Keynote Remarks by Steve VanRoekel, Federal Chief Information Officer As Prepared for Delivery

Good evening everyone. It's truly humbling to be here at PARC - the source of many of the great innovations of our time – it's not an understatement to say that PARC has helped shape how we all experience the world and live our daily lives.

As President Obama said in his last State of the Union address, "what America does better than anyone – is spark the creativity and imagination of our people." From the young upstarts tinkering with computers in their garage to the bold entrepreneurs taking big risks to bring transformational products to market, innovation has been a driving force throughout our history.

And the government has helped ignite that spark through fundamental research – from DARPA and the internet to NIH and the human genome – and by reducing barriers to growth and investment.

Too often today we hear that America is losing its ability to innovate, that we can't compete with other countries, and the best technology is made overseas.

We've heard this story before.

When I was growing up in the 80s, I remember hearing people say that America was "destined" to be a service economy. We didn't make anything anymore – our best days were behind us. But then ideas like those that came out of PARC helped spark a technology revolution that reestablished America's leadership and launched the innovation economy.

As it did then, America's future now depends on our capacity to innovate and harness technology.

That's even more true of the federal government.

The American people expect us to use technology to provide the same level of service they experience in their everyday lives. They pay bills online and buy plane tickets on smartphones. And it's not just the millennial generation – with 80-year olds now using Facebook to keep in

touch with grandchildren across the country - expectations have reached a critical point even faster than anticipated.

As the Federal Chief Information Officer, the President has charged me with using technology to help build a government that works better for the American people. And across his Administration, he has brought in people to drive his vision of wiring government for the 21st century so that America can out-innovate, out-educate, and out-build the competition.

Now there are some who say we shouldn't invest in government information technology in this fiscal environment, or use concerns about cyber security as a blanket excuse to preserve the status quo.

But if anyone doubts that now is the time to invest, consider the fact that more than half of the Fortune 500 companies were founded during an economic downturn. When forced to do more with less — when there is no alternative but to create a better way to get things done — that is when the real breakthroughs occur. In tough times, visionaries and risk-takers can tap into underutilized human capital, technology, information and other resources, picking up the pieces to reassemble them into something completely new.

And never before have we had such tools at our disposal. Technologies like cloud, mobile, web platforms, and servers have matured to the point where they can now play a key role in transforming every aspect of government. And we've learned how to adapt our business models to take advantage of new technologies – agility, flexibility, scalability, and openness help even the largest organizations thrive despite the ever quickening pace of change.

Building on the progress of the last two-and-a-half years, my focus going forward will be to drive innovation in government and make investments in technology that better serve the American people. We will use technology to improve government productivity and lower barriers to citizen and business interaction with the government, all while bolstering cyber security.

Do More with Less – Maximizing ROI on IT Investments

First, we must focus on maximizing the return on American taxpayers' investment in government IT by driving efficiency throughout the federal enterprise. President Obama is committed to rooting out misspent tax dollars and making government more efficient and

effective for the American people. By taking a hard look at government IT projects over the last two years we've already cut project costs by over \$3 billion -- and at the same time accelerated the time to get usable products up and running. The White House launched the Campaign to Cut Waste to hold each agency accountable for driving these kinds of reforms in every area of government. By doing more with less, we can drive savings across government and use those savings to reinvest in services that benefit the American people.

That's why we're launching an initiative aimed at rooting out waste and duplication across the federal IT portfolio. Through this "Shared First" initiative, we're looking for opportunities to shift to commodity IT, leverage technology, procurement, and best practices across the whole of government, and build on existing investments rather than re-inventing the wheel.

That's why we're shutting down duplicative, underutilized data centers and optimizing the remainder. We recently announced that we are expanding the scope of of data center consolidation plans and creating these efficiencies even faster – 962 data centers by the end of 2015, exceeding the original goal of 800, and 472 by end of next year – and we expect to yield \$3 to \$5 billion in savings in out years.

And this same logic accounts for our shift to the cloud. Cloud moves us away from a capital-intensive model and toward a more flexible operational model where agencies only have to pay for what they use. And shifting to the cloud doesn't just save money – it often provides better service, including the ability to scale up rapidly in real-time to meet increased demand.

Close the Productivity Gap

For too long, the government has employed 20th century tools to solve 21st century problems. We fell behind in making the smart investments in technology that yield productivity gains in the private sector every day.

To help close the productivity gap in government, we need a "future ready" workforce equipped with the modern tools and technologies they need to serve the American people effectively. We need smart telework policies that give our employees increased flexibility while also reducing our real estate footprint and better enabling the government to function effectively during an emergency. We need to think strategically about how we buy, manage and use mobile devices and collaboration tools cost-effectively and securely.

And overall we need to shift away from a paper-based mindset and focus on delivering information efficiently and effectively using digital tools. For half the price the government paid for a printed copy of all volumes of the federal register – last year – you could buy a tablet, download the free digital version, and navigate the 50,000-plus pages with ease to find the information you need.

Citizen and Business Interaction with Government

Our ultimate goal is to improve service to the citizen. To do this, we must lower the barriers to interaction with the government.

Too often the government has acted as an inhibitor, not an enabler, to people getting business done. That's why we're launching a one-stop, online portal for small businesses to find and access available programs, information, and other services from across the government rather than having to waste time navigating through the federal bureaucracy. We're also launching a dashboard where the public can track an initial set of large infrastructure projects through the review and permitting process.

These initiatives also embody the President's commitment to opening up the inner workings of the government to the American people. This commitment was reaffirmed this past September with the release of the National Open Government Action Plan, which continues our efforts to strengthen democracy and promote a more efficient and effective government through greater openness.

Cyber Security

As we increasingly move services online, we must be ever vigilant in the face of new threats that evolve on a daily basis. However, we shouldn't make the false choice between security and innovation. In fact, innovation can make us more secure as long as we build security into everything we do.

Consolidating data centers, shutting down legacy systems, and moving to the cloud all offer opportunities to enhance our cyber security posture. The private sector is already taking advantage of recent advances in cloud technology to make their systems even more secure. Going forward, we must build on top of a sound foundation of cyber security to ensure Americans and our government are safe.

Changing the Way We Invest

In the end, we can't build a 21st century government without fundamentally changing how we invest in technology.

Traditionally, it has taken years for an IT solution to move from planning to budgeting to procurement. Too often we have built closed, monolithic projects that are outdated or no longer needed by the time they launch. And because of how they are architected, modifying these systems to meet emerging needs has often cost more than building a new system from scratch.

Going forward, we need to embrace modular development, build on open standards, and run our projects in lean startup mode. We also need to work with Congress to change our approach to funding technology to better support these principles.

Given the rapid pace of change in technology, it's not enough to just build technology solutions that meet our needs today. We need to design for the future, not for the status quo.

That's why I am calling on a broad group from across industry, academia, and government – those in this room and your colleagues around the country – to help formulate a "Future First" initiative that will help us continuously architect for the future.

Much as our "Cloud First" policy changed the landscape of IT spending, "Future First" will jump-start the government's adoption of new technologies and approaches. I envision a set of principles like "XML First", "Web Services First", "Virtualize First", and other "Firsts" that will inform how we develop our government's systems. They will effectively establish a new default setting for architecting solutions government-wide, and they will be continuously updated as new technologies emerge to ensure that our government is at the frontier of advancements that yield a higher return on our IT investments, increase productivity, and improve the way the government interacts with the American people.

I'd like your help in defining these "Future First" principles. Are they the right principles? How should they evolve over time? How do they foster the greatest amount of competition and innovation? I look forward to working with you in the months ahead as we shape "Future First" and reorient the government to take better advantage of emerging and innovative technologies

in constant pursuit of better, more cost effective government. You can email me your feedback at futurefirst@cio.gov.

Closing

The beauty of innovation is that it is an endless resource. Throughout our history, America has always been able to draw upon the ingenuity and creativity of the American people when times are tough.

Now is the time to come together in service of the President's vision of building a 21st century government that works better and more efficiently for the American people. Whether you work for the government or for the private sector, we are all citizens. And we all have a role to play in bringing the spirit of innovation to the work of building a better government.

Thank You.