



Cybersecurity Tips and Tools – Cybersecurity Insurance, Is it Really a Good Investment for My School?

Frosty Walker
Chief Information Security Officer
Texas Education Agency
Frosty.Walker@tea.texas.gov
(512) 463-5095



Data Security Advisory Committee

The Data Security Advisory Committee (DSAC) provides guidance to the Texas education communities, maximizing collaboration and communication regarding information security issues and resources which can be utilized within the educational communities served.

The DSAC is currently comprised of representatives from school districts, ESCs, TEA and the private sector.

Texas Gateway
<https://www.texasgateway.org/>

Cybersecurity Tips and Tools

Texas Gateway - Cybersecurity Tips and Tools

The screenshot shows the Texas Gateway website interface. At the top, there is a navigation bar with links for 'TEA WEBSITE', 'CONTACT TEA', and 'SIGN UP FOR UPDATES'. Below this is the 'Texas Gateway for online resources by TEA' logo, followed by 'TEKS', 'SEARCH', and 'MORE' links. On the right, there are 'Log in' and 'Sign Up' buttons. The main banner features a smiling teacher interacting with students, with a blue overlay box that reads 'Online resources FOR YOUR CLASSROOM' and 'Find engaging, TEKS-aligned resources that you can use with your students as part of classroom instruction, intervention, acceleration, or additional practice.' A 'show me more' button is also present. Below the banner, there are 'BROWSE TEKS' and 'BROWSE RESOURCES' buttons, along with a search bar. The 'Featured Resources' section displays a grid of resource cards. The card for 'Cybersecurity Tips and Tools' is circled in red. Other visible resources include 'Early Childhood Prekindergarten Enrollment Toolkit', 'ESTAR/MSTAR MATH', 'Open-Source Instructional Materials', 'Study Edge', 'Restorative Discipline Practices in Texas', 'Complete "Red Book Series" Focused on Reading Instruction', 'Texas Lesson Study Briefing', 'Starting the Conversation', 'TEA Statistics', and 'Statistics'.

← → ↻ Secure | https://www.texasgateway.org ☆

TEA WEBSITE CONTACT TEA SIGN UP FOR UPDATES

★ Texas Gateway
for online resources by TEA

TEKS SEARCH MORE ▾

Log in Sign Up

Online resources
FOR YOUR CLASSROOM

Find engaging, TEKS-aligned resources that you can use with your students as part of classroom instruction, intervention, acceleration, or additional practice.

show me more

BROWSE TEKS BROWSE RESOURCES ▸ Search

Featured Resources

1 of 2

EARLY CHILDHOOD
Prekindergarten
Enrollment
Toolkit

ESTAR/
MSTAR
MATH
ESTAR/MSTAR

Open-Source
Instructional
Materials

openstax
STUDY
EDGE
TEA

cybersecurity
data
Cybersecurity
Tips and Tools

Restorative
Discipline
Practices in Texas

ELA & READING
Complete "Red
Book Series"
Focused on
Reading
Instruction

TEXAS
LESSON
STUDY
Texas Lesson
Study Briefing

Starting the
Conversation

MATH
TEA Statistics

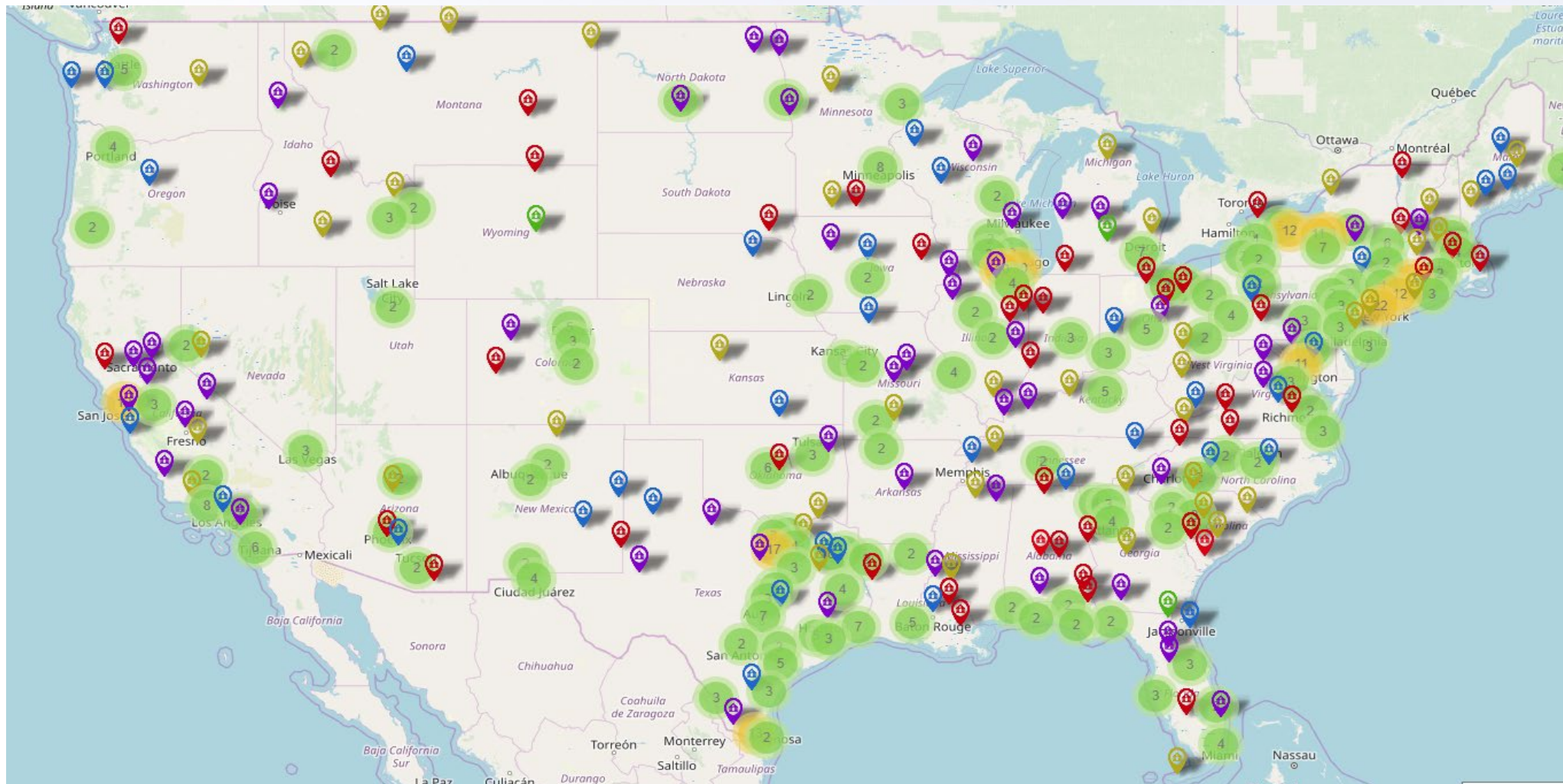
Statistics
TEA

Are Cybersecurity Events a Real Threat?

Senate Bill 64 (2019)

- A cybersecurity event is included in the definition of a disaster.
- Under Governor orders, the National Guard may assist with defending the state's cyber operations.

Nationwide K-12 Cyber Events since January 2016



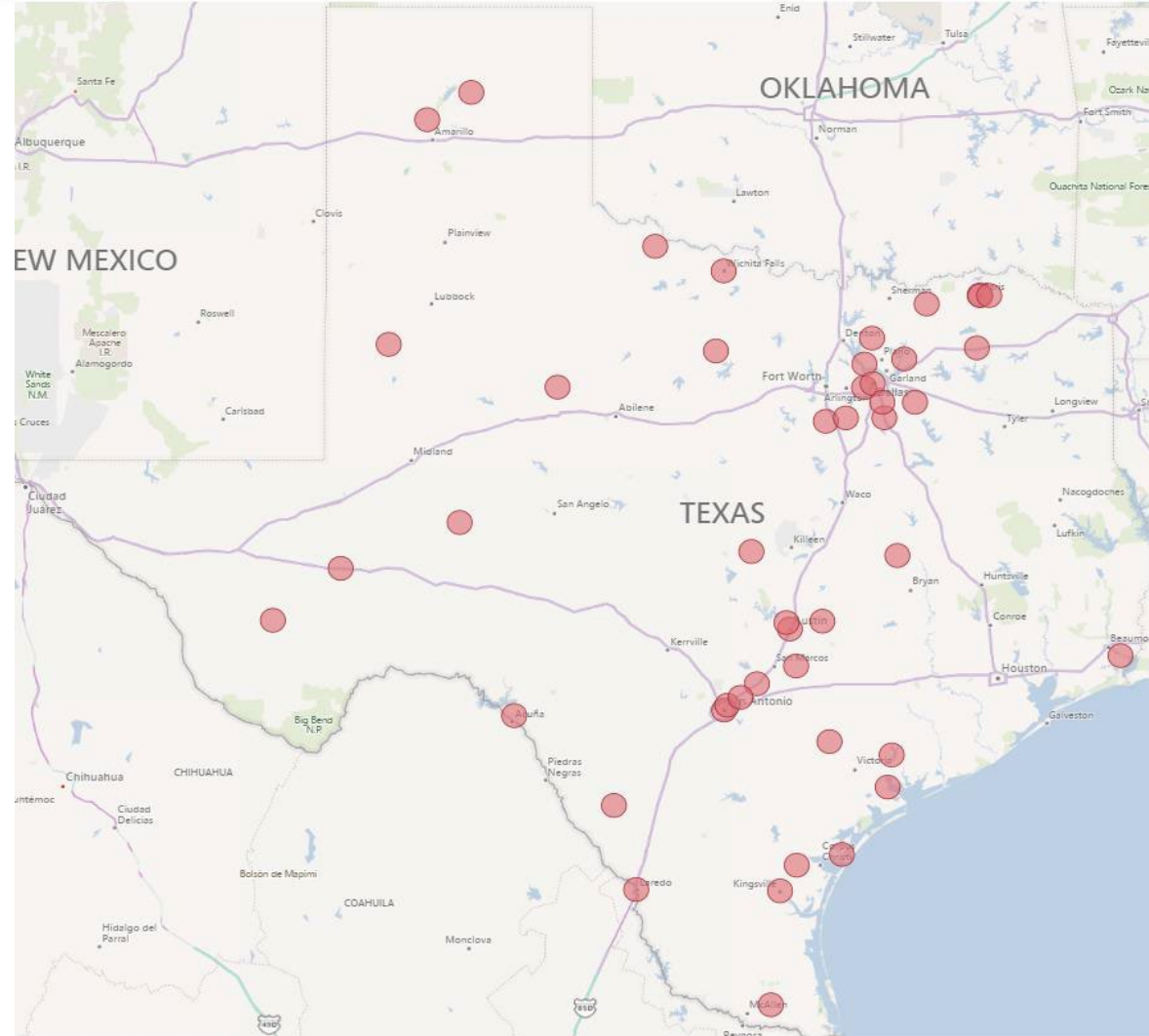
Source: <https://k12cybersecure.com/k12incidentmap>

Breakdown 2019 Texas Ransomware Incidents

Organization Type	Number of Incidents
Cities	23
Counties	9
School Districts	11
Other Local Entities	4
State Agencies and Universities	3

Source: Reported to DIR

2019 Texas Ransomware Incidents



By the Numbers

Average cost per record exposed in a data breach in the United States
\$242.00

Average size of data breach in the United States
25,575

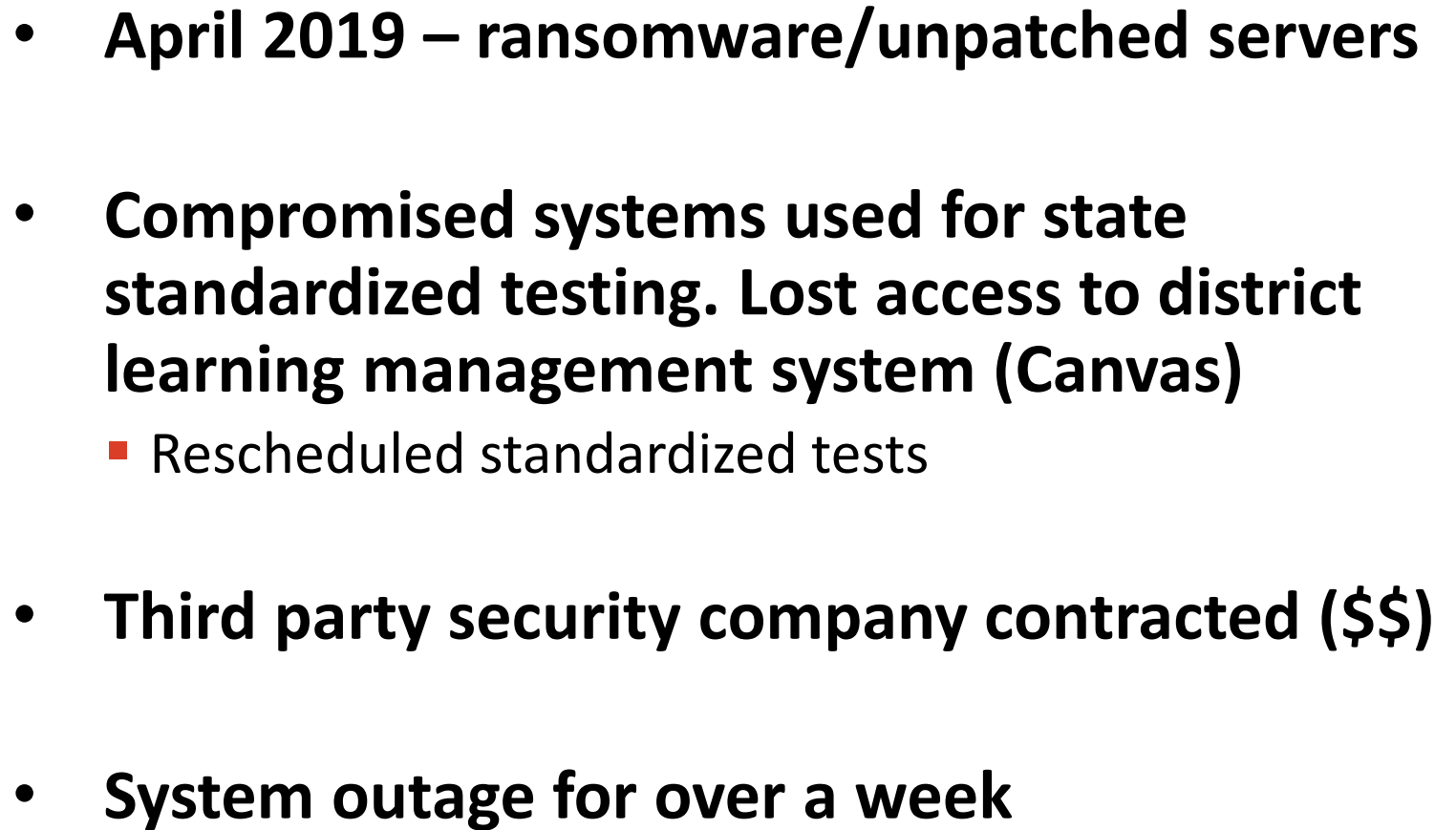
Average cost of a data breach in the United States
\$6,189,150

Source: Ponemon Institute *Cybersecurity Research Report*

Case Study - Boulder Valley School District

- **August 2017 – fraudulent instruction**
- **\$576M bond approved for campus renovation**
- **Accounts payable received a call from a ‘representative’ of the construction company**
- **Requested multiple account changes**
- **\$850,000 sent to a bogus account**





Case Study - Scott County Schools, Kentucky

- **April 2019 – phishing Attack**
- **Outstanding invoice scam**
- **Paid the \$3.7M invoice**
- **With FBI/bank assistance, the entire amount was recovered**
- **No claim filed**



5 Reasons You Should Consider Cyber Liability Insurance

1. It may be more affordable than you think.

- Cyber liability insurance is still a fairly new concept, so there's a lot of variation among policies, and a lot of room for negotiation.

2. It can cover more than you think.

- Some policies offer "first party" coverage--that is, they will pay you for things like business interruption, the cost of notifying customers of a breach, and even the expense of hiring a public relations firm to repair any damage done to your image as a result of a cyber attack.

3. You probably don't have a risk management team.

- An insurer might work with a small company to make sure a firewall is in place to protect your network, and make sure you have social media policies that reduce risk. Your insurer may well be willing to help with these areas because the better protected you are, the less likely you are to have a breach that could result in a claim.

4. Even if you don't host your data yourself, you're still responsible.

- “You can outsource anything, except responsibility”

John Keel – former Texas State Auditor

5. Your general policy won't cover you.

- **Typically, a general liability policy specifically excludes losses incurred because of the Internet, so a good cyber liability policy can pick up where your general policy leaves off.**

Cyber Liability Insurance Coverage

Investigation: A forensics investigation is necessary to determine what occurred, how to repair damage and how to prevent the same type of breach from occurring in the future. Investigations may involve the services of a third-party security firm, as well as coordination with law enforcement and the FBI.

Business losses: A cyber insurance policy may include similar items that are covered by an errors & omissions policy (errors due to negligence and other reasons), as well as monetary losses experienced by network downtime, business interruption, data loss recovery and costs involved in managing a crisis, which may involve repairing reputation damage.

Cyber Liability Insurance Coverage

Privacy and notification: This includes required data breach notifications to customers and other affected parties, which are mandated by law in many jurisdictions, and credit monitoring for customers whose information was or may have been breached.

Lawsuits and extortion: This includes legal expenses associated with the release of confidential information and intellectual property, legal settlements and regulatory fines. This may also include the costs of cyber extortion, such as from ransomware.

Keep in Mind that Cyber Insurance is Still Evolving.

Cyber risks change frequently, and organizations tend not to report the full impact of breaches in order to avoid negative publicity and damage the trust of customers. Thus, underwriters have limited data on which to determine the financial impact of attacks. Essentially, the true risk of cyberattacks is not completely understood.

528 cyber insurers in 2018

- Increase from 417 in 2017
- Top 10 writers held 69.5% of market
 - (Chubb, AXA US, AIG, Travelers, Beazley)

Premiums (both standalone and packaged) increased 12% in 2018

- \$1.8 Billion to \$2.0 Billion
- Double the number from 2015
- Slight slowdown from a 30% growth rate in previous two years

Growth in cyber coverage driven by threat awareness and separation of coverage

- 2018 55% was packaged
- 2017 45% was packaged

Claims grew 37% in 2018

- More than 12 million first party claims in 2018
 - Breach notifications
 - Credit Monitoring
 - Business Interruptions
- More small and medium sized organizations gaining coverage

Considerations:

Right sizing coverage levels

- Coverage is trending up as ransomware demands increase

Understanding your policy

- Business interruption?
- Fraudulent Instruction limitations
- Equipment?
- How many years of identity theft monitoring?

Requirements?

- Preferred Vendors

2014-2020

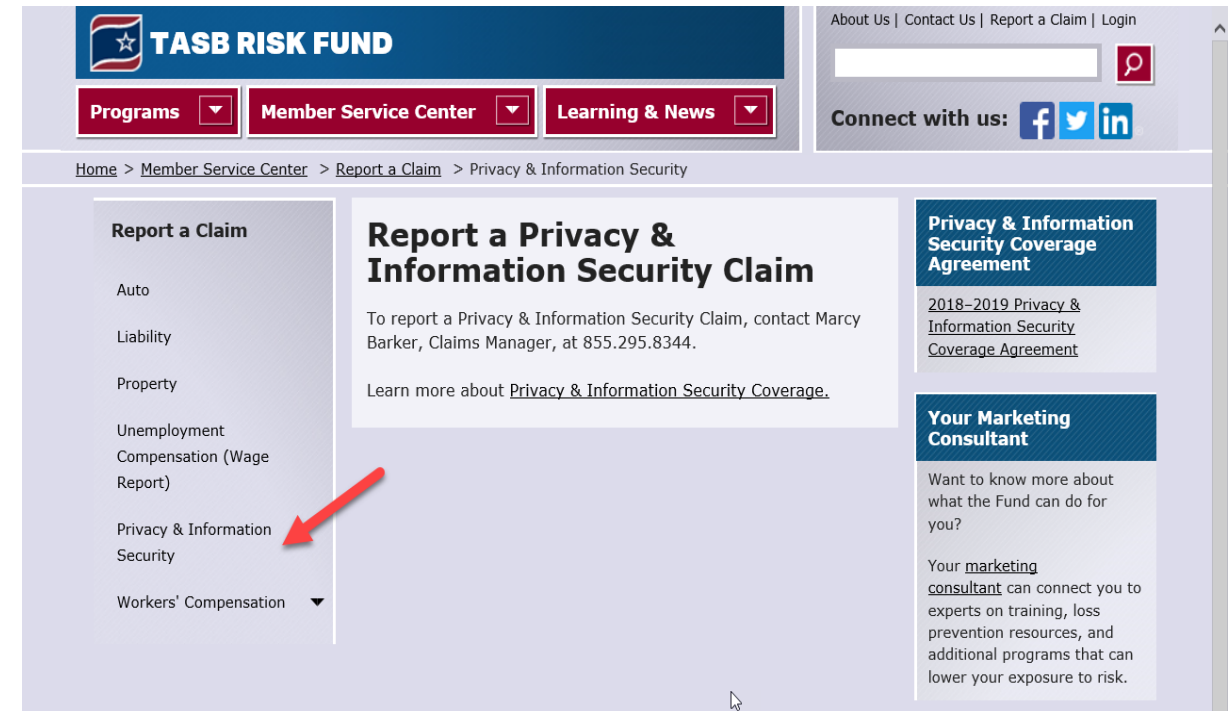
- **6 External Hacks**
- **7 Fraudulent Instruction**
- **20 Phishing Email Attacks**
- **15 Ransomware Attacks**
- **4 Stolen Technology/Device**
- **9 Unsecured Electronic Records**
- **3 Unsecured Physical Records**

- **Privacy Liability (third party coverage)**
- **Response Services (first party coverage)**
- **Notifications**

- **Ransomware**
- **Fraudulent Instruction**
- **Regulatory Proceeding**
- **Unauthorized Access or Use of Computer Systems**
- **Unauthorized Disclosure of Data (phishing, spoofed emails)**
- **External Hack (virus)**
- **Stolen or Lost Technology Device**
- **Access to Unsecured Electronic or Physical Records**

In the event of a suspected Data or Security breach report incident as soon as possible!

- If incident requires immediate attention, call: Marcy Barker, Liability Claims Manager, 855.295.8344
- You may also e-mail notice to Marcy Barker: marcelina.barker@tasb.org



If services are to be engaged, the BBR team will schedule a follow-up call with the member, Fund rep. (Marcy) and recommended vendors.

Engagement Letters and Statements of Work will be executed by Marcy Barker on behalf of the member

If forensic experts are to be engaged, privacy counsel will direct the activity under an attorney-client privilege

Services incurred within coverage will be billed and paid by the Fund.

If the member is required to provide notice of the breach, privacy counsel will assist with the notifications and activation of credit monitoring.

Notifications are capped (refer to CCS)

Costs associated with notifications and credit monitoring will be billed and paid by the Fund up to the coverage limits

Lessons Learned

David Truman – Cuero ISD

Questions?

A large group of diverse elementary school children are sitting together, filling the frame. They are all smiling and looking towards the camera. The children are of various ethnicities and ages, ranging from young children to pre-teens. They are wearing a variety of colorful clothing, including sweaters, shirts, and jackets. The background is a plain, light-colored wall.

Thank you!