## GRADUATE PROJECT PROPOSAL

### • <u>Project Description and Expected Outcome</u>:

Globalization and technological advancements of the internet present significant challenges in Social Security Administration's efforts to protect individual's personal records and data in order to protect its program integrity and safeguard people from risks (i.e. identity theft) posed by cyber threats(i.e. hacking).

For eighty years, the Social Security Administration (SSA) has been an integral part of American lives — whether through the payment of a benefit, the issuance of a Social Security number, or the provision of some other public good. More precisely, "one in seven Americans receives a Social Security benefit, and more than 90 percent of all workers are in jobs covered by Social Security. From 1940, when slightly more than 222,000 people received monthly Social Security benefits, until today, when over 50 million people receive such benefits, Social Security has grown steadily" (SSA, Historical Background and Development of Social Security). As one can see, SSA holds an enormous amount of the public's personal data, including social security numbers, earnings records, etc. Thus, safeguarding and protecting the confidentiality and integrity of the customers' information is agency's top priority. While this is the agency's top priority, it has been a challenge to do so with globalization and technological advancements.

When the Clinton Administration in 1993 initiated great advances in technology, enhancements in information sharing initiatives, and emergence of a strong Internet presence throughout Government, it posed various risk and vulnerabilities for the agency. As the internet and technology continues to advance, threat agents have more accessibility and opportunities to gain inappropriate access to personal information and steal people's identity. Thus, the need for improvement to enhance the protection of personal records in order to maintain program's integrity is essential.

This research project will be guided by the following questions:

- 1. How is the internet and technological advancements specifically affecting SSA program integrity?
- 2. Is SSA currently implementing security measures that protect the program integrity (i.e. public data? Why or why not?
- 3. How exactly is SSA going to improve and strengthen the program integrity? Precisely, what methods of protection (i.e. data encryption and authentication) is the agency going to use?

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In order to accomplish my outcome and objective, I intend to conduct research using publicly available SSA resources on the internet, policies, and procedures. I will review past and present strategic plans for the agency. In addition, I will review data from relevant Congressional Research Service reports and reports from the Office of Inspector General. I will be looking at current frameworks for cybersecurity, presidential executive orders, and other legal documents pertinent to cyberspace and information system and see how they can be implemented in SSA's strategies to protect the integrity of their programs.

After finishing the research project, I expect to have recommendations for how SSA can improve and strengthen the protection (i.e. encryption of data, strong authentication technologies and appropriate access to information and services) of its program's integrity [i.e. the public's data (i.e. social security numbers, earnings records, etc.) and securing online services (i.e. myssa.gov)].

#### • <u>Reading List</u>:

- Government Accountability Office. (2006, April). Personal Information- Agency and Reseller Adherence to Key Privacy Principles.. (GAO Publication No. 06-421). Washington, D.C.: U.S. Government Printing Office. Retrieved from <u>http://www.gao.gov/new.items/d06421.pdf</u>
- Office of the Inspector General (OIG). (2006, September 18). Office of Audit Annual Work Plan. Retrieved from <u>http://oig.ssa.gov/sites/default/files/audit/full/pdf/workplan2007\_1.pdf</u>
- Office of the Inspector General (OIG). (2013, June 19). Social Security Payments Go Paperless: Protecting Seniors From Fraud And Confusion. Retrieved from http://oig.ssa.gov/newsroom/congressional-testimony/june19
- Offices of Inspector General (OIG). (2004, September 22). *Theft of Electronic Data*. Retrieved from <u>http://oig.ssa.gov/newsroom/congressional-testimony/theft-electronic-data</u>
- Social Security Administration (SSA). Annual Performance Report 2014-2016. Retrieved from <u>http://www.ssa.gov/agency/performance/2016/FINAL 2014 2016 APR 508 compliant.</u> <u>pdf</u>
- Social Security Administration (SSA). Data Exchange. Retrieved from <u>http://www.socialsecurity.gov/dataexchange/index.html</u>
- Social Security Administration (SSA). Historical Background and Development of Social Security. Retrieved from <u>http://www.ssa.gov/history/briefhistory3.html</u>
- Social Security Administration (SSA). History of 1993-2000. Retrieved from http://www.ssa.gov/history/ssa/ssa2000chapter6.html

- Social Security Administration (SSA). SSA Agency Strategic Plan-Fiscal year 2014-2018. Retrieved from <u>http://www.socialsecurity.gov/asp/plan-2014-2018.pdf</u>
- The Federal Agency Data Protection Act, H.R. 4791, 110-26 (2008). Retrieved from https://www.socialsecurity.gov/legislation/legis bulletin 060308b.html
- U.S. Department of Homeland Security. (2008, Dec.). *National Incident Management System*. Retrieved from <u>http://www.fema.gov/pdf/emergency/nims/NIMS\_core.pdf</u>
- U.S. Department of Homeland Security. (2013). *NIPP: Partnering for Critical Infrastructure* Security and Resilience. Retrieved from <u>http://www.dhs.gov/sites/default/files/publications/NIPP%202013\_Partnering%20for%</u> 20Critical%20Infrastructure%20Security%20and%20Resilience\_508\_0.pdf
- U.S Department of Homeland Security. (2013, May). *National Response Framework*. Retrieved from <u>http://www.fema.gov/media-library-data/20130726-1914-25045-1246/final national response framework 20130501.pdf</u>
- <u>Timeline and Tasks</u>: *Effective end of August (beg. of Fall 2015 semester)*

# COLLECT DATA AND CONDUCT RESEARCH ANSWERING THE FOLLOWING QUESTIONS:

- How is the internet and technological advancements specifically affecting SSA program integrity? Identify if there is an empirical effect on integrity. If so, research the scope of this effect (i.e. (is it going to get worse, better, stay the same, change in nature, etc.). Research and identify the causal logic that is producing the effect on integrity. In short, how is the advancement in internet weakening program integrity? Draft DUE Midnight September 20<sup>th</sup> / Incorporate feedback by Midnight September 27<sup>th</sup>
- 2. What is the SSA doing to tackle the issue researched in task #1? Is SSA currently implementing security measures that protect the program integrity (i.e. public data? Why or why not? What outcomes are they expecting? Draft DUE Midnight October 18<sup>th</sup> / Incorporate feedback by Midnight October 25<sup>th</sup>
- 3. Analyze the information derived from (answers to) questions one and two. To what degree are the SSA's policies and actions likely to address challenges facing the program integrity from the advancements in internet and technology? Why is this the case? Draft DUE Midnight November 8<sup>th</sup> / Incorporate feedback by Midnight November 15<sup>th</sup>
- 4. Synthesize recommendations based on a sound logic, the evidence from the first three tasks, and any other sources I will find. Recommendation should cover the basis of how exactly is SSA going to improve and strengthen the program integrity? Precisely, what methods of protection (i.e. data encryption and authentication) can the agency use? Draft DUE Midnight November 29<sup>th</sup> / Incorporate feedback by Midnight December 6<sup>th</sup>

5. Write all of the findings in a coherent, logical form. FINAL DUE December 16

#### • Final Product:

- Executive Summary
- Table of Contents
- $\circ$  Introduction
- Project Description and Scope
- Explanation/Analysis (research findings)
- Recommendation
- References

**NOTE:** Deadlines, reading list, and subheadings for the "final product" are subject to change as I embark and dwell more in-depth into the project. I will notify faculty advisor with the changes as the semester progresses.