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Reconciliation Recommendations As ordered reported on September 9, 2021	of the Hous	se Committee on Science, Spa	ce, and Technology
By Fiscal Year, Millions of Dollars	2022	2022-2026	2022-2031
Direct Spending (Outlays)	1,644	28,270	44,595
Revenues	0	0	0
Increase in the Deficit	1,644	28,270	44,595
Statutory pay-as-you-go procedures apply?	Yes	Mandate E	iffects
ncreases on-budget deficits in any year after	Vaa	Contains intergovernmental mandate?	No
2031?	Yes	Contains private-sector mandate?	No
CBO has not reviewed the legislation for effects on	spending subject	to appropriation.	

S. Con. Res. 14, the Concurrent Resolution on the Budget for Fiscal Year 2022, instructed some committees of the House of Representatives to recommend legislative changes which would increase deficits up to a specified amount over the 2022-2031 period. As part of this reconciliation process, the House Committee on Science, Space, and Technology approved legislation on September 9, 2021, with provisions that would increase deficits.

The legislation would appropriate nearly \$46 billion in 2022 to improve infrastructure, facilities, equipment, and oversight and expand research and development activities within various federal agencies that study basic science, energy, weather, and climate change. Based on historical outlay rates for similar activities, CBO estimates that a portion of that appropriation for some programs would not be spent and for other programs would be spent after 2031. Thus, enacting the legislation would increase the deficit by nearly \$45 billion over the 2022-2031 period.



CBO Cost Estimate for the Reconciliation Recommendations of the House Committee on Science, Space, and Technology, as Ordered Reported on September 9, 2021

Specifically, the legislation would provide funds to the following agencies:

- Economic Development Administration, \$5.0 billion;
- Department of Energy, \$15.6 billion;
- Environmental Protection Agency, \$0.3 billion;
- Federal Emergency Management Agency, \$0.8 billion;
- National Aeronautics and Space Administration, \$4.4 billion;
- National Institute of Standards and Technology, \$4.2 billion;
- National Oceanic and Atmospheric Administration, \$4.3 billion; and
- National Science Foundation, roughly \$11.0 billion.

The costs of the legislation, detailed in Table 1, fall within budget functions 250 (general science, space, and technology), 270 (energy), 300 (natural resources and environment), 370 (commerce and housing credit), 400 (transportation), and 450 (community and regional development).

The CBO staff contacts are:

David Hughes (National Institute of Standards and Technology)

Aaron Krupkin (Department of Energy and National Aeronautics and Space Administration)

Stephen Rabent (Environmental Protection Agency)

Robert Reese (National Oceanic and Atmospheric Administration)

Janani Shankaran (Department of Energy, National Aeronautics and Space Administration, and National Science Foundation)
Jon Sperl (Economic Development Administration and Federal Emergency Management Agency)

The estimate was reviewed by Susan Willie, Chief of the Natural and Physical Resources Cost Estimate Unit, H. Samuel Papenfuss, Deputy Director of Budget Analysis, and Theresa Gullo, Director of Budget Analysis.

Table 1. Estimated Budgetary Effects of the Reconciliation Recommendations of the House Committee on Science, Space, and Technology

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_			By Fisc	al Year, M	illions of E	Oollars						
_	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2022- 2026	2022 2031
			Incre	ases in Di	rect Spend	ding						
Sec. 90001 - Department of Co	mmerce Regional	Innovation	1									
Budget Authority	5,000	0	0	0	0	0	0	0	0	0	5,000	5,000
Estimated Outlays	250	400	500	650	800	900	750	250	150	50	2,600	4,700
Sec. 90002 - Funding for DOE I	Laboratory Infrastr	ucture										
Budget Authority	12,250	0	0	0	0	0	0	0	0	0	12,250	12,250
Estimated Outlays	282	1,087	1,678	2,552	2,333	1,654	1,596	520	415	97	7,932	12,214
Sec. 90003 - DOE Research, De	evelopment, and D	emonstrat	ion Activit	ies								
Budget Authority	3,311	0	0	0	0	0	0	0	0	0	3,311	3,311
Estimated Outlays	135	748	870	719	393	225	119	61	5	0	2,865	3,275
Sec. 90004 - EPA Climate Chan	ge Research and l	Developm	ent									
Budget Authority	264	0	0	0	0	0	0	0	0	0	264	264
Estimated Outlays	53	75	84	35	13	4	0	0	0	0	260	264
Sec. 90005 - FEMA Assistance	to Firefighters Gra	ınts										
Budget Authority	798	0	0	0	0	0	0	0	0	0	798	798
Estimated Outlays	30	153	168	183	149	93	0	0	0	0	683	776
Sec. 90006 - Firefighter Grant C	Oversight											
Budget Authority	2	0	0	0	0	0	0	0	0	0	2	2
Estimated Outlays	*	*	*	*	*	*	*	*	*	*	1	2
Sec. 90007 - NASA Infrastructu	re											
Budget Authority	4,000	0	0	0	0	0	0	0	0	0	4,000	4,000
Estimated Outlays	60	120	280	600	800	800	680	400	120	100	1,860	3,960
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Table 1. Estimated Budgetary Effects of the Reconciliation Recommendations of the House Committee on Science, Space, and Technology

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			By Fisc	al Year, Mi	llions of D	ollars						
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2022- 2026	2022- 2031
			Incre	ases in Dii	rect Spend	ling						
Sec. 90008 - NASA Climate Chang	ge Research and	l Developr	nent									
Budget Authority	388	0	0	0	0	0	0	0	0	0	388	388
Estimated Outlays	50	120	165	40	13	0	0	0	0	0	388	388
Sec. 90009 - NASA Oversight and	l Cybersecurity											
Budget Authority	12	0	0	0	0	0	0	0	0	0	12	12
Estimated Outlays	1	2	2	2	1	1	1	1	1	0	8	12
Sec. 90010 - NIST Research												
Budget Authority	1,195	0	0	0	0	0	0	0	0	0	1,195	1,195
Estimated Outlays	100	131	138	143	148	153	159	165	52	6	660	1,195
Sec. 90011 -NIST Supporting Ame	erican Manufact	uring										
Budget Authority	2,000	0	0	0	0	0	0	0	0	0	2,000	2,000
Estimated Outlays	75	275	345	305	295	280	220	140	55	10	1,295	2,000
Sec. 90012 - NIST Research Facil	ities											
Budget Authority	1,000	0	0	0	0	0	0	0	0	0	1,000	1,000
Estimated Outlays	30	70	110	185	200	185	140	60	20	0	595	1,000
Sec. 90013 - NIST Oversight												
Budget Authority	5	0	0	0	0	0	0	0	0	0	5	5
Estimated Outlays	1	1	1	1	1	0	0	0	0	0	5	5
Sec. 90014 - NOAA Weather, Ocea	an, and Climate	Research	and Forec	asting								
Budget Authority	1,240	0	0	0	0	0	0	0	0	0	1,240	1,240
Estimated Outlays	62	124	248	434	248	62	31	0	0	0	1,116	1,209
											continued	

Table 1. Estimated Budgetary Effects of the Reconciliation Recommendations of the House Committee on Science, Space, and Technology

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_			By Fisc	al Year, Mi	illions of D	ollars						
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2022- 2026	2022- 2031
			Incre	ases in Di	rect Spend	ling						
Sec. 90015 - NOAA Climate Ada	ptation and Resili	ence Activ	/ities									
Budget Authority	765	0	0	0	0	0	0	0	0	0	765	765
Estimated Outlays	122	180	158	140	140	10	0	0	0	0	740	750
Sec. 90016 - NOAA High Perform	mance Computing	l										
Budget Authority	70	0	0	0	0	0	0	0	0	0	70	70
Estimated Outlays	7	14	14	21	7	4	2	0	0	0	63	69
Sec. 90017 - NOAA Phased Arra	ıy Radar											
Budget Authority	224	0	0	0	0	0	0	0	0	0	224	224
Estimated Outlays	11	18	22	29	34	34	22	18	7	2	114	197
Sec. 90018 - NOAA Hurricane H	unter Aircraft											
Budget Authority	1,024	0	0	0	0	0	0	0	0	0	1,024	1,024
Estimated Outlays	51	205	307	154	154	41	10	0	0	0	871	922
Sec. 90019 - NOAA Uncrewed S	ystems											
Budget Authority	12	0	0	0	0	0	0	0	0	0	12	12
Estimated Outlays	1	2	5	2	1	1	0	0	0	0	11	12
Sec. 90020 - NOAA Research In	frastructure											
Budget Authority	743	0	0	0	0	0	0	0	0	0	743	743
Estimated Outlays	89	149	223	134	89	37	0	0	0	0	684	721
Sec. 90021 - NOAA Space Weat	her											
Budget Authority	173	0	0	0	0	0	0	0	0	0	173	173
Estimated Outlays	43	78	26	17	5	0	0	0	0	0	169	169
											continued	



CBO Cost Estimate for the Reconciliation Recommendations of the House Committee on Science, Space, and Technology, as Ordered Reported on September 9, 2021

Table 1. Estimated Budgetary Effects of the Reconciliation Recommendations of the House Committee on Science, Space, and Technology

			By Fisc	al Year, M	illions of C	Dollars						
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2022- 2026	2022- 2031
			Incre	eases in Di	rect Spend	ding						
Sec. 90022 - NOAA Oversight												
Budget Authority	5	0	0	0	0	0	0	0	0	0	5	5
Estimated Outlays	1	1	1	1	1	0	0	0	0	0	5	5
Sec. 90023 - NSF Infrastructure												
Budget Authority	3,430	0	0	0	0	0	0	0	0	0	3,430	3,430
Estimated Outlays	35	100	275	340	410	690	860	345	140	105	1,160	3,300
Sec. 90024 - NSF Research and D	Development											
Budget Authority	7,550	0	0	0	0	0	0	0	0	0	7,550	7,550
Estimated Outlays	150	230	760	1,130	1,890	1,510	1,130	380	150	70	4,160	7,400
Sec. 90025 - NSF Oversight												
Budget Authority	50	0	0	0	0	0	0	0	0	0	50	50
Estimated Outlays	5	5	5	5	5	5	5	5	5	5	25	50
Total Direct Spending												
Budget Authority	45,511	0	0	0	0	0	0	0	0	0	45,511	45,511
Estimated Outlays	1,644	4,288	6,385	7,822	8,130	6,689	5,725	2,345	1,120	445	28,270	44,595
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Components may not sum to totals because of rounding; * = between zero and \$500,000.

DOE = Department of Energy; EPA = Environmental Protection Agency; FEMA = Federal Emergency Management Agency;

NASA = National Aeronautics and Space Administration; NIST = National Institute of Standards and Technology;

NOAA = National Oceanic and Atmospheric Administration; NSF = National Science Foundation.

Table 1.

Estimated Budgetary Effects of Reconciliation Recommendations of the House Committee on Science, Space, and Technology

Notes

Budget authority reflects appropriations specifically provided in the legislation.

The Budget Control Act of 2011 (BCA) requires the annual sequestration of nonexempt mandatory spending programs. The Office of Management and Budget (OMB) determines which accounts are subject to reductions under the BCA.

New mandatory funding provided in this legislation also may be subject to the annual sequestration of mandatory spending required by the Budget Control Act of 2011, but CBO does not have sufficient information to determine which of the new budgetary resources OMB would determine are subject to those reductions or how the reductions would be applied. For that reason, the amounts shown in this table for new mandatory funding have not been reduced to account for possible sequestration.