Remarks by Lori Garver for OSTP R & D Budget Rollout

Today I am proud to be here representing the men and women of NASA, to discuss our R & D budget for fiscal year 2011. Administrator Bolden has already provided a broad outline of our overall budget, as well as our bold, new space exploration initiative. I am pleased to be able to focus here on our R and D programs, many of them new, in our budget.

We are incredibly excited that the President's budget provides $6B in new funding to NASA over the next 5 years. This investment is a testament to our innovative workforce, our forward looking programs, and our ability to connect our work with societal needs to drive prosperity for people across the Nation. With President Obama's new direction to NASA, we will be investing billions in the best peer-reviewed research, innovative new technologies, dramatic flight demonstrations, and in building an inclusive new space industry, all of which are designed to again position NASA a national leader in research and development activities, and in meeting critical national needs.

NASA is a world leader in climate change research, and this budget dramatically expands NASA's climate research and observations capability. We will accelerate several of our most climate-relevant missions, consistent with the recommendations of the National Academy of Sciences. We will initiate a re-flight of the Orbiting Carbon Observatory, to be launched in 2013, and invest in additional carbon monitoring capabilities. These new projects are specifically targeted to provide greater scientific understanding of the most critical climate unknowns. With this knowledge, NASA and others will be able to better assess the potential global impacts of climate change.

Our Space Science program will continue to operate dozens of missions across the solar system, and support its current development programs that include missions to understand the Sun, Moon, Mars and the broader Universe. Our next science launch is only 8 days away! That's when the Solar Dynamics Observatory will become our unblinking eye on the Sun – monitoring our star in unprecedented detail as it awakens from solar minimum. The Mars Science Laboratory rover "Curiosity" is on track for a 2011 launch, and the next flagship astrophysics observatory, the James Webb Space Telescope is making great strides towards its launch in 2014. We look forward to working with the National Academy Decadal Surveys in Astrophysics and Planetary Science over the next year, as they define scientific priorities for the future of several of our space science programs.

We have also expanded R and D efforts in NASA's Aeronautics Program, emphasizing the Next Generation Air Transportation System and new "green aviation" research. These investments will enable safer and cleaner air travel in the future.

As we transition away from the Constellation Program, we are seeking to enable completely new ways of doing business in space exploration. To do this, we will create a number of transformative technology programs, focusing on inventing and demonstrating a myriad of new space exploration capabilities. We will seek new ideas from many sources, seeding innovation across the country, and creating a space exploration program for the 21st Century. We will invest in game-changing technologies such as advanced engines for launch and in-space travel, super light-weight structures, new types of space habitats, new entry systems, space resource processing, and radiation protection for people and space systems. We will begin activities ranging from

fundamental space technology research to flagship technology demonstrations in space and on other planets. I am energized just imagining all the possibilities, and I know I'm not the only one. We are focusing NASA where we can return the best science and cutting edge technology to help drive the nation's economic innovation engine. These activities will draw new innovators to NASA, revitalizing our capabilities for the decades to come. It is with these innovations that we will venture out into the solar system and, eventually, beyond.

The International Space Station will play a key role in our R and D plans as we move forward on our new path. The ISS is an extraordinary laboratory in space, and is currently vastly underutilized. We intend to change that. Our new innovative R and D programs specifically include provisions to enhance ISS utilization and to position the ISS as a true "international laboratory". We will fly payloads for Earth Science, significantly expand our Human Research Program, and use the ISS as a technology testbed to pave the way for future exploration.

And as we invest in the most innovative research and technology, we will also work to cultivate an expanded space exploration industry through a commercial crew transportation program that seeks to spur competition and innovation in American industry, ultimately resulting in commercial human spaceflight services. Once established, these services will not only allow astronauts to travel to the International Space Station, they will ultimately open space travel to many more people across the globe.

These are big changes for NASA, and we stand ready to go implement them as we look towards a more compelling, sustainable future in space. Thank you.