 | Physically or logically segregated systems should be used to isolate and run software that is required for business operations but incur higher risk for the organization. |

## CSC #3: Continuous Vulnerability Management

Total Implementation of CSC #3



| Risk Addressed: | 62% |
| Risk Accepted: | 38% |

| ID | Critical Security Control Detail |

**3.1** Utilize an up-to-date SCAP-compliant vulnerability scanning tool to automatically scan all systems on the network on a weekly or more frequent basis to identify all potential vulnerabilities on the organization's systems.

**3.2** Perform authenticated vulnerability scanning with agents running locally on each system or with remote scanners that are configured with elevated rights on the system being tested.

**3.3** Use a dedicated account for authenticated vulnerability scans, which should not be used for any other administrative activities and should be tied to specific machines at specific IP addresses.

**3.4** Deploy automated software update tools in order to ensure that the operating systems are running the most recent security updates provided by the software vendor.

**3.5** Deploy automated software update tools in order to ensure that third-party software on all systems is running the most recent security updates provided by the software vendor.

**3.6** Regularly compare the results from back-to-back vulnerability scans to verify that vulnerabilities have been remediated in a timely manner.

**3.7** Utilize a risk-rating process to prioritize the remediation of discovered vulnerabilities.

# CSC #4: Controlled Use of Administrative Privileges

## Total Implementation of CSC #4



| Risk Addressed: | 39% |
|---|---|
| Risk Accepted: | 61% |

| ID | Critical Security Control Detail |
|---|---|
| 4.1 | Use automated tools to inventory all administrative accounts, including domain and local accounts, to ensure that only authorized individuals have elevated privileges. |
| 4.2 | Before deploying any new asset, change all default passwords to have values consistent with administrative level accounts. |
| 4.3 | Ensure that all users with administrative account access use a dedicated or secondary account for elevated activities. This account should only be used for administrative activities and not internet browsing, email, or similar activities. |
| 4.4 | Where multi-factor authentication is not supported (such as local administrator, root, or service accounts), accounts will use passwords that are unique to that system. |
| 4.5 | Use multi-factor authentication and encrypted channels for all administrative account access. |
| 4.6 | Ensure administrators use a dedicated machine for all administrative tasks or tasks requiring administrative access. This machine will be segmented from the organization's primary network and not be allowed Internet access. This machine will not be used for reading e-mail, composing documents, or browsing the Internet. |
| 4.7 | Limit access to scripting tools (such as Microsoft PowerShell and Python) to only administrative or development users with the need to access those capabilities. |
| 4.8 | Configure systems to issue a log entry and alert when an account is added to or removed from any group assigned administrative privileges. |

| | |
|---|---|
| **4.9** | Configure systems to issue a log entry and alert on unsuccessful logins to an administrative account. |

# CSC #5: Secure Configuration for Hardware and Software

Total Implementation of CSC #5



| Risk Addressed: | 47% |
|---|---|
| Risk Accepted: | 53% |

| ID | Critical Security Control Detail |
|---|---|
| **5.1** | Maintain documented, standard security configuration standards for all authorized operating systems and software. |
| **5.2** | Maintain secure images or templates for all systems in the enterprise based on the organization's approved configuration standards. Any new system deployment or existing system that becomes compromised should be imaged using one of those images or templates. |
| **5.3** | Store the master images and templates on securely configured servers, validated with integrity monitoring tools, to ensure that only authorized changes to the images are possible. |
| **5.4** | Deploy system configuration management tools that will automatically enforce and redeploy configuration settings to systems at regularly scheduled intervals. |

**5.5**     Utilize a Security Content Automation Protocol (SCAP) compliant configuration monitoring system to verify all security configuration elements, catalog approved exceptions, and alert when unauthorized changes occur.

## Appendix A: References

Tracking of key references useful for this report.

| Executive Order 2017-01 | Findings of the Idaho Cybersecurity Taskforce | https://adminrules.idaho.gov/bulletin/2017/02.pdf#page=20 |
|---|---|---|
| Critical Security Controls | Version 7 | https://www.cisecurity.org/controls/ |
| Audit Scripts | Free Assessment Resources | http://www.auditscripts.com/free-resources/critical-security-controls/ |
| Policies | U of I IT Policies | https://www.uidaho.edu/governance/policy/policies/apm/30 |
| Standards | IT Standards | https://www.uidaho.edu/its/standards |
| Privacy | U of I Privacy Statement | https://www.uidaho.edu/privacy |
| IR Plan | Technology Security Incident Response Plan v1.4 | On file |

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[1] Quality and scope will be measured via comparison to Carnegie R1 institutions with the intent of the University of Idaho attaining R1 status by 2025. See methodology as described on the Carnegie Foundation website (http://carnegieclassifications.iu.edu/ ).

[2] This was established as a means to achieve our end goal for enrollment and R1 status by 2025.

[3] Measured via survey of newly enrolled students, For students who answered "Yes or No", "Somewhat No" or "Definitely no" to "In your high school junior year, were you already planning to attend college (UI or other)?" the percent that responded "Yes or No", "Somewhat Yes" or "Definitely Yes" to "Have the University of Idaho's information and recruitment efforts over the last year impacted your decision to go to college?"

[4] Internally set standard to assure program quality.

[5] Given data availability and importance for national rankings, percent of alumni giving is used for this measure.

[6] Based on a review of our SBOE peer institutions

[7] The IPEDS method for counting degrees and those used to aggregate the numbers reported on the Performance Measurement Report (PMR) for the State Board of Education (SBOE) use different methods of aggregation. As such the sum of the degrees by level will not match the total.

[8] Based on a review of the Idaho demographic and a desire to have the diversity match or exceed that of the general state population.

[9] Based on our desire is to reach the "Good" range (65%-74%), as established by the survey publisher.

[10] Based on HR's examination of turnover rates of institutions nationally.

[11] Established by SBOE.