

Cyber Security Overview

CITY OF GRESHAM – INFORMATION TECHNOLOGY



The Question...

How prepared are we to protect the city's digital resources against cyber-attacks?

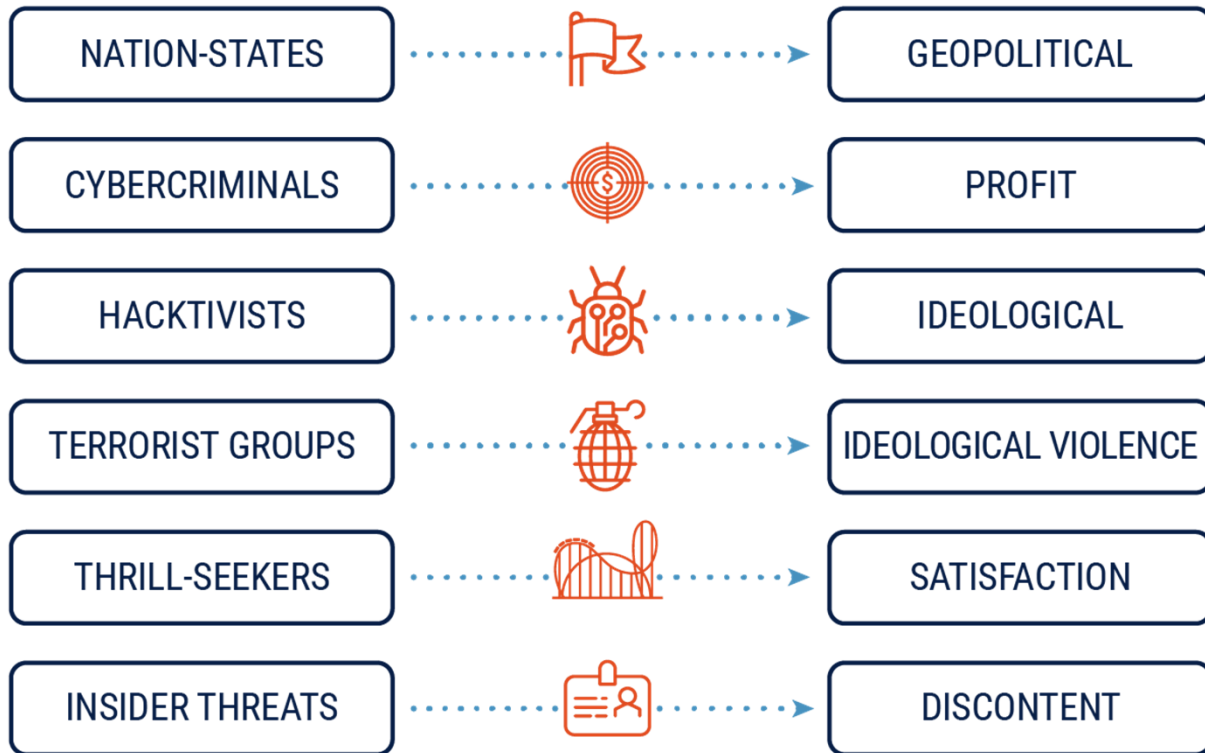
City Technology Deployment



- ▶ 650 (+/-) Users
- ▶ 900 Computers
- ▶ 106 Servers
- ▶ Modern Mitel Phone System
- ▶ 500 + Mobile Phones & Tablets
- ▶ 50K Emails per Week
- ▶ 56 Terabytes of Data
- ▶ 180% Increase in Remote Work
- ▶ 160 M Tracked Events per Month

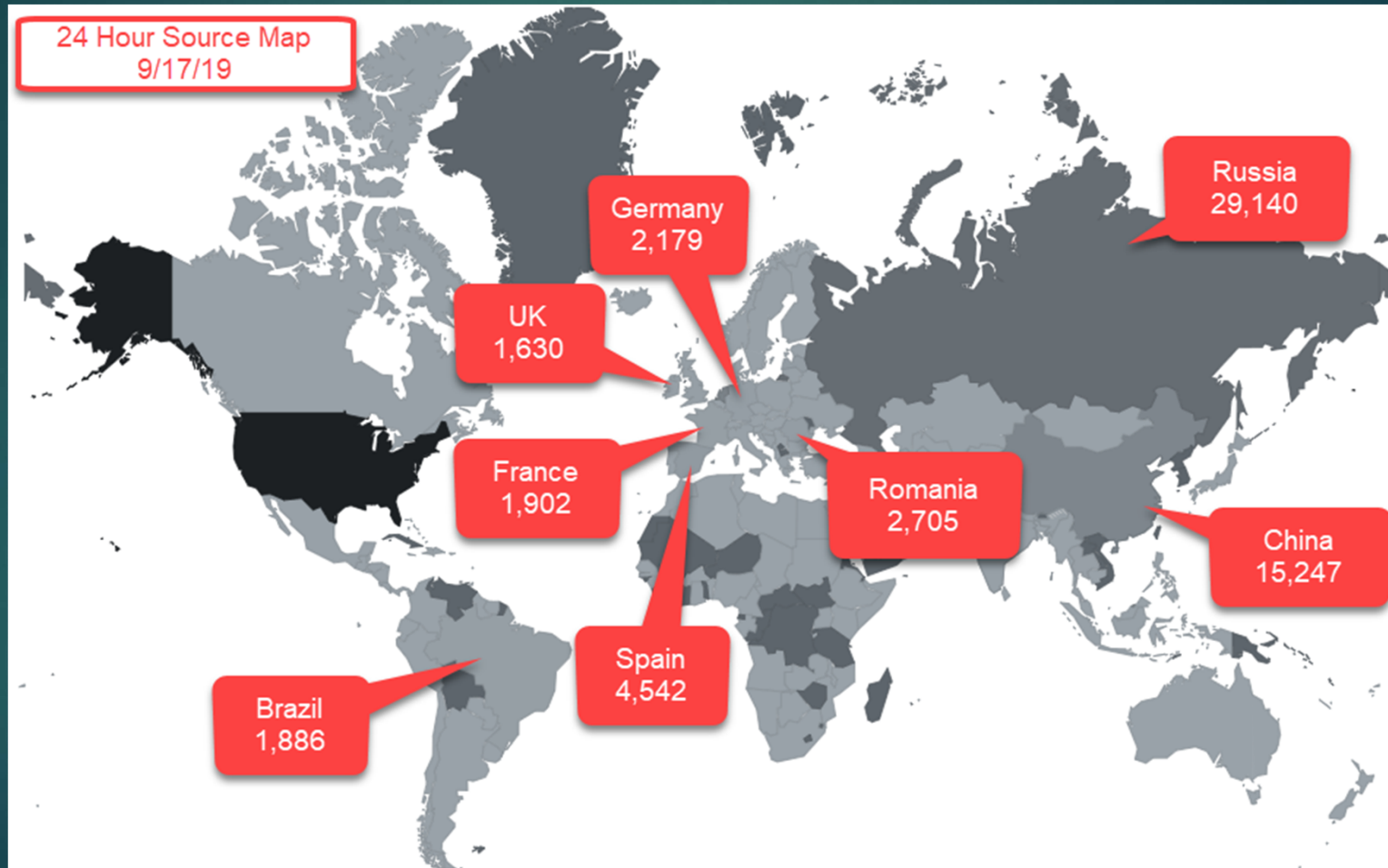
CYBER THREAT ACTOR

MOTIVATION



What Kinds
of Threats
are out
There?

What do we see at The City?



4%

Surface Web

Indexed and easily searchable.

Yahoo — ● — Google
Wikipedia — ● — Bing



90%

Deep Web

Not indexed, tougher to find.

Medical records — ● — Academic information
Legal documents — ● — Subscription information
Scientific reports — ● — Private databases
Corporate intranets — ● — Financial records
Government resources
Human resource records

6%

Dark Web

Obscured, difficult to discover.

Zeronet — ● — IRC
I2P — ● — Private communications
TOR encrypted sites — ●

What's Information Worth?

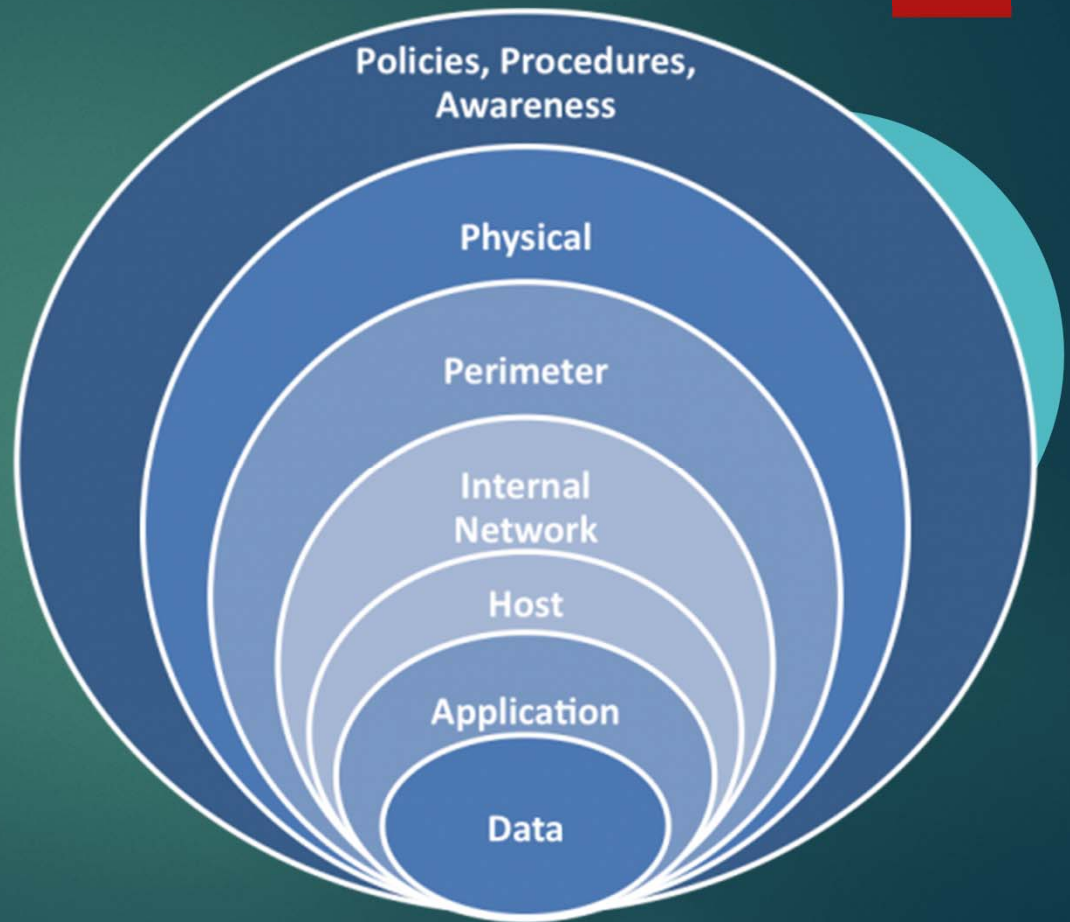


Defense In Depth

Cybersecurity is like an onion. It has many layers, it's stinky and it makes people cry...

- ▶ User Awareness & Action Plans
- ▶ Locked doors and badges
- ▶ Public Internet Firewall
- ▶ Spam and Malware Filtering
- ▶ Antivirus and Antimalware
- ▶ Single Sign On & MFA
- ▶ Backups and Encryption

...and Cybersecurity Insurance



Guiding Principle

No plan, no matter how sophisticated, ever survives first contact with the enemy.

~Helmuth Karl Bernhard Graf von Moltke
(The Elder - 1865)



Future Features for our Fleet

- ▶ Phishing Education (#1)
- ▶ Continuing User Awareness Training
- ▶ Remote security management tools
- ▶ Encrypted Laptops
- ▶ Equipment Replacement
- ▶ Multi Factor Authentication
- ▶ Automation and AI
- ▶ Penetration Testing



Q&A

