# RANSOMWARE

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and

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## **CRITICAL INFRASTRUCTURE**



Atlanta, 2018





#### COLORADO Department of

Department of Transportation







## DAMAGE CAUSED

ATLANTA (SamSam malware)

- Loss of computing and payment processing for a week
- Citywide including Hartsfield-Jackson International Airport
- ✓ \$10M cleanup

COLORADO DOT (SamSam malware)

- ✓ 50% IT resources
- ✓ 400 Servers/1300 workstations
- ✓ \$100M payment processing/month
- ✓ \$1.5M cleanup



Nearly 50% of MSPs report the average ransom requested is between \$500 - \$2,000.

An IBM study suggested that over a quarter of all companies would pay more than \$20,000 to hackers to retrieve data that had been stolen.

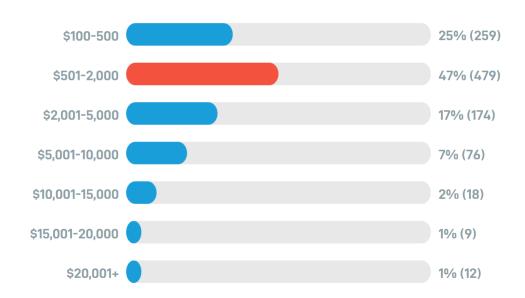
2016 data

2018 data





#### Total ransom paid by global SMBs to ransomware hackers\*: \$301 Million



\*Between Q2 2016 and Q2 2017

### 2018-19 data

2016 data

Ransomware costs businesses more than \$75 billion per year. (Source: Datto)





### 2018-19 data

The average cost of a ransomware attack on businesses was \$133,000. (Source: Sophos)



The downtime cuts the deepest

Which of the following have clients experienced due to a ransomware attack?

**57%** 

Report loss of data and/or

devices

75%

Report business-threatening downtime





2019 will be the year of Ransomware Rising

A new business will fall victim to ransomware every 14 seconds in 2019 and every 11 seconds by 2021. According to Cybersecurity Ventures predictions.

In 2019 ransomware from phishing emails increased 109 percent over 2017.

(Source: <u>PhishMe</u>)



TODAY'S CYBER CRIMINALS ARE MORE RUTHLESS THAN EVER

29% of MSPs report ransomware virus remained on a client's system after the first attack and struck again at a later time.

33% of MSPs report ransomware encrypting a customer's backup







### **REMAINING AGENDA**

- SCENARIOS
- LESSONS LEARNED
- BEST PRACTICES







### ATTACK ON LAW FIRM ATTACK ON MANUFACTURER





### **ATTACK VECTOR**

### ATTACK ON LAW FIRM ATTACK ON MANUFACTURER







### ATTACK ON LAW FIRM ATTACK ON MANUFACTURER





### **LESSONS LEARNED**

- USE OF CYBER THREAT INTELLIGENCE
- USE OF ATTORNEY-CLIENT CONFIDENTIALITY
- REMEDIATION APPETITE
- INFORMATION SHARING
- USE OF GOVERNMENT RESOURCES



## **BEST PRACTICES**

- INSURANCE
- INCIDENT RESPONSE PLAN
- BACKUPS
- TRAINING
- ATTORNEY-CLIENT PRIVILEGE



### **BEST PRACTICES**

- PUBLIC-PRIVATE PARTNERSHIP
- INFORMATION SHARING
- COMMUNITY CYBER CAPACITY
  BUILDING



## **COMMUNITY CYBER CAPACITY**

To improve cybersecurity in the U.S., a whole of government approach isn't enough – the nation needs a "whole of society" approach to cybersecurity, said Homeland Secretary Kirstjen Nielsen during a speech hosted by Auburn University yesterday.



'Warning Lights Are Blinking Red,' Top Intelligence Officer Says of Russian Attacks

"Cyber Security Is The Number One Problem With Mankind" Warren Buffett; May 2017

March 18, 2019





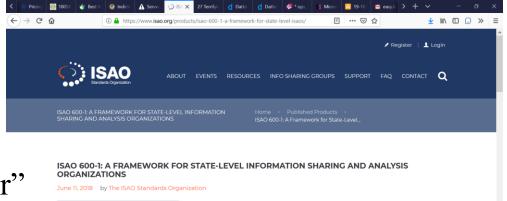
Cybersecurity from the lens of the Private Sector



## **COMMUNITY CYBER CAPACITY**

~ 50% of US GDP derives from small business 50% of employment is from small business

### WHAT IS BEING DONE FOR SMALL BUSINESS?



SLTT has a duty to "enable, support and partner" with community ISAOs.





## **CYBER ON MAIN**

### **Cyber on Main**

An initiative to coordinate and support public and private efforts to identify, evaluate, and protect National Critical Functions embedded in local communities

#### **Increase Resilience**

Programs developed under this initiative will favor risk-informed, market-based solutions over prescriptive, regulatory-driven solutions to increase resilience in communities of small businesses and small government / nonprofit organizations

#### **Increase Participation**

Ensure that small businesses and small community-focused organizations, who directly employ half of the workforce and nearly half of the GDP, are represented in the resilience and security outcomes we desire as a unified nation

1





### **Q & A**

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