

The mission of the State Election Commission is to ensure every eligible citizen in South Carolina (SC) has the opportunity to register to vote, to participate in fair and impartial elections, and have the assurance that their vote will count. The greatest challenge for the S.C. State Election Commission (SEC) over the past two years has been ensuring we have taken all reasonable measures to better secure the state's election infrastructure. The U.S. Department of Homeland Security designated election systems as critical infrastructure in January 2017. The SEC has applied considerable resources to hardening both the state's voting and voter registration systems by applying testing, assessments, and technological and human resources. As a result, the state's election infrastructure is more secure today, and the SEC continues to assess its security posture to identify additional security measures in light of emerging threats and new technologies.

As such, we intend to utilize the \$6,040,794 in 2018 HAVA Election Security grant funds to harden our security posture thus fundamentally enhancing the resilience of elections in the South Carolina.

# **PROJECT SUMMARY:**

Prior to receiving federal funds, SC had already began the process of hardening its security posture for the 2018 General Election through the use of State appropriated funds. The agency will use its allocation of HAVA grants funds to supplement the cost of replacing the current paperless statewide voting system and to conduct a series of comprehensive security assessments followed by applicable remediation over the grants term.

#### **PROBLEM STATEMENT:**

The State of South Carolina currently uses a statewide electronic voting system that was implemented in 2004-2005. The system includes more than 12,000 paperless touch screen voting machines, optical ballot scanners for absentee by mail ballots and other peripheral equipment that is at end of life.

Additionally, the state faces threats from various actors against its statewide voter registration system and other cyber assets. The SEC remains actively engaged in identifying and remediating any and all potential vulnerabilities.



### **PROJECT DESCRIPTION:**

- 1. Voting Equipment Replacement and Upgrades
  - Replace the current paperless statewide voting system, using the state's Request for Proposal (RFP) process, with one certified by a testing laboratory accredited by the Federal Election Assistance Commission (EAC) as required in State law.
    i. Timeframe: January-December 2019
- 2. Election Auditing (Section Not Applicable)
- 3. Voting Registration Systems and Management (Section Not Applicable)
- 4. Cyber Vulnerabilities
  - a. Conduct various risk and vulnerability assessments, code reviews, and penetration tests of the statewide Voter Registration and Elections Management System over the grants term along with other periodic contracted scans of agency networks. These scans will be in addition to the DHS Cyber Hygiene Program scans and those conducted by the S.C. Department of Administration.
    - i. Timeframe: June 2018-December 2022
  - b. Remediate vulnerabilities discovered, or address areas of concern discovered, during the vulnerability assessment, code review, and penetration test.
    - i. Timeframe: June 2018-March 2023
  - c. Conduct a risk and vulnerability assessment of the agency's statewide intranet accessed by election officials. Determine the feasibility of reassigning the associated servers to a cloud-based service for enhanced security protections. Reassign servers as deemed feasible.
    - i. Timeframe: June 2018-December 2022
  - d. Conduct a risk and vulnerability assessment along with a penetration test of the State's current e-poll book and remediate any vulnerabilities.
    - i. Timeframe: July 2018-August 2018
  - e. Introduce a supplementary statewide intrusion detection system that enacts network monitoring solutions in each of the forty-six counties with offices that access the statewide voter registration system and the elections management system.
    - i. Timeframe: July 2018-February 2019



- f. Conduct a risk and vulnerability assessment of the election VPN infrastructure and equipment.
  - i. Timeframe: June 2018-September 2018

# 5. Training

- a. Host a voting and election systems workshop for election officials across the State entitled "2018 Election Security and Technology Workshop". Objectives for this 2-day workshop will be to increase participant's cyber security awareness and preparedness, acquire new voting systems knowledge, and to conduct a cyber training exercise to assess participant's readiness.
  - i. Day 1 Participants will view voting systems offered by EAC certified manufactures, receive a presentation on ballot auditing methodologies, and study various balloting strategies.
  - Day 2 County election directors, staff, and board members will participate in a Cyber Tabletop Exercise facilitated by the U.S. Department of Homeland Security (DHS).
  - iii. Timeline: August 2018
- 6. Communication (Section Not Applicable)

# Strategic Objectives for the 2018 General Election

Activity	Budget
Conduct a secure code review, enhanced vulnerability assessments and penetration tests of the statewide voter registration system and agency networks.	\$ 82,000
Complete the remediation of vulnerabilities discovered, or address areas of concern discovered following various system assessments and tests.	\$ 21,000
Purchase and install secure endpoints in each county office.	\$ 32,200
Begin the purchase and installation of a supplementary statewide intrusion detection system that will include network monitoring devices in each county to enhance the security posture of the statewide voter registration system.	\$ 36,000
Host a 2018 Election Security and Technology Workshop that will include a Table Top Exercise (TTX) facilitated by the US Department of Homeland Security. Key election officials in each county along with their county information technology directors will be invited to participate.	\$ 25,000
Total	\$196,200



HAVA Grant Project Time Line

Activity	2018	2019	2020	2021	2022	2023
Begin the process to replace the current paperless statewide voting system, using the state's Request for Proposal (RFP) process, with one certified by a testing laboratory accredited by the Federal Election Assistance Commission (EAC) as required in State law.		х				
Conduct various risk and vulnerability assessments, code reviews, and penetration tests of the statewide Voter Registration and Elections Management System over the grants term along with other periodic contracted scans of agency networks. These scans will be in addition to the DHS Cyber Hygiene Program scans and those conducted by the S.C. Department of Administration.	Х	х	Х	х	Х	
Remediate vulnerabilities discovered, or address areas of concern discovered, during the vulnerability assessment, code review, and penetration test.	х	х	х	х	х	х
Conduct a risk and vulnerability assessment of the agency's statewide intranet accessed by election officials. Determine the feasibility of reassigning the associated servers to a cloud-based service for enhanced security protections. Reassign servers as deemed feasible.	х	х	х	х	х	
Conduct a risk and vulnerability assessment along with a penetration test of the State's current e-poll book and remediate any vulnerabilities.	х					
Introduce a supplementary statewide intrusion detection system that enacts network monitoring solutions in each of the forty-six counties with offices that access the statewide voter registration system and the elections management system.	х					
Conduct a risk and vulnerability assessment of the election VPN infrastructure and equipment.	х					
Host a voting and election systems workshop for election officials across the State entitled "2018 Election Security and Technology Workshop". Objectives for this 2-day workshop will be to increase participant's cyber security awareness and preparedness, acquire new voting systems knowledge, and to conduct a cyber training exercise to assess participant's readiness.	Х					
Submit final request to close out grant						Х

2018 HAVA ELECTION SECURITY GRANT											
Budget Information	Iget Information							CFDA # 90.404 Non-Construction Pr			
Name of Organization:	South Carolina State	Election Commission	ı								
Budget Period Start:	3/23/2018	SECTION A -	- BUDGET SUMMARY (Consolidated Budget for total project term								
Budget Period End:	3/23/2023		FEDERAL & NON-FEDERAL FUNDS (Match) up to 5 years as de				efined by grantee)				
	PROGRAM CATEGORIES										
BUDGET CATEGORIES	(a) Voting Equipment	(b) Election Auditing	(c ) Voter Registration Systems	(d) Cyber Security		(f) Other	(g) Other	TOTALS	% Fed Total		
1. PERSONNEL (including fringe)								\$-	0%		
2. EQUIPMENT	\$ 5,515,794.00							\$ 5,515,794.00	91%		
3. SUBGRANTS- to local voting jurisdictions								\$-	0%		
4. TRAINING				\$ 25,000.00				\$ 25,000.00	0%		
5. All OTHER COSTS				\$ 500,000.00				\$ 500,000.00	8%		
6. TOTAL DIRECT COSTS (1-6)	\$ 5,515,794.00	\$-	\$-	\$ 525,000.00	\$-	\$-	\$-	\$ 6,040,794.00			
7. INDIRECT COSTS (if applied)								\$ -	0%		
8. Total Federal Budget	\$ 5,515,794.00	\$-	\$-	\$ 525,000.00	\$ -	\$-	\$-	\$ 6,040,794.00			
11. Non-Federal Match	\$ 302,040.00							\$ 302,040.00			
12. Total Program Budget	\$ 5,817,834.00	\$-	\$-	\$ 525,000.00	\$ -	\$-	\$ -	\$ 6,342,834.00			
13. Percentage By Category	91%	0%	0%	9%	0%	0%	0%				
Proposed State Match	5.0%			1							
A. Do you have an Indirect Cost Rate Agreement approved by the Federal government or some other non-federal entity? If yes, please provide the following information:		No	]								
B. Period Covered by the Indirect Cost Rate Agreement (mm/dd/yyyy-mm/dd/yyy):					1						
C. Approving Federal agency:					-						
D. If other than Federal agency, please specify:											
E. The Indirect Cost Rate is:				]							