Interim Budget Committee

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Cybersecurity

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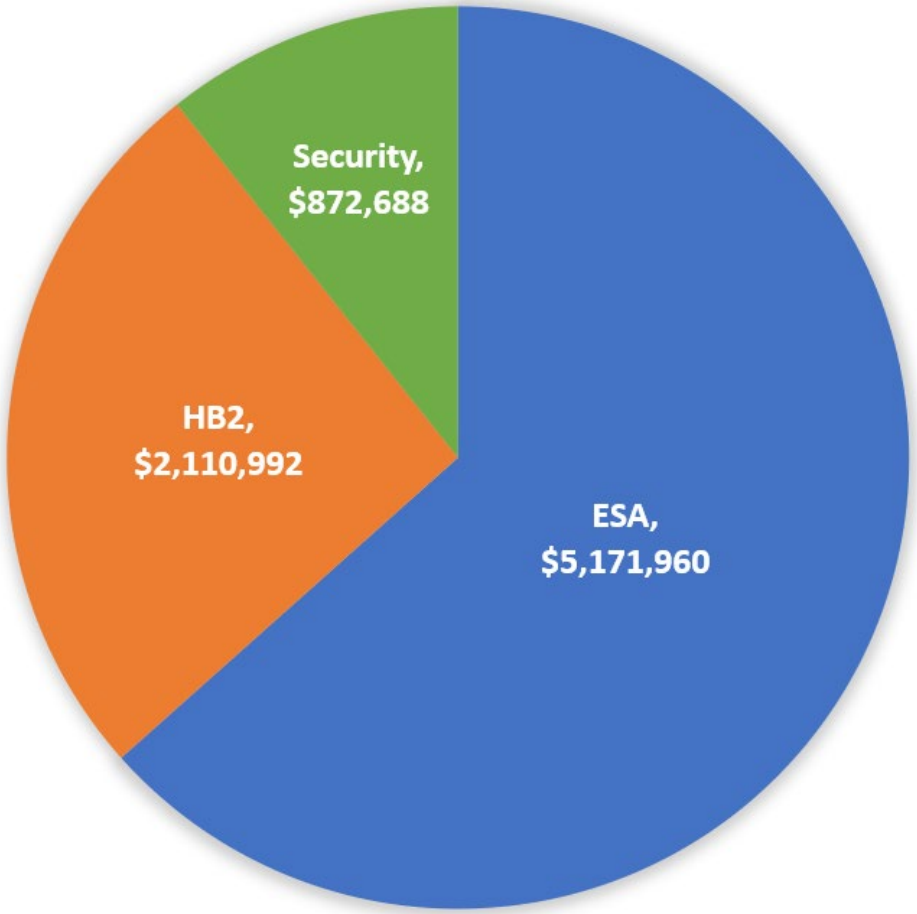
CYBERSECURITY

- Cybersecurity Enterprise Rate Background
- Cybersecurity Enterprise Rate Breakdown
- Evaluating Cybersecurity Costs
- Outline of the Information Provided During Session
- Conclusion

CYBERSECURITY ENTERPRISE RATE - Background

- Since 2010, State CISOs have reported the lack of sufficient funding as the number one barrier to addressing cybersecurity challenges
- A dedicated cybersecurity budget provides more visibility
- Monitoring and measurement of enterprise cybersecurity investments
- Federal and state cybersecurity mandates, legislation, and standards with funding assistance result in more dramatic progress than those that are unfunded
- Federal funding for security requirements and controls

CYBERSECURITY ENTERPRISE RATE - Breakdown



20/21 Services transferred from ESA	$	4,321,538
Increase for 20/21 Services	$	850,423
HB2 Operating	$	1,645,382
HB2 PS	$	465,610
Virtual Server	$	301,446
Live Storage	$	95,189
Tenable Increase	$	153,750
Security Awareness Training	$	104,550
Palo Auto Focus	$	56,375
E-Gov Identity Management	$	57,378
Application Development Hours	$	24,000
PS Increase	$	80,000
Total CESA	**$**	**8,155,640**

EVALUATING CYBERSECURITY COSTS

- Business Perspective
- Cost Avoidance
- Insurance
- Other (e.g., data-driven modernization efforts)

COST AVOIDANCE DETAIL

- **The average costs of data breaches is increasing**
  - The average cost of data breaches increased by $380k to $4.24m since last year
  - This 9.8% increase is the largest year-over-year increase in seven years
- **The average cost per record lost is $161 and $181 per record containing PII**
  - A breach of a statewide database would cost approximately $161m
  - A breach of a statewide database containing PII would cost approximately $181m (44% of data breaches)
- **The time to identify and contain data breaches is increasing**
  - Identifying data breaches early is critical to limiting scope and impact which reduces the associated costs
  - It takes 287 days to identify (212 days) and contain (75 days) a data breach, 7 days longer than last year
  - If a data breach occurs on January 1, then it would not be contained until October 14
- **The frequency of data breaches is increasing**
  - There were 1,108 data breaches reported in 2020
  - There have already been 1,209 data breaches reported in 2021 (17% increase year-over-year)
- **The most common initial attack vectors leading to data breaches are compromised credentials (20%), phishing (17%), and cloud misconfiguration (15%)**
  - Cybersecurity investments are made based risk assessments and current threat environment
  - Risk-based investments ensure funding is applied to gain the most value to protect citizen data

OUTLINE OF INFORMATION PROVIDED DURING SESSION

2021.01.02 Budget Presentation.pdf

- a description of 2019 HB2 Montana Cybersecurity Enhancement Project (MT-CEP) projects, their benefits including metrics and statistics, and the potential impacts of proposed reductions to cybersecurity funding in the 2021 session.

CESA Descriptions v4.pdf

- a description of the enterprise services and costs included in the Cybersecurity Enterprise Rate.

Committee Questions.pdf

- responses to subcommittee questions about SITSD's budget presentation.

Cybersecurity Enterprise Rate.pdf

- a visual of the cost categories (Vendor Costs, Personal Services, and Internal Costs) that make up the Cybersecurity Enterprise Rate.

MT-CEP2 Budget Crosswalk v3.pdf

- a description of the 2019 HB2 Montana Cybersecurity Enhancement Project (MT-CEP) detailing which projects used new budget and which projects augmented existing budgets.

CONCLUSION/NEXT STEPS

- Enterprise Risk Assessment (In Progress)
- Metrics Program Improvements
- Federal Programs
- Questions?