Submission for Hearing on the State of Social Security's Information Technology

Mr. Chairman, Ranking Member Becerra, and other members of the committee, I very much appreciate this opportunity to submit my views on Information Technology at the Social Security Administration.

My name is James Strassberger; I recently retired after almost 42 years at SSA. I spent the last 17 years working on the "PEBES" system (named for the original Personal Earnings and Benefit Estimate Statement) which provides the data for *Social Security Statements,* for the highly regarded online Retirement Estimator, the new Online *Social Security Statement*, and the "PEBES Query" used by SSA employees in dealing with *Statement* and claims inquiries. I have previously appeared as a witness before this committee in 1987 and 1989 as a representative of the American Federation of Government Employees.

I will discuss concerns about appropriate technology at SSA, such as the question of legacy COBOL systems, appropriate public service decisions related to information technology, and appropriate processes for assessing, evaluating and managing information technology at SSA.

The COBOL and "Big Data" Issues

At the May 9, 2012, hearing, Mr. Freed, of ForeSee Results, presented scores for SSA internet services which showed many were rated as highly as or more so than prominent corporate services. The Retirement Estimator's score was 91 on a scale on which above 80 is excellent. The core functionality for the Retirement Estimator is provided by systems written in COBOL, and in use since 1996 and earlier, including the program built for the 1996 Online PEBES, and used continuously since.

COBOL lacks features of modern languages, but our COBOL programs work. Please consider this: At the height of the Haitian cholera epidemic, a team from an American medical assistance NGO parachuted into the mountains. They jumped from a C-47 from which U. S. troops had jumped over Normandy. Within a limited budget, replacing working technology is not always the wisest investment priority, although often, someone would stand to profit from such a move. The SSA budget creates a zero-sum game. Which field offices should be closed to fund an arbitrary, accelerated replacement of COBOL?

Dr. Scherlis of the Carnegie-Mellon Software Engineering Institute argued for SSA's moving to "Big Data" and a "cloud" of servers. "Big Data" is most useful for searching for patterns and associations to determine such things as the optimal disposition of police patrol cars, and the dynamics of the Chesapeake Bay as derived from millions of measurements of chemical and biological factors. It is also used by Google and Facebook for the processing of personal data which, if done by government, would be illegal without probable cause in a criminal investigation. A specific case for using this technology for maintaining earnings records, adjudicating claims and computing benefits has not been presented.

Public Service Policy Choices within Information Technology

Within the context of IT, whatever the machinery and language, there are more important public service choices. A review of a few of these would be appropriate.

First, the recently implemented Online *Social Security Statement* offers the user significantly less useful functionality than what was built in 1996 and is still readily available. The new system provides an online version of an "SSA Initiated" *Statement*. This uses recent earnings for this year's and future earnings without user input of these facts which are very relevant to benefits. The 1996 system provided an "On Request" version, for which the user can enter Last Year's, This Year's and average Future Years' earnings, and the age the user plans to stop work. For all the discussion of how SSA must move up to offering the public sophisticated services such as they are used to from corporate information systems, why was the public not given a service more responsive to their needs? Consider a person who lost a job near the end of the year before last, was out of work last year and now has a job paying less. The system in place will project the year before last's wages forward until the year before each of the retirement benefit estimates and seriously over-estimate benefits. The over-estimate will be greater the younger the worker is. In addition, the ability to enter a specific age to stop work, perhaps below age 62 for someone laid off, or any personal choice from 63 to 69, is more responsive to individual needs but not available in the current version. Adding the Month of Election for retirement benefits as a separate entry would be a reasonable future enhancement. A user of the new service is not referred to SSA's other, more customizable, estimators.

This is not the only time that information on Statements was compromised by bureaucratic considerations. The Social Security Protection Act (Pub. L. 108-203, at title IV, Secs. 419(a)-(c)) required SSA to provide, "an explanation, in language calculated to be understood by the average eligible individual, of the operation of the [Windfall Elimination Provision (WEP) and the Government Pension Offset]." What was implemented as a bureaucratic choice regarding WEP was a simple selection between two paragraphs, one for those having at least one non-covered wage report, with no consideration, and the other for those having none. I thought that given two years to implement the provision meant that we could research the issues and provide appropriate information based on an intelligent evaluation of the individual's earnings pattern and age. At the time, we found 43.6% of workers had some non-covered employment. Only 1.8% of persons who became entitled in 2002 had a WEP-based benefit computation. No one ever got a pension from on-campus jobs for college students, but such jobs are non-covered work. A person who washed dishes in the dining hall thirty years ago gets the same paragraph as a person who has worked in several school systems, some covered and some not, and for whom intelligent information about WEP would be most useful. The Social Security Advisory Board has also criticized the implementation of this provision.

A proper review of information technology at SSA would be incomplete without discussion of the episode in which the Actuary's originally published computation of the Average Wage Index for 2009 was in error because someone used the online W-2 process to file more than 30 fraudulent W-2's, each claiming wages of almost <u>one billion</u> dollars. Did over-enthusiasm for the internet and for reduction of "red-tape" for small business almost lead to an exaggeration of benefit payments? The subcommittee should learn the disposition of this case and how the miscreant(s) knew it could be done and their motive.

<u>A Process for Effectively Dealing with the Issues</u>

As I cleared out my cubicle before retirement I had to deal with my collection of GAO, OIG and other reports and critiques on SSA systems, going back to the 1970's. The discussions are highly repetitive.

At the May 9th hearing there was considerable emphasis on the COBOL issue. There has been no opportunity for comprehensive consideration of this, unless it is in the now missing technology panel work product. It would perhaps be useful if a proper debate could be had between academic cloud advocates and defenders of SSA's use of the IBM WebSphere environment, which supports integrated COBOL and Java, mainframe and server-based systems and a means for transition. In the 1980's, the congressional Office of Technology Assessment commissioned an independent review of pretty much the same questions as are under discussion now, as they existed then. It included a day-long workshop which allowed for discussion much more revealing than the fault-finding and charge and counter charge process of GAO reports. Having followed these debates for more than 30 years I know that often such reports simply fail to appreciate all the technical and operational issues, and I recall none which took proper notice of the budgetary concerns. Pontifical assertions that, "SSA should …" are proclaimed as if money was not an issue. This is not constructive, as attested to by the fact that it has been going on for decades to little avail.

The recent OIG report specifically on the COBOL includes extensive information on the continued use of COBOL in major corporate financial systems, yet despite this, calls for additional efforts on SSA's part, as if the use of COBOL might allow the filing of fraudulent documents or something.

At the May 9th hearing, Congressman Berg, speaking from his experience with IT in business, made a good point that SSA is different from the private sector where IT development and modernization is done for market share and profitability. He also said that SSA's large internal IT workforce is a "blessing" but they need to be engaged with the outside IT world and "refreshed" with effective training and development. I totally agree. I dealt with these issues extensively in my testimony more than 20 years ago, and again, little has changed. It is this workforce which is responsible for the successes recognized at SSA, often succeeding more despite than because of certain bureaucratic processes and mechanisms. A collective, participative assessment of resource accounting and project management practices (often imposed in response to GAO or OIG criticism), and of the use of contractors (costing 38.6% more per work year than civil servants), and of the training program for systems staff should be undertaken. There are easy and inexpensive ways to do this.

Decades of repetitive agonizing over what SSA should do in managing IT is a function of the fact that the prevailing model for public administration is that "management", operating from various stations in a monolithic bureaucratic pyramid of power, will make "correct" choices about rational comprehensive schemes, and if only they would make correct choices of policy, and rigorously enforce them, all would be well. Higher Monitoring Authorities (HMA's – GAO and OIG) will be deployed from time to time to second guess and hector "management" about its choices, and often demand more and more monitoring and controlling activities. What the taxpayers need is problem solving and creative activities.

A case in point is found in the history of the management of *Social Security Statements.* From the mid 1990's until 2004, this was in the hands of the Earnings Statement Project Team, an unusually collegial inter-component group convened from the Office of Communications. It guided Statements through the original Online PEBES and its demise, studies and pilots of alternative designs, the congressionally mandated Contributions and Benefits Statement project, the development of field office PEBES and

PEBES History queries, the accelerated production of Statements (with dual printing contracts), the sudden bankruptcy of a printing contractor, the Y2K certification of the old PEBES system while developing a totally new system to support the vast increase in *Statement* processing when the population expanded to all persons 25 and older in FY2000. The Team ended about the time of the implementation of the WEP provisions. Since then there has been no comprehensive management of *Statements* as an SSA program. The dysfunctional effect of bureaucratic turf issues and competition was obvious in many incidents over the years; here is one example. The suspension of *Statement* mailings to save money required the abrogation of one printing contract and the bidding and award of another. At the October 25, 2011 post-award meeting it became obvious that SSA printing management staff and the contractor were unaware that both internet and paper *Statement* request processes had been terminated with no plan for their resumption. The contractor was thinking that in January, 2012, printing and mailing of On Request *Statements* would resume at about the volume seen before the suspension.

Considering specific technical issues, public service issues and organizational process issues, I believe that this committee is hearing for the umpteenth time about SSA Information Technology management problems because the traditional bureaucratic authority model is inadequate for complex 21st century organizational and technological systems. Organizational growth is not a function of fault finding and compliance. Real progress requires genuine organizational learning, internalizing in its own terms the ideas from the larger world as a matter of learning, not submission to "correct thinking" from a Higher Monitoring Authority.