

18-07

New York State Board of Elections APPROVED RESOLUTION – May 3, 2018

RESOLUTION APPROVING THE CYBERSECURITY PLAN PURSUANT TO THE SFY 2018-19 BUDGET.

WHEREAS the New York State Board of Elections (State Board) has been closely monitoring the ever-growing threat posed to information and elections systems by nation-states, terrorist organizations and independent criminal actors; and

WHEREAS the State Board has been working extensively with federal, state, local and other important partners (the Elections Assistance Commission (EAC), the federal General Services Administration (GSA), the federal Department of Homeland Security (DHS), the Federal Bureau of Investigation (FBI), the Center for Internet Security (CIS), the Multi-State Information Sharing and Analysis Center (MS-ISAC), the Elections Infrastructure Information Sharing and Analysis Center (EI-ISAC), NYS Office for Information Technology Services (OITS), Governor's Cybersecurity Advisory Board (CSAB), the Belfer Center for Science and International Affairs at Harvard University, and the University at Albany's Center for Technology in Government (CTG)) to develop a comprehensive plan to ensure the security of New York State's elections infrastructure; and

WHEREAS the SFY 2018-19 budget allocates \$5 million dollars for "services and expenses related to securing election infrastructure from cyber-related threats including, but not limited to the creation of an election support center, development of an elections cybersecurity support toolkit, and providing cyber risk vulnerability assessments and support for local board of elections(;)" and

WHEREAS, per the SFY 2018-19 budget, expenditures of such funds shall be approved by a vote of the State Board of Elections Commissioners pursuant to subdivision 4 of section 3-100 of the election law;

WHEREAS the State Board staff through their work with the federal, state, local, and other partners mentioned above, have drafted an allocation plan.

WHEREAS the State Board staff has been leveraging existing Federal and State resources, such as attending the Belfer Center of Science and International Affairs Cybersecurity Tabletop Exercise "Train the Trainer" program; and

WHEREAS the State Board staff has partnered with the federal Department of Homeland Security both have an internal risk assessment conducted and to execute six regional cybersecurity table top exercises across New York State; and

WHEREAS the State Board has been leveraging existing technological and security resources by partnering with the federal Department of Homeland Security, MS-ISAC and EI-ISAC; and

WHEREAS, the federal Elections Administration Commission (EAC) has allocated New York State \$19,483,647 (19.5 M) dollars subject to a State 5% match of cybersecurity related funds;

WHEREAS, the \$5 million dollar State cybersecurity funds will be leveraged to meet the federal 5% match requirement to secure federal Cybersecurity grant funding;

NOW THEREFORE BE IT RESOLVED the state cybersecurity plan, attached hereto, is hereby approved and the State Board of Elections is authorized to implement such plan;

NOW THEREFORE BE IT FURTHER RESOLVED that the State Board staff is authorized to expend up to \$1.25 million in State cybersecurity funds in the implementation of the state cybersecurity plan; and

NOW THEREFORE BE IT FURTHER RESOLVED that the State Board staff is authorized to expend federal HAVA cybersecurity funds at a limit to not exceed \$5 million dollars in the implementation of the state cybersecurity plan.

Approved May 3, 2018
VOTE 4-0

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.

Collaboration and Consultation

NYSBOE has been working extensively with federal, state, local and other important partners (the Elections Assistance Commission (EAC), the federal General Services Administration (GSA), the federal Department of Homeland Security (DHS), the Federal Bureau of Investigation (FBI), the Center for Internet Security (CIS), the Multi-State Information Sharing and Analysis Center (MS-ISAC), the Elections Infrastructure Information Sharing and Analysis Center (EI-ISAC), NYS Office for Information Technology Services (OITS), Governor's Cybersecurity Advisory Board (CSAB), the Belfer Center for Science and International Affairs at Harvard University, and the University at Albany's Center for Technology in Government (CTG)) to develop a comprehensive plan to ensure the security of New York State's elections infrastructure.

Funding (See Attachment A)

State funds are coming from the SFY 2018-19 executive budget which allocates \$5 million dollars¹ for "services and expenses related to securing election infrastructure from cyber-related threats including, but not limited to the creation of an election support center, development of an elections cybersecurity support toolkit, and providing cyber risk vulnerability assessments and support for local board of elections." In addition, federal funding is available through the 2018 HAVA (Help America Vote Act) Election Security Grant allocates \$19,483,647 dollars to the State of New York "to improve the administration of elections for Federal office, including to enhance election technology and make security improvements." In order to be eligible for newly allocated federal cybersecurity funds, the State must provide a 5% match. The \$5M State funding would meet the match requirements. NYSBOE is confident that the current State HAVA plan would not require any update to accept additional federal funding.

The Plan

Our comprehensive allocation plan is to:
Assess the risk to the State and County election systems;
Remediate the vulnerabilities;
Monitor ongoing Operations; and
Respond to incidents.

¹ State Operations Budget Bill (\$7500-A / A9500-A) 2018-19, page 130.

² 2018 Help America Vote Act Elections Security Grants Award Packet, April 17, 2018, page 1.

Assess the Risk

Comprehensive Risk Assessment for the New York State Board of Elections

The New York State Board of Elections has entered into a partnership with the federal Department of Homeland Security to have a free comprehensive Risk and Vulnerability Assessment conducted on the State's elections infrastructure. This one-on-one engagement will combine national level threat and vulnerability information with data collected and discovered through the assessment from which DHS will provide NYSBOE with specific risk analysis reports and strategic remediation recommendations prioritized by risk.

Comprehensive Risk Assessment for all County Board of Elections

NYSBOE will contract for professional services to conduct a comprehensive, uniform and verified risk assessment at every County Board of Elections (CBOE). NYSBOE has already conducted a 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 is critical in ascertaining a security baseline for our statewide elections infrastructure.

Remediate Vulnerabilities

NYSBOE Remediation

NYSBOE has identified several areas of remediation to implement concurrently with the risk assessment.

County Board Remediation

CBOE Risk Assessment findings will identify any potential vulnerabilities in the New York State's elections system and infrastructure. Vulnerabilities will need immediate remediation to ensure the security of our systems and a secure architecture of CBOEs. The Secure Elections Center would receive, analyze and evaluate, and set priorities to address identified vulnerabilities.

Monitor Operations

<u>Cybersecurity Regulation</u>

As part of monitoring ongoing operations, NYSBOE will develop, implement and evaluate a comprehensive cybersecurity regulation designed to set uniform regulatory standards. To do this, NYSBOE will procure information advisory services to assist in the development of cybersecurity regulations, setting standards for the state and county boards to monitor their ongoing cybersecurity. The regulation will be designed to promote the protection of election systems while not being overly prescriptive so that cybersecurity programs can match relevant risks and keep pace with technological advances. NYSBOE has started this process and has engaged and collaborated with relevant state partners.

Creation of a NYSBOE Secure Elections Center

The NYSBOE Secure Elections Center is tasked with assisting all Counties with the formulation, implementation and evaluation of security measures, regulations and policies relative to elections infrastructure. The Center is responsible for collecting, reviewing, consulting and evaluating all elections security policies and regulations and ensure continuity of election administration and operations. The Secure Elections Center would work closely with the existing executive management of the Board and report directly to the Chief Information Officer. The Secure Elections Center would require the addition of the following: one (1) NYSBOE Elections Chief Information Security Officer (CISO) to oversee the State Board's cybersecurity policy, patching, internal log review, incident management, security software management and to oversee the county liaison program; one (1) IT Specialist 3 to support security of NYSVOTER, the state voter registration list; two (2) Election Security Specialists to provide assistance and coordinate the delivery of services of the Center to the County Boards. one (1) Elections Security Clerk to manage the Secure Elections Center help desk function and assist with routine questions, coordination, monitoring and logging of activity; one (1) Website Secure Access Specialist to manage the Board's website and ensure the accessibility of documents; one (1) Senior Assistant for Elections Continuity to focus on risk assessment and mitigation strategies as part of the evaluation of election systems technology; and two (2) Elections Security Specialists to act as liaisons and coordinate with CBOEs relative to policy implementation, improved audits of election results, risk analysis coordination and connection support.

Network Monitoring at CBOEs

Federal, State and other stakeholders (EAC, CSAB and EI/MS-ISAC) 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 will 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. The State Board plans to provide interim monitoring services to CBOEs through December 2020.

County Cybersecurity Training and Toolkit

The NYSBOE will develop a series of training tools for CBOEs, based on recognized industry standards, in relation to cyber hygiene best practices, access management protocols and recommendations for incident handling. Comprehensive cybersecurity training will be provided to all CBOEs on a continuous basis. This is required to ensure a consistent level of cyber hygiene and combat vulnerabilities raised by staff turnover as well as to stay current with the latest trends and developments in cybersecurity.

Respond to Incidents

NYSBOE will establish the Secure Elections Center to increase the cybersecurity of the State and County Boards of Elections. The Center's focus on training and preparedness will prevent some incidents from occurring. The Center will also develop a comprehensive incident response plan for the State and County Boards to triage, coordinate and respond to cyber incidents. The incident response plan requires:

- personnel to staff and respond to cyber incidents;
- technology to facilitate the intake, coordination and tracking response to cyber incidents;
- the development of a comprehensive cyber incident plan which includes the review and updating of State and County Board of Elections current emergency security and response plans; and
- procedures for incident identification, containment, eradication, recovery and post-response assessment will be fully developed.

NYSBOE will conduct a series of regional tabletop exercises in conjunction with the US Department of Homeland Security, NY State Police, the FBI and County Boards of Elections to discuss hypothetical cyber events that may impact a Board's ability to administer an election. These exercises are used to identify additional mitigation strategies, preparedness needs and enhance collaboration between stakeholders.

			20	18	HAVA ELE	C	TION SEC	URITY GRAN	IT								
Budget Information											CFDA # 90.404 Non-Construction Prog			nstruction Progran			
Name of Organization:	New York St	ate Boa	rd of Elections														
Budget Period Start:	_{3/23/2018} SECTION A -					BUDGET SUMMARY (Consolidated Bu							udget for total project term				
Budget Period End:					FEDERAL & NON-FEDERAL FUNDS (Match) up to 5 year						s as defined by grantee)						
		PROGRAM CATEGORIES															
BUDGET CATEGORIES	(a) Vot Equipm		(b) Election Auditing		(c) Voter Registration Systems	(0	l) Cyber Security	(e) Communications	5	(f) Other		(g) Other		TOTALS	% Fed Total		
PERSONNEL (including fringe)						\$	5,000,000.00						\$	5,000,000.00	269		
2. EQUIPMENT						\$	100,000.00						\$	100,000.00	19		
3. SUBGRANTS- to local voting jurisdictions													\$		09		
4. TRAINING						\$	200,000.00						\$	200,000.00	19		
5. All OTHER COSTS						\$	14,183,647.00						\$	14,183,647.00	739		
6. TOTAL DIRECT COSTS (1-6)	\$	-	\$ -		\$ -	\$	19,483,647.00	\$ -	\$		\$	· ·	\$	19,483,647.00			
7. INDIRECT COSTS (if applied)													\$		09		
8. Total Federal Budget	\$		\$ -		\$ -	\$	19,483,647.00	\$ -	\$		\$		\$	19,483,647.00			
11. Non-Federal Match						\$	974,182.35						\$	974,182.35			
12. Total Program Budget	\$	-	\$ -		\$ -	\$	20,457,829.35	\$ -	\$		\$		\$	20,457,829.35			
13. Percentage By Category		0%		0%	0%	ó	100%	0%	6	0%		09	%				
Proposed State Match A. Do you have an Indirect Cost Rate Agreeme some other non-federal entity? If yes, please provide the following informatio B. Period Covered by the Indirect Cost Rate Agreeme	on:		deral government	or				1									
C. Approving Federal agency:																	
D. If other than Federal agency, please specify:						_											
E. The Indirect Cost Rate is:																	