

Information Security Posture Review

Prepared for
Florida Housing Finance Corporation



September 2017



© 2017 SHI International. All rights reserved.
This document contains confidential and proprietary information.

Florida Housing
Finance Corp.
Sept 2017

Table of Contents

1. PROJECT OVERVIEW AND OBJECTIVES	3
2. PROJECT DELIVERY METHODOLOGY.....	4
3. PROJECT MANAGEMENT	4
4. PROJECT ROLES AND RESPONSIBILITIES.....	5
5. PROJECT SCOPE AND DURATION.....	6
6. PROJECT APPROACH.....	7
7. PROJECT DELIVERABLES	8
8. PROJECT ASSUMPTIONS AND EXCEPTIONS.....	Error!
Bookmark not defined.	
9. PROJECT COST AND ACCEPTANCE	10



1. PROJECT OVERVIEW AND OBJECTIVES

Florida Housing Finance Corporation (“Florida Housing” or “Customer”) has identified the need to improve organizational cyber resilience and preparedness by assessing its information security posture and prioritizing current risks and impacts involved when critical business functions and processes are disrupted. To do so, Florida Housing must attain an independent and impartial security assessment of vulnerabilities that includes recommendations for improvement of its existing Information Security Program.

SHI International (“SHI”) is pleased to offer this statement of work (SOW) to deliver Internal Information Security Posture Review services to meet Florida Housing’s objectives. The approach described below outlines the best available methods for performing a detailed, comprehensive, and cost-effective assessment.

The Information Security Posture Review provides organizations with an independent analysis of how well their internal information security program benchmarks are meeting the CIS Critical Security Controls (formerly the SANS Top 20) standards by examining processes, systems, infrastructure and access controls; analyzing the risks and exposures that threaten them; and creating prioritized list of findings and recommended remediation and mitigation actions.

Florida Housing’s goals for performing the assessment include:

- Evaluating current and potential risks to core assets based on the security control objectives of data confidentiality/integrity/availability and then focusing on the control area of most concern;
- Identifying both the strengths of the information security program as well as gaps by comparing it to industry leading standards and best practices, such as the aforementioned CIS CSC;
- Discovering non-existent and/or weak information security management processes within the organization;
- Characterizing vulnerabilities to the information security program from both external and internal threats;
- Providing a “snapshot” of the current state of information security and establishing a customized information security management model for use within the organization;
- Identifying opportunities for network consolidation, simplification and cost reduction;
- Proposing solutions and mitigations to risk, vulnerabilities, and/or threats, including short- and long-term options for remediation of the identified vulnerabilities; and
- Prioritized list of recommended projects to correct gaps submitted as a roadmap to Florida Housing Finance Corporation.



2. PROJECT DELIVERY METHODOLOGY

SHI International's Information Security Posture Review provides a thorough and effective process to determine weaknesses and strengths of an information security program. Underlying this service engagement is SHI International's project and quality management process, which is based upon Project Management Institute (PMI®) principles. This helps ensure that the project is performed effectively to fulfill the customer's expectations.



3. PROJECT MANAGEMENT

A resource will be provided by SHI to work with Florida Housing to manage the entire project throughout its life cycle. This resource will be the central point of contact for support of any kind at any time during the project. SHI project management covers items such as, but not limited to:

- Conducting a kick off meeting to ensure all project deliverables are outlined and sets proper project expectations;
- Ensuring project timelines, dependencies, budgets and closure are met within the project lifecycle;
- Holds regular status meetings with SHI's consulting team to identify proactively any issues that may arise in order to mitigate risk;
- Conducting regular status meetings – as required – with the client to review project status, open action items, and upcoming tasks;
- Serve as SHI's mediation contact for any project conflicts/issues identified by the customer;
- Issues regular status reports – as required – to the management of all companies involved in the project; and
- Facilitates any necessary change orders and administrative tasks as necessary.



4. PROJECT ROLES AND RESPONSIBILITIES

SHI and Florida Housing will provide individual resources outlined below to be participants for this project effort. These resources will participate in all required steps and will be fully or partially responsible for tasks and deliverables where appropriate:

Role	Responsibilities
SHI Project Manager	Oversees all day-to-day delivery and ensures successful project completion.
SHI Consultant(s)	Provides technical expertise and conducts data gathering, analysis and deliverable creation.
Customer Contact	Serves as the central point-of-contact for SHI communications.
Technical Contact	Provide technical information and responses for the customer environment.

Both Florida Housing and SHI are responsible for the successful execution of this project. Florida Housing agrees to the following assigned responsibilities:

- Prior to the start of this SOW, Florida Housing will identify to SHI a person to be the point of contact for central communications. All project communications will be addressed to this point of contact (“Customer Contact”).
- The Customer Contact will have the authority to act for Florida Housing in all aspects of the project, however, any changes that affect the scope of this SOW, schedule or price will require that an amendment to the SOW be executed between the parties.
- The Customer Contact shall have the authority to resolve conflicting requirements.
- The Customer Contact will ensure that any communication between Florida Housing and SHI is made through the SHI project manager.
- The Customer Contact will obtain and provide project requirements, information, data, decisions and approvals within one working day of the request, unless both parties agree to a different response time.
- The Customer Contact will ensure that SHI project personnel have reasonable and safe access to the project site and adequate office space, if required.
- The Customer Contact will help resolve project issues and ensure that issues are brought to the attention of the appropriate persons within the Florida Housing organization, if required.
- The Customer Contact will provide technical liaisons, who have a working knowledge of the enterprise components to be considered during this project (“technical contacts”). SHI may request that meetings be scheduled with technical contacts.
- Florida Housing will inform SHI of all access issues and security measures, and provide access to all necessary hardware and facilities as required.
- Florida Housing is responsible for providing all telecommunications equipment, and access to related infrastructure as required for the successful completion of this project.



- Florida Housing agrees that all related information regarding this project will be communicated to SHI as expeditiously as possible.
- Florida Housing will provide a staff resource to escort SHI within secured areas during the assessment.
- Florida Housing will be responsible for ensuring the security for all equipment to be used during the onsite phase of the project. The equipment has a replacement cost of \$10,000.

5. PROJECT SCOPE AND DURATION

For the purposes of this project, the following items are considered within scope, and the services will be contained within said boundaries:

- Up to 1 security architecture and process review whiteboard session (maximum)
- Up to 2 interviews (maximum)
- Up to 1 policies reviewed (maximum)
- Up to 1 standard endpoints reviewed with hands-on configuration analysis
- Up to 1 total servers spot checked for alignment with current policies and the CSC's (maximum)
- Up to 36 Hours or 100k perimeter security events (maximum)
- Up to 1 firewalls reviewed (maximum)
- Up to 1 intrusion detection appliances reviewed (maximum)
- Up to 1 routers reviewed (maximum)
- Up to 1 switches reviewed (maximum)
- Up to 128 external IP addresses reviewed (maximum) (ESVA)
- Up to 256 internal IP addresses reviewed (maximum) (ISVA)
- 1 Data Center Location (maximum) included in the service at the location defined for vulnerability scanning.

SHI estimates the duration of this project to be not more than six days of non-contiguous effort to include both on-site/off-site activities, analysis/report writing, and delivery of findings. Travel is inclusive of one resource for one round-trip for up to two days of on-site delivery.



6. PROJECT APPROACH

In delivering the Information Security Posture Review, SHI International takes into consideration Florida Housing's specific business environment and organizational requirements. Our approach is designed to reduce resource impact on Florida Housing as well as provide interaction opportunities for IT and security employees while SHI is on-site.

For the scope of this service, SHI consultants will conduct security activities both externally as an off-site effort as well as internally while visiting up to one central location for the customer. For most engagements, the off-site activities are completed prior to the site visit to ensure that initial findings can be included in discussion with the site IT team members.

Off-Site Activities

In addition to gathering initial environmental information, SHI will perform an external review of the Internet-facing perimeter to include firewalls, web services, and applications. This review consists of public information discovery, automated vulnerability scanning, and manual inspection. The automated vulnerability scanning will use a red team methodology that does not require credentials unless the customer would like to provide these for application testing. The external review focuses on accurately determining the current security state of endpoints/applications for unauthorized users.

Post assessment and report delivery there will then be discussions and collaboration sessions to create policies for the Florida Housing' Information Security Program.

On-Site Activities

For the on-site component of this project, SHI will perform an internal review of the IT environment as well as gather information for understanding the critical information flow, policies, and processes. On-site tasks consist of, but are not limited to:

1. Perimeter data collection gathered behind the firewall at a mirror or SPAN port. SHI installs a virtual system designed to analyze – not interact with – traffic that is leaving and entering the customer environment. Highlights of this data collection include detecting high risk applications, attack signatures, known botnet and malware traffic, sensitive information transmission, and the types of applications being used by employees.
2. Network and security device configuration review to assess adherence to best practices. Typical configurations reviewed include firewalls, switches, routers, IDS/IPS, and wireless infrastructure. Additionally, SHI will review remote access security methodology and platforms.



3. Automated internal vulnerability scanning utilizing a white team methodology requiring local host or domain administrative credentials. This scanning focuses on accurately determining the current security state of endpoints/applications including patch and operating system levels.
4. A site walkthrough to identify possible physical security and wireless configuration concerns including weak security protocols or misconfigurations.
5. Standard endpoint inspection to understand how a standard user can interact with the internal environment and security controls.
6. Whiteboard discussion involving the interaction of external and internal IT assets and resources along with the supporting security controls. Additionally, SHI will discuss user management, change management, data management, and information awareness. Focus of discussion activities will be CIS CSC framework.

7. PROJECT DELIVERABLES

Following the off-site and on-site phases of this project, SHI will collate the gathered information and create a report consisting of the following components:

Executive Summary

- Summary of the state of the current IT security program
- Identification of risks
- Prioritized high-level recommendations

Technical Narrative

- External testing progression
- Internal testing progression
- IT security architecture summary
- Detailed findings and recommendations
- CIS CSC gap analysis

Supporting Artifacts

- Automated vulnerability/web application scan reports with remediation recommendations (external/internal)
- Screen captures
- Security appliance report annotating events such as:
 - Network attacks
 - High-risk applications
 - Botnet and malware
 - Sensitive data (PII/PCI/PHI/IP)

This report will be provided to Florida Housing for review in its draft form. Upon review by Florida Housing, SHI will conduct a WebEx to walk the customer through the findings,



clarify any areas which require additional information, and annotate any remediations/assumptions. This meeting will result in a finalized version of the report for dissemination to Florida Housing.

8. PROJECT ASSUMPTIONS AND EXCEPTIONS

The following assumptions and exceptions have been defined for this project:

- Interview sessions are designed to validate Florida Housing' current information security management and network design model; sessions may include, but are not limited to, representatives from the following areas: endpoint management and protection, security lifecycle and processes, network security infrastructure, access control, and data and information protection.
- Target hosts/devices are scanned for vulnerabilities and validated with automated and manual techniques. All hosts must be owned by Florida Housing or permission must be obtained by Florida Housing from the hosting provider.
- The Florida Housing Executive Sponsor will be assigned to serve as the point of coordination to engage Florida Housing' executive core team members at key points during the project, to make decisions relative to the project, and to assign resources or negotiate the assignment of resources within the organization.
- Florida Housing has identified a Project Coordinator to provide operational assistance to SHI International's consulting team, identify project participants, and to arrange meetings and associated logistics, etc.
- Florida Housing will provide workspace for the project team with the ability to access SHI International systems through a virtual private network (VPN) over the Internet.
- Should an alternate representative (designee) be assigned to participate in any workshop, presentation, or session, all answers and decisions of the alternate will be deemed accurate and may be used in the analysis and assessment without further qualification or review.
- Florida Housing has secured all necessary rights and permission in the networks, systems and facilities to permit SHI International to perform the service.
- The actual project plan will be based on a delivery schedule, including workshop dates, review activities, and presentation dates that will be mutually agreed and confirmed at the start of the project. Once confirmed, subsequent changes in Florida Housing's staff availability or failure to provide a timely response to requests for information, review, and/or resources may have an effect on the project's schedule, scope, and service fee.
- SHI International requires one-week advance notice on the cancellation of any onsite visits. If Florida Housing initiates a delay, additional fees may apply.



9. PROJECT COST AND ACCEPTANCE

SHI International is pleased to provide security services to Florida Housing as described in the prior sections for a fixed price of \$15,549.

BILLING TERMS

SHI will invoice Services for this engagement upon completion. All invoices are due and payable within 10 calendar days of the invoice date. Travel and living expenses are included in the cost.

TERMS AND CONDITIONS

This Statement of Work (SOW) is subject to and governed by the terms of the SHI services agreement between Customer and SHI, or, if Customer and SHI have not executed a services agreement, the terms of the "SHI Master Service Agreement Terms", located at SHI.com/serviceagreement, incorporated herein by reference (in either case, the "Terms and Conditions"). A copy of the Terms and Conditions is available upon your request. This agreement shall be considered an "SOW" for purposes of the Terms and Conditions.

CHANGE MANAGEMENT

In the event that there is a need to expand or change the scope or scheduling of this engagement, a formal change order will be executed and additional fees may apply.

By the signatures of their duly authorized representatives below, SHI International and Florida Housing, intending to be legally bound, agree to all of the provisions of this Statement of Work.

SHI International

Florida Housing Finance Corporation

BY: _____

BY: 

Print Name: _____

Print Name: Hugh R. Brown

Print Title: _____

Print Title: General Counsel

Date Signed: _____

Date Signed: 10-25-17

