

CREATING A 21ST CENTURY AUTHENTICATED ELECTRONIC FEDERAL FINANCIAL FRAMEWORK

WHITE PAPER

FINANCIAL SPENDING TRANSPARENCY

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Vision: Establish a 21st century, standards-based, secure electronic financial framework across government that provides accurate, interoperable, fully auditable electronic accounting with openness and transparency.

STATEMENT OF THE PROBLEM

The Federal Budget is one of the most complex and essential instruments needed to run the country. The steps and efforts it takes to prepare, justify, approve, appropriate, distribute and report results of the federal budget is a hugely complex and time-consuming task for both the Legislative and Executive Branches.

Significant gaps exist today in the financial framework that supports this effort across the organizations and the different components. These gaps impede accuracy, accountability, visibility, precision and timeliness, consequently reducing the effectiveness of decision-making by stakeholders at all levels and incurring wasteful and unnecessary expenditures. The Federal Budget begins at the activity / agency level which is rolled-up into the “Presidents Budget” which is annually submitted to Congress as a “starting point” to determine how tax payer monies should be allocated to meet the needs of the nation. Although there is a tremendous amount of good work being done across the Executive branch – including developing electronic budget creating tools and ever improving accounting systems, there is no unifying vision to build a connected model to harmonize these initiatives and thus create an even greater accretive return for tax payer investment.

Background—A Modern “Golden Spike”

Congress enacted the Pacific Railway Act of 1862 (*U.S. Statutes at large, vol. XII, p. 489*) creating the vital transcontinental link that is considered one of the greatest American technological feats of the 19th century. At Promontory Summit in Utah on May 10, 1869 the final link was completed with a ceremonial “golden spike” connecting the eastern and western portions of the rail



system to create a fully connected, single gauge standard rail network which historians credit as the leading economic reason the United States was able to capitalize on the Industrial Revolution. Today our national rail network remains critical to commerce, national security and our continued national success.

The current federal financial framework functions as a series of largely unconnected networks, analogous to the rail networks prior to the Pacific Railway Act, with neither consistent standards nor interoperable electronic “rails”. Creating a more precise, efficient and modern framework

that standardizes and connects the 21st century electronic rails, as was done with the physical rails in 1869, will establish a more accountable and transparent Government, enabling our Executive and Legislative leadership to succeed as world class managers of public resources. Bridging the electronic rails between Congress and the Executive Branch with an electronic “golden spike” can become one of the greatest 21st century Government modernization accomplishments, in keeping with the both the Federal Funding Accountability and Transparency Act of 2006 and the current administration’s commitment to an open and transparent Government¹.

Current Challenges

As in many large enterprises, the Federal financial system evolved as a series of incompatible computer systems developed and built at different times for each entity rather than holistically across the Government. Because individual systems are not interoperable, actual funds executed cannot be easily linked with a corresponding activity or appropriation with the required precision and timeliness. Because the individual components are not electronically connected, this current financial infrastructure makes it difficult to achieve transparency and accountability which results in ineffectiveness that creates significant, unnecessary cost burdens.

Developing a way to better describe outcomes not just outputs is a challenge for any enterprise, but especially for the Federal Government due to its large size, complexity and interdependencies – both within and between agencies and as well with the State and Local Governments. Another challenge is the ability to align the program elements to across the entire life cycle – from budget development/submission to Congress to final appropriations – through the passage and signing into law as well as performing oversight and measuring outcomes. Achieving an information age approach that provides for a more transparent and accountable outcome can be accomplished only when the Legislative and Executive branches have a better set of tools through which information can be contextually processed. This “life cycle” is still tremendously a manual and partially semi-automated process, one that has many disconnected parts.

Today an urgent need exists to improve the many shortcomings in the federal budget process. The Peterson-Pew Commission on Budget Reform notes, amongst other things, there is a need to make the accounting standards more modern and consistent to improve transparency and sustainability. According to the Peterson-Pew Commission, “significant emphasis on budget reform over the next few years is imperative given the current economic conditions, the tremendous amount of borrowing taking place to help stabilize the economy, and the large and growing promises for Social Security, Medicare and Medicaid benefits”.²

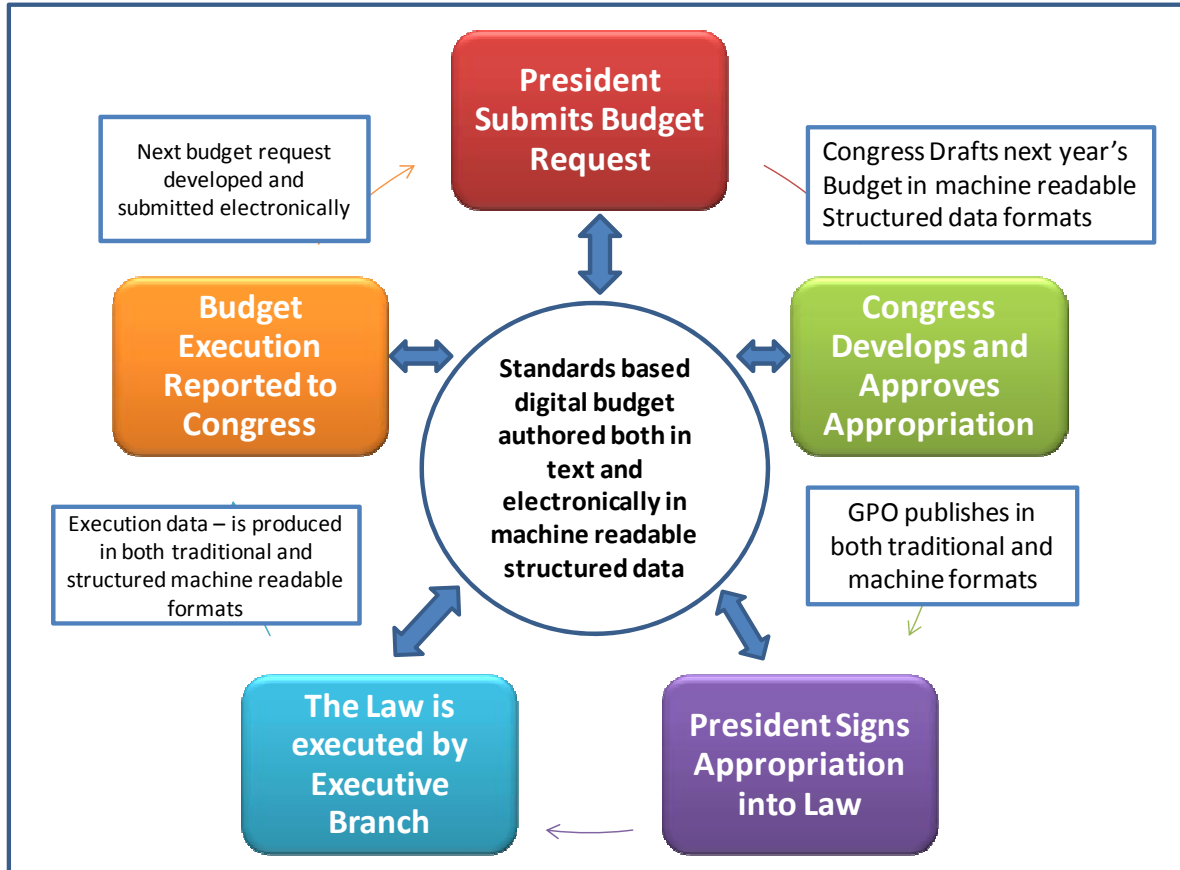
Very often Congress will ask the Executive Branch for reports on specific programs and activities, which are not easily understood by the present state-of-the-market reporting methods. Further Congress and their corresponding accountants and analysts at the Government Accountability Office (GAO) must link this and other data along with spending reports against the relevant section of the bill, Act or Appropriations. Using today’s manual processes, it is

¹ http://www.whitehouse.gov/the_press_office/Transparency_and_Open_Government/

² http://www.pewtrusts.org/news_room_detail.aspx?id=48156

estimated that a minimum of \$25,000 in staff time is required for each mark to determine if the grantee was qualified to receive a mark, to provide oversight, to audit the expenditure, perform follow up, etc. With around 9,000 marks in the 2009 spending bill alone³ (not including the American Recovery and Reinvestment Act of 2009), the time required equates to a minimum of \$225,000,000 of taxpayers’ money.

RECOMMENDATIONS TO MOVE FORWARD



The Administration and Congress share a goal to provide improved accountability and transparency as world class managers of our nation’s finances. We propose the implementation of a state-of-the-art, secure electronic financial framework that provides a better, more cost effective, consistent and interoperable solution. The framework will provide a pathway to reconcile budget, appropriations, and execution data without having to fundamentally change each underlying financial system. It will improve the way Congress and the Executive Branch communicate data with greater precision and visibility by leveraging current technical and financial infrastructures -- resulting in a better, more cost effective, consistent and interoperable solution to this long standing problem.

³ <http://www.heritage.org/research/budget/wm2318.cfm>

Near-Term Solutions: Capacity-Building and Pilots

As this figure demonstrates, the Budget, Appropriations, and Execution process all rely on information about dollars that are requested by the Administration in the President’s Budget, enacted by Congress in Appropriations law, and spent by Agencies through authorized programs that deliver results. Although each entity in this chain tracks the same dollars for the same programs and purposes, there is no common standard to “follow the money” and track results.

The current electronic financial framework is close to being able to support this beginning-to-end ability but lacks a common computerized standard that would allow linking of information between disparate systems and enable enhanced interoperation. Adopting and applying proven, open financial data standards applying best practices machine readable structured data formats to the existing infrastructure will yield the granularity and integrity necessary to meet the following four goals using this new digital framework to provide:

- 1: Greater precision and timeliness in budget development and execution reconciliation,
- 2: Improved understanding of programs to enable better management decision-making,
- 3: Better information to better enable auditable financials, and
- 4: Enhanced transparency and accountability.

Specifically, over the past decade both technical and legislative steps to modernize data communications within the Federal Government have significantly improved the process. Congress now generates most authorizing legislation using industry-standard electronic formats (Extensible Markup Language or “XML”). By making incremental enhancements to this existing framework, the electronic creation and communication of the corresponding Appropriations legislation and expenditure guidance would enable an enhanced and improved electronic financial supply chain, using the very same industry standards and proven tools. Most of the enabling steps and resources are already in place including key laws and statutes (e.g.: The Government Paperwork Elimination Act of 1998, the federal E-Signatures in Global and National Commerce Act of 2000, and the state Uniform Electronic Transactions Act of 1999). In addition, much of the work established by the “Recovery.gov” efforts can be applied to this initiative

We propose to leverage the XML schema used for current legislation by adding “tags” that would be associated with appropriated dollars anywhere they flow in the spending chain. By starting with the production of appropriations bills from the Government Printing Office (GPO), the Administration could then accept those tags – connecting a modern “Golden Spike” with the Congress -- and require that financial and performance data transfer and reports map to those same tags to ensure that they flow with the money. Once this framework is in place, we would envision moving toward full end-to-end reporting along the lines of agreed-upon data standards, starting with the preparation of the President’s budget and ending with performance reporting that is associated with appropriated funds.

This approach carries significant and proven benefits. Governments in Europe and Asia are adopting not only single electronic data standards to improve efficiency and precision, but employing powerful analytic tools and capabilities to be better stewards of public funds. For

example, The Netherlands estimates the country will save 25 percent⁴ of its budget preparation and execution costs in the first year alone of implementing an interoperable data standard solution using machine readable structured data -- such as what Congress presently utilizes for drafting the majority of the “words” for legislation based on Extensible Markup Language (XML). In the United States, projecting similar results would equate to estimated savings of at least \$2 billion per year as well as providing better information “on demand” across all stakeholders – including the American tax payer – while adopting global best practices in electronic financial data standardization.

The Constitutional Imperative

Driving this “Golden Spike” to create a fully electronic financial framework enables this Administration and Congress to deliver on the promise of a more accountable and transparent Government in a constitutionally consistent manner. The Constitution (*Article 1, Section 7*) already provides a consistent framework to implement an electronic enhanced appropriation:

All bills for raising revenue shall originate in the House of Representatives; but the Senate may propose or concur with amendments as on other Bills. Every bill which shall have passed the House of Representatives and the Senate, shall, before it become a law, be presented to the President of the United States; if he approve he shall sign it, but if not he shall return it, with his objections to that House in which it shall have originated, who shall enter the objections at large on their journal, and proceed to reconsider it. If after such reconsideration two thirds of that House shall agree to pass the bill, it shall be sent, together with the objections, to the other House, by which it shall likewise be reconsidered, and if approved by two thirds of that House, it shall become a law.

The Constitution already provides for the basic design requirement both directly and explicitly: **Present the law.** This presentation from Congress to the President can and could be done electronically. The proposed solution is consistent with the current processes and procedures. What is done today with paper and many manual steps, will be achieved far more efficiently and effectively using an aligned electronic approach.

Longer Term Goal: Achieving A Fully Electronic Financial Framework

Establishing a working partnership by and between stakeholders inside and outside the government -- including the Public Interest, Academic, Legislative and Executive Branches -- that forms a community of interest to catalyze and develop the framework to leverages the systems and inherent capabilities currently available in the Federal Government with coupling components to help to develop the electronic “rails”; considers the legislative, management process and technological aspects of the requirements; and fashions an actionable approach which can be quickly and adroitly executed to build a solution.

A standards-based electronic financial framework is the core element toward enabling an open, accountable and transparent Government at both federal and state/local levels; reaching that goal will be prohibitively difficult without the ability to seamlessly transfer financial data automatically (and on request) between authorized entities. Ultimately, this framework can enable:

⁴ http://www.xbrl-ntp.nl/.../Holland_Takes_a_Different_Tack_on_XBRL_article_Compliance.pdf

- More precise and timely understanding of “execution to budget” that affords management better decision-making information.
- Greater precision in budget development, drafting and coordination at all levels throughout the budget-execution lifecycle.
- Improved situational awareness, providing greater insight for more timely and effective strategic and tactical decision-making.
- An improved framework for enabling the ability to create auditable financials throughout the enterprise.
- Better use of automated management and visualization tools for improving transparency and accountability to the American public.
- Electronic audit capability for federal, state and local Government linked expenditures and programs.
- More efficient use of resources and scarce senior management bandwidth; reducing costs and enabling greater staff productivity.
- Improved effectiveness of public resources, which is especially critical for Defense, Healthcare and other large and complex programs.