

PDC2023
Vienna, Austria

**How NASA's Planetary Defense Budget Grew by More Than 4000% in 15 Years:
Lessons in Strategic Alignment**

Casey Dreier⁽¹⁾

*⁽¹⁾The Planetary Society, 60 S. Los Robles Ave, Pasadena CA, 626-793-5100,
casey.dreier@planetary.org*

Keywords: *Political strategy, space policy, budget*

ABSTRACT

In the last 15 years, U.S. expenditures on planetary defense activities grew by an astonishing 4175%, from 3.3 million USD to 137.8 million USD. Planetary defense activities expanded accordingly, with ongoing ground-based surveys, the establishment of the Planetary Defense Coordination Office, and the first in-space deflection test with NASA's DART mission. Yet throughout this period, and for decades prior, the fundamental arguments *for* investing in planetary defense did not change — getting hit by a large asteroid is an obviously undesirable outcome. What caused this extraordinary growth? And can it be generalized to other space agencies and nations beyond NASA and the U.S.?

This paper analyses the last 20 years of NASA budgets and finds that growth was neither steady nor aligned with shocking real-world events like Chelyabinsk. Instead, much of the budgetary growth came at the behest of NASA, notably when planetary defense activities aligned with agency interests, such as human spaceflight ambitions or addressing workforce needs in key congressional districts.

The converse is also true: that planetary defense funding can fall by the wayside when NASA's organizational interests lie elsewhere. In 2022 and 2023, NASA slashed funding for NEO Surveyor in order to prioritize unrelated exploration projects. Human spaceflight interests had shifted to the Moon, and planetary defense served no other organizational purpose beyond itself. Lacking that additional bureaucratic relevancy, it became prey for more embedded institutional priorities.

Planetary defense is a relatively new field, even by space-age standards. It occupies a nascent foothold in a larger, more entrenched bureaucracy committed to pursuing massive programs in human exploration and science. Instead of competing directly with these priorities, one strategy is to position planetary defense as a tool to enable the success of an organization's near-term goals, rather than as yet another problem to be solved. This serves as a valuable example for developing policy and communications strategies to grow planetary defense investments in nations around the world and for continued growth within the United States.