

# **Security Architecture and Privacy Program Support**

**Business Case**

April 24, 2001

**IT Investment Management Process**



# Why do we want security & privacy?

- Prevent data theft from SFA (*integrity*);
- Prevent unauthorized viewing or alteration of other people's data (*confidentiality*);
- Prevent service disruption (*availability*); and
- Provide for clean security audits\* (*auditability*).



\* Our latest security audit was legislatively mandated by the Government Information Security Reform Act of 2001 (GISRA). This is a multi-year audit.

# This is what we (SFA) get for the \$\$\$...

- Design a Single Sign-On solution for the Schools Portal for SFA selected back-end systems.
- Checklists, policy, and training that enhance the Confidentiality, Integrity and Availability of SFA Systems.
- Expertise to respond promptly and effectively to Congress, GAO, OIG, and ED CIO on information security compliance which is legally mandated. (GISRA)
- Service Level Agreements for contractors who manage data under the care and control of SFA.
- Content updates for our Intranet web site for security policy including best-practice guidance.



## Proposed Solution

Alternatives to the Proposed Tasks in this Business Case – Ignoring this work is not considered an option as many of the tasks are mandated by law.

Recommendation	Implications	Cost Impacts
<p><b>Outsource a Portion of the Security Functions and Solution Development</b></p> 	<p><b>Needs:</b> This is the solution of choice, supported by the Security and Privacy Champion and the Modernization Partner in the Business Case.</p> <p><b>Benefits:</b> This approach jumpstarts the security program with immediate source matter experts, gathers Single Sign-on requirements and rapidly creates an SSO design for the Schools Portal, transfers knowledge to our staff and provides a consistent level of support.</p> <p><b>Constraints:</b> It is not a long-term solution to a continuous need for a life cycle of security management task support.</p>	<p><b>High - Contractor costs are higher than on-board personnel but we do not risk losing the people, which would leave us in the current position.</b></p>

Alternatives	Implications	Cost Impacts
<p><b>Re-Allocate Existing SFA Personnel</b></p> <p>Existing Security Officers could be brought back under centralized management structure.</p>	<p><b>Needs:</b> The personnel need specialized knowledge of how to perform the tasks of the Security and Privacy program.</p> <p><b>Benefits:</b> It potentially is a lower cost solution to hiring full-time contractor support, and may be less expensive than hiring new personnel.</p> <p><b>Constraints:</b> Assumes that there are skilled personnel waiting to be moved to these positions, and that their former positions can be eliminated.</p>	<p><b>Medium - Re-allocating personnel is lower cost than new hires, but some current program functions could suffer.</b></p>

<p><b>Add 4 New Full time SFA Employees</b></p> <p>In order to respond to outside requests on a timely fashion, a full time staff must be in place to support the life cycle of security management tasks.</p>	<p><b>Needs:</b> The personnel need specialized knowledge of how to perform the tasks of the Security and Privacy program.</p> <p><b>Benefits:</b> It potentially is a lower cost solution to hiring full-time contractor support.</p> <p><b>Constraints:</b> Assumes a budget increase to cover the personnel, and that the skilled personnel are available in the current job market. Assumes a lifting of the hiring freeze.</p>	<p><b>High - Costs for added FTEs, would range from 600K to 800K.annually for salary and training.</b></p>
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## Planned Costs

Costs		
Single Sign-On for Schools Portal	FY 01	FY 02 Estimate
Requirements Definition	\$85,000	
Technical Specifications Analysis	\$35,000	
User Enrollment and Management Design	\$15,000	
Alternatives & Costs with SSO Design	\$115,000	
SubTotal	\$250,000	
<b>Security and Privacy Program</b>		
Web Site Content Design and Policy Development	\$88,000	\$75,000
Staff Support for Analysis and Response	\$242,000	\$250,000
Security Risk Assessment Checklist Design	\$42,000	
SDLC Checklist Design	\$28,000	
GISRA Analysis and Repository	\$62,000	\$75,000
SubTotal	\$462,000	\$400,000
<b>Security Response</b>		
Incident Response Plans and Exercise	\$68,000	
Service Level Agreements for Security Tool Support	\$98,000	
Tool Logging and Intrusion Detection Best Practices	\$122,000	
SubTotal	\$288,000	
FY 01 Total	\$1,000,000	

This work will develop Requirements for Single Sign-on and provide a design plan for implementation, with costs.

This Business Case is not requesting the FY 02 funding, but the need continues and will come back to the IRB.

This is a new effort, but one which is required by NIST guidance and measured by GAO and the IG.



## Delivery Schedule

Our schedule assumes the project would start May 2001 and conclude by October 2001.

