

Trends in Higher Education and Impacts to Minnesota State

March 18, 2025

Agenda

Future Demographics

Cyber Threats & Mitigation

Potential Regulatory Changes





Risks per MN State's 2021 Enterprise Risk Management

Potential Impact	High Impact Low Likelihood	High Impact Moderate Likelihood Campus Climate Program Demand Campus Safety Governance & Compliance Structure Government Policy Institution Accreditation Resource Optimization Student Financial Aid	High Impact High Likelihood Capitalizing & Executing Change Enrollment Management Institution/System Synergy & Structure Structure Structural Inequities Talent Management Academic Continuity Cybersecurity/Privacy Data Governance Financial Sustainability IT Systems NextGen Implementation Public Support Technological Disruption
	Moderate Impact Low Likelihood	Moderate Impact Moderate Likelihood Board Policy	Moderate Impact High Likelihood Facilities Reputation Management
024	Low Impact Low Likelihood	Low Impact Moderate Likelihood	LowImpact High Likelihood









Future Demographics



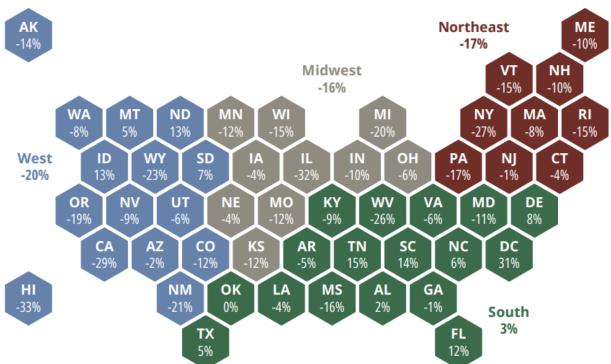


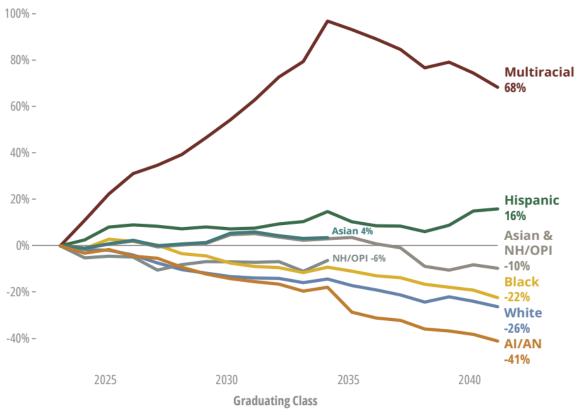
Figure 17. Projected percent change in high school graduates, 2023 to 2041

Notes: Total high school graduates include public and private schools. In these projections, the U.S. includes the 50 states and the District of Columbia. Future work will explore projected trends for the U.S. Territories and Freely Associated States.





Figure 7. Percent change in public high school graduate projections by race and ethnicity



Notes: The Asian and Native Hawaiian/Other Pacific Islander (NH/OPI) populations can only be projected separately to 2034 due to changes in federal data reporting on births.





Admissions







Student Retention

Use of data analytics to predict student attrition

Engagement in school

in clubs, sports, or other activities

Living on or in proximity to campus

Engagement in social activities





Student Retention

Surveying students for best practices of academics

Flexible scheduling options

Proactive advising programs

Enhancing the college experience

Getting students the programs they need or want

Teach
them
where
they are at







Cyber Threats and Mitigation Strategies



Cybercrime and Black-Market Economies

- Black market economy to support cyber fraud
 - Business models and specialization
 - Underground Marketplace (The Dark Web)
- Most common cyber fraud scenarios we see affecting our clients
 - Theft of information
 - Log-in Credentials
 - ePHI, PII, PFI, account profiles, etc.
 - Credit card information
 - Ransomware, interference w/ operations and extortion
- Monetization of access...



They will hit you with any or all of the following:

- 1. Email Spear Phishing Attacks
- Password Guessing and Business Email Account Takeovers
- Payment and Funds
 Disbursement Transfer Fraud
- Data exfiltration
- 5. Ransomware
- Extortion to avoid breach disclosure





Current Threat Vectors

- Large, diverse environments
 - Networks that are not centrally managed or standardized
 - Cloud based systems that are exposed
 - IoT that is not secured or managed
 - (over?) reliance on vendors

- Email Spear Phishing is still a thing
 - Exceptions to security standards result in breaches

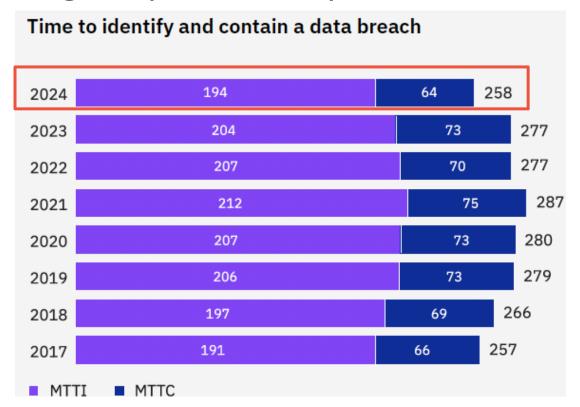








Average Days to Identify and Contain a Data Breach



Source: IBM Security Cost of a Data Breach Report 2024

Global average is 258 days

- 194 days to identify a breach
- 64 days to contain the attack
- IMPROVEMENT!

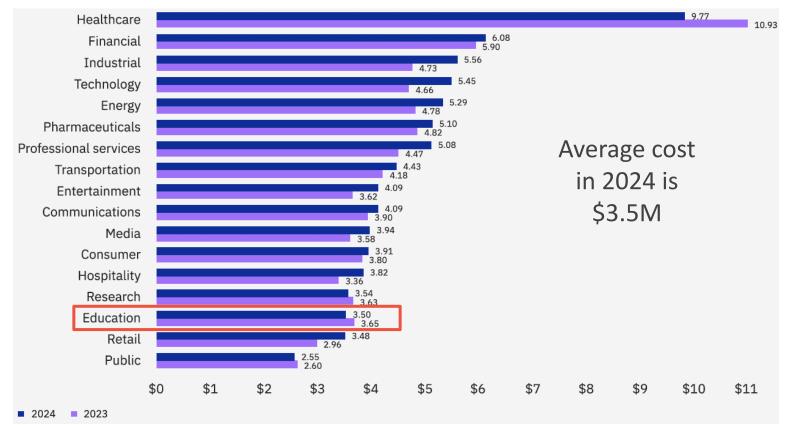
What are the bad actors doing for 194 days?





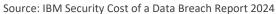


Cost of a Data Breach









Cyber Risk and Mitigation Strategies



Identifying Risk

Mapping the Supply Chain Assessing Potential Threats



Mitigating Risks

Establish Clear Security Requirements for Suppliers

Conduct Regular Security Assessments

Monitor Supplier Compliance

Have a Plan to Respond





Making Breaches WORSE

Longer Duration & Higher Cost

- Third party breach
- Supply chain breach
- Cloud migration
- Non-compliance with regulations
- Remote work force



Mitigating Impact of Breaches

Shortens Duration & Reduces Cost

- AI, machine learning driven insights
- Incident Response (IR) planning and practice
- Identity and access management (IAM)
- Proactive threat hunting
- Penetration testing and red team exercises (offensive testing)
- End point detection and response tools

Maturity leads to Incident Preparedness Cost Savings

- Global Average cost is \$3.5M
- The impact of (28) factors on the average cost of a data breach

Source: IBM Security Cost of a Data Breach Report 2024







Potential Regulatory Changes



Potential Regulatory Changes



Privatization of student loans



Removal of DEI in admissions



Immigration



Repercussions to institutions for graduates with low pay



Decommissioning of the Department of Education





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2024	Low Impact Low Likelihood	Low Impact Moderate Likelihood	Low Impact High Likelihood







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