

This is of more interest to a limited audience than the general public so I'm putting all the details after the "keep reading" tag. If you're a researcher, however, you should keep reading. The American Association for Advancement of Science (AAAS) has provided a [summary](#) of the R&D items of the appropriations. Below are some of the items:

- \$10.4 billion for NIH including \$500 million for buildings and facilities
- \$3 billion for NSF including \$300 million for major research instrumentation
- \$1.6 billion for the Department of Energy Office of Science
- \$400 million for the DOE Advanced Research Project Agency-Energy (ARPA-E). (This program supports high-risk, high-payoff research into energy sources and energy efficiency in collaboration with industry.)
- \$2.5 billion for DOE Energy Efficiency and Renewables
- \$1 billion for NASA, including \$400 million for climate change research
- \$200 million for DoD R&D programs
- \$600 million for the National Institute of Standards and Technology. This includes the Technology Innovation Program that funds high-risk, high-reward research projects from small- to medium-sized companies or company/university partnerships. See the [call for white papers](#) indicating particular interest in the following topic areas:
  - Civil Infrastructure-for example construction technologies or advanced materials for transportation or for water distribution and flood control;
  - Complex networks and complex systems-for example new theory or mathematical tools to enable better understanding and control of the complex networks that have evolved for energy delivery, telecommunications, transportation and finance;
  - Energy-technologies that address emerging alternative energy sources;
  - Water-technologies that address growing needs for fresh water supplies and ensure the safety of water and food supplies from contamination;
  - Manufacturing-for example, advanced manufacturing technologies that have shorter innovation cycles, more flexibility, and are rapidly reconfigurable;

- Nanomaterials and nanotechnology-for example technologies that enable the scale-up of nanomaterials and nanodevices from lab prototypes to commercial manufacturing;
- Personalized Medicine-for example, advances in proteomics and genomics that could enable doctors to select optimal drug treatments and dosages based on the patient's unique genetics, physiology, and metabolic processes; and
- Sustainable Chemistry-for example, novel, advanced process chemistries and technologies that are inherently safer and cleaner, while creating products and processes with attributes superior to conventional methods.