

RSA[®]Conference2019

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Defending Digital Democracy: How Security Professionals Can Help

Jordan D'Amato

Executive Director
Defending Digital Democracy Project (D3P)
Harvard Belfer Center

Mari Dugas

Project Coordinator
Defending Digital Democracy Project (D3P)
Harvard Belfer Center

#RSAC

Defending Democracy in 120 minutes!

Intro

15 min

Tabletop Exercise

75 min

Review

30 min

*Democracy is not a static thing.
It is an everlasting march.*

- Franklin D. Roosevelt

Why are you here today?



Experience the **challenges facing state and local election administrators.**



Understand the election “**system of systems.**”



Apply your security expertise to develop **creative solutions.**



Take an active role in helping **defend democracy.**



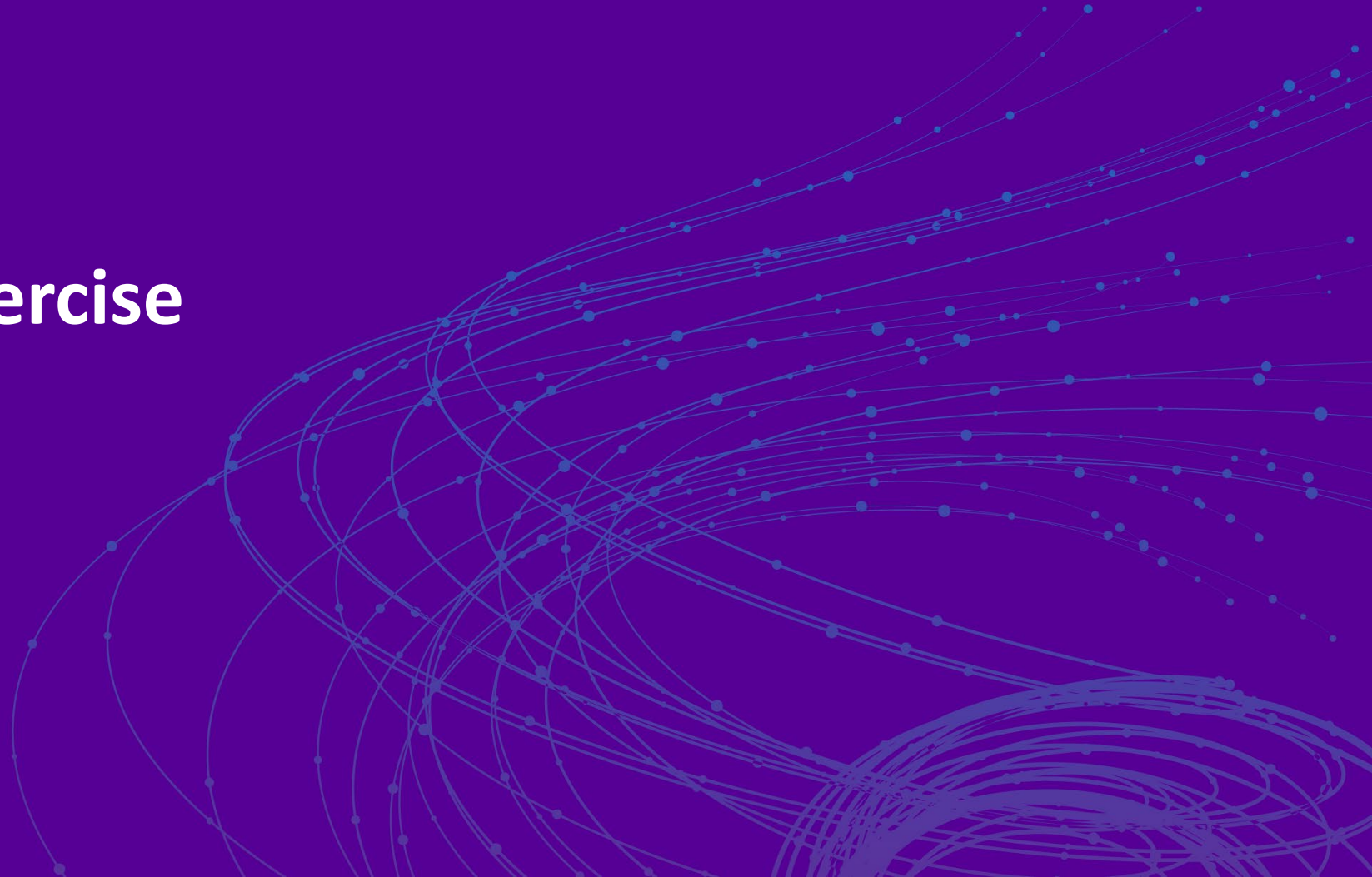
What is a Tabletop Exercise (TTX)?

- A simulation mirroring **real world conditions** and events that help prepare to overcome future challenges.
- Everyone has a **role** and corresponding responsibilities.
- **Compressed timeline** provides additional stress; requires participants to absorb information, make decisions, and develop/execute plans on an accelerated timeline.
- Provides **actionable lessons learned** and increased awareness.

What does this all mean for you?

- The worst election day we could think of! It will be difficult... but you will learn more.
- Your actions always matter! Keep fighting!
- The End-State: Understand election cybersecurity better and find new ways to deter, defend, and respond to risks posed by cyber attacks and information operations.

Table Top Exercise Overview



Tabletop Exercise Timeline

Intro
5 min

Phase 1
30 min

Break
5 min

Phase 2
30 min

6 Month Leadup
Every 5 min = 1 month

Take actions to prepare for election day (e.g., comms plan, adding security measures, policies).

Election Day
Every 2 min = 1 hour

Run election day and respond to events and challenges as they unfold

The Big Picture Behind this Scenario

- The **scenario, location, and all its actors are fictional**. This is a non-partisan event.
- Every attack in the scenario is something that has either happened, been attempted, or observed in a parallel fields. These **threats are absolutely real**.
- Just like in reality, there will be times when you have imperfect information and must make a decision.

Injects

- Injects will occur throughout the scenario. Think of them like Chance cards in Monopoly. Something good or bad (but probably bad) is going to happen.
- Your actions do not count if they are not **written down** in detail!
 - What are they?
 - When do they occur?
 - Who executes them? How?

Don't Fight the Game!

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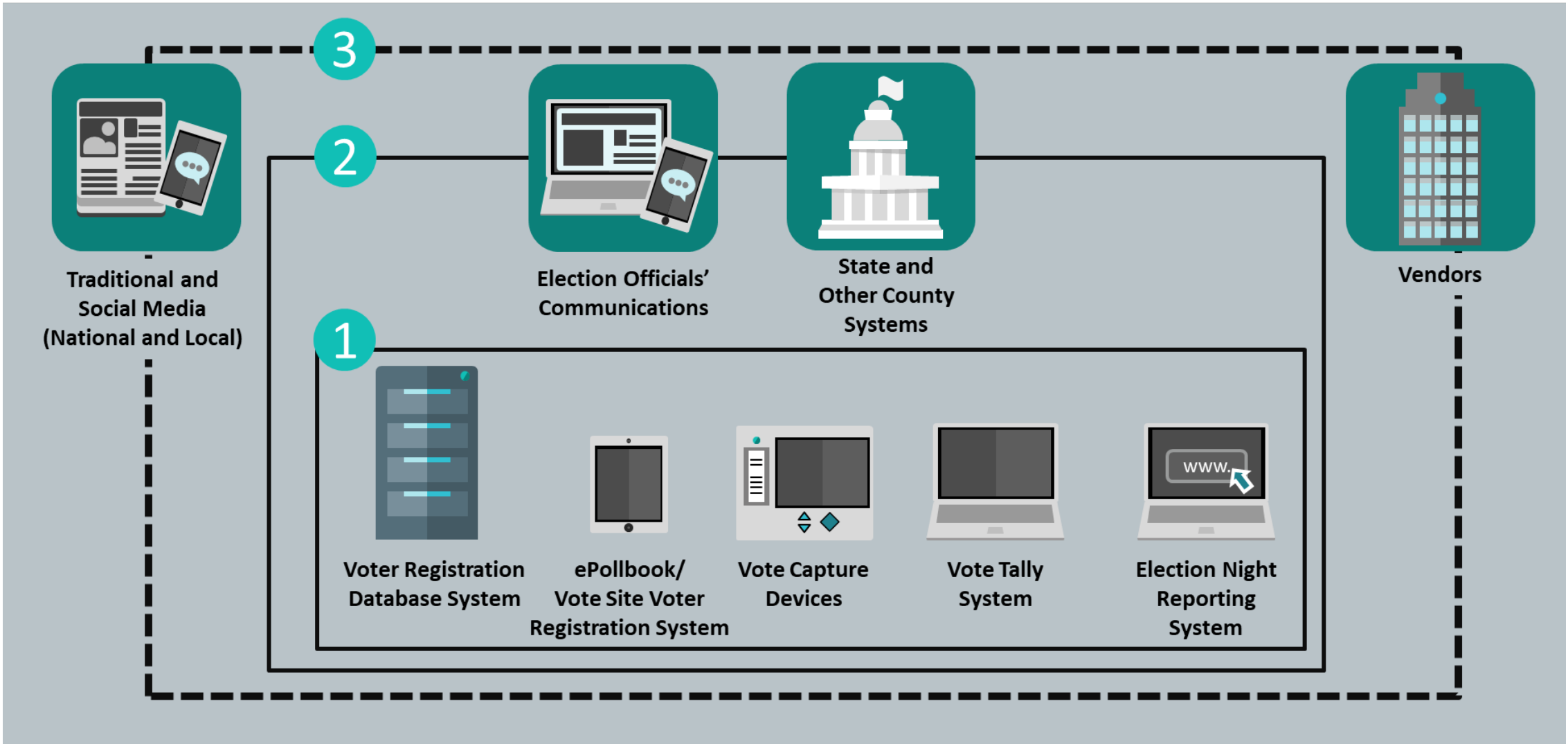
Table Top Exercise Scenario



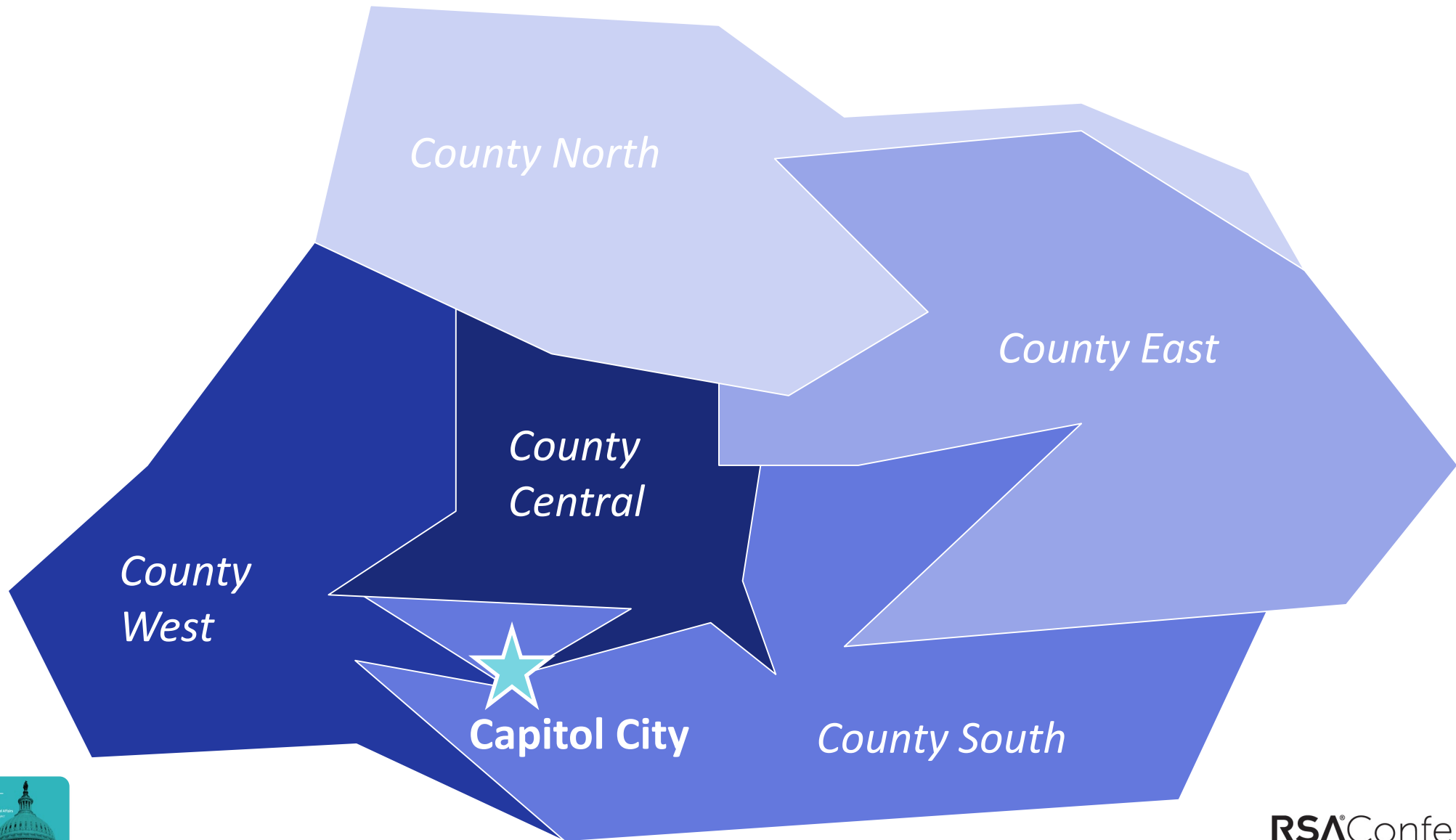
U.S. Presidential Elections 2020

- Media outlets focused upcoming U.S. elections
- Social media sites having high election related traffic; extensive postings on upcoming elections.
- Social media sites continue to be used as a primary means for information gathering and impression shaping by voters.
- First presidential election since the widely-discussed 2016 foreign meddling
- Scenario will begin **6 months out from election day (June 2020) and run through after polls close on election day.**

The Election “System of Systems”

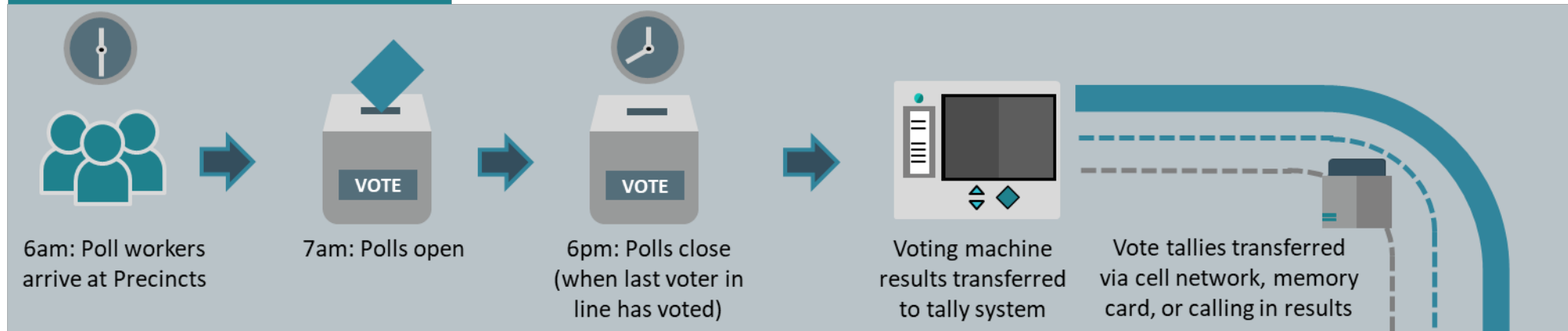


Welcome to Brattle: The 51st State

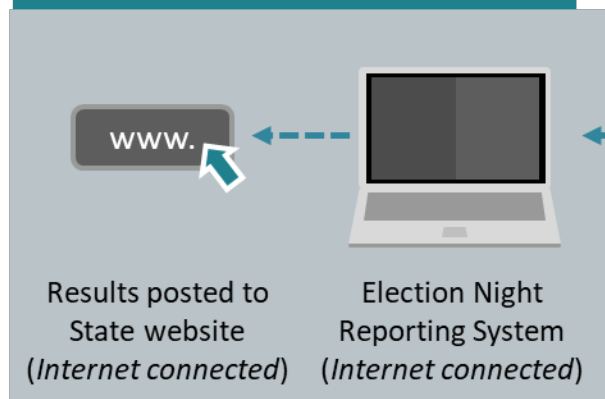


Voting and Vote Tallying in Brattle

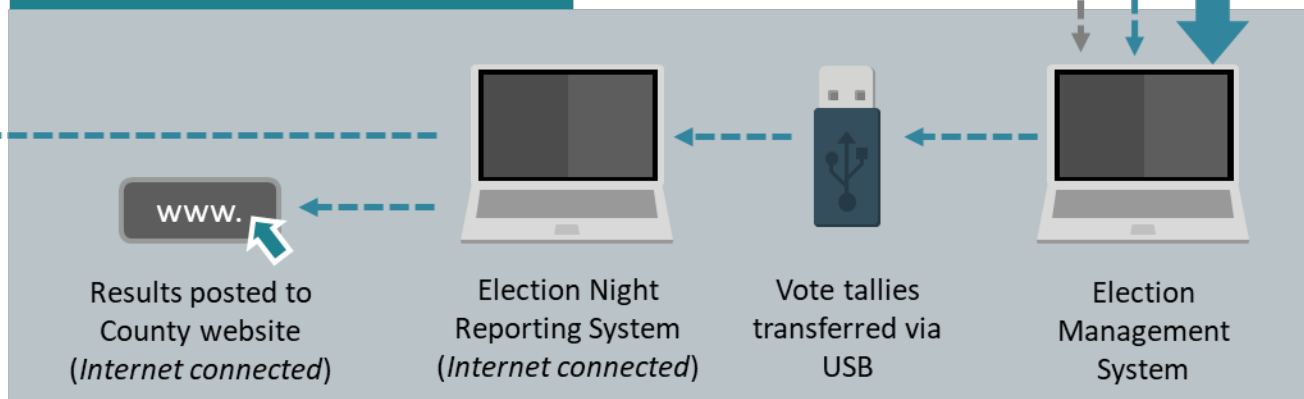
PRECINCT



STATE



COUNTY



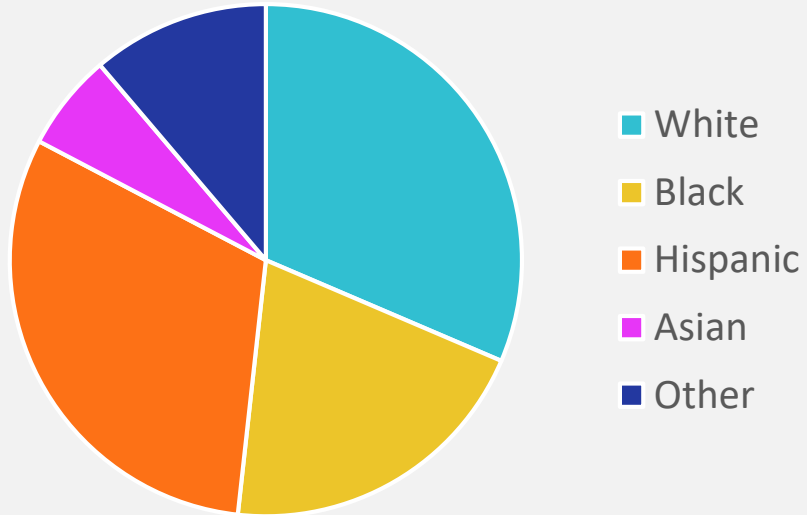
Brattle: Election Systems

- **Voter Registration Database:** Bottom-up System, centrally controlled
- **Voter Registration:** Online, by mail, in-person, but not same day
- **Voting Systems:** County-level decision point
- **ePollBook:** Yes
- **2 Major Parties:** Liberty and Freedom
- **Voter ID Requirements:** Voters must have state issued ID
- **Election Funds:** \$7k for State, \$5k for each County

Brattle: Demographics and Political Parties

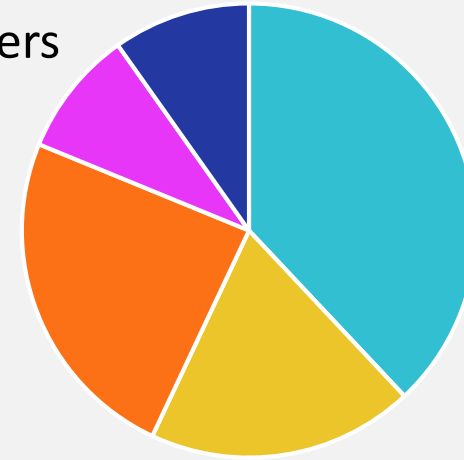
Brattle Demographics

13 million citizens, 7 million voters



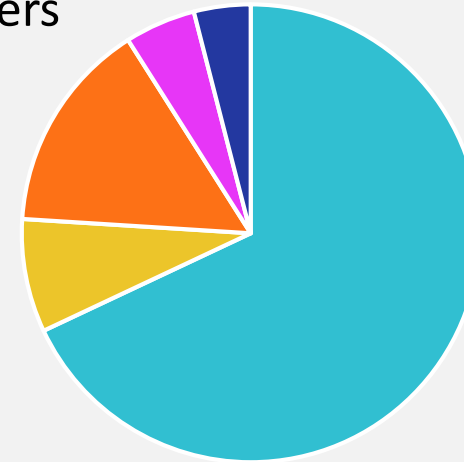
Freedom Party

4m Registered Voters

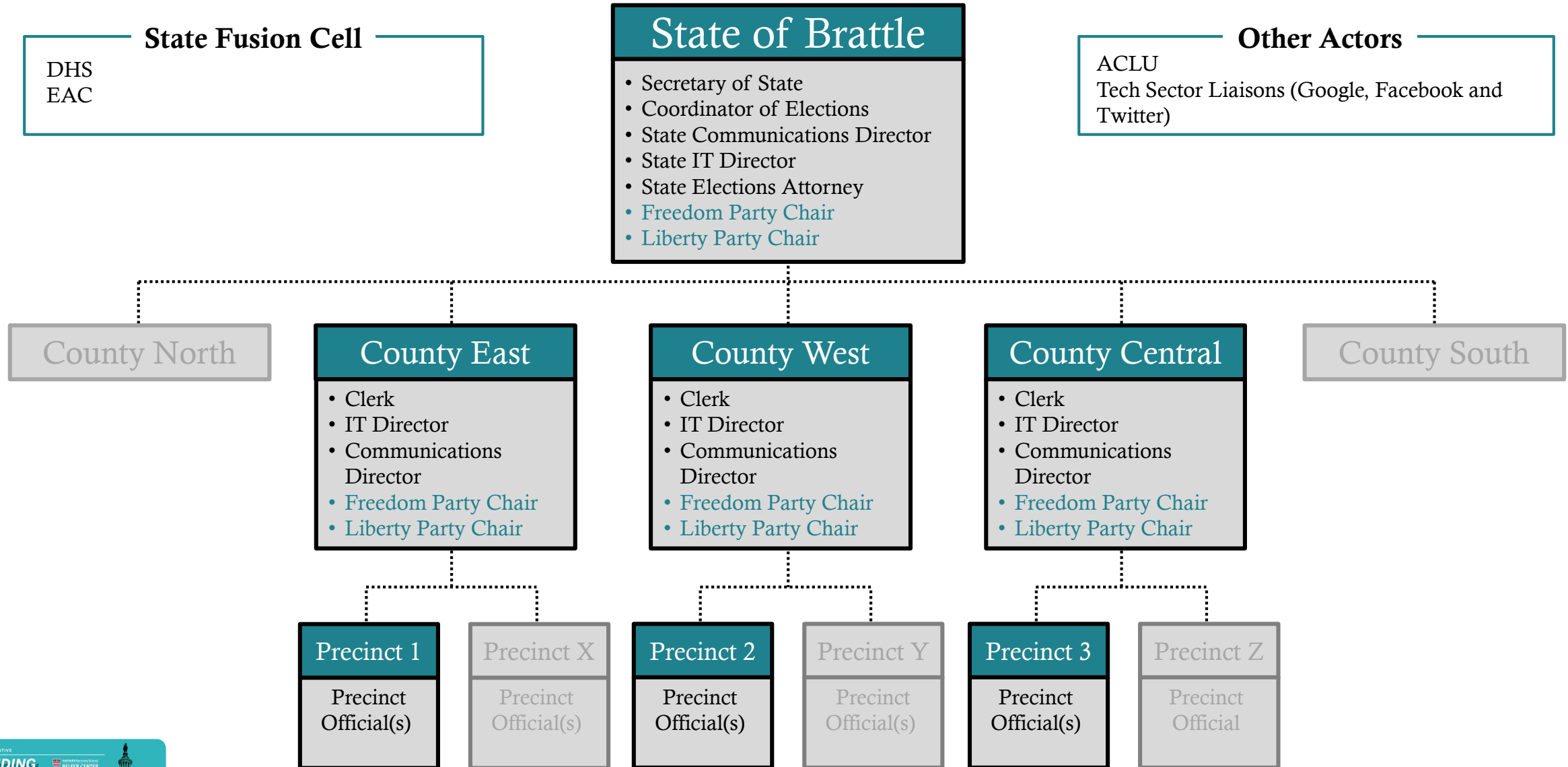


Liberty Party

3m Registered Voters



Room Setup in the State of Brattle



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Let the Games Begin!

An abstract graphic in the bottom right corner of the slide. It consists of numerous thin, light blue lines that form overlapping circles and arcs. Small blue dots are scattered along these lines, creating a sense of motion and complexity. The overall effect is a dynamic, network-like pattern that contrasts with the solid blue background.

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After Action Review



After Action Review (AAR) Timeline

Intro and Review

10 min

Lead: D3P

The team will explain how to do an AAR, and what was going on during Phase 1 and 2 of the scenario

Key Takeaways

15 min

Lead: You!

Take 5 minutes to discuss at your table, then one member from each table will present the table's most important takeaway

Wrap Up

5 min

Introduction to the After Action Review (AAR)

1

What Happened?

Just the facts: What did your team see happening and what did you do?

2

What Went Well?

How it happened: What actions that your team took were successful?

3

What Can Improve?

How it happened: What actions that your team took were unsuccessful?

Scenario Review and Lessons



People

Security is largely about people, and election security is no different.



Surprises

Planning, training, and creativity are key when dealing with the unexpected.



Management

Elections are tough work and cybersecurity is one of many concerns.

Apply What you Have Learned Today!

- In the next week you should:
 - **Join the Team:** Reach out to D3P if you want to help an election office or campaign (we already work with Crowdstrike, Google, Microsoft and many others).
- In the next three months you should:
 - **Do Your Part:** Consider how your organization can help an election office or campaign by providing time, knowledge, or resources (e.g., Google's Project Shield and Cloudflare's Athenian Project provide DDoS mitigation for election offices).
 - **Communicate:** Local officials can use your support not only to implement security solutions but also to educate and communicate with the public.
 - **Advocate:** Elections are a state and local run issue—your legislators decide how to regulate election security, so talk with them!

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