Since it first became a possibility for man to reach the stars, America has been the leader in space exploration. We have done so because we are a nation that prizes knowledge and progress. We have done so because we are a nation that imagines what can be and works to realize our vision. And we have done so because it is vital to our economy and national security.

Breakthroughs in healthcare, missile defense, even everyday products we use in the home, have all come out of research related to America’s space program. Some of these innovations were planned, others were pure happenstance. But they have all made our lives better.

Science and research are engines for both our financial and intellectual economy. NASA is an investment, not an expenditure. I have worked hard throughout my years in the Senate to be sure NASA is recognized for its strategic importance and the value it brings. This is more important than ever in such uncertain times.

Today, the nation is facing out-of-control spending and massive debt. But Washington doesn’t just need to reduce spending, it needs to be smart about how it allocates our resources. To ensure essential funding levels for our most important programs, we must be bold and strategic. We should set a cap on spending at 18 percent of GDP, and within that limit, determine the priorities that will produce economic and long-term rewards.

An example of good strategy is a recent decision by NASA Administrator Bolden to spend funds more efficiently to achieve two important goals.

With the retirement of the Space Shuttles, America must rely on Russian rockets to ferry our astronauts and their equipment to the International Space Station. In the future, however, our Space Station crew members and cargo will be transported to and from low-Earth orbit by a commercial space company, to be selected by NASA through a competitive process.

NASA initially funded four potential contractors to develop the necessary rockets, capsules and know-how. Two years later, it’s become clear to me and others in Congress that NASA should narrow the competition, to stay on budget and on schedule. That’s why I’ve called repeatedly for NASA to reduce the competition to fewer contenders. The recent successful launch of SpaceX’s Falcon rocket, and subsequent test berthing of its Dragon capsule with the Space Station, was a landmark achievement that strengthened my argument. So it was welcome news when Administrator Bolden recently decided to reduce the field of top contenders. His decision means that taxpayer funds will be more effectively used as commercial service to the Space Station is developed.

America should have two goals. First, to ensure manned access to the International Space Station, so we can fully utilize our investment in the research facility, including the Alpha-Magnetic Spectrometer (AMS), which was installed last year. Second, to achieve manned space exploration beyond low-Earth orbit, places where no human has ever been.

It is time for America to push forward beyond the frontiers we have already conquered, taking our space program to the next level. Nobel Laureate Dr. Samuel Ting, the Spectrometer’s principal scientist, made a point that reflects the vast promise of space exploration. He noted that while the AMS is trying to identify and understand dark matter and cosmic radiation, we cannot know in advance what we will actually discover.

The door is open to infinite possibilities. Many of our greatest discoveries were either stumbled upon inadvertently or intended for some other purpose altogether – the MRI, penicillin and the pacemaker were all accidents of scientific history. There is so much left to explore and so much we don’t even know we are looking for. As long as NASA’s funding and future are secure, there are no limits to what we might find.

Hutchison, a Republican, is the senior U.S. senator from Texas.