

## High Confidence Software and Systems (HCSS)

**NITRD Agencies: NSF, NIH, DARPA, NSA, NASA, NIST, OSD**

**Other Participants: AFRL, ARO, DHS, FAA, FDA, ONR**

HCSS activities focus on the basic science and information technologies necessary to achieve affordable and predictable high levels of safety, security, reliability, and survivability in U.S. national security- and safety-critical systems. These activities are essential in domains such as aviation, health care, national defense, and infrastructure.

### President's 2006 Request

#### *Strategic Priorities Underlying This Request*

- Assuring the security, safety, and highly dependable performance of systems and software in critical applications and U.S. infrastructures is one of the most significant and difficult challenges in computing and

systems. As of 2005, the NITRD research community estimates that in the third years of its funding, the focus on software and systems applications in defense, the growing need for secure, reliable IT systems in health care information and medical devices, and the increasing complexity of large-scale systems

