# TRANSFORMING GOVERNMENT THROUGH INNOVATIVE TOOLS AND TECHNOLOGIES

### **HEARING**

BEFORE THE

FEDERAL FINANCIAL MANAGEMENT, GOVERNMENT INFORMATION, FEDERAL SERVICES, AND INTERNATIONAL SECURITY SUBCOMMITTEE

OF THE

# COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS UNITED STATES SENATE

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(II)

#### CONTENTS

Opening statements:	Page
Senator Carper	1
Prepared statements: Senator Carper	41
Senator McCain	43
	10
WITNESSES	
Tuesday, August 3, 2010	
Daniel I. Werfel, Controller, Office of Federal Financial Management, Office of Management and Budget  The Honorable Earl E. Devaney, Chairman, Recovery Accountability and Transparency Board	3
Alexander Karp, Ph.D., Co-Founder and Chief Executive Officer, Palantir Technologies	27
Robert R. McEwen, Chairman and Chief Executive Officer, U.S. Goldcorp,	
Inc. Riley Crane, Ph.D., Human Dynamics Group, Media Lab, Massachusetts Institute of Technology	29 31
ALPHABETICAL LIST OF WITNESSES	
Crane, Riley, Ph.D.:	
Testimony	31 69
Devaney Hon. Earl E.: Testimony Prepared statement	5 53
Karp, Alexander, Ph.D.:	
Testimony	27 58
McEwen, Robert R.: Testimony Prepared statement	29 61
Werfel, Daniel I.: Testimony Prepared statement	3 45
APPENDIX	
Questions and responses for the Record from: Mr. Devaney	73
· · <i>J</i> ···································	

(III)

# TRANSFORMING GOVERNMENT THROUGH INNOVATIVE TOOLS AND TECHNOLOGY

#### TUESDAY, AUGUST 3, 2010

U.S. SENATE,
SUBCOMMITTEE ON FEDERAL FINANCIAL MANAGEMENT,
GOVERNMENT INFORMATION, FEDERAL SERVICES,
AND INTERNATIONAL SECURITY,
OF THE COMMITTEE ON HOMELAND SECURITY
AND GOVERNMENTAL AFFAIRS,
Washington, DC.

The Subcommittee met, pursuant to notice, at 2:32 p.m., in room SD-342, Dirksen Senate Office Building, Hon. Thomas R. Carper, Chairman of the Subcommittee, presiding.

Present: Senators Carper, Pryor, and McCain.

#### OPENING STATEMENT OF SENATOR CARPER

Senator Carper. The hearing will come to order. Welcome to our first panel, and I look forward to introducing each of you in just a couple of minutes. We are delighted that you are here. And thank you for not just your presence and thanks for your testimony, but thanks very much for your good work over a period of a number of years.

Mr. Devaney, you might have Mr. Werfel by a year or two, but he has done a lot in a relatively few years, and you have done a whole lot more than probably the rest of us combined, so welcome.

Over the last couple of years, everybody knows we have faced a set of economic challenges that are almost unparalleled since going back to the Great Depression. These challenges have disrupted the lives of millions of American workers and their families. They have slowed our Nation's economic growth, and they have brought greater attention to the fiscal stability of our government.

In the face of this uncertainty and fear, the American people demanded a new sense of urgency and an attention to these problems and called on us to act. That is why over a year ago, President Obama proposed and this Congress passed the American Recovery and Reinvestment Act (ARRA) to help put Americans back to work and to install a renewed sense of confidence in our economy. The plan totaled some \$787 billion over a couple of years, much of it in the form of tax cuts for working Americans, which citizens saw in clear dollars and cents right on their weekly paychecks.

The other piece of the Recovery Act (RA) was direct Federal spending for projects to help rebuild our physical and economic infrastructure while at the same time preserving jobs and beginning the process of getting unemployed Americans back to work. And

when the President and this Congress put together this plan, we wanted to make sure that not one dime was wasted.

The Recovery Accountability and Transparency Board (RATB) was created to give Americans a window into how their government was spending their money. The steps the Board and the Administration have taken in this area are, I think, unprecedented. Through Recovery.gov, citizens of this country for the first time could see or can see where projects were happening, how much was being spent on them, and how many jobs were created or saved because of those outlays.

With any pot of money this big, however, there will be scam artists and criminals who want to take advantage and defraud the American people. The Recovery Board (RB) was tasked to go after these individuals proactively and make sure that every penny or at least every dollar was being spent to put Americans back to work and not to line the pockets of crooks. Working with Inspector Generals (IGs) from 29 Federal agencies, the Recovery Board has successfully provided both transparency and accountability for these funds. In fact, they have done such a good job, the President has asked them, maybe even told them, to take their show on the road.

Last month, the Office of Management and Budget (OMB) Director Peter Orszag and Vice President Joe Biden announced that the tools and techniques successfully used at the Recovery Board will be expanded to the Centers for Medicare & Medicaid Services (CMS). I have said before, we need to do a better job of bringing the highest levels of health care to Americans for less money, and it is clear that there is a lot more that we can do to cut fraud and waste from our public health care system.

Medicare and Medicaid have made about \$65 billion in improper payments, I am told, in 2009, and it's safe to assume that at least some of those monies can be attributed to fraud. Now, if we can use the Recovery Board's work as a model for Medicare and Medicaid and quickly, more quickly detect and stop those payments, then we can start to put that money back to work for the American people.

I look forward to hearing from our first two witnesses, Chairman Devaney from the Recovery Board and Mr. Werfel from the Office of Management and Budget, about the Recovery Board's successes and its challenges, as well as the President's plan to expand these efforts to make all of our government work better and more efficiently.

As we look at the averted economic collapse in the rearview mirror, we face our Nation's mind-boggling budget deficits barreling straight toward us. I hope to have a broader discussion with members of our second panel about how they think government can perform better and more efficiently at a time when those of us in government are thinking about how we can do more with less.

These are well-respected visionaries in their fields, and I look forward to hearing their thoughts on how government might be able to solve problems and do more with less by leveraging novel approaches and innovative technologies. If we do not start doing a better job of managing our Federal expenses and begin to close our deficits, we are going to pass on a legacy of crippling debt to our children and to their children. We need to use every tool in our

toolbox that is available to bring our fiscal house back to order and give the American people the government that they deserve

And with that, I have the opportunity, pleasure really, of introducing our first two witnesses. Our first witness today is Mr. Daniel Werfel, the Controller of the Office of Federal Financial Management (OFFM) within the Office of Management and Budget.

I would just say to Chairman Devaney, if we paid Mr. Werfel for every time he has testified before this Subcommittee in the years that I have been in the Senate, we could probably come close to paying off the budget deficit. He has been here a lot, and it is always good to see him. He brings a lot to the table, as I know you do, too.

But as Controller, Mr. Werfel is responsible for coordinating the Office of Management and Budget's efforts to initiate governmentwide improvements and all areas of financial management, including financial reporting, improper payments, and real property management. Those are all issues and areas of concern to this Committee and this Subcommittee. Previously, Mr. Werfel served in multiple capacities within OMB, including Deputy Controller and Chief of the Financial Integrity and Analysis Branch. I think he had quite a successful career in football, college football, that we all remember fondly. For those of you in the audience who know football, I am just pulling your leg. But he is probably a much better witness than the other guy.

Our second witness is Mr. Earl Devaney, Chairman of the Recovery Accountability and Transparency Board. I am sure there is an acronym for that, too, but hopefully we will not learn too much about that. Mr. Devaney is charged with overseeing spending under the \$787 billion recovery program. Previously, Mr. Devaney served as Inspector General of the Department of the Interior and a whole lot of other things. Weren't you in the Secret Service for a number of years?

Mr. Devaney. I was, sir.

Senator CARPER. You have done a lot of things in your life, and

we are grateful literally for your decades of service.

We would invite you to proceed. My clock here in front of me says 5 minutes. If you stay fairly close to that, that would be good. If you go a little bit over, that is all right. But, Mr. Werfel, why don't you proceed? Your entire statement will be made part of the record. Thank you.

#### TESTIMONY OF DANIEL I. WERFEL,1 CONTROLLER, OFFICE OF FEDERAL FINANCIAL MANAGEMENT, OFFICE OF MANAGE-MENT AND BUDGET

Mr. WERFEL. Thank you. Good afternoon, Chairman Carper, Ranking Member McCain, and other distinguished Members of the Subcommittee. Thank you for inviting me to discuss how the government is using technology to prevent and reduce payment errors. It is an honor to be here and, of course, to sit alongside my esteemed colleague Earl Devaney.

As part of its Accountable Government Initiative, the Administration has moved to cut programs that do not work, streamline

<sup>&</sup>lt;sup>1</sup>The prepared statement of Mr. Werfel appears in the Appendix on page 45.

what does work, modernize how government operates to save money and improve performance, and make government more open and responsive to the needs of the American people.

One of the ways we will accomplish these goals is through improving the government's use of technology to enhance citizen services, improve the productivity of government operations, and identify and prevent fraud, waste, and error in government programs.

One of the biggest sources of waste and inefficiency is the nearly \$110 billion in improper payments that were made in fiscal year (FY) 2009 to individuals, organizations, and contractors. These errors are unacceptable, and the Administration is committed to reducing payment errors and eliminating fraud, waste, and abuse through aggressive and comprehensive efforts.

Accordingly, I am pleased that the President has charged his Administration with the aggressive goal to reduce the current government-wide amount of improper payments by \$50 billion and to recapture through payment recapture audits at least \$2 billion in improper payments to vendors—all of this to occur by fiscal year 2012.

Our partnership with Congress is vital to achieving these goals. The recently enacted Improper Payments Elimination and Recovery Act (IPERA) and the Affordable Care Act provide agencies such as the Department of Health and Human Services (HHS) numerous new authorities and tools to prevent, identify, and recover improper payments. Effective execution of these new laws is a top priority for the Administration. Our actions on this front build on an already aggressive set of administrative priorities in place to attack and eliminate payment errors.

I would like to briefly highlight a few such activities, each of

which leverage technology as a primary driver of success. First, on November 20, 2009, the President issued Executive Order (EO) 13520. Under this EO we have identified the highest priority programs that account for the majority of error, established supplemental measures to provide more frequent data to guide our efforts, and selected accountable officials that are responsible for getting results. In addition, we launched PaymentAccuracy.gov, a new dashboard that significantly increases the transparency of our

payment errors and our progress in remediating them.

Second, the President recently issued a memorandum creating a
Do Not Pay List. This list will serve as a single source to link agencies to relevant eligibility databases such as Social Security's Death
Master File and General Services Administration's (GSA's) Excluded Parties List.

Third, in March of this year, the President directed agencies to expand their efforts to recapture improper payments from government contractors using payment recapture audits where specialized auditors use sophisticated technologies to identify errors and are paid a portion of what they recover. The President directed agencies to recover at least \$2 billion in improper payments over the next 3 years, a significant acceleration from the previous several years.

Fourth, we are spreading best practices on the use of data mining tools that are proving effective in preventing error. For example, the Department of Defense (DOD) has prevented more than

\$700 million in improper payments to vendors over the past 2 years through the deployment of their business activity monitoring tool. Also, as you just referenced, we announced in June that we were rolling out the Recovery Board's innovative fraud detection tool for use across government beginning with Medicare and Medicaid.

Last, I would like to highlight the Partnership Fund for Program Integrity Innovation. This is a new program enacted in the fiscal year 2010 Consolidated Appropriations Act. Under this program we are working with State governments and other stakeholders to identify innovative practices and program integrity. We are testing them for broader application and providing a forum to share these innovations across programs and levels of government.

innovations across programs and levels of government.

Looking ahead, there is still important work to be done on both the legislative and administrative front. Of particular note, I am hopeful that Congress will act on the important provisions contained in the President's 2011 budget that would enable critical program integrity improvements in such areas as Medicare, Unemployment Insurance (UI), and Social Security. In total, the President's budget proposals, if enacted, would save more than \$150 billion over 10 years.

Moreover, significant work remains to carry out our new legislative authorities and to meet the aggressive goals for error reduction and recovery the President has set for us. I look forward to keeping you up to date on our progress.

Thank you again for inviting me to testify. I look forward to answering your questions.

Senator CARPER. Thanks, Mr. Werfel. Chairman Devaney, please proceed.

## TESTIMONY OF THE HON. EARL E. DEVANEY,¹ CHAIRMAN, RECOVERY ACCOUNTABILITY AND TRANSPARENCY BOARD

Mr. Devaney. Thank you, Mr. Chairman and Members of this Subcommittee. I want to thank you for the opportunity to appear before you today to discuss the accomplishments of the Recovery Board, with particular emphasis on the use of technology in both the accountability and transparency arenas. And after my opening remarks, I will be glad to answer any questions you have for me.

In the year and a half since the enactment of the Recovery Act, the Recovery Board has faced many challenges. From its inception in February 2009, the Board began striving to meet extreme deadlines in establishing two complex and innovative Internet sites: An inbound reporting site for recipients of contracts, grants, and a loans; and an outbound, public-facing site to make the recipient data transparent.

Now, under normal circumstances, such a project would proceed in sequence. Specific requirements would be determined according to the needs of the client and prospective users. A prototype would be developed and then tested, then readjusted, tested again and so forth until a final product meeting the client approval would be delivered.

<sup>&</sup>lt;sup>1</sup>The prepared statement of Mr. Devaney appears in the Appendix on page 53.

In government, this would normally take about 2 years. However, the time constraints upon the Board permitted no such luxury. Things had to happen simultaneously. We did it in about 6 months. And as one contractor would later say, "Basically we were building the ship as we were leaving the port.

Initially, the Board considered joining together existing legacy computer systems within Federal agencies to collect and house the data from recipients. But that course was ultimately rejected because of data, timing, and linkages issues that probably would have led to failure. So instead of having each Federal agency collect data from its own recipients, the Board and OMB opted to create a single, centralized reporting system called FederalReporting.gov.

As it turned out, the new inbound reporting side would resemble no other existing government system. FederalReporting.gov would also be the first to handle government contracts, grants, and loans all in one system—convenient for data trackers but a potential

nightmare for IT system builders.

For instance, Federal contracts and grants each involve different user communities as well as rules and policies. This entailed different coding, prototypes, testing, and approvals regarding data for

each type of award.

The first big test for the Board came nearly a year ago on August 17, 2009, when FederalReporting.gov was launched, enabling recipients of Recovery Act contracts, grants, and loans to begin registering for data reporting. Overall, registration went quite smoothly, largely because OMB and the Board had educated recipients about the system and its functions. The biggest test, however, was

On October 1, 2009, recipients began filing what turned out to be more than 130,000 separate data reports. As reporting periods have come and gone, recipients have become more comfortable with FederalReporting.gov, leading to fewer recipient filing and data er-

rors in each successive reporting period.

The Board has done its part as well in working to prevent errors. FederalReporting.gov now contains a number of internal logic checks to keep recipients from entering inconsistent data. For example, one logic check notifies recipients who have entered a congressional district that does not match up with the ZIP code they entered.

The Board's outbound reporting website, Recovery.gov, has likewise gone through a number of modifications over the past year and a half. When the Board was first established, we were presented with what I have termed Version 1.0 of Recovery.gov. This website had been created hurriedly out of necessity by GSA and OMB. After employing many technical advancements and obtaining public input through a round of focus groups and usability studies, the Board launched Recovery.gov Version 2.0 on September 28, 2009. And on October 30, 2009, 30 days after the end of the first reporting period began, Recovery.gov displayed an enormous amount of data that had been transferred smoothly from FederalReporting.gov. Both new Web-based reporting systems have continued to run smoothly for all four reporting periods so far.

In looking back on these extraordinary achievements, the Board's IT team members universally say that they learned two valuable lessons from the strategy of developing components of both websites simultaneously instead of serially.

First, developing a typical monolithic, one-size-fits-all technology to solve a problem is not necessary. Quickly and imaginatively integrating existing technologies can work as well, or even better.

Second, deploying individual tools and components as soon as they are ready and integrating others as they become available can work just as well as waiting until all the pieces have been completed.

Now that Americans have become more familiar with Recovery.gov and the transparency that it offers, the Board is beginning to get more questions relating to our accountability mission. Reporters have begun asking, "When can the public expect to see criminal indictments in the recovery program?" My answer is that prosecutions will emerge eventually, but there is much more to safeguarding taxpayers' dollars than bringing high-profile indictments. Indeed, the Board's most critical challenge is preventing fraud and waste before they occur. While transparency is harder to practice than it is to talk about, I have come to believe that transparency is the friend of the enforcer and the enemy of the fraudster.

Early on, the Board decided that we need to build a state-of-theart command center that would allow us to keep a close eye on the flow of recovery money and ensure that all contracts, grants, and loans could be subjected to a comprehensive scrutiny. To accomplish our goal, we built a Recovery Operations Center. The operations center combines traditional law enforcement analysis with sophisticated software tools, government databases, and opensource information to track the money.

It is helpful to visualize fraud occurring on a continuum as opposed to a finite point in time. In doing so, we realize that there are an indeterminate number of points between one end of the continuum—when the would-be lawbreaker first decides to commit the fraud—and the other—when the fraud has been fully completed and the money is out the door. The analytical tools used in our operations center have been designed to intercept fraud closer to the front end of that continuum rather than to detect it only after the monies have been lost. Simply put, the Board's skilled analysts look for early-warning signs of trouble. They use the software to search colossal amounts of data, looking for potential problems such as criminal convictions, lawsuits, tax liens, bankruptcies, risky financial deals, and suspension and debarment proceedings. Once a concern has been identified, the analysts then perform an in-depth analysis of the award and forward their report to the appropriate agency Inspector General for further inquiry.

This past May, we announced Recovery.gov had moved to a cloud computing infrastructure, a technology that allows for more efficient computer operations, improved security, and reduced costs. Recovery.gov became the first government-wide system to move to the cloud.

The Board is now engaging in our second round of focus group and usability testing, visiting cities across America with the ultimate goal of increasing the usability of Recovery.gov and further enabling detailed tracking of Recovery Act monies. Mr. Chairman, I would be remiss if I did not mention what we have determined is the single biggest impediment to the kind of transparency that the Recovery Act envisions. It is the lack of a single consistent governmentwide award numbering system. All 29 recovery agencies—in fact, all government agencies—have unique alphanumerical coding systems for their awards. While this may not sound like a big deal, it is. Disparate, inconsistent coding systems make the task of reviewing and checking award data unnecessarily arduous and ineffective for those with oversight responsibility. This problem needs to be fixed before we can achieve true spending transparency.

Finally, Mr. Chairman, I believe that even after the Board sunsets in 2013, the legacy of the Board will continue. I know I am not alone in touting the future good that this transparency and accountability model can continue to bring. William LeoGrande, dean of the School of Public Affairs at American University, was recently quoted in the Federal Times as saying of Recovery.gov, "I think this will be a model for the future on how the Federal Government can, if it is willing, provide incredible public access to the inner

workings of legislation as it is implemented."

And Vice President Biden, speaking about Recovery.gov, said, "I expect it to be a template from this point on for how Federal Gov-

ernment deals with taxpayers' money."

I believe the Vice President and Dean LeoGrande are correct that this historic experiment in transparency will continue. I expect it has to, and I cannot imagine the American public would meekly accept a retreat back to the old non-transparent ways.

Mr. Chairman, Members of this Subcommittee, that concludes my prepared testimony. Thank you for the opportunity, and I will be glad to answer any questions.

Senator Carper. Good. Thanks so much, Mr. Devaney.

We have been joined by Senator Mark Pryor. Senator Pryor and I have been involved for almost 6 years now in trying to nurture and bring along a centrist think tank called Third Way, and a big part of what we are trying to do here today is to put a spotlight on some of the parts of our government, some of the players in our government that have sought out a third way—a third way to make sure that we are spending our money in a more cost-effective ways, or taxpayers' money in a more effective way.

Usually when Senator Pryor comes to these hearings, he takes about half an hour for an opening statement, and then I go right to him for the questions. I do not know if you would like to make an opening statement at this time or not, but anything you would

like to add or take away, please do.

Senator PRYOR. I would prefer just to let you ask your questions, and I will ask mine.

Senator CARPER. All right. Fair enough. Thank you. Glad you could be here.

I want to just ask you, Mr. Devaney, some folks might be watching us on C-SPAN. I do not know if they are or not. But let us just say we have a poultry farmer in Delaware or maybe one in Arkansas—we have a lot of those in our two States. But they happen to be channel surfing, and they come across this hearing, maybe sometime later tonight, and they hear you talking about the Recov-

ery Accountability and Transparency Board. Can you make that concept real or meaningful in their lives, just in the lives of ordinary people?

Mr. Devaney. Well, Mr. Chairman, I think that-

Senator CARPER. Can you hear him? No? Just check your mic.

Mr. DEVANEY. I think the ability for the American public to finally see how their government is spending money is an incredible new thing that I think there is a big appetite for. They can literally go on this website, Recovery.gov, and drill down into their communities and see how the money is being spent in their own neighborhoods. They can look at it across the country or by State—as a matter of fact, in a variety of ways.

What we do is we make the data available. We hope to become the authoritative source so others can take that data and do what they call mash-ups and use that data in ways that we cannot even contemplate in the Federal Government. So this is really new, and it is a big piece of the transparency effort going on in government

right now.

Senator CARPER. Thank you.

Mr. Werfel, do you want to answer the same question?

Mr. WERFEL. I think to explain it to Mom and Dad back home, I would say the Board was created by Congress and by the President to have a very strong set of leaders and individuals come from around government and monitor the funds that are moving out into the public sphere in a way that has not been done before. I would say that there was a recognition when this law was passed that there were certain risks associated with this amount of money going out through the normal standard channels that we have for payment processes and the way we administer government. And with these types of risks, we wanted to make sure as a government that we had put the necessary people in place to watch those funds closely and to report and help report on exactly where they were going

And so the vision, I think, really is a great example of a vision of Congress and the President coming to fruition effectively, because the Board is a gathering of very talented and dedicated professionals that are singularly focused on making sure the money goes out correctly and wisely and judiciously and it is reported ef-

fectively.

And so we have a very good track record in terms of the lack of identification of major instances of fraud and error in the Recovery Act, in large measure because of the scrutiny that the Board places on the overall process. And we have Recovery gov, which provides an unprecedented view and enormous quantities of data, just as Congress and the President envisioned.

So I think the process has really worked effectively, and I think

the Board has had a big deal to do with it.

Senator Carper. Mr. Devaney, Mr. Werfel just said this kind of activity had not been done before, and let me just ask of you a twopart question. Why not? And why are we able to do it now?

Mr. DEVANEY. I do not know why not. I really cannot answer that question. But I can tell you that I have come to believe—with my background in law enforcement, I will be candid and tell you that transparency has not always been my favorite thing, butSenator CARPER. I can remember a day not that long ago when someone would accuse you of being transparent, it was not a com-

pliment.

Mr. Devaney. Right. But I have come to believe that transparency actually drives accountability. I think as Mr. Werfel mentioned, we have had, relatively speaking with this amount of money, very few large fraud events so far. There are active cases ongoing but, quite frankly, less than I would have presumed a year and a half ago. And I think a large part of that answer is the transparency piece, the fact that citizens get up every morning and look at this website, reporters get up every morning and look at this website. Those citizens call us and tell us about things they see that they do not think are right, and we follow that up.

Senator CARPER. How many people comprise the Board or the

staff of the Board?

Mr. Devaney. The Board is 12 Inspector Generals and myself, and the 12 Inspector Generals were named in the legislation, and I was selected by the President. The Board meets typically once a month. We have Subcommittees that meet more regularly. And we also have a presidential panel that provides advice to the Board that was named recently.

Senator CARPER. All right. In your testimony, Mr. Devaney—I think it is the last page of your testimony—there is a paragraph that ends, "I have, therefore, decided to dedicate a considerable portion of my remaining time in government to fixing this problem."

Explain this problem. I have read your paragraph a couple of times and listened to your testimony. Explain this problem and why is it something—you have had a distinguished career working for the people of this country. But why is it a promise of such importance that you would decide to dedicate a considerable portion of your remaining 30 years in government?

of your remaining 30 years in government?
Mr. DEVANEY. Well, Mr. Chairman, first of all——
Senator CARPER. OK, maybe it is not 30 years.

Mr. DEVANEY. It is actually 40, and my remaining time is very small, so maybe I am not really committing to much there. I did not know this problem existed, quite frankly, before—

Senator Carper. I did not either. Why don't you tell us about it? Mr. Devaney. And as I mentioned in my testimony, each agency—and they have for years—has its own unique numbering system for awards, grants, contracts that they give out. None of them are harmonized or look like each other unlike, for instance, credit cards which are, a certain length and without dashes, without letters in them. And each agency does it their own way and have been doing it that way for years.

So along comes Recovery and we try and collect all the data and make sense of it. We have tried to make sure that the agency tells us what they have given out as money, and when we look at what comes in, we try to match that. And when we try to do that, the lack of a common single awarding report system really is problematic. And we have what we call mismatches where we have to literally almost hand search these awards to make sure that they match up.

So I think if that problem was fixed—and I do not know that it would be very practical to fix it on awards in the past. I think we would have to do something going forward. And the Board wants to provide a solution. We want to try to work with OMB to not only identify the problem but find a way forward. And Mr. Werfel and I are going to work together on that.

Senator CARPER. Well, good. It sounds like this is a problem that could take years to finish out, so it looks like we will have you

around for a little while. At least we hope so.

I have some more questions, and I look forward to asking them. Right now I am going to yield to Senator Pryor for however much time he wishes to take.

Senator PRYOR. Thank you, Mr. Chairman, and thank you for your tenacious focus on this and your leadership on this issue.

Mr. Werfel, let me start with you, if I may. As I understand it, OMB has decided to take some of the tools that the Recovery Board has been successful with and are going to start to apply them to other government agencies and maybe even across government generally. My understanding is that CMS is going to be maybe the first or one of the first to see a pilot program.

Could you tell us a little more about that in terms of when that

starts and what you hope to accomplish there?

Mr. Werfel. Certainly, Senator. Very early in the life of the Recovery Act, we started to recognize that the Recovery Board was developing some cutting-edge best practices: The way in which FederalReporting.gov was deployed, the way in which Recovery.gov was constructed. And then we became aware of this fraud detection tool that the Recovery Board was working on, and we quickly saw that there was potential benefit to this type of technology and innovation outside of the Recovery Act.

In particular, the tool takes publicly available information and combines it with information that the government may have about a particular set of individuals or corporations and how the money is spent. And it essentially shines a light on new risk factors for where there might be fraud or prohibited activity taking place.

And so it created more of a multi-dimensional view into the picture that we had in front of us for finding problems. So when we look at our current suite of information that we have in today's world, before this tool came along, it lacks certain dimensions and lacks certain information that allows us to see risks and red flags, and the Recovery Board's tool kind of turns the information and combines it with other things on its axis a little bit, and suddenly

things come to light that otherwise would not have.

And this is general. There is nothing specific or unique about the Recovery Act. We have risks of improper payments, fraud, and error in all programs. And because we started to see the power of this tool—in particular, one of the major benefits of the tool is that it is resource smart. You do not have to send a field of investigators out locally to look at things. You can see things from a central location, almost in real time in terms of the information flow. And in a world of scarce resources, we need every tool we can get that would allow the agencies to do more oversight and more scrutiny with limited budgets and limited field trips and the like.

We started the process and we approached Mr. Devaney and said we are very excited about this. We are in the business at OMB of identifying best practices and sharing them. And we think there are too many—Senator Carper mentioned \$65 billion in improper payments just in Medicare and Medicaid. That is too big of a number to say, "Hey, we will pilot this at some other small agencies and see how it is going." We wanted to move a tool like this right into the sweet spot of where we are having problems with fraud and error in government programs.

Senator PRYOR. So you will try to apply the tool in the payment system of CMS, not just the contracting and some of the other things they do, but actually where you think most of the fraud is?

Mr. Werfel. I think the key with CMS has to do with the medical providers that enroll in those programs, some of which have been previously excluded and are coming back under new names, some of which are involved in fraud and are billing for treatments that never took place or have medical practices but have a history of overbilling, double billing for systems advertently. And so CMS may have been blind to some of this activity before a tool like this comes along.

You asked earlier about the timing. CMS has already started to review their data through the Recovery Board's tool and is already seeing some potential important impacts of having information earlier in the process about fraud and error than they would have otherwise had.

Senator PRYOR. So, in other words, they are starting pretty much now? Is that what you mean?

Mr. WERFEL. They are in the process right now.

Senator PRYOR. And how close to real time can they look at the numbers? In other words, one of the problems with Medicare fraud and Medicaid fraud is usually either the U.S. Attorney or the State Attorney General, they do these fancy searches and algorithms but it may take months or even a year or more before they really detect what has happened in the past, and sometimes by that time, it is just way too late.

So how close to real time do you think CMS can look at their numbers?

Mr. WERFEL. I think it can be essentially as real time as we need it to be to stop a payment before it goes out, which is real enough for us——

Senator PRYOR. I think that is critical to really go after this, because you are always going to have the people who—have been ripping the system off for a long time, but as soon as, they get the sense that they are about to be caught, they seem to go away and you cannot find them. They change names. They come back under another name.

Do you think that you are going to be able to track those kind of repeat offenders down, the folks that do change names or change a few things so they make it look like they are different folks in the system but it is really the same people? Do you think this system can—

Mr. WERFEL. I used the term before. I think that is the sweet spot of whether this tool comes into play, and it has been an area of problem for us in government in the past, tracking these types of corporations, companies, partnerships, or providers that get convicted or targeted and then come back in a different incarnation.

Senator PRYOR. I think that is huge.

Do you have a sense of how much this will save the taxpayer? I know you mentioned there is \$65 billion worth of fraud there. Realistically, how effective do you think this will be?

Mr. WERFEL. I do not know. I wish I could tell you the exact impact of the tool. I do know that in early June the President drew a line in the sand for HHS and, quite frankly, for the rest of the Administration to cut errors in Medicare fee-for-service in half. And that is a pretty substantial drop in improper payments because the Medicare fee-for-service errors are very high.

This will be an important part of that, as well as other tools. I do not know what proportion of it, but some of it is we are going to stop payments before they go out, and some of it I think will have a deterrent effect, because as we start bringing to bear more important tools—and, in particular, I mentioned the Affordable Care Act provides us and DOJ in particular stronger enforcement tools and penalties to attack fraud and error.

So, taken as a whole, we think this tool combined with other new authorities in both the bill that Senator Carper helped pass recently, the Improper Payments Elimination and Recovery Act, and the health care bill, we think we can meet the President's charge

for cutting Medicare errors in half within 3 years.

Senator PRYOR. I think the deterrent effect is very important because I think most people who commit Medicare fraud, know that there is a pretty small chance that they will get caught. And if you can increase that percentage, and dramatically increase it like you are talking about, I think you will see fewer people trying to rip off the system. I think that is great news.

Let me ask you one more question, Mr. Werfel, and that is about the PaymentAccuracy.gov that you have. Can you tell us, first,

about the website and, second, how it is working?

Mr. Werfel. I would be happy to. When the President issued an Executive Order in November, this was in large part in response to the fiscal year 2009 numbers that had just come out and shown a significant spike in improper payments over the past several years, that we were trending in the wrong direction dating back, 2005, 2006, 2007, 2008, and 2009. We decided to take as strong a step as we could, and one of the things that the Executive Order did was require that we publish a dashboard that would have some key ingredients both for transparency and accountability.

In particular on the accountability side, we named a senior accountable official for the major programs with the highest errors, such as at Medicare and Medicaid, and put their name on this website. We published all the information in a way that the public can go see which agencies have the highest improper payments. We list on this website, as an example, the highest dollar improper payments that were found, whether there was a \$2 million error, an \$8 million error, or a \$40,000 error. Whatever the top 10 are listed in a very transparent way on the website and which agency is responsible for it.

So there is a sense, that we are owning the problem, showing where the issues are, which agencies and which officials are responsible for them, and we also on that website have our targets going forward. Where do we think we can be going forward? So the first thing you see when you go on PaymentAccuracy.gov is a bar chart that shows where we are today in terms of our error rate and where we want to be 3 years from now, which would correlate to our goal of a \$50 billion reduction in terms of dropping that error rate down.

I will mention we are somewhat proud of the fact that PaymentAccuracy.gov had about 50,000 hits in the first 2 days and close to 300,000 hits in the first 2 weeks, which for us, in my world, that is pretty good foot traffic on a website of this kind. So we are excited about the type of attention we are getting to it.

Senator PRYOR. Good.

Mr. Chairman, can I have just one more minute to ask Mr. Devaney another question?

Senator CARPER. The gentleman's time has expired. [Laughter.] No, go ahead.

Senator PRYOR. Thank you.

Mr. Devaney, I am excited about what you are doing. I think you are getting good results. I think that as Mr. Werfel said, there is really some good news here. I know you have a lot more work to do, but I am curious about the feedback you have received from other departments, and the IG community and if those folks are coming to you and asking, "Tell us what we can do to be better? Are you helping to make other agencies and departments better?"

Mr. DEVANEY. That is an excellent question, Senator. I think the fact is the IG community has never had these tools before as a community, and now that we do, what we see is certainly the 29 IGs that have recovery responsibilities are, in fact, not only receiving information about this, Senator, but they are bringing it to us. And as a result, we have interaction we have never had before. They tell me that the material we are giving them is value-added to their investigations; it is saving them an awful lot of leg work. It is very cost-effective for them to use the information the center gives them.

So I would say that from that perspective I think this tool is going to be something the IG community uses in the future.

Senator PRYOR. Let me ask one last question, and that is, I know you are using some great tools there, and obviously the private sector in most circumstances has a lot of incentive to get rid of fraud and waste and, different types of things that bleed them financially where they are just not getting a good return on what they are spending.

Do you feel like your tools today are as good as the private sector users for their various endeavors, whatever they may be? Or is this an example where, the government has found one or two good things, but there is a set of other things that we could be doing that we are not yet doing?

Mr. Devaney. I think it is—I would not want to say that we are better than the private sector. I will say we are using tools that I think the private sector has used before, the banking industry, the credit card industry. Quite frankly, some of the tools we are using, some of the software we are using has been used before in the law enforcement setting, in the terrorism setting. And we are

using these tools for the very first time, I think it is fair to say, in the government spending arena, and that is the newness of it. We are taking tools that others have used successfully in the last few years, and other tools are coming along. And as we see those tools, we plug them in.

So what we are doing is taking a new approach and using tools that, quite frankly, have never been used in government spending before.

Senator PRYOR. Thank you, Mr. Chairman.

Senator Carper. Thanks very much for joining us. Thanks for

those questions as well.

We have been joined by our Ranking Republican, Senator McCain. Senator McCain, you are recognized for as long as you

Senator McCain. Thank you, Mr. Chairman, and I apologize for being a little late.

Senator CARPER. I am just glad you are here.

Senator McCain. There was a nomination hearing in the Armed Services Committee, and so I thank you for your patience. I thank the witnesses.

Mr. Devaney, is it an accurate statement that a 7-percent loss of funds to fraud is considered the normal course of doing business?

Mr. DEVANEY. Senator, I think that figure was last year's figure. I am told it has gone down to 5 percent. But even at that, that is a totally unacceptable figure, percent rather, when you apply it to \$787 billion. The 7 percent would be \$55 billion and the 5 percent I think is around \$40 billion. That is totally unacceptable. I have never imagined that it could get that bad, and I do not think it will, quite frankly, ever come near that figure.

So as I mentioned in my testimony, I think the value in what we are doing is trying to prevent fraud and waste before it occurs as opposed to waiting, as Senator Pryor indicated in his comments, long after the money is out the door. So I think that we have been able—I think the transparency is a big help here to keeping fraud

at a minimum.

Senator McCain. So you want to head off the fraud and abuse

before it takes place. Now, exactly how do you go about that?

Mr. Devaney. Well, the IG community as a whole took a very proactive approach to preventing fraud. There was an enormous amount of training that went on, both in the government and the private sector, to train folks that were not only recipients of the money but those that were giving it out in the government.

Senator McCain. So far, what have you done? Could you give us an example?

Mr. DEVANEY. Of training?

Senator McCain. No. Of fraud and abuse that you have prevented.

Mr. DEVANEY. Well, that is a difficult metric to talk about, but I think it is fair to say we simply have not seen the kind of fraud that we would have imagined as professional law enforcement we would have seen by now. So I think some of the things we are doing are working. I think that the whole concept that we have with our Recovery Operations Center (ROC) is to identify fraud before it occurs or at least intercept it as it is occurring. And there have been times when we have notified agencies that you seem to be——

Senator McCain. Well, can you give me an example of fraud you have detected while it is occurring?

Mr. DEVANEY. Yes. I think there are several cases where we—

Senator McCain. Could you name one?

Mr. Devaney. Well, most of these cases are active criminal investigations, Senator, but in general, we have identified money that has gone to—

Senator McCAIN. The program has been going on for a year and a half, and all these are still ongoing, you have not completed one?

Mr. DEVANEY. The Inspector Generals are—normally, it is about a 2-year cycle for a criminal investigation, so no, there have not been any significant criminal investigations completed. There are over 350 ongoing right now.

Senator McCain. But not one completed? Mr. Devaney. None of any significance.

Senator McCain. That does not inspire confidence in me.

Mr. Werfel, do you have any comment on that?

Mr. Werfel. Only that I think it is—a couple of things. First of all, I think that the fact that there are ongoing investigations establishes a sense among the Recovery Act recipients that there are watchdogs and close scrutiny looking at the funds as they are going out the door. The tools that the Recovery Board has put in place, we have promoted them and had the agencies talking to their recipients about the nature of their activities and that they are being looked at in unprecedented and closer ways than have been done before by both the public and government watchdogs. And I think the overall metrics that we are seeing in terms of, as Mr. Devaney referenced, a much lower rate of error and problem than one would have anticipated for a program of this size is an indicator to us that the measures that we are taking, whether the investigation is ongoing or otherwise, are working effectively.

Senator McCain. So of the potential cases of fraud, those you were talking about, are those that have been referred to the corresponding Inspector Generals' office, the Department of Justice (DOJ) or the appropriate State and local stimulus oversight authorities?

Mr. Devaney. Yes, sir.

Senator McCain. And how many is that?

Mr. DEVANEY. It is a little over 350.

Senator McCain. Have been referred to all of the above or some of the above or one of the above?

Mr. DEVANEY. I would say all of the above.

Senator McCain. So you find a case of fraud and abuse, and you refer it to the IG's office, the Department of Justice, and the appropriate State or local stimulus oversight authorities?

Mr. DEVANEY. Exactly.

Senator McCain. And there are three hundred and—

Mr. DEVANEY. Fifty or so.

Senator McCain. How many of these have been dropped?

Mr. DEVANEY. By dropped, do you mean declined for prosecution? Senator McCain. Yes.

Mr. DEVANEY. I think there are over 100—not of those 350, but an additional 100 have been looked at and prosecution has been declined.

Senator McCain. And so far there has not been any case that has been brought to court?

Mr. Devaney. There have been some in the Social Security arena, people getting small checks that have pled guilty to those kinds of crimes. It is only \$250 per check, so I would not consider that a significant fraud. So the answer, I think, to your question is no, there have not been any significant plea agreements or convictions in what I would consider major fraud?

Senator McCain. And when would you expect some of these

things to happen?

Mr. DEVANEY. I would think we could expect to see some indictments in the near future, and I think that starts the process, and we go to court and we go to trial.

Senator McCain. "Near future" meaning?

Mr. DEVANEY. Well, we are about 18 months into it, and the normal cyclical cycle for a criminal case is about 2 years, so within the next 6 months.

Senator McCain. Thank you very much. I thank the witnesses. Thank you, Mr. Chairman.

Senator CARPER. Thank you, Senator McCain.

On page 3 of your testimony, Mr. Devaney, you actually cite a number of examples that I think could be responsive to Senator McCain's question. You cite four examples. Do you want to just mention those?

Mr. DEVANEY. Sure, I would be glad to. In one case, a Federal agency has canceled a research grant after our staff discovered that the recipient had previously been debarred from receiving Federal funds.

A \$1 million award was revoked by a Federal agency after we discovered that the recipient was not eligible for the award under Federal guidelines.

A Federal agency canceled a company's contracts worth more than \$7 million after our analysis showed that the recipient had been debarred.

And another company with multiple awards of over \$10 million was debarred from doing government business after we uncovered information showing the company was not eligible to receive contract awards.

These are not exactly—these did not turn into a full-fledged criminal investigation, but are examples of what I talked about earlier in trying to intercept fraud at the front end to prevent it from happening in the first instance.

Senator CARPER. Part of what we tried to do in the improper payments legislation that Senator McCain and I, Senator Collins and others, Senator Coburn, Senator McCaskill, had worked on is we said basically there are three things we wanted to be done with respect to improper payments:

First, make sure all Federal agencies, including Medicare, all parts of Medicare, Medicaid, are reporting improper payments. Number one. Not just some. All across the government.

The second piece is we want you to stop making them. We want to stop making them.

The third part of it is we want you to go out and use private recovery contractors to go out and recover as much of the money that

has been improperly paid, overpaid, as you can.

We got the idea from the work that was begun, I want to say about 4 years ago, in Medicare. I think just initially in three States—California, Florida, and New York—we said let us use some recovery audit contractors and go out and recover money as best we can that has been really stolen, almost stolen from the Medicare trust funds. And then we added a couple of other States, I think a total of five, and then worked on it for about 3 years and recovered about \$1 billion. We recovered about \$1 billion. We spent the last year kind of standing down and doing a lessons learned from that experience, and we are starting to extend that recovery work to all 50 States.

I have heard estimates for improper payments for Medicare and Medicaid combined on an annual basis, estimates that go up as high as \$60 billion a year, maybe even more. But let us just say it is \$50 billion a year. I think in our testimony today, maybe it was you, Mr. Werfel, who said we hope to capture at least \$2 billion by 2012. As I understood it, you were saying from all Federal agencies, from all Federal programs. And I am encouraged that we are going to use this approach that Mr. Devaney has been leading along with the Vice President for the last year and a half. And \$2 billion is a lot of money, but if we are talking about just in Medicare and Medicaid as much as maybe \$100 billion in 2 years in improper payments, a lot of it fraud, \$2 billion captured governmentwide, Medicare and Medicaid and everything else, does not seem like a lot or certainly does not seem like enough.

Mr. Werfel. It is a good question, Senator. Let me start by saying when we established the \$2 billion goal, there were essentially two places where we had the ability to recover improper payments using this concept of payment recapture audit where you are hiring a specialized auditor to go out and get the money and they are paid based on the amount of error they recover. The two places were Medicare and Federal contracting.

So that left off the table Medicaid and all the other programs that make up the brunt of these \$110 billion figures that we have been discussing, including food stamps and Social Security and all these other programs and, in particular, Medicaid.

Since that time, with the passage of the Improper Payments Elimination and Recovery Act and the Affordable Care Act, our authorities to use these tools have expanded, and so we are relooking at our \$2 billion goal in light of these new expanded authorities to see if we should be raising it and how significantly we should be raising it to set a new bar.

When you look just at Federal contracting in Medicare, we looked at our experience over the last several years in terms of what we could achieve, and the \$2 billion ends up being more than double the recoveries in that universe of Federal contracts and Medicare than we were able to recover, and for that reason we thought it was the right aggressive goal to set.

But I agree with you that given new authorities and the fact that we now have this ability for a broader set of programs, that is a

goal worth revisiting.

Senator CARPER. Good. As I understand it, during this last year we stood down the recovery audit contracting activities in these five States and did a lessons learned. One of the lessons we tried to learn is to hear from the private contractors that have been retained to ask them, "What have you learned that can inform the Federal Government, particularly Medicare, to enable us to stop making improper payments?" And we have tried to spread that word. So the idea there is to benefit from the lessons learned from these private contractors.

In the testimony we had, oh, gosh, a week or two ago here, the folks from CMS indicated that I think they said about 40 percent of the recommendations have actually been done, maybe close to half, but there is a bunch of them that have not been, and we asked for a timetable of when we are going to do the rest. And it

is not clear when we are going to do the rest.

Do you have any thoughts on that?

Mr. Werfel. By the rest, you mean Medicaid and other parts of Medicare?

Senator Carper. Yes.

Mr. WERFEL. Well, the——

Senator Carper. Let me say this: About roughly half—of the ideas of what we need to do to stop making these improper payments, about half of them, maybe half of them, have been acted on, but the rest have not. And I think the savings for those are potentially \$300 million a year, and it could be year after year after year, so it turns into a lot of money. And the question I asked is—and this may not be something you are even aware of, but in terms of turning out attention to the other ideas from the contractors, making sure we use those ideas to stop making improper payments, what are we going to be doing about that? My hope is that OMB is going to be at least from afar riding herd on this.

Mr. WERFEL. Absolutely, and, I think it is—when you look at the improper payments terrain and HHS is half the balance sheet, so it is very critical that OMB is applying the appropriate oversight and partnership with HHS going forward. I will reflect on a couple

of observations just to respond to your question.

Some of the lessons learned coming from HHS is that when they have run their pilots before, sometimes—and, God bless the contractors. They are trying to go out and get those recovered dollars. Sometimes you can almost go too aggressive and identify errors that are not really errors and end up with a lot of appeals and litigation and a lot of administrative activities that are not having value added to the process. And so, really, the challenge that HHS has—and I think what you are seeing is some tentativeness on some of the recommendations and then full steam ahead on some.

The recommendations, where I think they are being more tentative is where they are concerned that going out and collecting errors before certain things are checked and due process elements are put in place and certain due diligence is done is going to create a lot of false positives. And so what they are trying to do is find the right equilibrium. And we learned a lot during that five-State

pilot that you mentioned, and the numbers are probably somewhat inflated, only because a lot of those recoveries ended up being litigated, appealed, and created a lot of administrative activity that we want to try to avoid and some equity issues that we want to try to avoid.

But from my standpoint, my guiding principle is to make sure that HHS is as aggressive on the spectrum as they can be without crossing into lines of inequity or administrative problem. I do not think they are there yet. I think we need to work with HHS to push them down that continuum into a more aggressive posture on their error reduction efforts in general, but in particular on payment recapture. And so I will be working with them on the remaining recommendations.

I am excited by the fact that they have embraced the ones that they believe they can embrace because I think that will have an impact. To the extent they are not embracing, I think it is incumbent upon us to make sure that they are doing those reviews quick-

ly and landing on a good place so they can move forward.

Senator CARPER. All right. Thank you.

Mr. Devaney, I understand that the Recovery Board and OMB worked closely on the ramp-up of Recovery.gov and the Board's various activities. I often say right here in this hearing room, if it is not perfect, make it better; everything I do I know I can do better. I think that is true for all of us. But I know there are a number of challenges that the Board faced early in its mission.

Let me just ask, in your view, what was maybe the most significant or perplexing problem that you faced as it relates to the Re-

covery Act? And how did you go about solving it?

Mr. Devaney. I think as I mentioned in my testimony, Mr. Chairman, the biggest problem was time. We had time constraints that were, quite frankly, almost insurmountable. We had to build two separate websites in less than 6 months. I think it is fair to say that the government would normally take a couple years to do that.

So we had to pull together a team of folks. The staff I pulled together were outstanding, from all parts of the government. We got the backing, the full backing of OMB in that endeavor, and we were able to do it. We probably did not do it the way the government usually does it, but that is probably what made it work. And we did a lot of things simultaneously, and we got it up and running and it worked. So it was the time constraints that we faced when we took over.

Senator Carper. OK. Let me just follow up with a related question. As I said earlier, the task that was set out for you was not an easy one, and in your testimony you talk a little bit about—I think you talk about extreme deadlines that you had to meet. As you just said, our government is not exactly known for the speed in which we operate. In fact, a lot of big entities are not. But how were you able to establish the Recovery Operations Center in such a short period of time and find specific cases of fraud and waste as quickly as you did?

Mr. DEVANEY. Well, we are doing that simultaneously. We are building the two websites. We also have half of the staff is dedicated to accountability, so that portion of my staff was working to pull together all of those special tools, and the recipient data had not come in yet until October, so we had a little time to plan that out a little, quite frankly, more than we had time to play in the two websites.

So it took a lot of thought, and once again, we pulled folks together from different parts of the government, from different IGs. We brought in some folks with unique software, one of whom, at least, is going to testify later this afternoon, and pulled all that together probably just about the time the data started to roll in and we had our first look at it.

Senator Carper. OK. Mr. Werfel, in your testimony you say that the fraud and abuse of the Recovery Act funds has been much lower than a lot of people had anticipated. From your vantage point, what have been some of the Board's secrets, if you will, to success in protecting those funds? And what sort of lessons has your office taken away from what you have seen at the Recovery Board and which might be extended to other parts of our government?

Mr. Werfel. Well, I would like to answer that, if I could, a little bit broader than the Board. I think the Board was a key part of it, but I have been asked this question a lot and given it a lot of thought, because I do often say I want to bottle some of the success that we have had.

It might sound somewhat trite, but it really is not—the leadership involvement and emphasis is so critical. And from day one there has been such a strong message from the President and the Vice President regarding the scrutiny that they expected Federal agencies to place on watching these dollars, making sure they were being spent judiciously yet quickly and wisely, and that there was no poor judgment used in the type of projects or activities that would be funded.

And this message did not come across just once. It came across repeatedly. And the Vice President has played an extremely active role, bringing the Cabinet together and senior recovery officials, often calling Governors on a rolling basis and, pounding the table if he needs to regarding the importance of making sure that every dollar is watched and that there is a tremendous amount of what I call healthy stress or healthy pressure placed on the system to watch every single dollar that is going out the door and making sure that it is spent wisely.

And this type of scrutiny and attention and engagement has really established an accountability structure where if dollars go out in error or for poorly defined or thought of projects, there is a strong sense that this is unacceptable throughout government.

I think the Board's presence has been critical to these efforts because, in any activity that you undertake where you are looking at these payments and these activities through a close eye, the Inspector General is always standing there on the side making sure that eye is keen and that it is diligent and that it is taken seriously and that it is thorough. And here what you have is a very interesting development, and that is, the IGs coming together across government in a common purpose for a common program and talking amongst each other and sharing practices and approaches and evaluating agencies together around these activities. And I think

the entire government has advanced because of it, because of the lack of silos and the cross-cutting nature by which the Vice President drives and his cross-cutting meetings about doing things better, where it is not, the low-level employee talking about what they are doing; it is the Secretary or the Deputy Secretary talking about how seriously they are taking these activities. And the Inspector General community is there in unison as well looking across programs.

This is certainly, I think, a best practice and an exciting development that we need to leverage going forward.

Senator CARPER. Good. Thank you.

Mr. Werfel, is it true that Mr. Devaney is the supervisor of the

Vice President? Is that the way it works? [Laughter.]

Mr. WERFEL. I will say if Mr. Devaney is coming by for a meeting, we take that very seriously, and we want to make sure that we are ready, because Mr. Devaney asks tough questions, as he should, but they are always fair. And I think one of the best practices coming out of this is the partnership that OMB in particular, the Vice President's office, and the Recovery Board have forged here. Mr. Devaney mentioned tight deadlines and an overwhelming challenge that we had on our hands that was delivered to us, and the challenge was the right challenge, and we took it on together. But we would not have been successful, I do not think, if we did not immediately find a way to bring both of our comparative advantages to the table. And Mr. Devaney and I would sit down and talk to each other. At the beginning I remember there were all these questions: What is your role, what is my role in terms of OMB and the Recovery Board? And ultimately I think we made the decision that our roles should be who can do the best work in the quickest time and where your expertise comes to bear.

And so we tried at OMB to throw our expertise on the table in certain areas. The Recovery Board did the same, and the results were we met our deadlines, and I think we met them pretty effec-

tively.

Senator CARPER. Good. Thanks.

I do not know which one of you mentioned this, but one of you mentioned earlier in this back-and-forth a Do Not Pay List. I am not sure who did. But I want to go back to that for a moment. I think it was maybe last month that the President issued a memorandum issuing the establishment of a single Do Not Pay List. I suspect that a lot of Americans might be surprised that there was not already a single list of people or companies that the government should not be sending money to.

We have all heard the stories of deceased people receiving checks or debarred contractors continuing to receive new business from the Federal Government. I am just wondering if one or both of you could just shine a little more light on what the system looked like say before this announcement of a month ago and what the new

Do Not Pay List means for our taxpayers.

Mr. WERFEL. Well, this is kind of an OMB-generated initiative, so I will take the lead on it.

Senator CARPER. OK.

Mr. WERFEL. It was inspired by some of the Recovery Act activities. In particular, I will start by saying, when we look at improper

payments and the \$110 billion, there is certainly a spectrum of how challenging or less challenging it is to get out in front of these payments and deal with them. On the more challenging end of the spectrum, you might find a Medicare reimbursement which, after evaluation and audit, looks like it was not a necessary medical procedure, and knowing that up front can be extremely difficult. And so that is the type of error that I would put at the more difficult end of the spectrum.

But more at the less difficult, certainly less difficult end of the spectrum is when the government makes payments to individuals or entities where we have clear information sitting in either a public or a government database that we know would nullify that payment, whether the individual is deceased or on the Excluded Parties List or owes an outstanding tax or other form of debt to the

government.

And, unfortunately, we continue to make both kinds of errors, and Mr. Devaney testified earlier that there were instances in the Recovery Act where individuals or entities on the Excluded Parties List, which is right there on GSA's website for the whole world to see, were continuing to get payments. I think the Do Not Pay List is recognizing that we have to at a minimum, if we are going to be successful in improper payments, get rid of all the improper payments that exist at this less challenging end of the spectrum.

So what we have today, and before the Do Not Pay List was issued, is a set of disparate databases held by different agencies. GSA maintains the Excluded Parties List. Social Security maintains the Death File. Treasury maintains our debt files on who owes outstanding or delinquent debts. And when we started talking to agencies about this problem of not being able to get at the basic errors that we should be able to get at, one of the things we learned was that there were challenges, administrative challenges that they were facing in terms of accessing these databases and building that into their prepayment processes in a more seamless way, in a way that, when this Excluded Parties List is refreshed, I am automatically in tune with that refreshed list, or that I have the right technology set-up between myself and the Social Security administration to do that bump-up with the data. And we also learned that the agencies were not being as thorough as they needed to be in their prepayment processes to make sure that these data sets were being checked.

So as a result of the Do Not Pay List, what we are charged with doing and what we have already started is bringing these data sets together for the single entry point. So if I am an agency, no longer do I have to establish multiple agreements and data-sharing arrangements and technology interfaces with agencies. I just have to do it once. And through that one interface, I can start to see what

the spectrum of potential ineligibility factors are raising.

We have started the process already at GSA. They have started to bring this data together on contractors where we now have in one place, for example, information on whether a contract has been excluded, a contractor has been excluded, or whether they owe a debt. So just picture the kind of coming together in various pieces as we go over time to bring these data sets in to—we could not do it overnight, but I am happy to report that we have already started

the process. And in the coming months, our goal is to continuously add to this unified data structure and have agencies more and more tap into it. So that is how the world will be changing.

Senator CARPER. Good. Before I excuse you from the testimony, do either of you have something you would like to add in conclusion, just a concluding thought, something—and taking in mind one of the questions I often ask is—we are forever asking more of you, and one of the questions I ask is what can we do to be of fur-

ther support and help.

Mr. Werfel and I have had this conversation before, but one of the responsibilities of this Subcommittee and this Subcommittee is to kind of look throughout Federal Government and try to figure out how we can save money and how we can spend money more effectively, more cost-effectively. And from time to time we get actually very good feedback, helpful feedback, but our job is in part to do oversight, the good oversight, constructive oversight; on the one hand, when agencies are misbehaving, to put a spotlight on that; on the other hand, when an agency is doing a particularly good job, as we have an example here today, to put a spotlight on that as well, try to reinforce and reward the good behavior.

We learned earlier in my tenure here in the Senate that if it is just this Committee or just this Subcommittee that is trying to do this, we are not going to get very far. If we can somehow partner with OMB, if we can somehow partner with the Government Accountability Office, if we can somehow partner with all the Inspector Generals, and, frankly, outside of government there are a number of entities that are interested in eliminating waste and abuse—if we could somehow partner with all of those, we might actually get something done here. And my sense is that we are starting to partner pretty well together, and I think we are on the verge of getting a whole lot done in terms of stopping, for example, improper payments and beginning to recover significant amounts of money.

But just a concluding thought about what maybe we can be doing more of or less of that would be supportive to you in your efforts. Mr. Devaney, I will go to you first, and then I will ask Mr. Werfel,

if you will, to conclude. Thank you.

Mr. DEVANEY. Well, Mr. Chairman, I think as has been said earlier today, I think the specter of all of those folks getting together and finally working together is a first in my career.

Senator CARPER. Is that right?

Mr. Devaney. I think so. I think there have been examples in the past perhaps of\_\_\_\_

Senator CARPER. How long is your career?

Mr. DEVANEY. About 40 years.

Senator CARPER. That is a long time.

Mr. DEVANEY. It is a long time. So as Mr. Werfel testified, we could not have done this if we had decided to fight those old parochial battles that we inevitably get into sometimes in government. So that all went away because I think we were all faced with the same problem set in trying to do this under the constraint of the time. And I think we now all see the value of getting together and working harmoniously. It is very apparent in this effort.

And so I think that-I hope it will live on long after I am gone or, for that matter, the Recovery Board sunsets in 2013. My hope is that what we have started here will serve as a platform or a template for the future, and that others will come along later and make it better, with your help.

Senator CARPER. All right. Thank you.

Mr. Werfel, a closing thought? Mr. WERFEL. Yes, a couple.

First of all, I want to thank you for your leadership and this Subcommittee's leadership in this area. It is very important for us to be able to—when we are talking with members of the community and stakeholders about this effort and try to drive momentum and accountability and energy and passion, that we can point to activities and hearings and Senate statements, in particular your message on the Senate floor where you thanked OMB for our efforts was extremely energizing.
Senator CARPER. We do not hear that every day, do we?

Mr. Werfel. No, we do not. And it is extremely energizing not just for me and my small staff sitting behind me, but the whole of OMB was made aware of your statement, and it was a good moment for us that our efforts were recognized.

But your continuing championing this issue is helpful for me, I think for my boss, Jeff Zients, and our incoming Director-to-be, Jack Lew, to be able to champion it as well and have this kind of combined legislative and Executive Branch voice around this challenge. So on that, I think more of the same is appreciated.

I do want to re-highlight something I said earlier because, I say it and it sounds impressive-and it is, and I do not know that it gets much attention. But the President's budget in 2011 contains a series of program integrity provisions, both discretionary and mandatory, that all totaled would save \$150 billion over 10 years if enacted. That is the way our budget experts score these important provisions. And I think that is an important reminder that, our legislative work in this area is probably never done, and this is a challenge that is going to elude us unless we stay ahead of it.

One of the things I am excited about, in addition to my hope that the President's budget proposals are looked at and acted upon, is the new IPERA legislation sets up an important structure, I think, where if programs are noncompliant or are falling behind, that we are required to come up with legislative proposals to make sure that they are not falling behind any more. If that is a vibrant and active terrain for us, working with you, I think we are going to stay ahead of this problem over time. And so that is another area I look forward to working with you on.

Senator CARPER. Good enough.

Going back to the President's proposals in the 2011 budget that would actually, in the view of the Administration and maybe the Congressional Budget Office (CBO), save as much as \$150 billion over 10 years, we are looking for-in the Legislative Branch, we are always looking for pay-fors, the way to pay for program expansion in some cases, the way to provide offsets to either tax cuts or spending increases. We are always looking for that stuff, even today.

You may be well advised to have your folks just come back to our Committee staff, our Subcommittee staff and say, "By the way, as you look for those pay-fors, remember in our budget we had all these different ideas that add up to \$150 billion, because especially

right now we could use some of them."

The last question I ask is tongue in cheek, but you mentioned your small staff, and I know they are not all here, but I think they would fit easily into this room, if I am not mistaken. But I noticed as you spoke and testified, Mr. Werfel, that there is a young man sitting directly behind you in the front row. And as I watch carefully, I see his lips move when you speak, and he looks very familiar. What is his name? Do you recall what his name is?

Mr. Werfel. He has a nickname. We call him the Pika guy at

OMB.

Senator CARPER. The Pika guy.

Mr. Werfel. But his name is Joe Pika. Senator Carper. I wonder where he is from.

Mr. WERFEL. I do not know. Joe, where are you from?

Mr. Pika. Delaware.

Senator Carper. Delaware.

Mr. WERFEL. And he knows that he is under oath when he says

anything in the Senate chamber. He is truly from Delaware.

Senator Carper. He was once a member of—as a young man, he was a member of our staff, and I think maybe even an intern at one point in time, and later became a member of our staff. His father was someone I had the privilege as Governor to nominate to serve on the Delaware State Board of Education. He is a legendary professor at the University of Delaware, and the apple in this case did not fall far from the tree. I heard recently from another senior member of my staff that Joe Pika's Dad, also known as Dr. Joseph Pika, has had some kind of health impediment impairing his speech, as I recall. And I would just ask if that is indeed the case, convey our best to your Dad, Joe, and say we hope he is well on his way to a complete recovery, and when I come across him again in Delaware that he will be at full voice once again.

Our thanks to both of you for joining us today. Thank you for your good work, and we look forward to continuing to partner with you. Mr. Devaney, I will convey to the Vice President when I see him that he is earning high marks for his good work, too. All right.

Thanks very much.

I would ask our second panel to go ahead and come to the front of the room. Welcome. It is nice to see some of you again and to be able to welcome others before this panel for the first time. I am going to go ahead and introduce our witnesses starting with Dr. Karp. I will just telegraph this one ahead. The question is: What happened to the last two letters of your name?

Dr. KARP. I think it was Ellis Island.

Senator CARPER. OK, fair enough. I always wondered that when I saw that name. We are glad that you are here, abbreviated name

or not. Just a real quick introduction, if I could.

Dr. Alex Karp, Co-founder and Chief Executive Officer (CEO), Palantir Technologies. Palantir Technologies develops tools to assist groups in analyzing and integrating and visualizing various types of data. I understand that Dr. Karp earned his law degree from Stanford University, his Ph.D. from the University of Frankfurt in Germany, and he is fluent in English, in German, and maybe even in French. Which language will you be testifying in today?

Dr. KARP. In a pidgin version of English that will be hard to understand.

Senator Carper. We will do our best. We will do our best. Thank you for joining us today. I used to live in Palo Alto and Menlo Park when I was a naval flight officer, Moffett Field, and spent a little bit of time at Stanford. It is a great part of the world. Great part of the world. A lot of good, smart people come out of there.

Our next witness is Dr. Robert McEwen. Mr. McEwen, welcome.

Mr. McEwen is the CEO and chairman of U.S. Gold Corporation, among other companies. In March 2000, Mr. McEwen, I understand that you launched the Goldcorp Challenge, a Web-based context which successfully used what is called incentivized crowd sourcing to renew an underperforming gold mine. We have read about that with a fair amount of interest and want to see what we have to learn here in the Federal Government from some of what you all were doing back then and in the years since.

Our final witness is Dr. Riley Crane, the senior post doctoral fellow in the Human Dynamics Group at the Massachusetts Institute of Technology (MIT). Dr. Crane's research focuses on understanding the hidden patterns behind collective behavior on social media networks such as YouTube. In addition to his scientific work, Dr. Crane consults for business and government and has built virtual media campaigns for the United Nations, among others. We thank you for joining us today. One of our two sons spent some time—4 years—on your campus and just wrapped up his undergraduate work there. We have a huge amount of respect for the work that you all do at MIT on a whole wide range of fronts. So thank you.

Dr. Karp, please proceed. Again, thank you for joining us today.

#### TESTIMONY OF ALEXANDER KARP,1 PH.D., CO-FOUNDER AND CHIEF EXECUTIVE OFFICER, PALANTIR TECHNOLOGIES

Dr. KARP. I would like to thank you, the Chairman, for hosting this hearing and commend you on the outstanding work you have done in this field, and also the Ranking Member McCain and the Subcommittee in general for inviting us. Likewise, obviously, thank Chairman Devaney whose leadership made the Recovery Board possible and many of the successes that have been already discussed.

By way of introduction, we are a Silicon Valley company, essentially specialized in perhaps the least glamorous aspect of finding fraud, which is getting the data to the analysts so that they can find fraud in real time.

A couple words about our company. We self-finance our company based on a methodology, developed by PayPal that reduced fraud by 90, in some cases 98 percent, wanted to turn that methodology into an off-the-shelf, fully deployable, and extensible software platform. We did this and brought it to the government market and to

<sup>&</sup>lt;sup>1</sup>The prepared statement of Dr. Karp appears in the Appendix on page 58.

large institutions with a hope of making data integration something that can take thousands of hours and often unsuccessful into something that can be done in real time. And currently we employ 300 people, 80 percent of whom are engineers—we do not deploy a sales force. We essentially work in one environment to the next.

We are honored to be invited to take part in extending Chairman Devaney's mission of reducing fraud, waste, and abuse, which was an extension of the work that you have done, Mr. Chairman. And our piece basically involves detection and prevention. We allow analysts to perceive latent patterns hidden in large data stores across different siloed environments so that fraud becomes apparent to the non-technical analyst, something which is very difficult to do and which costs a lot of money usually in the commercial and in private sector. And by doing that and uncovering these latent patterns, which is very similar to what we have done across government and at PayPal, we are able to empower analysts to find a highly adaptive adversary. As was mentioned in the previous testimony and by you, one of the challenges is not just finding a static adversary but finding someone who obviously is a professional in many cases in attempting to adapt their behavior based on what they think the latest methodology is.

When successful, this not only cuts fraud and detects fraud, as in the case of the Recovery Board, but it also provides a preventative methodology so that fraudsters prevent or are not eager to en-

gage in the kind of fraud that they have been engaged in.

The second part that we have been involved in, also under the leadership of the Recovery Board, is extending this so that once the fraud is detected, that it can be prevented going forward, as essentially a second piece. So, obviously, finding fraud and preventing fraud at the early part of the spectrum, as both of your guests mentioned, is crucial. But then preventing those fraudsters from reappearing under other names, which is a common practice, or using latent networks which obfuscate their identity or the kind of behavior they are doing is crucial to reducing fraud, waste, and abuse across government.

We are delighted that this approach is being extended into other parts of government and humbled to be a part of this. We see our part of it as basically being one technology among many, providing an open architecture so that other technology and other expertises can be integrated, which is pretty important, in our view; but really doing the kind of heavy engineering lifting under the leadership of technical experts. We are not the investigators. We are the people that provide an extensible platform so the investigators can do their work across large data stores and without being engineers.

We are delighted that this came about.

One thing that should be noted before I close, the idea of using technology which has been broadly deployed in commercial space and in other parts of government in the context of fraud, waste, and abuse took essentially an entrepreneurial mind in the form of Chairman Devaney. It was not—usually people do not take the leap of using one form of technology that has been successful for finding latent networks and providing civil liberties protections. At the same time in another context, it was the leadership of the Recovery Board which really led to deploying our technology, which

is quite well known in law enforcement, the civil liberties area, security-level collaboration, and in counterterror and cyber work, again pernicious fraud and finding latent networks there, while, of course, maintain civil liberties norms.

So thank you again for having us, and thank you to Chairman Devaney and the Chairman especially. Delighted to be here.

#### Senator Carper. Thanks so much, Dr. Karp. Mr. McEwen.

# TESTIMONY OF ROBERT R. MCEWEN,¹ CHAIRMAN AND CHIEF EXECUTIVE OFFICER, U.S. GOLDCORP INC.

Mr. McEwen. Chairman Carper, Ranking Member McCain, distinguished Members of the Subcommittee, thank you for the opportunity of testifying today concerning innovative technologies and approaches to solving problems and making the government run more effectively.

I have been asked to share with you a story of innovation that I believe has vast application and benefit to the government.

In 2000, my company, Goldcorp, made a \$1 million investment in website development, database assembly, and cash prizes. The result was stunning. We reaped the benefit in excess of \$3 billion in new found gold. My business is gold mining, definitely not an area that you would look to for inspiration for innovation However, what we did astounded both the mining and the high-tech community. It was one of the first examples of incentivized crowd sourcing used to solve problems. The successful utilization of the Web was well documented in such best-selling business books as "Wikinomics," "The World Is Flat," "Mavericks at Work."

When we put the Goldcorp Challenge up on the Web, we "broke the mold". We defied industry standards by sharing proprietary data about our orebody that everyone knew was never shared without confidentiality agreements. We provided free, comprehensive, and unrestricted access to an extremely valuable database about the most exciting gold discovery of the decade. In effect, we started a worldwide brainstorming session via the Internet where we offered half a million dollars in prize money to exploration experts to help us find the next 6 million ounces of gold at our mine. And this was a mine that had already been going for 50 years.

Our strategy was to make available to anyone anywhere in the world an extremely valuable, proprietary geological database via the Internet as well as software that allowed one to analyze and depict this data graphically in two and three dimensions, plus an economic incentive to have the participants share their geological insights.

The response was immediate and remarkable. Within a week we had 120,000 hits on our website. The mining industry on every continent knew about the company. And within 4 months there were a quarter million hits, and more than 1,300 individuals, corporations, domestic and foreign, governmental, geological agencies, and universities representing 50 countries had registered for the Challenge.

In addition, the rest of the Web was looking at Goldcorp and concluding it was not your typical mining company, and they were

<sup>&</sup>lt;sup>1</sup>The prepared statement of Mr. McEwen appears in the Appendix on page 61.

right. The Challenge served as a powerful catalyst to improve the careers and financial independence of our employees and propelled Goldcorp's future growth. The Challenge provided much more than an immense exploration success. It changed the attitude of our employees. They became proud of their work and their company. They became more confident and comfortable with accepting change and new technologies. They became eager to share and test their ideas about how to innovate and improve the way we worked.

Given the time constraints to my oral testimony, I have attached an appendix to my written version, and it outlines how we came to develop the Challenge, and I would recommend it for your re-

view.

So how might the concept of crowd sourcing have a positive impact on government efforts to become a more effective, more efficient provider of services to all Americans? I would like you to consider these thoughts.

First, there is a vast pool of experience, knowledge, and insights within the ranks of the government. This pool could and should be engaged in brainstorming to define questions to be asked to provide

alternatives for improvements to current practices.

Two, initiate brainstorming on a departmental or interdepartmental level. Too often all of us get very close to an issue to see it objectively and are thus unable to see the alternatives. By introducing another perspective, a new problem statement may be formulated that can generate surprising and effective alternatives.

Three, look to bring in individuals from the outside into a department, into the government and importantly give them the author-

ity to introduce unconventional change.

Four, look for the unquestioned underlying assumptions in your department, in the government. These are the ones that most people never question, because they are so fundamental. Once identified, question and challenge these assumptions.

Remember, nobody is as smart as everybody, and that you need to share knowledge freely to gain their insights and answers.

The incentives for crowd-sourcing projects can be much more than cash. The range of prizes available to you are limitless because people engaged in problem solving have a wide range of needs and motivations. In our Challenge, individuals participated for a variety of reasons: Intellectual curiosity, access to otherwise unobtainable data, peer recognition, an opportunity to profile and market their services, and more.

I believe to achieve major change in an organization, one must be, first, unconventional, change the rules, and I emphasize keep selling the opposition on the benefits to them on a personal basis.

An area of opportunity for innovation by the government. The government is good at making laws, rules, regulations. The Securities and Exchange Commission (SEC) was created to protect investors. It has more rules today than when it was established in 1933, but the losses suffered by investors recently have been enormous. Consider this thought: Does the creation of additional laws create more or less opportunity for criminals?

One last observation. The biggest gold mine in the world exists between everyone's ears. So tap into the minds of your fellow Americans and the citizens of the world to achieve your Committee's objectives. I applaud your quest to innovate. I thank you for your invitation to testify today, and I would be pleased and honored to answer any questions from the Members of the Subcommittee.

Senator CARPER. Good. Thank you. When I read your testimony, a couple things jumped off the page at me. One of them was your comment, "Nobody is as smart as everybody." I thought that was terrific. And I thought, Is that original? Is that something that-

Mr. McEwen. Someone else scribed those words.

Senator CARPER. All right. And the other one was the one you just used. You said the biggest gold mine in the world is between our ears.

Mr. McEwen. That is mine.

Senator CARPER. Good stuff. All right. You might have a future around here writing our material. You never know. Thank you.

Mr. McEwen. You are welcome.

Senator Carper. We will borrow from it, but always try to give you credit, or somebody.

Riley Crane, how long have you been at MIT?

Dr. Crane. Almost a year.

Senator CARPER. What did you do before that?

Dr. Crane. I was a post doc in Switzerland at ETH, and then before that I did my Ph.D. at the University of California, Los Angeles (UCLA).

Senator Carper. OK. Boy, you have been getting around. Welcome. Please proceed.

#### TESTIMONY OF RILEY CRANE. PH.D. HUMAN DYNAMICS GROUP, MEDIA LAB, MASSACHUSETTS INSTITUTE OF TECH-NOLOGY

Dr. Crane. Mr. Chairman and Members of the Subcommittee, thank you for this opportunity to testify before you today. My name is Riley Crane, and I am post doc at MIT in the Human Dynamics Group at the Media Lab. In December 2009, I led the team from MIT that won the DARPA Network Challenge using crowd sourcing, social networking, and social media to mobilize thousands of individuals around the world in under 9 hours. I would like to share with you this story in the hope that we can take away some of the insights that might be applied to government.

On December 5, 2009, the Defense Advanced Research Projects Agency (DARPA), unveiled 10 moored, red weather balloons at undisclosed locations around the continental U.S. and offered \$40,000 to the first person to correctly locate all of the coordinates of these balloons. DARPA is the agency credited with the creation of the Internet, and this Challenge, considered to be impossible to solve by those within the intelligence community, was designed to cele-

brate the 40th anniversary of the creation of the Internet.

Over these 40 years, we have seen incredible advances both in the Internet linking together all the world's computers, followed by the Web, which now links together all of the world's publicly available documents. But recently there has been a transformation driven by the convergence of new networked and mobile and social

<sup>&</sup>lt;sup>1</sup>The prepared statement of Dr. Crane appears in the Appendix on page 69.

technologies that is for the first time allowing us to bridge the gap between online and real worlds and create virtual connections between people, places, and things.

Many wonder whether this new social and global infrastructure can be used to solve important challenges, and so it was DARPA that wanted to challenge and to test this question to explore the role that crowd sourcing, social networking, and social media play in timely communication, wide-area team building, and urgent mobilization required to solve a broad range of problems.

To tackle this challenge, our team built a platform that used incentives, referrals, and social media to effectively construct a network of human sensors throughout the world. Our platform was designed to track the chain of referrals as individuals signed up and spread the information through their social network in order to account for who was responsible for recruiting whom.

In addition, we created an incentive system that divided the \$40,000 equally over the 10 balloons. In this way, for example, Mr. Chairman, if you signed up and found a balloon, we would give you \$2,000 and give the remaining \$2,000 to charity. If instead you had signed up and referred Mr. McCain, and if he found the balloon, we would have given him the \$2,000, we would have given you \$1,000 for referring him, and given the remaining \$1,000 to charity.

Senator Carper. So I would still get more money than Senator McCain.

Dr. Crane. No, It always starts with who found the actual balloon, and then it goes backwards, halving at each level. So you can have these chains as long as you would like.

In total, over 4,000 teams competed, many of which were very well organized. Using our strategy, the MIT Red Balloon Challenge Team found all 10 balloons in 8 hours and 52 minutes. One of the most—

Senator Carper. Did you say this was an assignment or an undertaking that was deemed to be impossible by the intelligence community? Did you say that?

Dr. CRANE. Yes. And it took us 8 hours and 52 minutes. And there were estimates all over the place. Some people thought it would be finished in minutes, and some people thought it was never be finished.

Senator CARPER. So the intelligence community said we cannot do this or this cannot be done. You did it in less than 9 hours?

Dr. CRANE. The intelligence community said it could not be done using traditional techniques.

Senator CARPER. OK.

Dr. Crane. One of the more interesting facts of the story is that I had only heard about the Challenge 4 days before the competition began. In 2 days, we built a platform and in just 36 hours recruited nearly 5,000 participants. According to the official results released by DARPA our approach found four balloons before any other team, and of the 10 individuals that were the first to report to us the locations, we recruited half of them before the competition began. So this I think illustrates the power of social media to rapidly spread information.

One of the questions we often receive is "What did we do differently from these other teams that were more well organized?" While some teams spent months preparing, organizing, and designing systems to solve the problem, our approach, which was conceived of, built, and executed in 4 days, relied on continuous feedback from the spontaneous network and evolved throughout the Challenge. And rather than coming up with the best solution, we built a platform that leveraged the problem-solving capabilities of the participants. This platform encouraged individuals to innovate and to spread the message to their own audience in the most contextually relevant way, whether this was "help science", "help charity", "win money", or something else.

Our system provided a solution that aligned the goals of each participant acting in their own self-interest with the broader goals of our organization. And really at the end of the day, we built the infrastructure that allowed others, even some of our competitors, to

solve the problem for us.

In the interest of time, I am going to skip over some of the examples I had prepared. While I think that our example nicely encapsulates some of the disruptive innovation that is being driven by the democratization of technology and its convergence with many other factors that are changing the way that we communicate, collaborate, and coordinate, there are many other examples of crowd sourcing that I would like to focus on one in particular that I believe addresses the Subcommittee's concerns here today.

Last year, the Guardian, a British newspaper, created a crowdsourcing platform that digitized the expense reports for Members of Parliament and encouraged citizens to investigate and to bring attention to the charges that they believed required further investigation. Looking at the site last week, the program had resulted in the review of over 200,000 pages of documents by more than 27,000 people and had brought to light many examples of extrava-

gant spending.

There have been many other great examples of new platforms that have enabled government to more effectively mobilize citizens. Another great one happened in the aftermath of the Haitian earth-quake in which the U.S. State Department teamed up with great organizations like Ushahidi and Open Street Maps. One of the sort of success stories of this was highlight by Secretary Clinton when she emphasized the plight of a little girl who was "pulled from the rubble in Port-au-Prince. She was alive. She was reunited with her family, and she will have the chance to grow up because these networks took a voice that was buried and spread it to the world."

I think the lessons that can be applied from these examples to government is that in each of the cases that I have mentioned, the organizations created a platform that enabled citizens acting in their own interests to solve problems. And my recommendation to the Subcommittee is that government should embrace the ideas espoused by Tim O'Reilly and others around government 2.0, which is a sort of catch-all term that means everything and nothing, but whose emphasis is that government should become a platform that provides the foundation for citizens to solve the problems that they care about most.

Thank you very much for your time, and I look forward to answering your questions.

Senator CARPER. You bet. Thanks so much, Dr. Crane, for your

testimony.

This Subcommittee has fairly broad jurisdiction across a lot of different parts of our Federal Government. In fact, our full Committee is called Homeland Security and Governmental Affairs. It used to be just Governmental Affairs, but it has very wide jurisdiction to drill down to examine what is going on in different agencies of our Federal Government.

One of the entities over which the Subcommittee has jurisdiction is the Census Bureau, and another one is the Postal Service. And I want to ask you to focus with me, if you will for a little bit, on the Census Bureau, the Bureau of the Census. We are just completing our decennial census. We do it every 10 years. We do a number of intermediate censuses almost on an annual basis, but we try to count everybody every 10 years. We are just about wrap-

ping that up.

Part of the census involves figuring out what are all the residences where people could live in this country from coast to coast, from north to south; and then once we have done that, to figure out who lives in those places. And as time goes by, it gets actually harder to count them all, count all the places where people can live, all the places here folks are living, and then actually get people to respond to the census. We had really troubling reports this year of the enumerators, the people actually going out and doing the counting, being harassed just trying to do their job, in some cases chased off, chased, and berated and worse.

The cost of the census is measured in billions and billions of dollars, and it is going up. In fact, the census this year cost way more than the census just 10 years ago. I think we counted about 75 percent of the people. We got about 75 percent of the people to respond

to the mailings that we sent out.

Here is my question: I think it is for every extra percentage of people who responds to the mailings that go out in the census, asking people to respond from where they live, I think it saves the—reduces expenditures by—I do not know, \$80, \$90, \$100 million. So if we go from 70 percent response to an 80 percent response, we save roughly 10 times, we will say, "\$80 million, which would be

like \$800 million. A lot of money."

Here is my question. I do not know if you can see where I am going with this. But is there anything that you all have been doing, in particular, Dr. Crane and Mr. McEwen, and certainly Dr. Karp, anything that you all have been doing that you think might be applicable for our work on the census? One of the things that I was troubled by, Dr. Coburn, who sat here where Senator McCain sat for many years, and also right here as either the Chair or the Ranking Member of this Subcommittee, he and I were very unhappy that, again this year, the Census Bureau did not make very extensive use of technology, at least not the kind we had hoped for, using the Internet like some other countries do to actually reach out to people and help count them.

But I would be interested if you think some of what you have done might be applicable to help us to do a better job counting people and do a more effective job counting people. I do not care who goes first.

Dr. Crane. I have a sort of very quick answer, which is that while there are many implications or privacy implications that would have to be thought out very carefully, I think most Americans carry a phone. And there have been recent mobility studies showing that people are quite predictable, that if you think about where you go throughout your day, you spend most of your time going between home and work with maybe a few deviations to go to the market or other outings.

I think there is the possibility to use phones as sensors to detect, at least to get a broad-scale scope, sort of count of the number of people in the country, although this data is typically owned by the cellular phone carriers, and they are quite rightfully protective of that data.

Senator CARPER. All right. Thank you.

Mr. McEwen, think outside the box for us for a little bit. Do a

little bit of blue skying for me?

Mr. McEwen. You may want to offer an incentive for the people to give that information. Right now it is viewed as an intrusion. Given the fact that his information is very important to the country, and that the higher the response rate, the bigger the savings, for the government. To encourage participation consider sharing some of the potential savings in some way, with the respondents. Possible areas to discount are on State tax, income tax, municipal tax, tuition or Medicare, etc.

I found in our Challenge there was all sorts of opposition amongst our management team. To overcome it, I had to first understand the basis of their opposition and then show them the potential for personal benefit. Once they saw the benefit, then they

embraced the concept.

Senator CARPER. Good. Right here in this hearing room we had the folks from the Bureau of the Census before us a year or two ago, and we were trying to get them to think outside the box to see how they could use technology, whether it was too late to use the Internet or cell phones or whatever. And I suggested to the fellow who—I think it was either the Acting Director of the Bureau of the Census or about to become the Director. And I said to him maybe we should consider like offering a reward to people who participate in the census, but for those who did maybe their name would be entered into something to make them eligible for the lottery, a lottery, and then so many people from every State would have the chance of participating in some prize money. I did not know at the time if it was a good idea or a bad idea. I just wanted to think outside the box. And they were crazy about the idea, but did not do a whole lot of thinking outside the box.

I want to make sure—if I will be around here in this chair 10 years from now when we do the census again, but I want to make sure that the way we do the census then will be a good deal different than the way we have done it this year and 10 years ago

and 20 years ago and so forth.

Dr. Karp, anything you want to add to this before I move on to another question?

Dr. Karp. I think you get the smartest people and you have them brainstorm. I do think you would have to use incentives. I would be a little careful about using data for civil liberties reasons. It would clearly have to be something that people buy into. So there is essentially the challenge of how can you do it, which might be very different than the challenge of how can you do it in a way that society believes in. And I think that would be the dichotomy that is being outlined here, and I would be very focused on getting a consensus around how it is done as opposed to just doing it.

Senator Carper. All right. We have a somewhat different situation with the Postal Service. The Postal Service is sort of a quasi-Federal private operation with hundreds of thousands of employees. Six days a week, they deliver to every door, every mailbox in America. And before we had the Internet, before we had electronic bill paying and the ability to send email messages or text messages like that, folks used mail a lot. I recall when I was a naval flight officer out at Moffett Field, and we would go overseas during the Southeast Asia and Vietnam War, we always looked forward to the mail call, and we did not have the ability to send email messages, text messages, or any of that stuff. We were just lucky to be able to get a MARS call with ham radio operators and be able to talk to our loved ones every several months.

But the Postal Service is operating in a very different world today, and part of what they need to do is be able to not just find ways to save money—and they are, I think, doing an admirable job there, but also to help them use their business model to deliver more revenues. And somewhere along the line, we might want to reach out to you and to the folks that you work with to see if you

could help us think outside the box there as well.

Dr. Karp, for you please. Palantir instituted the fraud mapping tool at the Recovery Board and is now bringing that same technology, as we talked earlier, to a pilot over at the Centers for Medicare & Medicaid Services. And your company's maybe best known work for government has been, I think, in the intelligence community, which is just a far cry from recovery contracts and from Medicare claims.

What are the similarities, if you will, that your company has encountered when it comes to analyzing secret intelligence or finding fraudulent or wasteful activity of government funds?

Dr. KARP. Well, obviously at a very general level, we are particularly interested in uncovering latent networks so that—there is a big difference between—

Senator CARPER. When you say uncovering latent networks, I think I know what that means, but maybe not everybody does.

Dr. KARP. Uncovering networks that are not visible and essentially conspiracies. So you can think of the difference between ordinary criminality and a conspiracy of the kind that creates a terrorist attack as being something that requires multiple people working together or some kind of very sophisticated methodology. What makes that kind of behavior particularly difficult to find is it may be in very different data stores, each of which has different data that you need to be able to see the conspiracy.

So, in fact, the fact that I am sitting here and you are sitting here is very hard to find sometimes in a data store if one data store has you and one data store has me. And what we are specialized in is allowing analysts to perceive the data in every data store so that they can uncover hard-to-find or latent networks.

So if you take that to the fraud, waste, and abuse case, what you have are different kinds of criminals. Some criminals are very simple. They are just doing something that—they are a Mom-and-Pop shop essentially. They are just trying to perpetrate very simple fraud. But the most productive criminals tend to have methodologies that include switching their name, switching their LSE, switching their location. These are actually very, very hard to find in large data sets. And it is also hard to find while simultaneously maintaining privacy and civil liberties protections, which, of course, one has to do in the intelligence community. That is something we have been very passionate about.

And so what we did—or under the leadership of Chairman Devaney, what was done was taking the ability to find latent networks or difficult-to-find networks and using that in the fraud, waste, and abuse context so that we not only find the simple criminal but the criminal that is essentially a professional, someone that is changing their identity, changing their LSE, but has been caught perhaps in the past, knows they have been caught in the past, but has a network of people that allow them to shift their identity, shift the kind of methodology they are doing. This kind of person has heretofore actually been very, very hard to catch, but using some of these techniques and especially the knowledge that Chairman Devaney and others had, combined with our ability to integrate data, it has been very effective.

Senator CARPER. OK, thanks. And one last question, if I could, for the entire panel. And, Dr. Crane, I will ask you to kind of lead it off, and we will move from your right to your right, and then we will wrap this up. But one theme which has been repeated often in your testimonies for today is the necessary link between innovative technology and human intelligence. And computers do a lot of things very well, as we know, but they can only get us, if you will, part of the way there.

I think the Recovery Board's work has shown us or provided for us a great example of how we can leverage both of these assets to produce real results. And I would like for each of you really from your own unique experience to take a moment and explore with us that idea. And what does each of those assets bring to the table? How can government foster the right ratio to make it most effective? Dr. Crane.

Dr. Crane. If I understand the question, it is about how do we combine innovative technologies with human intelligence?

Senator Carper. Yes.

Dr. Crane. I think that in all of our cases here, we have all been involved in some way with augmenting human intelligence with communication networks and other exchange networks. I think that in some way there is the sort of catch-all term of crowd sourcing that means a lot of things to a lot of people.

I think in my experience the most effective way of doing crowd sourcing and bringing these technologies of communication and human intelligence together is about finding the right incentives, finding the way that you involve the largest number of people that are acting in their own interest, but that you have designed or shaped their behavior through the right incentive mechanisms that are not always financial, that can sometimes be reputational in the case of the United Nations project that I had the pleasure to work on.

And I think that while many people have thought about just applying crowd sourcing or going in the crowd-sourcing direction, it is not always effective. And one has to think very carefully about what the objectives are and what the goals are of the actual program so that you can—for example, in some cases, crowd sourcing means simply asking everyone in this room what your weight is, and you probably will get it on average. And this is a type of averaging of the crowd or the wisdom of the crowd; whereas, other types of crowd sourcing are thought of in terms of Wikipedia, where it is a sort of social production crowd, where there the incentives are very different for participation.

So, again, it is hard to address these things so generally, but what I would suggest is that whatever problems are being thought of, to think very carefully about what types of crowd one would like and how to properly incentivize their participation.

Senator CARPER. OK. Thank you. Mr. McEwen.

Mr. McEwen. Chairman Carper, I believe it is about communication—

Senator CARPER. Say that again? You believe what?

Mr. McEwen. It is about communication, and when people are talking between different industries, different organizations, they each have their own vocabulary, and often there is not an interpreter to do that.

There is a great benefit to be realized by getting different organizations talking, different departments talking. My wife and I set up a Center for Regenerative Medicine. Once a month our researchers come together to share what they are doing. It is always surprising to me by how much surprise is in the room as each of these researchers hear what the others are doing, and how it relates to what they are doing. So the more you encourage communication between the departments, the greater the benefits.

I have found in my own business, the mining industry, if you can translate mining language into the words understood by investors, then they can understand why you are getting excited and why your company's share be bought. It is this linkage that is very important.

And the other aspect is only 5 or 10 percent of the audience you are talking to are going to be lateral thinkers. It is this group that are able to look across a broad spectrum of information and make connections between what appear to be disparate facts or observations. So you are not going to get everybody doing it. You will get a small percentage that do the innovation. The others will follow once they see the benefit.

Senator CARPER. OK. Thank you. Dr. Karp. Dr. KARP. First of all, thank you for hosting us. Senator CARPER. It was my pleasure. Thank you.

Dr. KARP. Some of the comments about crowd sourcing come down to how does one augment intelligence. We are very passionate about augmenting human intelligence and in this case allowing non-technical investigators to do the work of essentially technical engineers. So for us the question is: How can you take someone who is not technical but has deep insight into a problem, like Chairman Devaney, and allow them to extend their knowledge into a technical area? This is something that all of society will face, all of government will face, and doing that simultaneously and protecting civil liberties I think will be one of the core challenges of our time. We are very passionate about it. We are delighted to be a part of the Recovery Board and its efforts and would like to do more of this.

Senator Carper. Good. Well, my guess is you will have that op-

portunity, and we look forward to partnering with you.

Let me just close, if I can, by saying if we keep on doing things the way we have always done them, we will keep on getting the same result. And what is insanity? Insanity is described as doing the same thing over and over and over again expecting a different

result and not getting it.

Obviously, with the kind of budget deficits that we face—and we have literally doubled our Nation's deficit between 2001 and 2008. We are on track to maybe double it again over the next 10 years if we are not careful. I am pleased with the initiatives of this Administration to try to turn the—get the boat on a better course. But we need to really be thinking outside the box. The three of you and the folks that you work with really do a pretty good job-a very good job of thinking outside the box, and we appreciate your working with us and particularly with the Board, Dr. Karp, in other ways here to help us provide, one, better service, do so more effectively, to spend less money, and the money that we do spend to better ensure that we are getting our money's worth, the taxpayers' money's worth for that.

I really do want to have a chance to maybe follow up with maybe a couple of you with respect to the Census Bureau and do some thinking outside the box. One of the things the Census Bureau does is they partner with all kinds of organizations across the country who are invested and interested in making sure that their constituents turn out and are counted. These organizations are not paid anything. They are just part of a very broad partnership. They are incentivized because they want to-for reasons I will not get into now, they want to make sure that their constituents are counted and represented in the surveys.

So I am one who thinks a lot about how to incentivize good public policy and how do we use market forces and other forces to do that, and we would like to have an opportunity to drill down with

you on that.

There may be some way that you all can help us think more smartly about the Postal Service and find ways that they can—I want them to be around for another 200, 300 years or more. We want them to be able to function and compete in a world that continues to change.

Thanks again for joining us. It is great to see you, each of you, and we will look forward to crossing paths with you again. You may get some follow-up questions from some of our Members that were here or maybe not here. If you do get those questions, would

you please respond to them as promptly as you can.

And with that, this hearing is concluded. Thanks very much. Dr. Karp. Thank you.
Mr. McEwen. Thank you.
Dr. Crane. Thank you.
[Whereupon, at 4:37 p.m., the Subcommittee was adjourned.]

#### APPENDIX

FOR IMMEDIATE RELEASE



FOR RELEASE: August 3, 2010 CONTACT: Emily Spain (202) 224-2441

SUBCOMMITTEE ON FEDERAL FINANCIAL MANAGEMENT, GOVERNMENT INFORMATION, FEDERAL SERVICES, AND INTERNATIONAL SECURITY

#### COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS

HEARING: "Transforming Government Through Innovative Tools and Technology"

#### Opening Statement of Senator Thomas R. Carper, Chairman

"Over the past two years, we've faced a series of immense economic challenges. These challenges have disrupted the lives of millions of American workers, slowed our nation's economic growth, and brought greater attention to the fiscal stability of our government. In the face of this uncertainty and fear, the American people have demanded a new sense of urgency and attention to these problems and called on us to act.

"That is why, over a year ago, President Obama proposed and this Congress passed, the American Recovery and Reinvestment Act to help put Americans back to work and instill a renewed sense of confidence in our economy. The plan totaled over \$787 billion, much of it in the form of tax cuts for working Americans, which citizens saw in clear dollars and cents right on their weekly paycheck.

"The other piece of the Recovery Act was direct federal spending for projects to help rebuild our physical and economic infrastructure while, at the same time, preserving jobs and beginning the process of getting unemployed Americans back to work. And when the President and this Congress put together this plan, we wanted to make sure that not one dime was wasted.

"The Recovery Accountability and Transparency Board was created to give Americans a window into how their government was spending their money. The steps the Board and the administration have taken in this area are unprecedented, really. Through Recovery-dot-gov, citizens for the first time could see where projects were happening, how much was being spent on them, and how many jobs were saved or created because of them.

"With any pot of money this big, however, there will be scam artists and criminals who want to take advantage and defraud the American people. The Recovery Board was tasked to go after these individuals proactively and make sure that every penny was being spent to put Americans back to work and not to line the pockets of crooks. Working with Inspectors General from 29 federal agencies, the Recovery Board has successfully provided both

(41)

transparency and accountability for these funds. In fact, they've done such a good job, the President has told them to take their show on the road.

"Last month, Office of Management and Budget Director Peter Orszag and Vice President Biden announced that the tools and techniques successfully used at the Recovery Board will be expanded to the Centers for Medicare and Medicaid Services. I've said before we need to do a better job of bringing the highest level of health care to Americans for less money, and it's clear there's a lot more we can do to cut fraud and waste from our public healthcare system.

"Medicare and Medicaid made about \$65 billion in improper payments in FY 2009 - and good deal of those payments can be attributed to fraud. If we can use the Recovery Board's efforts as a model to quickly detect and stop those payments and put that money to work for the better health and treatment of the American people.

"I look forward to hearing from our first two witnesses - Chairman Devaney from the Recovery Board and Mr. Werfel from the Office of Management and Budget - about the Recovery Board's successes and challenges as well as the President's plans to expand these efforts to make all of government work better and more efficiently. As we look at the averted economic collapse in the rearview mirror, we face our nation's mind-boggling budget deficits barreling straight toward us.

"I hope to have a broader discussion with members of our second panel about how they think government can perform better and more efficiently at a time when those of us in government are thinking about how we can do more with less. These are well-respected visionaries in their fields and I look forward to hearing their thoughts on how government might be able to solve problems and do more with less by leveraging novel approaches and innovative technologies.

"If we do not start doing a better job of managing our federal expenses and begin to close our deficits, we will pass on a legacy of crippling debt to our children. We must use every tool available to bring our fiscal house back in order and give the American people the government they deserve."

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#### STATEMENT OF SENATOR JOHN MCCAIN, RANKING MEMBER

### SUBCOMMITTEE ON FEDERAL FINANCIAL MANAGEMENT, GOVERNMENT INFORMATION, FEDERAL SERVICES AND INTERNATIONAL SECURITY

#### COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS

"Transforming Government Through Innovative Tools and Technology"

August 3, 2010

Nearly a year and a half since the American Recovery and Reinvestment Act was passed; most Americans still question the impact it has had on the economy. Recent polls reflect an increasingly skeptical public. A CNN/Time poll from mid-July found that 53% felt that the economy would be better off today without having spent the \$862 billion in stimulus funds. But the bill was passed and as a result, the national debt will continue to soar towards an unsustainable level. To make matters worse, unemployment numbers continue to rise, despite considerable promises to the contrary.

Sensing the public's disenchantment, the Administration has stepped up the pressure to get more stimulus money out the door. Indeed, its efforts have been moderately successful. Hundreds of billions of dollars have already been awarded and spent. But, with increased pressure comes the increased risk that adequate oversight and accountability will suffer.

It has been brought up before, including by Mr. Devaney himself, that the industry standard is a 7% expected loss to fraud. Based on the current cost of the stimulus, that's an astonishing \$60 billion in possible losses. Considering that the stimulus will add

Page 1 of 2

over \$1 trillion to our national debt, letting \$60 billion to be lost to fraud and abuse is just plain unacceptable.

I recognize that the Recovery Board, under difficult circumstances, has worked to set up an operation that will provide the transparency and oversight both promised and demanded. Mr. Devaney testified at several full committee hearings last year that the Board was implementing a series of internal controls and procedures intended to prevent instances of fraud, waste, and abuse before funding is awarded. I'm encouraged with his focus on prevention rather than response after money has already gone missing.

While today's hearing highlights new tools and technologies that the Recovery Board has implemented to assist in its efforts, their effectiveness depends on the skill and experience of the individual using them. Finding skilled auditors and contract specialists, or training new personnel in these important professions, must be a priority.

Such is the case with the Centers for Medicare and Medicaid Services. This subcommittee has held several hearings over CMS' failures to address improper payments at CMS. The Chairman and I also co-sponsored legislation that became law earlier this spring that addressed this issue. Considering that CMS accounted for roughly sixty percent of the \$110 billion in improper payments the government made last year, they have room for significant improvement. CMS, however, has some long standing issues that it is still working to address. My confidence in their ability to follow the Recovery Board's success, and expand beyond the pilot program, will improve as prior deficiencies are addressed successfully.

Mr. Chairman, I look forward to receiving the testimony from our witnesses today and thank you for holding this hearing.

Page 2 of 2

# EXECUTIVE OFFICE OF THE PRESIDENT OFFICE OF MANAGEMENT AND BUDGET

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Testimony of Daniel I. Werfel
Controller, Office of Management and Budget
before the
Senate Subcommittee on Federal Financial Management, Government Information, Federal
Services, and International Security

August 3, 2010

#### Introduction

Thank you Chairman Carper, Ranking Member McCain, and distinguished members of the Subcommittee, for inviting me to discuss how the Federal government is using technology to prevent and reduce government payment errors. As you know, the President feels strongly that we need to bring a new sense of responsibility for taxpayer dollars by eliminating what doesn't work, cracking down on waste, and by making government more open and responsive to the American people. This is a cause he worked on as a member of this body and that the Administration has focused on since taking office. One of the ways the Administration will accomplish these goals is through improving the Federal government's use of technology to enhance citizen services, improve the productivity of government operations, and identify and help prevent fraud, waste, and error in government programs.

One of the biggest sources of waste and inefficiency is the nearly \$110 billion in improper payments made in Fiscal Year (FY) 2009 to individuals, organizations, and contractors. Improper payments occur when funds go to the wrong recipient, a recipient is ineligible for the payment (e.g., a deceased or incarcerated individual), the recipient receives the incorrect amount of funds (including overpayments and underpayments), documentation is not available to support a payment, or the recipient uses funds in an improper manner. Whether the payment error resulted from inadequate recordkeeping, an inadvertent processing error, the lack of timely and reliable information to confirm eligibility, or fraud, the amount of payment errors we incur is unacceptable and must be addressed aggressively and comprehensively.

Accordingly, I am pleased that we have set aggressive goals to reduce the current, government-wide amount of improper payments by \$50 billion, and to recapture through payment recapture audits at least \$2 billion in improper payments to vendors by FY 2012 - a significant acceleration and increase of recoveries from the previous several years.

While the Administration has several initiatives underway to accomplish these goals, our partnership with Congress is vital to these efforts to prevent and recover improper payments. The recent enactment of the Improper Payments Elimination and Recovery Act was an important milestone in this partnership, providing Federal agencies with new tools to address payment errors. The President's FY 2011 Budget was another critical step, as it contains a series of

mandatory and discretionary proposals that enable critical program integrity improvements in areas such as Medicare, Medicaid, Unemployment Insurance, and Social Security. Common to all these proposals are taxpayer savings from the elimination of waste and error. In total, the President's proposals, if enacted, would save more than \$150 billion over 10 years.

In addition, the Affordable Care Act was an important milestone in program integrity, as the new law contains numerous authorities and tools for the Department of Health and Human Services (HHS) to root out fraud and error in Medicare and Medicaid, and to recapture improper payments in these programs. With the Act's passage, we are now focused on the important work of effectively executing these new authorities in a manner that results in swift and sharp decreases in payment errors in our Federal health care programs.

The remainder of my testimony today further elaborates on our efforts to prevent and recover improper payments, with emphasis on the central role that technology plays.

#### Improper Payments Overview

The Federal government makes billions of dollars in payments every year. These payments provide support to millions of retirees and disabled individuals, student loan benefits for many college-aged students, payments to contractors for services performed in the United States and abroad, and funds for state-administered programs like Unemployment Insurance (UI) and the Supplemental Nutrition Assistance Program (SNAP).

The vast majority of payments made by the government are proper. This means that the payments are for the right amount, are sent to the right recipient, and are used for the right purpose. Unfortunately, there are instances where the government makes improper payments. For example, an agency may send a payment to the wrong person or business, the payment may be sent to an ineligible individual who is deceased or incarcerated, the payment may be for the wrong amount or be a duplicate payment, or there may be inadequate documentation to verify that the payment is appropriate.

Recognizing that improper payments were a problem that likely extended throughout the Federal Government, Congress passed the Improper Payments Information Act of 2002 (IPIA, Pub. L. 107-300), and the Improper Payments Elimination and Recovery Act of 2010 (Pub. L. 111-204). Among other things, agencies are required to conduct risk assessments to determine which programs are susceptible to significant improper payments, to measure and report improper payment rates and amounts for programs that are found to be susceptible to improper payments, and to implement corrective actions to address the root causes of improper payments and reduce and prevent future improper payments.

Where once there was limited government-wide knowledge of the extent of improper payments, agencies now work to identify programs that are susceptible to making significant improper payments, and to address the causes of improper payments. In FY 2004, the first year of improper payment reporting, agencies measured 30 programs and reported an estimated \$45 billion in improper payments. Since that first year of reporting, the number of programs measured has more than doubled, agencies have refined their measurement methodologies and improved the identification of improper payments, and government outlays have increased.

These three factors have led to increases in improper payments reported by agencies, and in FY 2009, the most recent year of reporting, agencies reported \$110 billion in improper payments. This total represents a \$38 billion increase from FY 2008. Contributing to this increase is a lack of adequate controls surrounding payments, a lack of tools to identify and prevent improper payments, and the factors previously identified (an increase in the number of programs reporting, increased government outlays, and changes to error measurement methodologies).

As noted throughout my testimony, the Administration has begun aggressive efforts to remediate the nearly \$110 billion in estimated improper payments. To that end, we have several initiatives under way to prevent, reduce, and recapture improper payments, and have proposed additional efforts in the President's FY 2011 Budget. At the same time, the Administration is cognizant that efforts to reduce improper payments cannot unduly burden the intended beneficiaries of program benefits and legitimate entities doing business with the Federal government. That is why, as discussed below, Executive Order 13520 focused both on reducing improper payments and ensuring program access for program participants.

#### **Current Administration Efforts**

In addition to putting forward administrative, legislative, and funding requests in the President's FY 2011 Budget, the Administration is already taking several steps to reduce and recapture improper payments. Many of these initiatives revolve around leveraging technology to improve government operations and reducing payment errors. I would like to highlight and provide a brief description of six of these initiatives: implementation of Executive Order 13520 on Reducing Improper Payments, release of a Presidential memorandum on Enhancing Payment Accuracy Through a "Do Not Pay List," release of a Presidential memorandum of March 10, 2010 on Payment Recapture Audits, implementation of the Affordable Care Act (P. L. 111-148), implementation of the Partnership Fund for Program Integrity Innovation, and use of prepayment and post-payment tools to identify and prevent improper payments.

#### Executive Order 13520 on Reducing Improper Payments

In response to the large increase in improper payments between FY 2008 and FY 2009, on November 20, 2009, the President issued Executive Order 13520 on Reducing Improper Payments. The Executive Order will reduce and prevent improper payments by enhancing transparency, increasing agency accountability, and exploring incentives for State and local government efforts to reduce improper payments in State-administered programs (such as UI, SNAP, and Medicaid).

The Executive Order represented a fresh approach to improper payments in many ways, including emphasizing the importance of improving payment accuracy without taking actions that restrict access to program benefits for legitimate beneficiaries. The goal is not to make government harder to navigate. For example, for a poor family who needs SNAP benefits to help put food on the table or a child who needs health care and qualifies for Medicaid or the Children's Health Insurance Program (CHIP). The goal is to do a better job of detecting

<sup>&</sup>lt;sup>1</sup> Executive Order 13520 can be viewed on the White House's website at: <a href="http://www.whitehouse.gov/the-press-office/executive-order-reducing-improper-payments">http://www.whitehouse.gov/the-press-office/executive-order-reducing-improper-payments</a>

fraudulent claims and averting improper payments while maintaining and improving how accessible our programs are for the public.

Agencies have made great strides in implementing the Executive Order. We have identified agencies with high-priority programs that account for the majority of improper payments, established supplemental measures to provide more frequent and current measurements for the majority of these high-priority programs, and selected Accountable Officials that are responsible for coordinating efforts to reduce improper payments at agencies with high-priority programs. All of this information is now readily available to the public on a recently launched improper payments dashboard at *PaymentAccuracy.gov*. Specifically, the dashboard, required by the November Executive Order, includes:

- Government-wide and program-by-program data on improper payment rates, amounts and reduction targets;
- Data on the amount of contract payment errors recovered;
- The top 10 highest improper payments for the most recent reporting quarter;
- · The identity of the agency senior accountable official; and
- Agency success stories.

Further, I am pleased to report an early success in one of our high-priority (or high-error) programs, the Supplemental Nutrition Assistance Program (SNAP). In June, the Secretary of Agriculture reported that the SNAP error rate fell from 5.01% to an all-time low of 4.36%. Over \$50.3 billion in SNAP benefits were issued in 2009. If the error rate had remained the same as the prior year's rate, \$330 million in additional errors would have occurred. Despite record-breaking participation levels, benefit increases, an increased amount of resources being spent, and a continued focus on outreach and accessibility, the program experienced its 6th consecutive year of error rate reduction.

#### The "Do Not Pay List"

In addition to the November Executive Order, the Administration has taken other steps to reduce and prevent improper payments. As you may know, the President recently issued a memorandum to agencies on Enhancing Payment Accuracy through a "Do Not Pay List." The President's memorandum directs that a "Do Not Pay List" be established, which will serve as a single source through which all agencies can check the status of a potential contractor or individual by linking the agency to relevant eligibility databases, such as the Social Security Administration's Death Master File, the General Service Administration's Excluded Parties List System, the Department of the Treasury's Debt Check Database, the Department of Housing and Urban Development's Credit Alert System or Credit Alert Interactive Voice Response System, and the Department of Health and Human Services' Office of Inspector General's List of Excluded Individuals/Entities.

Too often, an agency does not check these and other government databases before making a payment, or finds it difficult to do so. By not checking these databases, agencies are denied

<sup>&</sup>lt;sup>2</sup> The President's memorandum on Enhancing Payment Accuracy Through a "Do Not Pay List" can be viewed on the White House's website at: <a href="http://www.whitehouse.gov/the-press-office/presidential-memorandum-enhancing-payment-accuracy-through-a-do-not-pay-list">http://www.whitehouse.gov/the-press-office/presidential-memorandum-enhancing-payment-accuracy-through-a-do-not-pay-list</a>

essential information that they need to determine, for example, if an individual is alive or dead or if a contractor had been debarred. In fact, over the past three years, Federal auditors have reported that the government paid out benefits totaling more than \$180 million to approximately 20,000 Americans who were dead; and more than \$230 million in benefits to approximately 14,000 fugitive felons or those in jail and who are not eligible for benefits. In addition, earlier this summer government auditors released a report that identified millions of dollars to ineligible recipients, including dead and incarcerated individuals, in the Treasury Department's First-Time Homebuyers Credits Program (Homebuyers Credits program), and similar improper payments were described in another report on HHS' Low Income Home Energy Assistance Program (LIHEAP).

The "Do Not Pay List" will allow Federal agencies to utilize technology to access eligibility information in a timely and cost effective manner. As we work to implement the requirements of this memorandum, we look forward to working with Congress to ensure that agencies have access to information and relevant databases, and technological resources and systems, which can help prevent improper payments before they occur.

#### Payment Recapture Audits Memorandum

While the Administration believes agencies must do everything possible to prevent and reduce improper payments, we also believe that when they do occur, agencies should do everything possible to recapture these payments. On March 10, 2010, the President issued a memorandum to agencies directing them to intensify and expand their efforts to recapture improper payments. Under the Recovery Auditing Act, agencies were required to review contract outlays if their annual awards are over \$500 million. Many agencies hire contractors that use sophisticated software and tools to identify contract overpayments that could be recovered. In addition, other agencies review grant, benefit, and contract payments as part of their normal post-payment review process. Certain other programs – including Medicare— are also authorized to review payments and to recover any improper payments identified during these reviews. Through these and other methods, agencies are reviewing their payments and recapturing any improper payments identified.

The President's memorandum of March 10, 2010 directs agencies to intensify and expand these efforts. In accordance with the memorandum, we have set a goal of recovering at least \$2 billion in improper payments over the next three years, a significant acceleration from the previous several years. OMB is working with agencies to review current practices, reviewing the results of previous recapture audits performed on contract outlays, and reviewing the results of Medicare Recovery Audit Contractors to promulgate additional guidance for agencies that will describe best practices and ensure that agencies are doing as much as possible to identify and recapture improper payments, and to meet the recovery goal. In addition, the recently-enacted

<sup>&</sup>lt;sup>3</sup> Treasury Inspector General for Tax Administration, Additional Steps Are Needed to Prevent and Recover Erroneous Claims for the First-Time Homebuyer Credit, June 17, 2010.

<sup>&</sup>lt;sup>4</sup> Government Accountability Office. Low-Income Home Energy Assistance Program. Greater Fraud Prevention Tools are Needed, June 2010.

<sup>&</sup>lt;sup>5</sup> The Presidential memorandum of March 10, 2010 can be viewed on the White House's website at: http://www.whitehouse.gov/the-press-office/presidential-memorandum-regarding-finding-and-recapturing-improper-payments

Improper Payments Elimination and Recovery Act (Pub.L. 111-204) will also significantly expand agency efforts to recapture improper payments by lowering the threshold for conducting recovery audits and expanding their scope to payments beyond contracts.

#### The Affordable Care Act

As you know, Federal health programs are a major driver of government-wide improper payments, and HHS' programs accounted for nearly 60% of government-wide improper payments in FY 2009. To address this problem, the President recently announced an ambitious and aggressive goal to reduce improper payments in the Medicare fee-for-service program by 50%, from 12.4% to 6.2%, by FY 2012. We will achieve this goal through many of the initiatives I have already described, as well as through the provisions contained in the new health reform law.

The Affordable Care Act was recently signed into law and the White House and the Office of Management and Budget are working with Federal agencies to implement this historic legislation. While the new law contains many important provisions to extend and improve health care for millions of Americans, it also has several provisions designed to prevent and detect fraud and abuse, to identify and recover improper payments, and to penalize those who commit fraud or abuse, in Medicare, Medicaid, and the Children's Health Insurance Program (CHIP).

#### These provisions include:

- Providing the Secretary of HHS with new authorities to increase screening of providers and suppliers before they enroll in Medicare, Medicaid, or CHIP and to conduct oversight directly after they enroll; and to implement temporary moratoria on new providers in highrisk areas to combat waste, fraud, and abuse;
- Increasing data sharing between Federal agencies like HHS' Centers for Medicare and Medicaid Services (CMS), SSA, the Department of Defense, and the Department of Veterans Affairs – to detect and investigate potential fraud and abuse throughout Federal health programs;
- Expanding the Recovery Audit Contractor program from Medicare Parts A and B to also include Medicare Parts C and D and Medicaid; and
- Enhancing civil and criminal penalties for Federal health care fraud and false claims.

The Administration is currently working across agencies to implement these and other program integrity provisions included in the new law.

#### Partnership Fund for Program Integrity Innovation

A fifth initiative that I would like to highlight is the Partnership Fund for Program Integrity Innovation. The FY 2010 Consolidated Appropriations Act (Pub.L. 111-117) allocated \$37.5 million for the Partnership Fund for Program Integrity Innovation (the Partnership Fund). The purpose of the Partnership Fund is to identify ways to improve service delivery, payment accuracy, and administrative efficiency, while also reducing access barriers to Federal assistance programs and protecting beneficiaries. The Partnership Fund will accomplish these goals by funding innovative pilots at the state and local level that will be rigorously evaluated to determine their effectiveness in meeting these goals.

We have made significant progress since the Partnership Fund's inception. In January, we established a website, Partner4Solutions.gov, where anyone can submit pilot ideas. In this short time, we have received 59 ideas from both public and private stakeholders. Ideas are beginning to coalesce around common themes, such as using data matching to reduce improper payments, standardizing Federal benefits applications to improve service and efficiency, expanding information technology systems and physical benefits service locations that offer access to multiple Federal programs through a single encounter, and testing new reimbursement processes to incentivize State participation. We are working directly with the Federal agencies through a Federal Steering Committee, and have also engaged a number of states and other organizations representing key stakeholder interests. We are working now to engage these and other organizations as part of a collaborative forum to generate and refine concepts. We expect this forum to form working groups around specific pilot ideas that can be presented to OMB and the Federal Steering Committee for consideration. I am very excited about this promising program and the potential improvements and savings that we expect to be generated in the near future.

# Pre-payment and Post-payment Reviews

A final area I would like to highlight is the government's use of technology to identify and prevent improper payments and fraud. Specifically, an increasing number of agencies are using data mining and other business intelligence tools to look across programs and to identify errors that can either be prevented before they are made, or recovered if they are made.

For instance, CMS, the HHS agency which administers Medicare, Medicaid, and CHIP, uses prepayment analytic software to identify payments with characteristics that are outside the norm, such as duplicate payments, overpayments in general, and a large number of payments to one provider. This review helps the agency establish a profile of the type of payments that should trigger an intensified review. In addition, the Department of Defense (DoD) has prevented more than \$700 million in improper payments to vendors over the past 2 years through the deployment of their Business Activity Monitoring (BAM) tool. BAM is an analytical tool that assists DoD in flagging potential improper payment transactions before they are completed and the money is spent. Lastly, the Recovery Accountability and Transparency Board (RATB) has deployed a cutting-edge fraud mapping tool that leverages the latest technologies in data capture and analytics to identify potential fraud and error. The RATB has pioneered and refined the tool, and its use is one of the reasons why fraud and abuse in Recovery Act funds has been much lower than most people expected. Earlier this summer, we announced that we are starting to roll out this innovative tool for use across government. We are first piloting the tool at CMS, a natural place to start since Medicare and Medicaid combined had about \$65 billion in improper payments in FY 2009 - including about \$47 billion in Medicare alone.

#### Conclusion

The problem of improper payments is not new; to the contrary, it has likely affected Federal agencies since the founding of the Republic. Under this Administration, Federal agencies are renewing and improving their efforts in this area.

In addition, States and Federal agencies have been implementing initiatives designed to reduce improper payments for at least the last decade, if not longer. This experience has helped us identify practices that work to prevent improper payments, such as pre-payment reviews using new software and technology, and the use of third-party databases to verify eligibility for benefits or payments. In addition, it is also imperative that we share best practices on how to recapture improper payments when they do occur. Moving forward, one of my goals is to ensure that Federal and State agencies share these best practices with each other, and we are working to do so by improving collaboration and bringing together different agencies and offices within agencies.

Whereas Federal agencies have traditionally taken a siloed approach to addressing improper payments - e.g. the financial managers try to implement changes without talking to programmatic staff, or Federal and state agencies work independently of each other - I believe the results of the last six years show that this approach has limited impact. Accordingly, I am excited that many of the initiatives under way - including the implementation of Executive Order 13520- have already helped to foster collaboration by bringing together representatives from different parts of agencies, from different agencies, and from different levels of government, to identify best practices and share information on efforts that have helped to improve payment accuracy and our government's financial management.

Thank you again for inviting me to testify. I look forward to answering your questions.

TESTIMONY OF THE HONORABLE EARL E. DEVANEY
CHAIRMAN, RECOVERY ACCOUNTABILITYAND TRANSPARENCY BOARD
BEFORE THE SUBCOMMITTEE ON FEDERAL FINANCIAL MANAGEMENT,
GOVERNMENT INFORMATION, FEDERAL SERVICES, AND INTERNATIONAL
SECURITY
UNITED STATES SENATE
AUGUST 3, 2010

Mr. Chairman and members of this Subcommittee, I want to thank you for the opportunity to appear before you today to discuss the accomplishments of the Recovery Accountability and Transparency Board (the Board), with particular emphasis on our use of technology in both the accountability and transparency arenas. After my opening remarks, I will be glad to answer any questions you have for me.

In the year and a half since the enactment of the American Recovery and Reinvestment Act of 2009 (Recovery Act), the Recovery Accountability and Transparency Board (Board) has faced many challenges. From its inception in February 2009, the Board began striving to meet extreme deadlines in establishing two complex and innovative Internet sites: an inbound reporting site for recipients of Recovery Act contracts, grants, and loans, and an outbound, public-facing site to make that recipient data transparent. Under normal circumstances, such a project would proceed in sequence: Specific requirements would be determined according to the needs of the client and prospective users, a prototype would be developed, then tested, then readjusted, tested again, and so forth until a final product meeting client approval would be delivered. In government, this would normally take two years. However, the time constraints upon the Board permitted no such luxury. Things had to happen simultaneously. We did it in about six months. As one contractor would later say, "Basically, we were building the ship as it was leaving the port."

Initially, the Board considered joining together existing legacy computer systems within federal agencies to collect and house data from recipients of Recovery funds. But that course was ultimately rejected because of data, timing, and linkage issues that probably would have lead to project failure. So instead of having each federal agency collect data from its own Recovery fund recipients, the Board and the Office of Management and Budget (OMB) opted to create a single, centralized reporting system: FederalReporting.gov.

As it turned out, the new inbound reporting site would resemble no existing governmental system. FederalReporting.gov also would be the first to handle government contracts, grants, and loans all in one system – convenient for data trackers, but a potential nightmare for IT system builders. For instance, federal contracts and grants each involve different user-communities, as well as rules and policies. This entailed different coding, prototypes, testing, and approvals regarding data for each type of award.

The first big test for the Board came nearly a year ago, on August 17, 2009, when FederalReporting gov was launched, enabling recipients of Recovery Act contracts, grants, and loans to begin registering for data reporting. Overall, registration went quite smoothly, largely because OMB and the Board had educated recipients about the system and its functions.

The biggest test, however, was yet to come: On October 1, 2009, recipients began filing what turned out to be more than 130,000 separate data reports. Throughout the reporting cycle, FederalReporting.gov experienced no software defects that prevented either recipient reporting or agency reviews of the data. Some recipients, however, failed to submit timely reports because they simply did not understand the new processes and policies established for the reporting cycle. As reporting periods have come and gone, recipients have became more comfortable with FederalReporting.gov, leading to fewer recipient filing and data errors in each successive reporting period. The Board has done its part, as well, in working to prevent data errors: FederalReporting.gov now contains a number of internal logic checks to keep recipients from entering inconsistent data. For example, one logic check notifies recipients who have entered a Congressional district that does not match up with the zip code they entered.

The Board's outbound reporting website, Recovery.gov, has likewise gone through a number of modifications over the past year and a half. When the Board was first established in February of 2009, we were presented with what I have termed "version 1.0" of Recovery.gov. This website was created hurriedly, out of necessity, by the General Services Administration (GSA) and OMB. After employing many technological advancements and obtaining public input through a round of focus groups and usability studies, the Board launched Recovery.gov version 2.0 on September 28, 2009. And on October 30, 2009, 30 days after the end of the first reporting period began, Recovery.gov displayed an enormous amount of data that had been transferred smoothly from FederalReporting.gov. Both new web-based reporting systems have continued to run smoothly for all four reporting periods so far.

In looking back on these extraordinary achievements, the Board's IT team members universally say they learned two valuable lessons from the strategy of developing components of both websites simultaneously instead of serially. First, developing the typical monolithic, one-size-fits-all technology to solve a problem is not necessary. Quickly and imaginatively integrating existing technologies can work as well, or even better. Second, deploying individual tools and components as soon as they are ready and integrating others as they become available can work just as well as waiting until all pieces have been completed.

Now that Americans have become more familiar with Recovery.gov and the transparency that it offers, the Board is beginning to get more questions relating to our accountability mission. Reporters have begun asking: When can the public expect to see criminal indictments in the Recovery program? My answer is that prosecutions will emerge eventually, but there is much more to safeguarding taxpayers' dollars than bringing high-profile indictments. Indeed, the Board's most critical challenge is preventing fraud and waste before they occur in Recovery programs. While transparency is harder to practice than it is to talk about, I have come to believe that transparency is the friend of the enforcer and the enemy of the fraudster.

With that in mind, the Board's oversight program combines time-honored detective work with cutting-edge technology to allow for meticulous analysis of contracts, grants and loans awarded under the Recovery program. Prevention also means conferring and coordinating regularly with our allies in the oversight community, including the 29 Inspectors General who monitor their agency's Recovery projects and other oversight officials at federal and state levels.

Early on, the Board decided that we needed to build a state-of-the-art command center that would allow us to keep a close eye on the flow of Recovery money and ensure that contracts, grants, and loans would be subjected to comprehensive scrutiny. To accomplish our goals, we built the Recovery Operations Center. The operations center combines traditional law enforcement analysis with sophisticated software tools, government databases, and open-source information to track the money.

It is helpful to visualize fraud occurring on a continuum, as opposed to a finite point in time. In so doing, we realize that there are an indeterminate number of points between the one end of the continuum – when the would-be lawbreaker first decides to commit the fraud – and the other – when the fraud has been fully completed and the money is out the door. The analytical tools used in our operations center have been designed to intercept fraud closer to the front end of that continuum, rather than to detect it only after monies have been lost. Simply put, the Board's skilled analysts look for early warning signs of trouble. They use the software to search colossal amounts of data, looking for potential problems such as criminal convictions, lawsuits, tax liens, bankruptcies, risky financial deals, and suspension and debarment proceedings. Once a concern has been identified, the analysts then perform an in-depth analysis of the award and forward their report to the appropriate agency Inspector General for further inquiry.

However, not all of our efforts are so high-tech. As a veteran investigator, I cannot discount the value of old-fashioned shoe leather – that is, hunting for the proverbial needle in a haystack. Every day, the Board's separate procurement compliance staff pores over individual Recovery awards to identify issues that perhaps should be addressed by federal agencies. For example:

- A federal agency canceled a research grant to a company after our staff discovered that the recipient had been previously debarred from receiving federal funds.
- A \$1 million award to a company was revoked by a federal agency after we discovered
  that the recipient was not eligible for the award under federal guidelines.
- A federal agency canceled a company's contracts worth more than \$7 million after our staff's analysis showed that the recipient had been debarred.
- Another company with multiple awards of nearly \$10 million was debarred from doing
  government business after we uncovered information showing the company was not
  eligible to receive contract awards.

I cannot speak of fraud prevention without lauding those I have termed "citizen IGs": individuals who call or fax our hotline, or use the complaint form on Recovery.gov to report fraud, waste, and mismanagement. As is common with law enforcement hotlines, roughly 10 percent of the information we receive is actionable – but we take reports very seriously. For example, last month we received a hotline complaint from a woman in Ohio, who alleged some impropriety regarding a grant program. She complained bitterly that nobody was listening. I then directed the Board's staff to follow up with her, assuring her that her report would be forwarded to the relevant Inspector General.

I would now like to look ahead at what the future holds for the Board, and also for the greater notions of transparency and accountability. As you may have heard, the Recovery Act provides funds to more than 275 different federal programs. In the past, these programs would have relied on their own separate data-reporting systems, but – because of the creation of FederalReporting.gov and Recovery.gov – a single, two-part system is now used to capture and display data for all of these programs. Innovation like that is the hallmark of the Board's IT team, and that kind of innovation continues to this day. This past May, for instance, the Board announced that Recovery.gov had moved to a cloud computing infrastructure, a technology that allows for more efficient computer operations, improved security, and reduced costs. Recovery.gov became the first government-wide system to move to the cloud.

For aesthetics, usability, and – most importantly – unadulterated data, Recovery.gov 2.0 has raised the standard for accountability and transparency in the federal government. Recovery.gov has now been honored for innovation by several local and national organizations, including the Ad Club of Metropolitan D.C. and the 14<sup>th</sup> annual Webby Awards. And a recent Newsweek article on the re-launch of the site noted: "The result is the current incarnation of Recovery.gov—which, as anyone who has spent significant amounts of time scouring government websites for information will tell you—is perhaps the clearest, richest interactive database ever produced by the American bureaucracy."

I want to assure this Subcommittee that the Board will not rest on its laurels. For instance, we continue to consult with Edward Tufte, Professor Emeritus of political science, statistics, and computer science at Yale University. Professor Tufte has been referred to as "the DaVinci of Data" and is renowned for his ideas on analytical design and the display of information. Recovery gov will soon be implementing a piece suggested by him, which should help users get a visual feel for how Recovery funds are being spent across the country.

The Board is now engaging in our second round of focus group and usability testing, visiting cities across America – including Detroit and Phoenix – with the ultimate goal of increasing the usability of the Recovery.gov and further enabling detailed tracking of Recovery Act monies.

Later this summer and early fall, the website will also be unveiling a new widget that will allow users to put on their own websites a live, real-time display of Recovery projects in whichever Congressional district they select. We also plan to reach out to the public for input and ideas on additional widgets and hopefully get the citizenry engaged in creating new applications we had not even considered.

My excitement about the future extends beyond the Board's websites, Recovery.gov and FederalReporting.gov. The usefulness and potential applicability of our accountability technology is expanding rapidly. As recently reported in the news, we are applying the accountability tools of the Recovery Operations Center to a pilot program for the Centers for Medicare and Medicaid (CMS). This pilot program has not yet concluded, but initial results have been very positive. We have been able to uncover relationships that might not have been found without the special tools we are using. Looking back over the Board's 18-month

existence, I can say without hesitation that our oversight program has been successful and will help transform the way the Inspector General community combats fraud in the future.

Mr. Chairman, I would be remiss if I did not mention what we have determined is the single biggest impediment to the kind of transparency that the Recovery Act envisions. It is the lack of a single, consistent governmentwide award numbering system. All 28 Recovery agencies - in fact, all government agencies - have unique alphanumeric coding systems for their awards. While this may not sound like a big deal, it is. Disparate, inconsistent coding systems make the task of reviewing and checking award data unnecessarily arduous and inefficient for those with oversight responsibility. I have therefore decided to dedicate a considerable portion of my remaining time in the government to fixing this problem.

As my testimony today has already indicated, I believe that even after the Board sunsets in 2013, the legacy of the Board will long continue. I know I am not alone in touting the future good that this transparency and accountability can continue to bring. William LeoGrande, Dean of the School of Public Affairs at American University, was recently quoted in the Federal Times as saying of Recovery.gov: "I think this will be a model for the future on how the federal government can - if it's willing - provide incredible public access to the inner workings of legislation as it's implemented."

And Vice President Biden, speaking about Recovery.gov, said: "I expect it to be a template from this point on for how the federal government deals with taxpayers' money." I believe the Vice President and Dean LeoGrande are correct that this historic experiment in transparency will continue. I expect it has to, in that I cannot imagine the American public would meekly accept a retreat back to the old, non-transparent ways. The template created by the Recovery Act should be the platform on which others can innovate and build improvements.

Mr. Chairman and members of the Subcommittee, that concludes my prepared testimony. Thank you for this opportunity. I will now be glad to answer any questions you might have.

# **Q** Palantir

Testimony from Dr. Alexander Karp
Co-Founder and CEO, Palantir Technologies
Senate Committee on Homeland Security and Governmental Affairs
Subcommittee on Federal Financial Management, Government Information, Federal Services, and
International Security
August 3, 2010

Good afternoon. I would like to begin by thanking Chairman Carper for including Palantir In this hearing, and commending him on the outstanding work he has done in this field. I would also like to thank Ranking Member McCain and the Committee for the opportunity to discuss these critical issues that affect all of us. We are delighted to play a part in your efforts.

Likewise, we are honored to support Chairman Earl Devaney and the Recovery Accountability and Transparency Board in their mission to establish a new model of excellence in the fight against fraud, waste and abuse affecting government. Chairman Devaney's years of experience in the field and tenacity in implementing the most advanced and aggressive program to fight fraud, waste and abuse continue to benefit government. While our technology has supported this vision, the success that the RATB has enjoyed would not have been possible without Chairman Devaney's vision, expertise and guidance. Chairman Devaney formed this agency with extremely modest resources. Nevertheless, its impact has been transformational.

It is also a pleasure to join Daniel Werfel and the other distinguished members of this panel.

Palantir was founded in 2004 by key PayPal employees along with Stanford University computer scientists. I am a co-founder and Chief Executive Officer. We started Palantir with the goal of addressing the most complex information analysis, security and oversight challenges faced by the intelligence, military, law enforcement and regulatory communities. Our software is based on a simple Idea: that the human mind is the most effective tool to discern meaning from information, while computers are the most effective tool to manage enormous amounts of data. By creating the optimal intersection of the irreplaceable human intellect and the computing powers of the most advanced analytical software platform in existence, Palantir revolutionizes an analyst's ability to perform data analysis at massive scale. Palantir empowers analysts to easily ask questions of large and disparate data sets, to understand micro and macro patterns in temporal and geospatial arrays, and to communicate relevant findings using secure enterprise collaboration tools.

Palantir is the first true enterprise-grade platform for the prevention, detection and investigation of financial malfeasance (as seen at the Recovery Board), fusing the four essential analytic requirements: data integration, intuitive search and discovery, knowledge management and secure collaboration. A productized, out-of-the-box solution, Palantir was designed from the ground up to enable real-time analysis

and collaboration across organizations while enforcing privacy and civil liberties restrictions. Our platform accomplishes this by seamlessly integrating everything from excel spreadsheets to news articles to emails while simultaneously tracking the lineage and pedigree of all information that enters the system. This unique capability allows users to perform sophisticated analysis of all their data in a unified environment, subject to fine-grained and highly configurable access controls.

While many assume that Palantir's beginnings were in the intelligence and defense industries, the truth is that the idea for our software was developed in the fight against consumer fraud at PayPal. Under constant attack from organized crime, PayPal was forced to confront the task of policing an entirely electronic transactional environment without alienating legitimate customers. Sparse demographic data, limited transaction histories, and the high cost of false attribution were Just a few of the challenges to effective regulation. Because existing statistical and algorithmic tools had failed, PayPal ultimately turned to human analysts, developing technology around their most meaningful discoveries, rather than the raw data. The intuitive analytical tools that eventually became the Palantir platform were a direct outgrowth of this effort. In this sense, Palantir has been focused on financial regulation and oversight even longer than the intelligence and defense applications.

Like many of the distinguished members the Subcommittee, we are not only passionate about upholding civil liberties, but also recognize that such protections do not compromise, but in fact strengthen, our national security. At first glance, this may appear to be a contradiction in terms, but as I will explain shortly, the mechanisms by which we enforce both security and civil liberties are not only complementary, but also highly interdependent.

Palantir's technical approach to civil liberties derives from the principle that different data inherently carry different privacy and access requirements. Hence, civil liberties protection and secure information sharing are in fact the same challenge viewed from different angles. Palantir answers this challenge by enabling fine-grained control of the means by which information is ingested, modified, and disseminated with respect to all appropriate restrictions. These restrictions may concern personally identifiable information, medical and financial records, data collected by law enforcement agencies, and other sensitive items.

Palantir enables this protective schema through its Object Model and Revisioning Database. The Object Model dictates how data are transformed into graphical objects and their components (including properties, notation, media, and links). The Revisioning Database, in turn, tracks and attributes all manipulations of objects and their underlying data sources, providing a tamper-free audit trail of analyst activity. Because all access permissions, including civil liberties protections, are assigned at the data source level, rather than the graphical level, analysts can only interact with data in the manner prescribed. This highly configurable control framework means that Palantir treats civil liberties compliance as a firm prerequisite, not an enhancement that can be discarded for convenience.

As our software is adopted more broadly, our responsibility to the common good grows. At Palantir, this means creating technology that reflects our commitment to protecting privacy and civil liberties. This

pledge has remained a guiding principle since the company's inception, and is reflected in our leadership, our technologists, and our advisory board. Putting our values to work, we voluntarily developed, from the ground up, a rigorous new technical framework to: protect privacy and civil liberties; empower policymakers and administrators to enforce legal, regulatory, and policy requirements; and, equally important, ensure that the implementation of all requirements is fulfilled.

As the Co-founder and CEO of Palantir Technologies, I am proud that our company works with a sense of excitement and purpose, believing that we have created a product that will help analysts take quantum leaps in their ability to achieve mission success and do their best for our country.

Thank you again for the opportunity to join you all here today, and for the opportunity to contribute to this vitally important mission.

Reference: U.S. Senate Homeland Security and Government Affairs Committee's Subcommittee on Federal Financial Managem nt, Government Information, Federal Services, and International Security on Tuesday, August 3, 2010, at 2:30 PM in room 342 of the Dirksen Senate Office Building in Washington, D.C.

# Testimony of Robert R. McEwen

Chairman Carper, Ranking Member McCain, distinguished members of the Subcommittee, thank you for the opportunity to testify at today's hearing concerning innovative technologies and approaches to solving problems and making the government run more effectively.

I have been asked to share with you a story of innovation that I believe has vast application and benefit for the government and for all industries.

In 2000, my company, Goldcorp Inc., made an investment of \$1 million in website development and cash prizes. The result was stunning. We reaped a benefit in excess of \$3 Billion in new found gold. Yes, my business then was gold mining – definitely an old economy business and a very unlikely source of inspiration for innovation.

When we put the "Goldcorp Challenge" up on the web we "broke the mold". We defied industry practice by sharing proprietary information about our orebody(deposit) that everyone knew was never shared without terms, confidentiality agreements and payment. We provided free, comprehensive and unrestricted access to an extremely valuable database about the most exciting gold discovery of the decade.

In effect, we started a worldwide brainstorming session via the Web where we offered \$500,000 in prize money to exploration experts to help us find the next 6 million ounces of gold at our

mine. A small mine that had already been in production for 50 years.

Our strategy was to make available to anyone, anywhere in the world, an extremely valuable proprietary geological database via the Internet, as well as software to analyze and depict this data graphically in 2 and 3 dimensions, plus an economic incentive to have the participants share their geological insights.

The response was immediate and remarkable. Within a week of our launch we had attracted the attention of the mining industry on every continent and received 120,000 hits on our website. Within 4 months there had been 250,000 hits and more than 1,300 individuals, corporations, domestic and foreign government geological agencies, and universities, representing 50 countries, had registered for the Challenge.

In addition, the rest of the web was looking at Goldcorp and concluding it was not your typical mining company. And they were right. The Challenge served as a powerful catalyst to improve the careers and financial independence of our employees and propel Goldcorp's future growth.

The Challenge provided much more than immense exploration success – it changed the attitude of our employees, they became proud of their company and work, they became more confident and comfortable accepting change and new technology and they became eager to share ideas and test their thoughts about how to innovate and improve the way we worked.

In my oral testimony I will discuss in detail how we came to do the Challenge. (see Appendix A) But due to a shortage of time I will now jump into my suggestions and observations.

So how might the concept of crowd sourcing have a positive impact on the government's efforts to become a more effective, more efficient provider of services to all Americans.

## Consider these thoughts.

- There is a vast pool of experience, knowledge and insights within the ranks of the government. This pool could be and should be engaged in brainstorming to define the questions to be asked to provide alternatives for improvements to current practices;
- 2. Initiate brainstorming on a department and inter department basis. Too often all of us get to close to a problem to see it objectively and thus unable to see other alternatives. By introducing another perspective a new problem statement may be formulated that generates surprising and effective alternatives;
- 3. Look to bring in individuals from the outside a department, outside the government and give them authority to introduce unconventional change;
- 4. Look for the unquestioned underlying assumptions in your department, in the government. Once identified, question and challenge these assumptions;
- Remember Nobody is as smart as everybody share knowledge freely to gain insights and answers;
- 6. Incentives for crowd-sourcing projects can be much more than just cash prizes. The range of prizes available to you are limitless because the people engaged in problem solving have a wide range of needs and motivations. In our Challenge, individuals participated for a variety of reasons: intellectual curiosity, access to otherwise

unobtainable data, peer recognition, an opportunity to profile and market their services and more

One last observation, the biggest gold mine in the world exists between everyone's ears. So, tap into the minds of your fellow Americans and the citizens of the world to achieve your committee's objectives. I applaud your quest to innovate.

Thank you for your invitation to testify today and I would be pleased and honored to answer any questions from the members of this distinguished Subcommittee.

Please note that certain portions of this testimony were taken or paraphrased from the following article and books:
Mining and E-Business, Hoisting the Value by Michele Davies, e-business Strategy Consultant, IBM Consulting Group. IBM Global Services – Mining Journal August 2000
Wikinomics, How Mass Collaboration Changes Everything by Don Tapscott and Anthony Williams – published by Portfolio a member of Penguin Books 2006
Mavericks at Work, Why the Most Original Minds in Business Win by William C. Taylor & Polly LaBarre – published by Harper Collins 2006

Appendix A Robert R. McEwen's Testimony Origins of Goldcorp Challenge

It is important to note that the Challenge took form over a period of five years and was changed by a number of factors.

Going into 1995, our mine was in bad shape: it was a tired 50 year old, high and rising production costs, poor relations with the union workforce, a falling gold price was squeezing operating margins. As a result, most industry participants expected the mine to run out of gold and close in a few years.

The problem was the mine had been undercapitalized for many years. In essence, its future had been sacrificed. No money had been spent on exploration (R&D of the mining industry). We were new management and saw this situation as an opportunity and gave our geologists \$10 million to go explore what appeared to be an under-explored mine.

Three months later, our geologists had made a very rich gold discovery at the bottom of the mine. The richness of the gold (concentration of gold per ton of rock) and its geological setting caught the industry and the market by surprise.

Three years later, our discovery had grown into a big, rich gold deposit and we were planning to build a very profitable new mine. In order to maximize our investment it was critical to know the ultimate size of the deposit because that would determine the throughput (production) rate.

So I asked our senior geologists: how big they thought the deposit would be? They didn't know! Then I asked: how long would it take them to determine? They didn't know!

I definitely didn't like their answers. These two wrong answers led to the Challenge's brainstorming format. I started thinking about how we would get the answers and who could provide it. I remembered some interesting ideas that a few of our geologists had shared with me but which differed from those being pursued by our senior geologists.

I thought our exploration program could improve its effectiveness if we could get all our geologists together to share all their ideas in a two-day brainstorming session. In order to present ideas that hadn't been shared, analyze and discuss current exploration method.

As CEO, I was planned to be an observer but three minutes into the session I asked our chief geologist, who was leading the session to sit down. I thought he was starting the wrong way. He was explaining the background of our current exploration program. This was old news and not breaking new ground.

I asked an outspoken geologist to talk about the last idea his boss shot down. Well the tension in the room jumped dramatically followed by a rapid exchange of glances between the geologist and his boss. The boss' silent message was clear: "Say that and you are fired". I interjected and said if anyone were to be fired it would be the geologist's boss if he threatened again. After some nervous laughter all inhibitions in the room were broken and the sharing of ideas began in earnest.

At the end of the two-day session everyone left with a new energy, enthusiasm and focus on getting the answers. I walked away pleased with our progress and wondering if by broadening the group by adding outside perspectives and experiences could we derive greater value from the next brainstorming session. The list of individuals we might invite

began to grow: our retired geologists, our competitors, government geologists and then experts around the world. Now the question was how do we connect with them?

The answer came several months later while I was attending a YPO (Young Presidents Organization) course on Information Technology in Boston at M.I.T.

On the afternoon of the second day the professor was discussing the origins of the open source movement and the development of the Linux operating system. Essentially programming experts from around the world, connected by the web, worked at no cost to improve on a freely available operating system, an alternative to Microsoft.

That when I had my Eureka moment. I suddenly saw the template that I was looking for to connect with the geological experts around the whole. I rushed back to Toronto, after the course, to share my idea of global brainstorming focused on our mine with my directors and senior management.

Curiously, my Directors were quicker to see the value of this approach than my senior management who had a list of reservations. They thought it was risky, expensive, unnecessary diversion of attention. Furthermore it could expose us to a takeover or loss of opportunity to acquire key exploration properties. By emphasizing the benefits my senior management could reap if our Challenge worked and by addressing and removing their concerns they agreed to work on developing the Goldcorp Challenge.

With the means to connect to expertise worldwide via the Internet we turned our attention to the incentive. What would catch their attention? We concluded cash prizes were required.

How large? We decided \$500,000 would be an attractive prize. We structured the Challenge along the lines of a sporting event with semi-finals and finals in order to have multiple exposures. A judging panel comprised of 5 experts from 3 continents was assembled. The panel was charged with the responsibility of selecting the most innovative submissions.

We launched the Goldcorp Challenge in March 2000 at a major annual mining conference with a lot of media coverage supplemented by a newspaper campaign. The unconventional nature of our Challenge, in essence its shock value and the big media push resulted in immediate exposure.

I also believe the economic conditions in the mining industry in year 2000 contributed a high participation rate. The mining industry was in a recession as metal prices were at a twenty year low and much of the industry was underemployed.

Also during this period our unionized workforce was on strike. The labor disruption went for 46 months. It was resolved 2 months after the Challenge was launched. The workforce ceased to be unionized and this fact also contributed to the surge of innovation at the mine.

I believe to achieve major change in an organization one must first be unconventional, change the rules and keep selling the opposition on the benefits to them on an individual basis.

An area of opportunity for innovation by the government: The government is good at making laws, regulations and rules. The SEC was created to protect investors. It has many more rules today than when it was established in 1933 but the losses suffered by investors recently have been enormous. Consider this thought. Does the creation of addition laws create more or less opportunity for criminals?

# Testimony before the Committee on Homeland Security and Governmental Affairs United States Senate

on the subject of "Transforming Government Through Innovative Tools and Technology"

Riley Crane, Ph.D., "Society in Science" Postdoctoral Fellow, Massachusetts Institute of Technology, Media Laboratory

August 3, 2010

Mr. Chairman and Members of the Committee, thank you for this opportunity to testify before you today. My name is Riley Crane and I am currently the "Society in Science" postdoctoral fellow in the Human Dynamics group at the Media Lab at MIT. I received a Ph.D. in Physics from the University of California Los Angeles and I have spent the last several years applying ideas from physics to the collective behavior of social systems. My research focuses on how information spreads through online social networks and whether or not social systems obey quantitative mathematical rules. In December 2009, I led the team from MIT that won the DARPA Network Challenge using crowdsourcing, social networking and social media to mobilize thousands of individuals around the world in under 9 hours.

We are here today to discuss the subject of "transforming government through innovative tools and technology" and in particular how government can use leading-edge techniques and technologies to solve problems and cut out fraudulent waste and spending.

In this testimony I would like to discuss how new technologies are transforming our ability to solve incredibly difficult problems and to propose promising new directions that would help government reduce spending, increase transparency, and create a population that is more engaged in the civic process and more equipped to solve problems requiring collective action.

I'd like to illustrate some of the powerful new approaches to problem solving by sharing with you a story that I had the great fortune to be a part of. On December 5, 2009 DARPA — the Defense Advanced Research Projects Agency — unveiled 10 moored, red weather balloons at undisclosed locations around the continental US and offered \$40,000 to the first person to correctly report all of the coordinates accurate to within one mile. DARPA is the agency credited with the creation of the Internet, and this challenge, considered impossible to solve by those within the intelligence community, was designed to celebrate the 40th anniversary of that achievement.

In the 40 years since the first four computers comprising the ARPANET were connected and exchanged a message heralding the age of information, our world has been transformed.

From these humble beginnings came the Internet which now links together all of the world's computers. This was followed 20 years later by the emergence of the World Wide Web linking together all of the world's publicly available information. In recent years we have witnessed the addition of a new social layer, driven by the convergence of networked, mobile and social technologies that are for the first time allowing us to bridge the gap between the online and real worlds and create virtual connections between people, places, and things.

While this new "social web" makes it easier to find restaurants and share photos, and there is a general sense that something transformative may be occurring, many wonder whether this new global infrastructure can be used to solve important challenges. Hence DARPA issued the challenge to test this question and to explore the role that crowdsourcing, social networking and social media play in timely communication, wide-area team building, and urgent mobilization required to solve broad scope, time critical problems.

In order to tackle this challenge our team built a platform that used incentives, referrals, and social media to construct a network of "human sensors" throughout the world. Our web based platform was designed track the chain of referrals as individuals signed up and spread the information through their social network in order to account for who was responsible for recruiting whom. In addition, we created an incentive system that divided the \$40,000 equally over the 10 balloons thus allocating a prize of \$4,000 for each balloon. The incentive system worked in the following way: If for example Mr. Chairman, you signed up and found a balloon we would pay you \$2,000 and would give the remaining \$2,000 to charity. However, if you signed up and recruited Senator McCain and he found a balloon, he would receive \$2,000 for finding it, you would receive 1/2 of the remaining prize (\$1,000) for referring him to us, and the leftover \$1,000 would be donated to charity. This division of the award along the referral chain could be extended to any chain length. Furthermore, the structure of the incentive was such that its value could be transferred through the network undiminished, since it depended not on being first or having the largest number of referrals, as is the case with a typical pyramid scheme, but rather relied on rewarding individuals who made actual contributions for their role in connecting us to the individual with relevant information.

In total over 4,000 other teams competed, including universities, minor celebrities, community organizations with many tens of thousands of members, and even Google. Using our strategy the MIT Red Balloon Challenge Team found all 10 balloons in 8 hours and 52 minutes. One of the more interesting facts of the story is that I had only heard about the challenge four days before the competition began. In two days we built a platform and in just 36 hours recruited nearly 5,000 participants. According to the results of the official DARPA logs we located 4 balloons before any other team, and of the 10 individuals that were the first to report to us the correct locations, we had recruited half before the competition began, demonstrating the power of social media to rapidly spread information far and wide.

How did we win? What did we do differently from the other larger and more well organized teams? While other teams spent months preparing, organizing and designing systems to solve the problem, our approach, which was conceived of, built, and executed in 4 days relied on continuous feedback and evolved continuously throughout the challenge. Rather than coming up with the "best" solution, we built a platform that leveraged the problem solving capabilities of

the participants. Our platform encouraged individuals to innovate and to spread the message to their own audience in the most contextually relevant way — regardless of whether their focus was science, charity, money or something else. Our system provided a solution that aligned the goals of each participant, acting in their own self interest, with the broader goals of our organization. We built the infrastructure that allowed others, even our competitors, to solve the problem for us.

While this example nicely encapsulates the disruptive innovation being driven by the democratization of technology and its convergence with social factors and economies of scale that are changing the way we communicate, collaborate, and coordinate, there are many other important examples that I would like to bring to your attention.

On his first day in office, President Obama ushered in a new era of Government by creating the "Open Government Initiative" providing a mandate for federal agencies to take specific steps to achieve milestones in "transparency, participation, and collaboration". This initiative has since been embraced by cities across the nation such as Boston, New York, San Francisco and Washington D.C. For example, efforts in Boston that resulted in the release of transportation data have already yielded enormous cost savings by providing entrepreneurs with data and APIs they need to solve problems themselves. These programs yield millions of dollars in savings to the taxpayers and are often achieved in weeks or months instead of years and decades.

In another example of how increased transparency can reduce fraudulent spending, "The Guardian", a British newspaper, created a crowdsourcing platform that digitized the expense reports for members of Parliament. This platform encouraged citizens to investigate and bring attention to charges that they believed required further investigation. As of last week, the program had resulted in the review of 221,384 pages of documents by 27,029 individuals and had brought to light many examples of extravagant spending.

Finally I'd like to bring to the attention of this committee incredible efforts made by the open source community in partnership with the U.S. Department of State during the recent devastating earthquake in Haiti. Volunteer organizations such as Ushahidi and Open Street Map mobilized in the immediate aftermath to establish communication networks and interactive crisis maps. Using these systems, victims on the ground could send out urgent requests for help that were translated, mapped, and then delivered to the search and rescue teams on the ground. One success story highlighted by Secretary Clinton emphasized the plight of a little girl who was "pulled from the rubble in Port-au-Prince. She's alive, she was reunited with her family, she will have the chance to grow up because these networks took a voice that was buried and spread it to the world."

What are the lessons from these examples? In each case organizations created a platform that enabled citizens, acting in their own self interest, to solve problems. While the Federal Government has already made great strides towards becoming more open, including great examples such as Data.gov, more effort should be made to open data, develop and support standards for data exchange, encourage the use and reuse of free and open software, and to continue the use of social media to increase dialogue and engage more directly with

constituents. Most importantly the Federal Government should adopt the philosophy of the "Government 2.0" movement espoused by Tim O'Reilly and others and to start to think and behave more as a platform which incentivizes civic engagement, supports collective action, and enables and empowers citizens to solve the problems which do not require the Government to intervene.

If there is one message it is this: support open standards and data, and build infrastructure that empowers citizens to solve problems they care about.

I thank you for your time and attention and would be pleased to answer any questions you may have.

#### Answers to: Post-Hearing Questions for the Record Submitted to the Honorable Earl E. Devaney From Senator Claire McCaskill

#### "Transforming Government Through Innovative Tools and Technologies" August 3, 2010

1. You stated in your testimony that the Board's Recovery Operations Center uses analytical software tools to intercept fraud closer to the front end rather than detecting it only after the monies have been lost. This includes using software to look at criminal convictions, lawsuits, tax liens, bankruptcies, risky financial deals, and suspension and debarment proceedings. The General Services Administration currently has an Excluded Parties List System (EPLS) which includes information regarding entities debarred, suspended, proposed for debarment, excluded or disqualified under the nonprocurement common rule, or otherwise declared ineligible from receiving Federal contracts, subcontracts, assistance, and benefits. How do you use EPLS in your risk model?

EPLS is an integral part of our Risk Modeling and Fraud Prevention system in two main areas. First, it is a key element of our initial screening process conducted on ARRA awardees. Once funds are awarded, we receive all relevant information and screen ARRA recipients using various factors from bankruptcies, to liens, to lawsuits, and more. As part of this initial review, we check the EPLS system for suspension and debarment information that would indicate a risk factor. All EPLS findings are considered in our risk evaluation. However, more recent actions are weighted more heavily in terms of risk relevance.

Second, if we do come across a target that merits further analysis, we use the EPLS system to cross-check the timing of suspension and/or debarment actions against award dates and certification dates in order to create an accurate timeline of events. To create precise analyses, we depend upon the EPLS system's accuracy and its timely use by the rest of the federal government.

2. In April 2010 the final FAR Rule became effective for implementing the Federal Awardee Performance and Integrity Information System (FAPIIS), which integrates various sources of information on the eligibility of Government contractors for award. In a June 2010, the administration instructed all federal agencies and departments to review pre-payment and pre-award procedure databases before release of any Federal funds to identify ineligible recipients and prevent certain improper payments from being made in the first place. These federal government wide databases will collectively be called the "do not pay list." FAPIIS will be the single entry point for accessing these multiple federal databases. Are there aspects of your model that can enhance FAPIIS? If so, what are they?

FAPIIS is emerging as a great breakthrough in risk management and fraud prevention. At this time, we have no recommendations for ways that our model will enhance FAPIIS. In fact, we feel that the tool as it is designed now will most likely enhance our model. Currently, our treatment of data sources involves either enveloping them completely or performing "one-off look-ups," which involve accessing another data set and then "datatagging" relevant points. With FAPIIS, we would potentially have another data source to enhance and shorten our analytic process and sharpen the focus of the "one-off look-ups."

3. You stated in your testimony that disparate, inconsistent coding systems across federal government agencies make the task of reviewing and checking award data unnecessarily arduous and inefficient and that you plan to use a large portion of your remaining time in government fixing the problem. You suggested a single, consistent government wide award numbering system. Is this something the Recovery Board is looking to implement and if so how do you plan on carrying this out? What are some of the obstacles you expect and how do you plan to overcome them?

Recently, the Recovery Accountability and Transparency Board (Recovery Board) recommended that the Chief Financial Officers (CFO) Council's Grants Policy Committee establish a new policy and enact implementing guidelines regarding use of a uniform, governmentwide Award ID for federal financial assistance awards. We recognize that each agency may use its own unique document for grant awards, but regardless of what that document looks like or what data it contains - the uniform governmentwide Award ID should be prominently displayed on it. We further recommend that the FAR Council strengthen its current proposed rule calling for a unique governmentwide procurement instrument identifier and demand that the Award ID convention be standardized across all agencies. It is imperative that the CFO Council's Grants Policy Committee and the FAR Council work together to ensure consistency between the two groups' approaches.

The creation of a uniform, government wide Award ID will assist the federal government's push for transparency and contribute to its ongoing efforts for accountability of taxpayer dollars. This need for standardization transcends Recovery Act funding. A standardized Award ID will make it easier for all those charged with oversight responsibility - auditors, investigators, program managers - to track award progress and, where reporting is required, to cross-check reported award numbers against agency control lists. This will hasten the process of determining whether reported data on federal awards is accurate, and whether those required to report have fulfilled their reporting obligations in the first place.

The Recovery Board's staff has drafted a white paper, attached, on this matter. We appreciate your interest in this critical issue and would be happy to discuss it with you further.

4. After you identify common trends of fraud, waste, and abuse, what is being done to close these common trend loopholes for good? Have you had any difficulties with

closing loopholes related to processes, policies, or legislation? If so, what were some examples and what were the results?

While it is still too early to identify common trends, steps to reduce improper payments are being considered. One primary recommendation is the development of accountability measurements in the form of metrics scorecards, baseline standards, and annual targets for each program, all of which would be publicly reported. These would be designed to track progress over time and to provide meaningful information about grant oversight at the program level via results from the numerous single audits of each respective program.

As a result of this recommendation, the Single Audit Metrics Workgroup (Metrics Workgroup) was formed to develop these accountability measurements. The Metrics Workgroup is composed of representatives from the Office of Management and Budget (OMB), the Recovery Board, the Federal Audit Clearinghouse, and several other executive agencies, including some Inspector General offices.

The Metrics Workgroup intends to develop a grants program oversight scoring tool that would rate grant program effectiveness on a numeric scale and then translate that score into a qualitative rating. The Metrics Workgroup plans to set standard baselines for each metric and assign point values in each category. Each year, every qualifying program would have to meet specific targets set the previous year, and success from year to year would be based on the program's level of improvement.

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