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# National Institutes of Health (NIH) Funding: FY1994-FY2020

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## NIH Funding: FY1994-FY2020

The National Institutes of Health (NIH) is the primary federal agency charged with conducting and supporting biomedical and behavioral research. It is the largest of the eight health-related agencies that make up the Public Health Service (PHS) within the Department of Health and Human Services (HHS).<sup>1</sup> NIH's organization consists of the Office of the Director (OD) and 27 Institutes and Centers (ICs). The OD sets overall policy for NIH and coordinates the programs and activities of all NIH components, particularly in areas of research that involve multiple institutes.

NIH activities cover a wide range of basic, clinical, and translational research, focused on particular diseases, areas of human health and development, or more fundamental aspects of biology and behavior. Its mission also includes research training and health information collection and dissemination.<sup>2</sup> More than 80% of the NIH budget funds extramural research through grants, contracts, and other awards.<sup>3</sup> This funding supports research performed by more than 300,000 individuals who work at over 2,500 hospitals, medical schools, universities, and other research institutions around the country.<sup>4</sup> About 10% of the agency's budget supports intramural research conducted by nearly 6,000 NIH physicians and scientists, most of whom are located on the NIH campus in Bethesda, MD.<sup>5</sup>

### Funding Sources

Funding for NIH comes primarily from the annual Labor, HHS, and Education (LHHS) appropriations bill, with an additional amount for Superfund-related activities from the Interior/Environment appropriations bill. Those two bills provide NIH's discretionary budget authority.<sup>6</sup> In addition, NIH has received mandatory funding of \$150 million annually that is provided in Public Health Service Act (PHSA), Section 330B, for a special program on type 1 diabetes research, though under current law, no new funding will be available for this program after September 30, 2019.<sup>7</sup> Some funding is also transferred to NIH pursuant to the "PHS Evaluation Tap" Transfer authority.<sup>8</sup> The total funding available for NIH activities, taking account of add-ons and PHS tap transfers, is known as the NIH program level.<sup>9</sup>

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<sup>1</sup> The Public Health Service also includes the Centers for Disease Control and Prevention (CDC), the Food and Drug Administration (FDA), the Agency for Healthcare Research and Quality (AHRQ), the Health Resources and Services Administration (HRSA), the Substance Abuse and Mental Health Services Administration (SAMHSA), the Indian Health Service (IHS), and the Agency for Toxic Substances and Disease Registry (ATSDR).

<sup>2</sup> For further information on NIH, see CRS Report R41705, *The National Institutes of Health (NIH): Background and Congressional Issues*.

<sup>3</sup> Department of Health and Human Services, *Fiscal Year 2018 Budget in Brief*, Washington, DC, May 2017, p. 38. Updated numbers were not available in the FY2019 or FY2020 HHS Budget in Brief.

<sup>4</sup> Ibid.

<sup>5</sup> Ibid.

<sup>6</sup> NIH received a total of \$10.4 billion in supplemental, one-time FY2009 appropriations in the American Recovery and Reinvestment Act (ARRA) of 2009 (P.L. 111-5). ARRA funds were made available for obligation for two years; \$4.95 billion was obligated in FY2009, and \$5.45 billion in FY2010. CRS Report R43304, *Public Health Service Agencies: Overview and Funding (FY2010-FY2016)*.

<sup>7</sup> 42 U.S.C. §254c-3.

<sup>8</sup> For more information on the PHS Evaluation Tap, or PHS Evaluation Set-Aside, see discussion in CRS Report R44916, *Public Health Service Agencies: Overview and Funding (FY2016-FY2018)*.

<sup>9</sup> Totals include amounts "transferred in" pursuant to PHS tap, but do not include any amounts "transferred out" under

## Trends

**Table 1** outlines NIH program level funding over the past 25 years, and **Figure 1** illustrates funding trends in both current (also called nominal dollars) and projected constant (i.e., inflation-adjusted) FY2020 dollars.

NIH has seen periods of high and low funding growth. Between FY1994 and FY1998, funding for NIH grew from \$11.0 billion to \$13.7 billion in nominal terms. Over the next five years, Congress and the President doubled the NIH budget to \$27.2 billion in FY2003. In each of these years, NIH received annual funding increases of 14% to 16%. Since FY2003, NIH funding has increased more gradually in nominal dollars. Funding peaked in FY2010 before declining in FY2011 through FY2013, with increases in subsequent years.<sup>10</sup> In some years, (FY2006, FY2011, and FY2013) funding for the agency decreased in nominal dollars.<sup>11</sup> From FY2016 through FY2019, the NIH has seen funding increases of over 5% each year. The largest increase was from FY2017 to FY2018, where the program level increased by \$3.0 billion (+8.7%), making this the largest single-year nominal dollar increase since FY2003 (excluding one-time funds provided by the American Recovery and Reinvestment Act of 2009 [ARRA, P.L. 111-5]).

### The 21<sup>st</sup> Century Cures Act and the NIH Innovation Account

The 21<sup>st</sup> Century Cures Act (“the Cures Act,” P.L. 114-255) created the NIH Innovation account and specified that funds in the account must be appropriated in order to be available for expenditure. The Cures Act specified that the following amounts shall be transferred to the NIH Innovation account: \$352 million for FY2017; \$496 million for FY2018; \$711 million for FY2019; \$492 million for FY2020; \$404 million for FY2021; \$496 million for FY2022; \$1,085 million for FY2023; \$407 million for FY2024; \$127 million for FY2025; and \$226 million for FY2026. All amounts authorized by the Cures Act have been fully appropriated from FY2017 to FY2019.<sup>12</sup> President Trump’s FY2020 budget request requested the full amount authorized by the Cures Act for FY2020.

For further information, see CRS Report R44720, *The 21st Century Cures Act (Division A of P.L. 114-255)*.

For FY2019, the NIH has a program level total of \$39.308 billion. Under the LHHS appropriations act (H.R. 6157, P.L. 115-245), NIH received \$37.933 billion in discretionary LHHS budget authority, including amounts authorized by the 21<sup>st</sup> Century Cures Act (see text box).<sup>13</sup> Adding to this total the amounts for the evaluation tap (\$1.147 billion), the mandatory

this same authority.

<sup>10</sup> Amounts shown in **Table 1** include appropriations for the Global Fund to Fight AIDS, TB, and Malaria (FY2002-FY2011) that were subject to transfer-out. As of FY2012, NIH no longer receives appropriations for the National Institute of Allergy and Infectious Diseases (NIAID) identifying resources for the Global Fund; this responsibility was transferred to another federal agency. For further details on the amounts transferred out by fiscal year, see the “Supplemental Appropriation Data Table” for “History of Congressional Appropriations, Fiscal Years 2000-2012” at [http://officeofbudget.od.nih.gov/approp\\_hist.html](http://officeofbudget.od.nih.gov/approp_hist.html).

<sup>11</sup> For instance, the FY2006 total was 0.1% lower than the previous year, the first time that the NIH appropriation had decreased since FY1970; the FY2011 total, provided in the Full-Year Continuing Appropriations Act, 2011 (P.L. 112-10), was 1.0% below the previous fiscal year; and the FY2013 total, provided in the Consolidated and Further Continuing Appropriations Act, 2013 (P.L. 113-6), was reduced by the March 2013 sequestration and a transfer of funding under the authority of the HHS Secretary (\$1.553 billion and \$173 million, respectively), resulting in a budget that was 5.0% lower than the prior year.

<sup>12</sup> The first round of funding was provided by Section 194 of the Further Continuing and Security Assistance Appropriations Act, 2017 (CR, P.L. 114-254). The CR appropriated \$352 million in the NIH Innovation account for necessary expenses to carry out the four NIH Innovation Projects as described in Section 1001(b)(4) of the Cures Act. The second round of funding was provided by the FY2018 omnibus (P.L. 115-141). The third round of funding is provided by the FY2019 Consolidated Defense, LHHS, and Continuing Resolution Appropriations Act (P.L. 115-245).

<sup>13</sup> NIH, “Justification of Estimates for Appropriations Committees- Overview FY2020, Vol. 1,” p. 78.

type 1 diabetes program (\$150 million), and Superfund related activities (\$79 million)<sup>14</sup> brings the program-level total to \$39.308 billion. This program level provides the NIH with \$2 billion (5.4%) more than the FY2018 program level and \$4.52 billion (13.0%) more than President Trump's FY2019 budget request for the NIH. This program level is \$744 million (1.9%) more than the House committee recommendation<sup>15</sup> but is close to the earlier Senate-passed program level recommendation.<sup>16</sup>

The lower half of **Figure 1** portrays NIH funding adjusted for inflation (in projected constant FY2020 dollars) using the Biomedical Research and Development Price Index (BRDPI).<sup>17</sup> It shows that the purchasing power of NIH funding (non-ARRA) peaked in FY2003 (the last year of the five-year doubling period) and then fairly steadily declined for more than a decade (excluding ARRA) until back-to-back funding increases were provided in FY2016, FY2017, FY2018, and FY2019.

## FY2020 Budget Request

President Trump's FY2020 budget request would provide NIH a total program level of \$34.368 billion, a decrease of \$4.941 billion (-12.6%) compared with FY2019-enacted levels.<sup>18</sup> The proposed FY2020 program level total would include

- \$33.410 billion provided through LHHS appropriations (including the full amount authorized by the Cures Act),
- \$741 million from the PHS evaluation transfer,
- \$66.581 million provided through Interior/Environment appropriations for Superfund-related activities, and
- \$150 million in proposed funding for the mandatory type 1 diabetes program.

In addition, the FY2020 Budget Request proposes consolidating the Agency for Healthcare Research and Quality (AHRQ) into NIH, forming a 28<sup>th</sup> IC—the National Institute for Research on Safety and Quality (NIRSQ). The creation of a new NIH institute would require an amendment to the PHSA Section 401(d), which specifies that “[i]n the National Institutes of Health, the number of national research institutes and national centers may not exceed a total of 27.”

Under the FY2020 budget proposal, all the existing ICs and budget activity lines, except for Buildings and Facilities, would receive a decrease compared to FY2019-enacted levels.<sup>19</sup> The

<sup>14</sup> Provided by P.L. 116-6, Consolidated Appropriations Act, 2019.

<sup>15</sup> The House appropriations committee recommendations provide for an NIH program level total of \$38.564 billion, calculated from figures in H.Rept. 115-952, pp. 573-575, and using the House Superfund appropriations recommendation of \$80 million to NIEHS from H.Rept. 115-765, p. 82.

<sup>16</sup> The Senate appropriations committee recommendations provide for an NIH program level total of \$39.312 billion, calculated from figures in H.Rept. 115-952, pp. 573-575, and using the Senate Superfund appropriations recommendation of \$78 million to NIEHS from S.Rept. 115-276, p. 95.

<sup>17</sup> The index is developed for NIH by the Bureau of Economic Analysis of the Department of Commerce. It reflects the increase in prices of the resources needed to conduct biomedical research, including personnel services, supplies, and equipment. It indicates how much the NIH budget must change to maintain purchasing power. See “NIH Price Indexes,” at <https://officeofbudget.od.nih.gov/gbiPriceIndexes.html>.

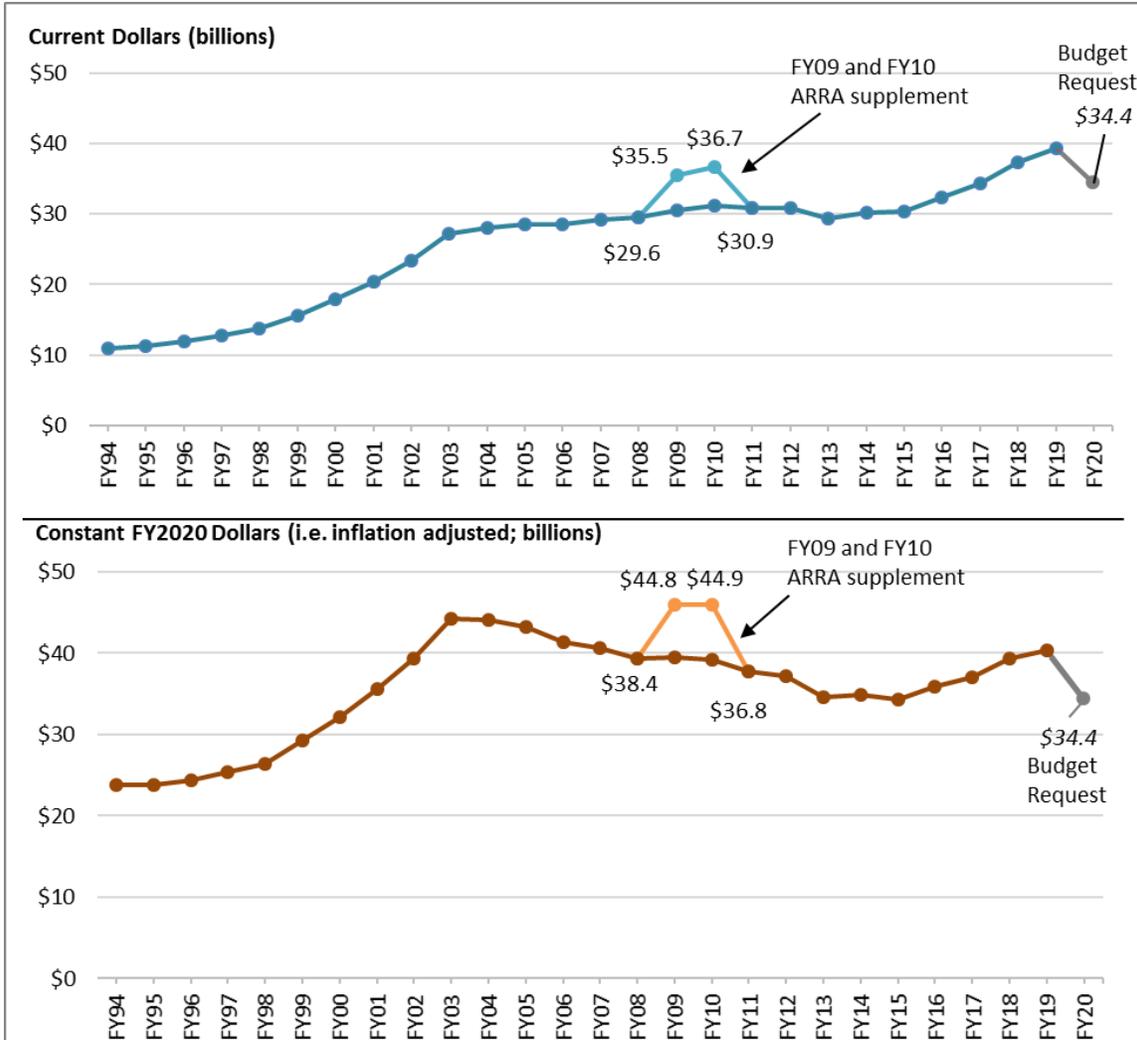
<sup>18</sup> NIH, “Justification of Estimates for Appropriations Committees--Overview FY2020, Vol. 1,” p. 78.

<sup>19</sup> Though the budget request provides an increase to NIGMS through discretionary LHHS budget authority, the total amount for NIGMS with the PHS evaluation transfer included is less than FY2019-enacted levels. For proposed FY2020 IC funding levels see NIH, “Justification of Estimates for Appropriations Committees- Overview, Vol. 1,” p. 78.

Buildings and Facilities appropriation of \$200 million would not change from FY2019 to FY2020. NISRQ would receive \$256 million in funding for FY2020. The budget request also aims to reduce the direct cost of research by proposing a cap on the percentage of an investigator’s salary that can be paid with NIH grant funds at 90%.

As shown in **Table 1**, the proposed FY2020 program level would be 22.4% less than the FY2003 program level (peak funding year), in constant FY2020 dollars.

**Figure 1. National Institutes of Health (NIH) Funding, FY1994-FY2020**  
Program Level Funding in Current and Projected Constant (FY2020) Dollars.



**Sources:** NIH Budget Office, Appropriations History by Institute/Center (1938 to Present), at [http://officeofbudget.od.nih.gov/approp\\_hist.html](http://officeofbudget.od.nih.gov/approp_hist.html). The FY2019 and F2020 program levels are based on budget data from NIH, “Justification of Estimates for Appropriations Committees FY2020--Overview, Vol. 1,” p. 78, except for FY2019 appropriations to NIEHS through the Consolidated Appropriations Act, 2019 (P.L. 116-6). Inflation adjustment reflects the Biomedical Research and Development Price Index (BRDPI), updated January 2019, <https://officeofbudget.od.nih.gov/gbiPricelIndexes.html>.

**Notes:** By convention, program level totals include amounts “transferred in” pursuant to PHS tap, but do not include any amounts “transferred out” under this same authority. Program level includes all budget authority, including appropriations for the Global Fund to Fight AIDS, TB, and Malaria (FY2002-FY2011) that were subject

to transfer-out. As of FY2012, NIH no longer receives appropriations for the National Institute of Allergy and Infectious Diseases (NIAID) identifying resources for the Global Fund; this responsibility was transferred to another federal agency. ARRA supplementary funding is from the American Recovery and Reinvestment Act of 2009, P.L. 111-5. In general, amounts provided to NIH for emergency requirements are excluded from these totals (e.g., FY2015 amount does not include \$238 million for the NIAID for research on Ebola that was provided in P.L. 113-235, Title VI of Division G).

**Table I. NIH Funding, FY1994-FY2020**

Program Level Funding in Current and Constant (FY2020) Dollars (billions)

Fiscal Year	Program Level		Program Level	
	Current \$	% Change	Projected Constant FY2020 \$	% Below FY2003 <sup>a</sup>
1994	\$10.956		\$23.817	
1995	11.300	3.1%	23.741	
1996	11.928	5.6%	24.436	
1997	12.741	6.8%	25.395	
1998	13.675	7.3%	26.363	
1999	15.629	14.3%	29.206	
2000	17.841	14.1%	32.141	
2001	20.459	14.7%	35.671	
2002	23.321	14.0%	39.359	
2003	27.167	16.5%	44.292	
2004	28.037	3.2%	44.069	-0.5%
2005	28.594	2.0%	43.262	-2.3%
2006	28.560	-0.1%	41.299	-6.8%
2007	29.179	2.2%	40.650	-8.2%
2008	29.607	1.5%	39.403	-11.0%
2009	30.545	3.2%	39.495	-10.8%
2010	31.238	2.3%	39.199	-11.5%
2011	30.916	-1.0%	37.716	-14.8%
2012	30.861	-0.2%	37.173	-16.1%
2013	29.316	-5.0%	34.662	-21.7%
2014	30.143	2.8%	34.891	-21.2%
2015	30.311	0.6%	34.386	-22.4%
2016	32.311	6.6%	35.875	-19.0%
2017	34.301	6.2%	37.119	-16.2%
2018	37.311	8.8%	39.353	-11.2%
2019	39.308	5.4%	40.373	-8.9%
2020 PB <sup>b</sup>	34.368	-12.6%	34.368	-22.4%
<b>NIH Funding Including ARRA Supplement</b>				
2009	35.499		\$46.02	
2010	36.684		\$46.15	

**Source:** NIH Budget Office, Appropriations History by Institute/Center (1938 to Present), at [http://officeofbudget.od.nih.gov/approp\\_hist.html](http://officeofbudget.od.nih.gov/approp_hist.html). The FY2019 and F2020 program levels are based on budget data from NIH, "Justification of Estimates for Appropriations Committees FY2020--Overview, Vol. 1," p. 78, except for FY2019 appropriations to NIEHS through the Consolidated Appropriations Act, 2019 (P.L. 116-6). Inflation adjustment reflects the Biomedical Research and Development Price Index (BRDPI), updated January 2019, <https://officeofbudget.od.nih.gov/gbiPriceIndexes.html>.

**Notes:** By convention, budget tables, such as **Table I**, include amounts "transferred in" pursuant to PHS tap, but do not include any amounts "transferred out" under this same authority. Program level includes all budget authority, including appropriations for the Global Fund to Fight AIDS, TB, and Malaria (FY2002-FY2011) that were subject to transfer-out. As of FY2012, NIH no longer receives appropriations for the National Institute of Allergy and Infectious Diseases (NIAID) identifying resources for the Global Fund; this responsibility was

transferred to another federal agency. ARRA supplementary funding is from the American Recovery and Reinvestment Act of 2009, P.L. 111-5. In general, amounts provided to NIH for emergency requirements are excluded from these totals (e.g., FY2015 amount does not include \$238,000,000 for the NIAID for research on Ebola that was provided in P.L. 113-235, Title VI of Division G).

- a. FY2003 was the peak funding year for the NIH program level.
- b. PB means “President’s Budget.”

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