

## NEW YORK STATE BOARD OF ELECTIONS CYBERSECURITY PLAN 2022

### Background

The New York State Board of Elections (NYSBOE) has been closely monitoring the ever-growing threat posed to information and elections systems by nation-states, terrorist organizations and independent criminal actors. In 2018 and 2020, NYSBOE received federal funding available through the HAVA (Help America Vote Act) Election Security Grant. Between 2018 and 2020, the State of New York was awarded \$41,431,865 to utilize for cybersecurity risk assessment and remediation. In addition to these federal funds, New York State provided a 20% match which totaled \$5,363,824 to further the NYSBOE's cybersecurity initiatives.

NYSBOE is now eligible for additional HAVA Election Security Grant funds for 2022. NYSBOE is eligible to receive \$3,219,900 in federal funding to continue to enhance cybersecurity protections. In order to receive those funds, New York State will again provide a match with its own funds, in the amount of 20%, or \$643,980. In total, NYS anticipates receiving \$3,863,880 to further protect secure elections for the people of New York State.

To fulfill the purpose of the grant, NYSBOE previously initiated, and intends to continue, the **ARMOR** plan, designed to:

- Assess the risk to the State and County election systems;
- Remediate the vulnerabilities;
- Monitor ongoing Operations; and
- Respond to incidents.

Key elements of that plan which have already been executed include:

- a thorough risk assessment of each County Board of Elections (CBOE);
- Intrusion Detection System (IDS) protections at each CBOE;
- Managed Security Services (MSS) as an option for each CBOE;
- cyber hygiene user training, provided by industry-recognized Secure Awareness Network (SANS);
- creation of a Secure Elections Center;
- conducting Table-Top Exercises across the State;
- daily pre-election operation center statewide calls; and
- a Cybersecurity newsletter distributed to CBOEs.

In 2018, the State Board created a Secure Elections Center tasked with assisting all CBOEs in the formulation and implementation of security measures and risk remediation. Since its inception the SEC has proven effective in its mission to secure the statewide elections infrastructure, end-to-end, from any threat that has the potential to disrupt election operations. The SEC has partnered with numerous State and Federal Agencies to enhance its mission and achieve success. In addition to emergency management and incident response, the SEC helps prepare County Boards and local IT Resources from

cyber-related threats by offering numerous trainings, workshops, resources, and education programs in support of county boards of elections and local county IT resources.

In 2021, the Board of Elections Secure Elections Center (SEC):

- continued extensive outreach to inform and involve federal, state and local stakeholders to increase the communication, expertise and cybersecurity resources available for the State and County Boards of Elections (CBOES);
- extended a uniform cybersecurity hygiene web-based training for all State Board, County Board and IT staff supporting elections infrastructure;
- participated in DHS-based tabletop exercises for state and local election officials;
- continued to respond to county cyber incidents;
- initiated renewal process for uniform county Intrusion Detection System (IDS) and Managed Security Services (MSS);
- strengthened working relationship with NYS County IT Directors;
- issued a comprehensive Cybersecurity Regulation;
- improved vulnerability management and remediation processes to include new application deployments;
- deployed an asset inventory tool
- upgraded mobile device management capability
- implemented a help desk ticketing system
- deployed an automated remote patching tool
- deployed a security information and event management software to correlate security alerts
- expanded multi-factor authentication to additional applications
- implemented third level backups leveraging cloud infrastructure
- initiated deployment of enhanced failover and recovery software
- explored acquisition of application code review software
- completed an in-house phishing exercise, including remediation training;
- wrote in-house policies, standards, and procedures to mature the State Board's cybersecurity program;
- managed a \$9 million NYS election infrastructure cybersecurity mitigation grant program.

**The State Board continues to fortify our own internal cybersecurity and will use new 2022 HAVA Election Security funds for network segmentation and expansion of current credential management, disaster recovery, multifactor authentication (MFA), and Security Information and Event Management (SIEM) initiatives. The State Board will also begin planning for future risk remediation assessments and undertake a new communication initiative to dispel misinformation and disinformation around elections.**

#### Network Monitoring at CBOEs

Federal, State and other stakeholders recommend that network monitoring be immediately implemented at each County Board of Elections, if not already in place. Monitoring, Distributed Denial of Service (DDOS) protection and site scanning provide a baseline of security for elections systems and infrastructure. County Board of Elections infrastructure may be networked with County infrastructure which increases the scope and cost of network monitoring. Through 2018 HAVA Grant funds, NYSBOE undertook two significant efforts to provide this monitoring:

- **Intrusion Detection System (IDS)** – each CBOE was required, at no cost to themselves, to implement FireEye IDS protection, or alternatively to substantively demonstrate pre-existing IDS protection of an equivalent level. All CBOEs in New York now have this protection, either through this program, through the federal DHS Albert sensor program, or through their own procurement. (See Figure 2.)
- **Managed Security Services (MSS)** –each CBOE was also given the option to participate, again at no cost to themselves, in log monitoring services to detect and report anomalies and potential threats. In total, thirty-four (34) CBOEs took advantage of this program. (See Figure 3.)

Through the 2022 HAVA Grant funding, NYSBOE intends to continue, and expand where possible, each of these two programs for an additional two (2) years of monitoring and protection.

#### Comprehensive Risk Assessment for all County Board of Elections

Beginning in 2018, NYSBOE contracted with a third-party vendor for professional services to conduct a comprehensive, uniform and verified risk assessment at every County Board of Elections (CBOE). This was in addition to a previously-conducted CBOE elections risk survey to gain an understanding of the security posture of each county board. County Boards are responsible for procuring, inventorying, securing and training staff on elections infrastructure and technologies. A uniform and verified third party risk assessment was deemed critical in ascertaining a security baseline for our statewide elections infrastructure. Individual reports were created for each CBOE, for distribution to the corresponding county IT unit and Board of Elections. In addition, an overarching report on statewide trends observed at CBOEs was also generated by the third-party vendor, and augmented with analysis by in-house NYSBOE staff from the Secure Elections Center (SEC). Although these reviews were conducted in 2018, CBOEs will benefit from routine assessments of their infrastructure. HAVA 2022 funding will be used to plan additional risk assessments on the State and County Boards to continue to improve cybersecurity.

#### Dispelling Misinformation and Disinformation

In 2020, the New York State Board of Elections ran a successful ad campaign to promote the alternative methods of voting during the COVID-19 pandemic. The use of ads allowed the Board to reach a larger audience than traditional or social media, and ensured voters had accurate information about how they could vote without risking exposure to the virus. In 2022, the Board plans to replicate this campaign and develop a larger communications plan with a focus on dispelling mis-and-disinformation around elections.

The Board will use social media and Google ads to promote accurate information about upcoming elections and provide resources to combat mis-and-disinformation. Electronic ads will reach voters statewide and target areas with high rates of misinformation. Messages can also be targeted in relevant languages to ensure all voters have access to correct information in an accessible format. This campaign will establish trust in New York State's election infrastructure and procedures.

**EAC HAVA GRANT - BUDGET WORKSHEET**

<b>GRANTEE NAME:</b>	New York State Board of Elections	<b>MATCH %:</b>	20%
<b>AWARD TYPE:</b>		<b>INDIRECT COST % (IF APPLIED):</b>	
<b>PROJECT PERIOD START DATE:</b>	3/23/2018	<b>INDIRECT COST TYPE:</b>	
<b>PROJECT PERIOD END DATE:</b>	Until Expended		

SECTION A: GRANT BUDGET	YEAR ONE	YEAR TWO	YEAR THREE	TOTAL:
FEDERAL AMOUNT	\$ 19,483,647.00	\$ 21,838,990.00	\$ 3,219,900.00	\$ 44,542,537.00
NON FEDERAL MATCH	\$ 974,182.35	\$ 4,367,798.00	\$ 643,980.00	\$ 5,985,960.35
<b>TOTAL:</b>	<b>\$ 20,457,829.35</b>	<b>\$ 26,206,788.00</b>	<b>\$ 3,863,880.00</b>	<b>\$ 50,528,497.35</b>

SECTION B: BUDGET CATEGORIES (Federal Only)	Voting Equipment	Voting Processes	Voter Registration Systems	Election Auditing	Cyber and Physical Security	Voter Education	Accessibility	Other (Provide description in this box)	Other (Provide description in this box)	TOTALS	% Fed Total
PERSONNEL					\$ 6,070,571.60					\$ 6,070,571.60	14%
FRINGE RELATED TO SALARY										\$ -	0%
EQUIPMENT					\$ 350,000.00					\$ 350,000.00	1%
TRAINING					\$ 500,000.00					\$ 500,000.00	1%
CONTRACTUAL										\$ -	0%
OTHER (Describe)					\$ 31,180,873.60	\$ 50,000.00				\$ 31,230,873.60	70%
OTHER (Describe)										\$ -	0%
SUBGRANTS					\$ 5,737,138.50					\$ 5,737,138.50	13%
TOTAL DIRECT COSTS	\$ -	\$ -	\$ -	\$ -	\$ 43,838,583.70	\$ 50,000.00	\$ -	\$ -	\$ -	\$ 43,888,583.70	98%
INDIRECT COSTS (if applied)					\$ 763,172.30					\$ 763,172.30	2%
<b>TOTAL PROGRAM BUDGET</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 44,601,756.00</b>	<b>\$ 50,000.00</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 44,651,756.00</b>	<b>100%</b>
<b>PERCENTAGE BY CATEGORY</b>	0%	0%	0%	0%	100%	0%	0%	0%	0%		

**SECTION C: NON FEDERAL MATCH RESOURCES**

SOURCE DESCRIPTION	STATE FUNDS	OTHER	TOTAL:
The New York State Legislature appropriated the required 20% match.	\$ 974,182.35		\$ 974,182.35
	\$ 4,367,798.00		\$ 4,367,798.00
	\$ 643,980.00		\$ 643,980.00
			\$ -
	\$ 5,985,960.35	\$ -	\$ 5,985,960.35