



New Year, Old Budget

An Update on the State of R&D funding

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This story was updated on January 8 to reflect the agreement on discretionary toplines that occurred during weekend, which you will find at the bottom.

The State of R&D in 2024

The new year has just begun with only a handful of days before the first of two continuing resolutions (CR) expires, and negotiations are still in play on total discretionary spending topline numbers (aka the total amount of discretionary funding appropriators can use). This means that the first four appropriations bills for fiscal year (FY) 2024 will enter calendar year 2024 in the same state they left 2023 – with significant differences between the House and Senate versions and no resolution in sight.

The following graph shows the amount of pure R&D, estimated based on the basic, applied, and developmental research (as well as associated facilities and construction costs) identified by the Office of Management and Budget. The dollar amounts for the House and Senate numbers are calculated by scaling the breakdown of pure R&D in the FY 2023 enacted budget to the corresponding FY 2024 plans, with the assumption that FY 2024 will have similar ratios of research to whole agency budgets.

Two of the twelve appropriations bills do not contain any R&D, those from the Financial Services and General Government as well as the Legislative Branch subcommittees. They are kept on the table regardless, as all twelve bills are listed in either red to represent the **January 19th deadlines** or black to list all those due on February 2nd. Agencies of note from each bill have also been highlighted in their own row.

Estimated R&D in Each Appropriations Bill and Agency					
Subcommittee Agency	in millions of current dollars				
	FY2023	House FY2024	% Change	Senate FY2024	% Change
NonDefense	\$ 106,902.88	\$ 93,832.91	-12%	\$ 98,105.76	-8%
Agriculture	\$ 3,616.00	\$ 3,146.33	-13%	\$ 3,201.54	-11%
USDA	\$ 3,616.00	\$ 3,146.33	-13%	\$ 3,201.54	-11%
Energy & Water	\$ 23,338.00	\$ 19,500.40	-16%	\$ 20,221.88	-13%
DOE	\$ 23,218.00	\$ 19,252.40	-17%	\$ 19,973.88	-14%
Other	\$ 120.00	\$ 248.00	107%	\$ 248.00	107%
Mil Con VA	\$ 1,624.00	\$ 1,690.00	4%	\$ 1,690.00	4%
T-HUD	\$ 1,257.00	\$ 952.00	-24%	\$ 918.54	-27%
DOT	\$ 1,257.00	\$ 952.00	-24%	\$ 918.54	-27%
CJS	\$ 25,844.00	\$ 23,893.91	-8%	\$ 23,324.05	-10%
NIST	\$ 2,997.00	\$ 2,318.90	-23%	\$ 2,138.34	-29%
NOAA	\$ 1,739.00	\$ 1,245.97	-28%	\$ 1,221.39	-30%
NASA	\$ 13,105.00	\$ 12,671.80	-3%	\$ 12,447.55	-5%



NSF	\$ 7,974.00	\$ 7,650.24	-4%	\$ 7,509.77	-6%
Other	\$ 29.00	\$ 7.00	-76%	\$ 7.00	-76%
Financial	--	--	--	--	--
Homeland	\$ 634.00	\$ 485.51	-23%	\$ 363.61	-43%
Interior, Environment	\$ 2,214.88	\$ 1,532.72	-31%	\$ 1,982.48	-10%
EPA	\$ 568.00	\$ 37.08	-93%	\$ 563.70	-1%
Interior	\$ 1,646.88	\$ 1,495.64	-9%	\$ 1,418.79	-14%
Labor HHS	\$ 48,136.00	\$ 42,393.04	-12%	\$ 46,164.66	-4%
NIH	\$ 46,317.00	\$ 41,399.43	-11%	\$ 44,662.89	-4%
Education	\$ 346.00	\$ 174.61	-50%	\$ 195.77	-43%
Other	\$ 1,473.00	\$ 819.00	-44%	\$ 1,306.00	-11%
Legislative	--	--	--	--	--
State	\$ 239.00	\$ 239.00	0%	\$ 239.00	0%
Defense*	\$ 91,928.19	\$ 99,945.66	9%	\$ 93,621.14	2%

* defense R&D estimates include only RDTE 6.1-6.6

Some notable R&D in the appropriation bills include the ‘other’ accounts in the Energy and Water bill – the Army Corps of Engineers and the Tennessee Valley Authority both receive a very favorable increase from the House and the Senate for FY 2024. The Department of Transportation’s R&D accounts, however, are not faring quite as well, with both the Federal Aviation Administration (FAA) and the Office of the Secretary seeing cuts.

Homeland Security might be seeing an increase in its total overall budget but decreasing in the amount of R&D. For example, the Senate appropriations bill completely defunds R&D in Cybersecurity and Infrastructure, TSA and the Coast Guard, and it contains cuts to the Science and Technology account and the Countering Weapons of Mass Destruction Office.

Another very significant difference between the House and Senate plans is the Environmental Protection Agency, whose R&D is nearly completely defunded in the House plan, but kept at near FY 2023 levels in the Senate. The Center for Disease Control and Prevention (CDC) is also seeing very different outcomes between the two chambers; it would receive a cut nearly in half in the House versus a twenty percent cut in the Senate.

What about the FRA?

The Fiscal Responsibility Act (FRA) signed in June dictates discretionary limits on defense and nondefense funding for any appropriations bills that are not signed into law by the 1st of January. All twelve appropriations bills are now subject to these limits, referred to as Section 102 in the FRA. If the appropriations bills are not signed into law by April 30th, another set of more stringent caps, called Section 101, will be instituted – and they hold even for any appropriations that are passed after the 30th.

No limits, however, are to be enforced until the 30th of April, as stated by an [FAQ that OMB](#) has been circulating. This means that the White House has taken a stance to ignore Section 102 for now.

If no movement occurs on these bills in the next few weeks, some in Congress have stated that they would be open to a full-year CR. This would mean that we might reach the 30th of April with some or all



of the appropriation bills not yet signed into law, and thus ‘sequestered’ or forced to undergo a blanket percentage cuts mandated by Section 102 and 101.

To make things even more complicated, the Congressional Research Service performed its regular [reevaluation of funding levels](#) in November, and found that FY 2023 contained more nondefense discretionary funding than anticipated, and less defense funding than originally allotted. The Congressional Budget Office performed its own [calculations](#) yesterday, and confirmed that there will be a significant increase to nondefense funding in FY 2023. In a regular year this would be no problem, but with the threat of a sequester in the spring, unexpected increases in funding means that the limits set in June are not reflective of a true 1% cut anymore.

The following table shows what the two different sections of the FRA that govern funding caps would look like for R&D.

Estimated R&D in Defense and NonDefense Appropriations					
	in millions of current dollars				
	FY2023	Section 102	% Change	Section 101	% Change
NonDefense	\$ 106,902.88	\$ 101,323.84	-5%	\$ 96,811.08	-9%
Defense	\$ 91,928.19	\$ 90,835.74	-1%	\$ 94,744.83	3%

TOPLINES UPDATE

The Speaker and Senate Majority Leader were able to come to an agreement on discretionary topline this weekend. The deal touches on several aspects of the FRA caps: \$886 billion for defense, and \$704 billion for nondefense discretionary in line with Section 101 that will be the legal maximum come April 30th. However, a side deal that Biden and McCarthy made back in June was retained, allowing for an extra \$69 billion to nondefense.

That means that the nondefense discretionary funding cap would be functionally \$773 billion, above the FRA caps but true to its initial intent of a 1% cut. How that extra funding will be distributed among the appropriations subcommittees is yet unknown, and the contents of the side deal are not publicly available. Additionally, we already know that the cuts will not be applied universally, Speaker Johnson has already stated that Veteran’s Affairs will be spared any cuts and that bill is a not insignificant 32-35% of nondefense discretionary spending.

With those caveats in mind, we’ve updated the table for total R&D estimates for the new topline ‘total’. Depending on the contents of the side deal, the topline numbers for nondefense discretionary may end up looking a lot more like Section 101, or possibly worse if the VA truly remains funded at 2023 levels. Defense, on the other hand, will have a small increase consistent with the FRA caps.

Estimated R&D in Defense and NonDefense Appropriations							
	in millions of current dollars						
	FY2023 Budget	FRA Caps				Bipartisan Topline Deal	
		Section 102	% Change	Section 101	% Change	FY 2023 Caps	% Change
NonDefense	\$ 106,902.88	\$ 101,323.84	-5%	\$ 96,811.08	-9%	\$ 106,311.27	-1%
Defense	\$ 91,928.19	\$ 90,835.74	-1%	\$ 94,744.83	3%	\$ 94,707.42	3%