

## **Space Security Spending 2005-2009**

### **Methodology**

The TCS Space Security Spending Database includes defense-related satellite programs, launch programs, ground portions of space systems, and technology development programs that build the basis for space systems. We also include relevant funding in the National Oceanic and Atmospheric Association (NOAA), Department of Energy and NASA. Figures for the database are compiled from unclassified FY09 budget justification materials produced by these agencies as well as the Missile Defense Agency, Defense Advanced Research Projects Agency (DARPA) and each of the military services, (with the exception of the Marine Corps, which does not fund space programs). These documents show the amounts spent or appropriated for each fiscal year up to the current year, after which figures are “estimated.”

We include NASA and NOAA because of their substantial investment in satellite programs that provide information to the Department of Defense (DOD). In the case of NOAA, we include programs within the National Environmental Satellite, Data and Information Service in which DOD is a partner or significant customer. Ferreting out defense-related spending in the NASA budget is more challenging, in large part because NASA has eschewed a traditional line-item budget structure in favor of grouping numerous programs together under “themes” and other sub-categories. We include all programs that list DOD as a partner in NASA’s budget justification documents, though we recognize this may neglect several programs as these partnerships are self-reported. For example, the Tracking and Data Relay Satellite System is described as providing voice and video information to “other government agency users,” not listing any in particular. The NASA budget also underwent a radical restructuring in 2007 that makes breaking out defense-related costs difficult. For this reason, we do not include large budget accounts such as Earth Science Research, since DOD programs are buried within the total cost. Further, much of NASA’s work for DOD consists of in-kind services such as renting wind tunnels for use in weapons testing, which do not constitute defense-related spending per se.

Some additional points:

- All dollar figures are in millions.
- We do not include a topline number for classified intelligence programs, which were estimated at \$10 billion in fiscal year 2008.
- Most of the budget justification documents provide cost estimates through 2013. When they do not—for example in the case of NOAA, DARPA and military O&M programs—out-years funding is marked N/A.
- Contractor information was obtained from budget justification documents, which list prime contractors and their corporate location. Additional information on subcontractors, when available, was taken from internet and corporate research.
- Advance procurement programs are not listed separately because they are included in the base program’s “total procurement costs” figure.
- Programs eliminated by FY 2009 are included in the database in order to show spending trends.

TCS does not claim to capture every element of defense-related space spending, as our research has shown that even the federal government has trouble tracking it. We believe, however, that this database is the most comprehensive ever produced on the topic, and hope it provides a helpful tool to lawmakers, scientists and concerned taxpayers.