

NATIONAL INSTITUTE
OF STANDARDS AND TECHNOLOGY

AND

NATIONAL TECHNICAL INFORMATION SERVICE

FISCAL YEAR 2027

CONGRESSIONAL BUDGET SUBMISSION

**DEPARTMENT OF COMMERCE
NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY
Budget Estimates, Fiscal Year 2027
Congressional Budget Submission**

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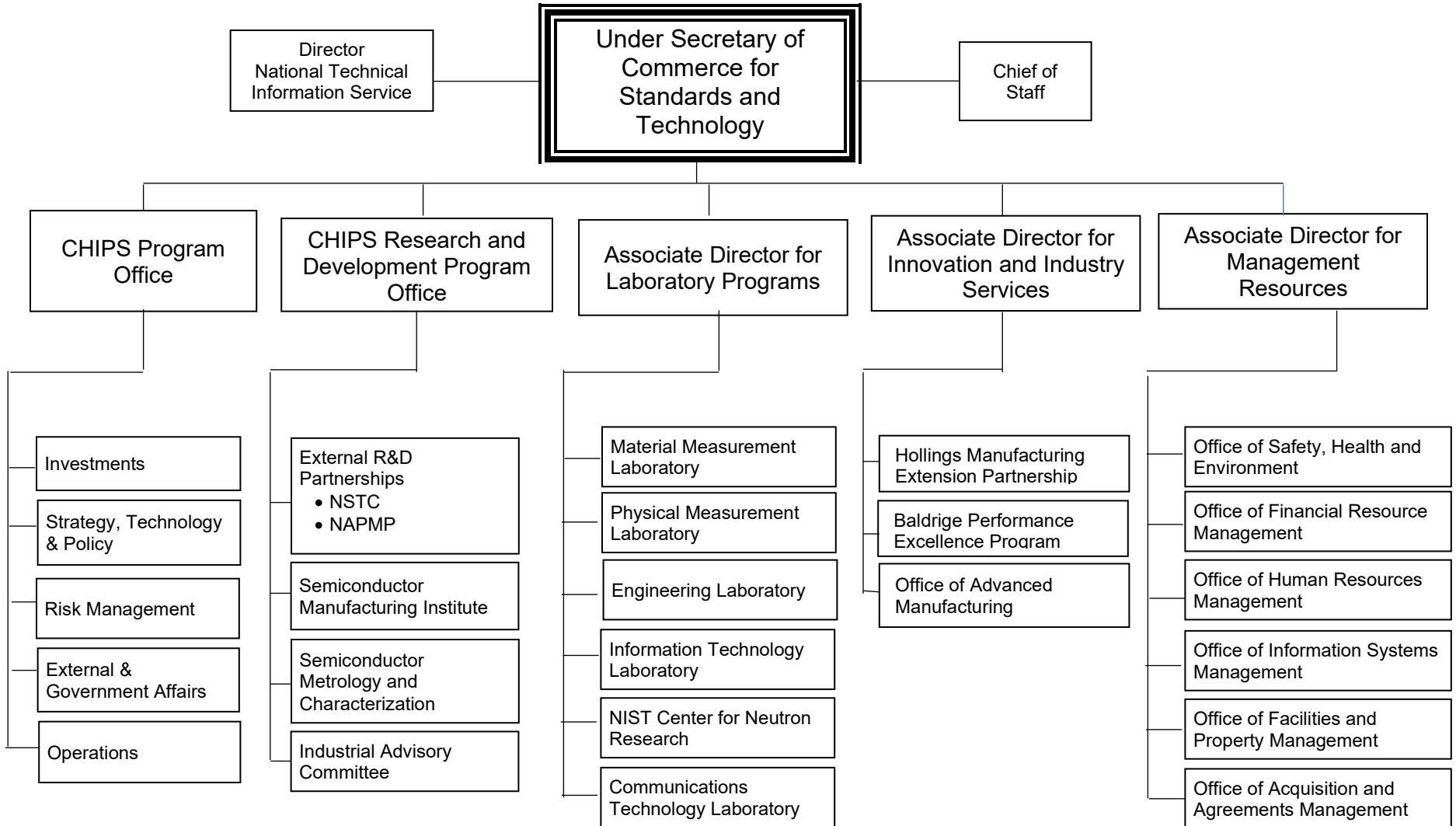
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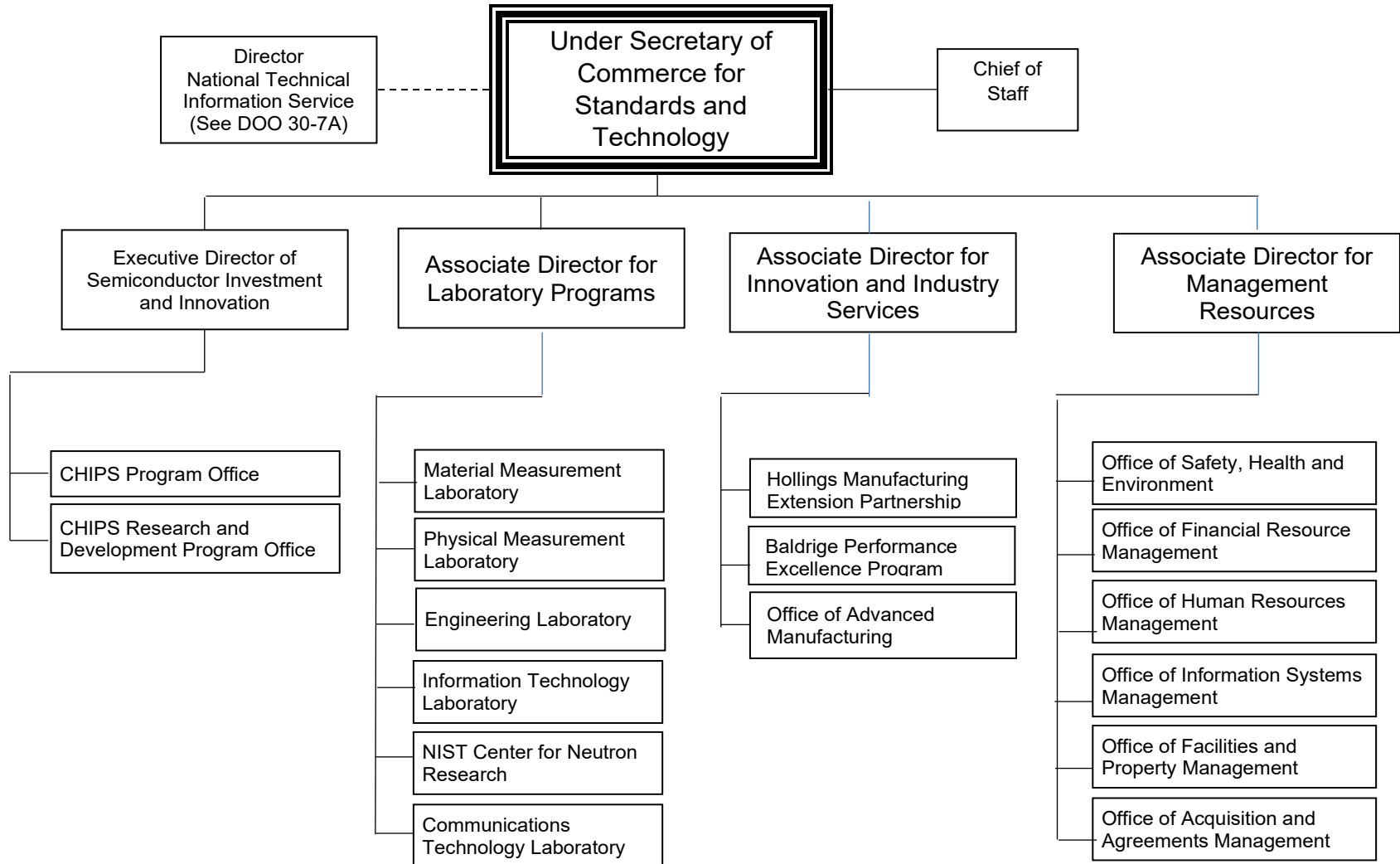
U.S. DEPARTMENT OF COMMERCE
National Institute of Standards and Technology

Current



U.S. DEPARTMENT OF COMMERCE
National Institute of Standards and Technology

Proposed



*Reflects Congressional Notification of Reorganization sent to House and Senate Committees on Appropriations, Commerce, Justice, Science and Related Agencies Subcommittees on April 8, 2026

**Department of Commerce
National Institute of Standards and Technology
Budget Estimates, Fiscal Year 2027
Executive Summary**

The National Institute of Standards and Technology (NIST) Fiscal Year 2027 (FY 2027) discretionary budget request is \$853.9 million, representing a decrease of \$993.2 million from the FY 2026 Enacted level of \$1.847 billion. The request includes \$729.1 million for Scientific and Technical Research and Services (STRS), \$37 million for Industrial Technology Services (ITS), and \$87.8 million for Construction of Research Facilities (CRF). This reduction reflects several changes, including the nonrecurrence of \$663.2 million in Congressionally Directed Spending (CDS) within the STRS and CRF accounts, a \$114.7 million decrease to STRS, the elimination of \$175 million in federal funding for the Hollings Manufacturing Extension Partnership (MEP) program, and a \$40.2 million reduction to CRF, while maintaining Manufacturing USA funding at the FY 2026 level. In accordance with administration policy announced in the Budget, NIST will follow new government-wide grants guidance prohibiting the use of Federal funds to pay for subscriptions to academic journals, as well as for the publication of research results that are not specifically required by Federal statute or approved in advance by a Federal agency. This policy preserves funds to support actual research by ensuring that the American taxpayer does not pay for the research, publication, and access to that research, essentially triple-charging the public for the same product. The FY 2027 discretionary request for NIST is summarized below by appropriation account.

1. Scientific and Technical Research and Services (STRS): \$729.1 million

The proposed NIST STRS budget protects investments in critical, emerging, and digital technologies -- and are aligned with the Administration’s priorities within artificial intelligence, quantum information science and technology, biotechnology and biomanufacturing, next-generation communications, and cybersecurity.

FY 2026 Enacted (\$ in thousands)	\$1,249,239
Inflationary Adjustment	\$14,267
Removal of One-time Congressionally Directed STRS Projects	(\$405,331)
Total STRS Program Reduction	(\$129,016)
<i>Critical and Emerging Technology Measurement and Standards (CET) – Artificial Intelligence</i>	<i>\$16,053</i>
<i>Core Metrology and Measurement Services --Fundamental and Applied Metrology Reduction</i>	<i>(\$52,857)</i>
<i>Critical and Emerging Technology Measurement and Standards (CET) - Quantum Information Science and Technology Reduction</i>	<i>(\$29,522)</i>
<i>Critical and Emerging Technology Measurement and Standards (CET) - Biotechnology and Biomanufacturing Reduction</i>	<i>(\$20,407)</i>
<i>Resilience and Fire Research Reduction</i>	<i>(\$9,862)</i>
<i>NIST Center for Neutron Research Reduction</i>	<i>(\$8,964)</i>
<i>Advanced Manufacturing Research and Development Reduction</i>	<i>(\$8,278)</i>

<i>Exploratory Measurement Research and Development Reduction</i>	(\$5,809)
<i>Digital Technology Measurements and Standards --Next-generation Communication and Networks Reduction</i>	(\$4,848)
<i>Digital Technology Measurements and Standards --Cybersecurity and Privacy Reduction</i>	(\$4,522)
Total STRS FY 2027 Request	\$729,159

2. Industrial Technology Services (ITS): \$37 million

The ITS request eliminates federal funding for the MEP and maintains investments for the Manufacturing USA program.

FY 2026 Enacted (\$ in thousands)	\$212,000
<i>Hollings Manufacturing Extension Partnership (MEP) Program</i>	\$175,000
<i>Manufacturing USA</i>	\$37,000
Inflationary Adjustment	\$492
Manufacturing USA Program Reduction to Offset Inflationary Costs	(\$105)
Hollings Manufacturing Extension Partnership (MEP) Program Elimination	(\$175,387)
Total ITS FY 2027 Request/Manufacturing USA	\$37,000

3. Construction of Research Facilities (CRF): \$87.8 million

The request for CRF eliminates one-time congressional external community projects and returns SCMMR to the FY 2025 level.

FY 2026 Enacted (\$ in thousands)	\$385,897
Inflationary Adjustment	\$2,354
Removal of One-time Congressionally Directed CRF Projects	(\$257,897)
SCMMR Program Reduction	(\$42,596)
Total CRF FY 2027 Request	\$87,758

Adjustments:

Inflationary Adjustments

The NIST base budget includes a total of \$17.113 million to account for the full funding requirement for inflationary adjustments to current programs for NIST's activities.

**Department of Commerce
National Institute of Standards and Technology
FY 2026 to FY 2027 PROGRAM INCREASES / DECREASES / TERMINATIONS**

(Dollar amounts in thousands)
(By Appropriation, Largest to Smallest)

Increases

Page No In CJ	Appropriations	Budget Program	Title of Increase	Positions	Budget Authority
NIST-16	Scientific and Technical Research and Services	Critical and Emerging Technology Measurement and Standards (CET)	Critical and Emerging Technology Measurement and Standards (CET) – Artificial Intelligence	34	\$16,053
Total, Increases				34	\$16,053

Decreases

Page No In CJ	Appropriations	Budget Program	Title of Decrease	Positions	Budget Authority
NIST-58	Scientific and Technical Research and Services	Congressionally Directed Projects	Removal of One-time Congressionally Directed STRS Projects	0	(\$405,331)
NIST-117	Construction of Research Facilities	Construction and Major Renovations	Removal of One-time Congressionally Directed CRF Projects	(4)	(257,897)
NIST-35	Scientific and Technical Research and Services	Core Metrology and Measurement Services	Fundamental and Applied Metrology Reduction	0	(52,857)
NIST-120	Construction of Research Facilities	Safety, Capacity, Maintenance, and Major Renovations	SCMMR Program Reduction	0	(42,596)
NIST-20	Scientific and Technical Research and Services	Critical and Emerging Technology Measurement and Standards (CET)	Critical and Emerging Technology Measurement and Standards (CET) - Quantum Information Science and Technology Reduction	0	(29,522)
NIST-22	Scientific and Technical Research and Services	Critical and Emerging Technology Measurement and Standards (CET)	Critical and Emerging Technology Measurement and Standards (CET) - Biotechnology and Biomanufacturing Reduction	0	(20,407)

NIST-50	Scientific and Technical Research and Services	Resilience and Fire Research	Resilience and Fire Research Reduction	0	(9,862)
NIST-55	Scientific and Technical Research and Services	NIST Center for Neutron Research	NIST Center for Neutron Research Reduction	0	(8,964)
NIST-45	Scientific and Technical Research and Services	Advanced Manufacturing R&D	Advanced Manufacturing Research and Development Reduction	0	(8,278)
NIST-40	Scientific and Technical Research and Services	Exploratory Measurement R&D	Exploratory Measurement Research and Development Reduction	0	(5,809)
NIST-27	Scientific and Technical Research and Services	Digital Technology Measurements and Standard	Next-generation Communication and Networks Reduction	0	(4,848)
NIST-29	Scientific and Technical Research and Services	Digital Technology Measurements and Standard	Cybersecurity and Privacy Reduction	0	(4,522)
NIST-97	Industrial Technology Services	Manufacturing USA	Manufacturing USA Program Reduction to Offset Inflationary Costs	0	(105)
Total, Decreases				(4)	(\$850,998)

Terminations

	Appropriations	Budget Program	Title of Termination	Positions	Budget Authority
NIST-90	Industrial Technology Services	Hollings Manufacturing Extension Partnership (MEP)	Hollings Manufacturing Extension Partnership (MEP) Program Elimination	(89)	(\$175,387)
Total, Terminations				(89)	(\$175,387)

**Department of Commerce
National Institute of Standards and Technology
CONTROL TABLE**
(Dollar amounts in thousands)

	2026 Enacted			2026 ATBs			2027 Base			2027 Program Changes			2027 Estimate		
	Pos	FTE	Amount	Pos	FTE	Amount	Pos	FTE	Amount	Pos	FTE	Amount	Pos	FTE	Amount
Critical and Emerging Tech. Meas. & Standards															
Artificial Intelligence	93	82	\$56,000	0	4	\$947	93	86	\$56,947	34	25	\$16,053	127	111	\$73,000
Quantum Science and Technology	130	121	\$90,000	0	0	\$1,522	130	121	\$91,522	0	0	(\$29,522)	130	121	\$62,000
Biotechnology and Biomanufacturing	150	140	\$57,436	0	0	\$971	150	140	\$58,407	0	0	(\$20,407)	150	140	\$38,000
subtotal	373	343	\$203,436	0	4	\$3,440	373	347	\$206,876	34	25	(\$33,876)	407	372	\$173,000
Digital Technology Measurements and Standards															
Next-generation Communication and Networks	115	108	\$47,151	0	0	\$797	115	108	\$47,948	0	0	(\$4,848)	115	108	\$43,100
Cybersecurity and Privacy	199	186	\$88,034	0	0	\$1,488	199	186	\$89,522	0	0	(\$4,522)	199	186	\$85,000
subtotal	314	294	\$135,185	0	0	\$2,285	314	294	\$137,470	0	0	(\$9,370)	314	294	\$128,100
Core Metrology and Measurement Services															
Fundamental and Applied	886	829	\$253,075	0	0	\$4,277	886	829	\$257,352	0	0	(\$52,857)	886	829	\$204,495
Measurement Services	302	284	\$78,890	0	0	\$1,334	302	284	\$80,224	0	0	\$0	302	284	\$80,224
subtotal	1,188	1,113	\$331,965	0	0	\$5,611	1,188	1,113	\$337,576	0	0	(\$52,857)	1,188	1,113	\$284,719
Exploratory Measurement R&D															
Exploratory Measurement R&D	53	50	\$25,380	0	0	\$429	53	50	\$25,809	0	0	(\$5,809)	53	50	\$20,000
Advanced Manufacturing R&D															
Advanced Manufacturing R&D	155	144	\$43,401	0	0	\$734	155	144	\$44,135	0	0	(\$8,278)	155	144	\$35,857
Resilience and Fire Research															
Resilience and Fire Research	173	160	\$51,196	0	0	\$866	173	160	\$52,062	0	0	(\$9,862)	173	160	\$42,200
NIST Center for Neutron Research															
NIST Center for Neutron Research	194	177	\$53,345	0	0	\$902	194	177	\$54,247	0	0	(\$8,964)	194	177	\$45,283
STRS Congressionally Directed Projects															
Congressionally Directed Projects	0	0	\$405,331	0	0	\$0	0	0	\$405,331	0	0	(\$405,331)	0	0	\$0
STRS SUBTOTAL	2,450	2,281	\$1,249,239	0	4	\$14,267	2,450	2,285	\$1,263,506	34	25	(\$534,347)	2,484	2,310	\$729,159
Holling Manufacturing Extension Partnership															
Holling Manufacturing Extension Partnership	89	82	\$175,000	0	0	\$387	89	82	\$175,387	(89)	0	(\$175,387)	0	15	\$0
Manufacturing USA															
Manufacturing USA	34	33	\$37,000	0	0	\$105	34	33	\$37,105	0	0	(\$105)	34	33	\$37,000
ITS SUBTOTAL	123	115	\$212,000	0	-	\$492	123	115	\$212,492	(89)	-	(\$175,492)	34	48	\$37,000
Safety, Capacity, Maintenance and Major Repairs															
Safety, Capacity, Maintenance and Major Repairs	152	148	\$128,000	0	0	\$2,354	152	148	\$130,354	0	0	(\$42,596)	152	148	\$87,758
CRF Congressionally Directed Projects															
External Prjoects	4	3	\$257,897	0	0	\$0	4	3	\$257,897	(4)	0	(\$257,897)	0	0	\$0
CRF SUBTOTAL	156	151	\$385,897	0	0	\$2,354	156	151	\$388,251	(4)	-	(\$300,493)	152	148	\$87,758
NIST TOTAL	2,729	2,547	\$1,847,136	0	4	\$17,113	2,729	2,551	\$1,864,249	(59)	25	(\$1,010,332)	2,670	2,506	\$853,917

**Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services ^{1/}
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)**

	Positions	FTE	Budget Authority	Direct Obligations	Appropriation
Enacted, 2026	2,450	2,281	\$1,250,739	\$1,331,784	\$1,249,239
Less: Unobligated balance from prior year	0	0		(81,045)	
Less: Transfer from DoJ	0	0	(1,500)	(1,500)	0
2027 Adjustments to Base					
Annualization of positions financed/reduced in FY 2026	0	4	0	0	0
Plus: Inflationary adjustments to base	0	0	14,267	14,267	14,267
2027 Base	2,450	2,285	1,263,506	1,263,506	1,263,506
Less: 2027 Program changes	34	25	(534,347)	(534,347)	(534,347)
Plus: Transfer from DoJ	0	0	1,500	1,500	0
2027 Estimate	2,484	2,310	730,659	730,659	729,159

		2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease over 2027 Base					
		Personnel	Amount	Personnel	Amount	Personnel	Amount				
Critical and Emerging Technology Measurement and Standards	Pos./Approp	385	\$154,106	373	\$203,436	373	\$206,876	407	\$173,000	34	(\$33,876)
	FTE/Obl.	319	138,550	343	223,275	347	206,876	372	173,000	25	(33,876)
Digital Technology Measurements and Standards	Pos./Approp	341	135,185	314	135,185	314	137,470	314	128,100	0	(9,370)
	FTE/Obl.	283	125,593	294	148,660	294	137,470	294	128,100	0	(9,370)
Core Metrology and Measurement Services	Pos./Approp	1,308	388,799	1,188	331,965	1,188	337,576	1,188	284,719	0	(52,857)
	FTE/Obl.	1,097	396,069	1,113	371,213	1,113	337,576	1,113	286,219	0	(51,357)
Exploratory Measurement Research and Development	Pos./Approp	60	26,380	53	25,380	53	25,809	53	20,000	0	(5,809)
	FTE/Obl.	50	24,880	50	27,649	50	25,809	50	20,000	0	(5,809)
Advanced Manufacturing Research and Development	Pos./Approp	170	44,857	155	43,401	155	44,135	155	35,857	0	(8,278)
	FTE/Obl.	141	41,965	144	47,590	144	44,135	144	35,857	0	(8,278)
Resilience and Fire Research	Pos./Approp	193	52,787	173	51,196	173	52,062	173	42,200	0	(9,862)
	FTE/Obl.	156	53,891	160	51,758	160	52,062	160	42,200	0	(9,862)
NIST Center for Neutron Research	Pos./Approp	218	55,045	194	53,345	194	54,247	194	45,283	0	(8,964)
	FTE/Obl.	172	57,573	177	55,597	177	54,247	177	45,283	0	(8,964)
Congressionally Directed Projects	Pos./Approp	0	0	0	405,331	0	405,331	0	0	0	(405,331)
	FTE/Obl.	0	5,400	0	406,042	0	405,331	0	0	0	(405,331)
TOTALS	Pos./Approp	2,675	857,159	2,450	1,249,239	2,450	1,263,506	2,484	729,159	34	(534,347)
	FTE/Obl.	2,218	843,921	2,281	1,331,784	2,285	1,263,506	2,310	730,659	25	(532,847)

	2025		2026		2027		2027		Increase/Decrease	
	Actual		Enacted		Base		Estimate		over 2027 Base	
	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Adjustments for:										
Recoveries		(10,206)		0		0		0		0
Refunds		(570)		0		0		0		0
Unobligated balance, start of year		(\$51,231)		(81,045)		0		0		0
Unobligated balance, end of year		81,045		0		0		0		0
Unobligated balance, expired account		0		0		0		0		0
Budget Authority		862,959		\$1,250,739		\$1,263,506		\$730,659		(\$532,847)
Financing from transfers:										
Transfers from DoJ for OLES (-)		(1,500)		(1,500)		0		(1,500)		(1,500)
Transfer from GSA for IT modernization (-)		(4,300)		0		0		0		0
Transfers to other accounts (+)		0		0		0		0		0
Appropriation		857,159		1,249,239		1,263,506		729,159		(534,347)

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
SUMMARY OF FINANCING
(Dollar amounts in thousands)

	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
Total Obligations	\$843,921	\$1,331,784	\$1,263,506	\$730,659	(\$532,847)
Offsetting collections from:					
Federal funds	0	0	0	0	0
Non-Federal sources	0	0	0	0	0
Total offsetting collections	0	0	0	0	0
Adjustments for:					
Recoveries and refunds	(10,776)	0	0	0	0
Unobligated balance, start of year	(51,231)	(81,045)	0	0	0
Unobligated balance, end of year	81,045	0	0	0	0
Unobligated balance, expired	0	0	0	0	0
Budget Authority	862,959	1,250,739	1,263,506	730,659	(532,847)
Financing:					
Transfers from other accounts (-)	(5,800) ^{1/}	(1,500) ^{2/}	0	(1,500)	(1,500)
Transfer to other accounts (+)	0	0	0	0	0
Appropriation	857,159	1,249,239	1,263,506	729,159	(534,347)

^{1/} Transfers of \$1.5 million from DOJ for NIST Office of Law Enforcement Standards and \$4.3 million from GSA for IT modernization.

^{2/} Transfers of \$1.5 million from DOJ for NIST Office of Law Enforcement Standards.

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

	Positions	Amount
Transfers of Estimates		0
Adjustments		0
Financing		0
<hr/>		
Other Changes		
2026 Pay raise		1,258
2027 Pay raise		0
Awards		1,346
Full-year cost in 2027 of positions financed for part-year in 2026		0
Change in compensable days		0
Civil Service Retirement System (CSRS)		(51)
Federal Employees Retirement System (FERS)		(2,093)
Thrift Savings Plan		(407)
Federal Insurance Contribution Act (FICA) – OASDI		439
Health Insurance		3,875
Employees Compensation Fund		(37)
Travel:		
Mileage		3
Per Diem		68
Rental payments to GSA		(219)
GSA Furniture and IT Program (FIT)		(37)
Postage (Included in GPL adjustment)		0
Working Capital Fund, Departmental Management		5,581
Cybersecurity (Non-Add in WCF)		[551]
National Archives and Records Administration (NARA)		1
General Pricing Level (GPL) Adjustment		3,732
Telecommunications Services – Enterprise Infrastructure Services (EIS)		0
Human Resources – Pay, PAR, Benefits Direct Bill		0
HCHB Utilities		0
Federal Protective Service		0
Other changes unique to certain bureaus (e.g., grants, ship and aircraft costs)		808
Electricity / Natural Gas Rates		0
Subtotal, other changes	0	14,267
Total, adjustments to base	0	14,267

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Budget Program: Critical and Emerging Technology Measurement and Standards

Project/Activity		2025 Actual		2026 Enacted		2027 Base		2027 Estimate		Increase/Decrease over 2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Artificial Intelligence	Pos./Approp	81	\$51,000	93	\$56,000	93	\$56,947	127	\$73,000	34	\$16,053
	FTE/Obl.	67	38,182	82	69,998	86	56,947	111	73,000	25	16,053
Quantum Science and Technology	Pos./Approp	141	62,000	130	90,000	130	91,522	130	62,000	0	(29,522)
	FTE/Obl.	117	60,190	121	93,671	121	91,522	121	62,000	0	(29,522)
Biotechnology and Biomanufacturing	Pos./Approp	163	41,106	150	57,436	150	58,407	150	38,000	0	(20,407)
	FTE/Obl.	135	40,178	140	59,606	140	58,407	140	38,000	0	(20,407)
Total	Pos./Approp	385	154,106	373	203,436	373	206,876	407	173,000	34	(33,876)
	FTE/Obl.	319	138,550	343	223,275	347	206,876	372	173,000	25	(33,876)

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
JUSTIFICATION OF PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

Budget Program: Critical and Emerging Technology Measurement and Standards

Goal Statement

The goal of NIST's Critical and Emerging Technology Measurement and Standards programmatic area is to conduct groundbreaking research and advance cutting-edge measurement science, standards, and technology in the critical and emerging technologies that will drive U.S. innovation, global competitiveness, and national security.

Program Description

The United States is in a battle for global leadership in the critical and emerging technologies (CETs) that will drive decades of national and economic security and prosperity. As the nation's premier laboratory with the mission to promote U.S. innovation and industrial competitiveness, NIST is poised to work with industry at every step to support U.S. manufacturing and technological capacity in CETs, including artificial intelligence (AI), quantum information science and technology (QIST), and biotechnology and biomanufacturing. These areas hold promise to transform U.S. manufacturing, communications, healthcare, transportation, and beyond.

NIST conducts world-class research to drive discoveries and advance the measurement science and standards in CETs. While technological innovations will contribute to the U.S. economy and quality of life, they have many associated barriers and challenges in areas like interoperability, security, usability, and performance. NIST uniquely responds to these challenges by engaging with government and industry stakeholders to develop the measurement science solutions, standards, prototypes, and guidelines essential for technology adoption. Throughout its history, NIST has provided new industries with foundational measurement tools to accelerate innovation, adoption, and impact of CETs, including:

- *Artificial Intelligence*: NIST's AI portfolio is driving consistency in the measurement of AI system performance, reliability, and security to solidify American dominance in AI innovation, technology leadership, economic competitiveness, and national security.
- *Quantum Information Science and Technology*: NIST's advances in quantum science and quantum measurement technologies are catalyzing the growth of U.S. businesses and services, strengthening the domestic quantum industry. Building on this foundation, NIST conducts research and development in quantum computing, sensing, and networking that addresses critical national needs while helping train a robust U.S. quantum workforce.
- *Biotechnology and Biomanufacturing*: NIST advances measurement science and standards to accelerate the design, development, and manufacturing of innovative biotechnology products, such as high-value biopharmaceuticals, specialty chemicals, and biomaterials, including through new classes of reference materials and the application of AI to biotechnology and biomanufacturing applications.

Statement of Operating Objectives

NIST will continue to support the measurements, standards, and technology needs of the Nation for continued leadership in critical and emerging technologies amid growing global competition, and align with Administration, Department of Commerce, and NIST priorities outlined in the public [NIST Strategy for American Technology Leadership in the 21st Century](#).

Explanation and Justification

			2025 Actual		2026 Enacted		2027 Base	
			Personnel	Amount	Personnel	Amount	Personnel	Amount
Critical and Emerging Technology Measurement and Standards	Pos./BA		385	\$154,106	373	\$203,436	373	\$206,876
	FTE/Obl		319	138,550	343	223,275	347	206,876

Artificial Intelligence: NIST will continue to drive consistency in the measurement of AI system performance, reliability, and security to solidify American dominance in AI innovation, technology leadership, economic competitiveness, and national security, including through developed guidelines, benchmarks, and standards. Additionally, through the Center for AI Standards and Innovation (CAISI), NIST will increase U.S. capacity to rapidly evaluate AI system capabilities to promote American AI innovation.

Quantum Information Science and Technology (QIST): NIST will continue to conduct research and development in quantum computing, sensing, and networking that addresses critical national needs. Partnering with stakeholders, entrepreneurs, and experts, NIST will harness the transformative impact of quantum technologies on security, computing, and communications and develop the measurement science and standards infrastructure required to fully realize this emerging potential.

Biotechnology and Biomanufacturing: NIST will continue towards unlocking the potential of biotechnology and biomanufacturing to solve U.S. industry challenges. NIST will continue to play a lead role within the advancement of the U.S. bioeconomy in incorporating biotechnology automation, data integration, convergence with AI, coupling genomic measurements with cybersecurity best practices, and bolstering U.S. biomanufacturing through measurements and standards. To ensure that the United States continues to lead in these CET priority areas and science, innovation, and technology writ large, NIST will a) continue to collaborate directly with private and public sector stakeholders; b) support the private sector-led international standards ecosystem; c) create a work environment that fosters excellence in science and safety; and d) ensure NIST research, services, and products meet the needs of the American public so that the benefits of CETs will reach every relevant sector of the economy.

**Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGES FOR 2027**
(Dollar amounts in thousands)

Budget Program: Critical and Emerging Technology Measurement and Standards (CET)
Project Change: Critical and Emerging Technology Measurement and Standards (CET) - Artificial Intelligence

		2027 Base		2027 Estimate		Increase/Decrease from 2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
CET - Artificial Intelligence	Pos/BA	93	\$56,947	127	\$73,000	34	\$16,053
	FTE/Obl.	86	\$56,947	111	\$73,000	25	\$16,053

Critical and Emerging Technology Measurement and Standards (CET) - Artificial Intelligence (+\$16.053 million, 25 FTE / 34 Positions) –

The FY 2027 President’s Budget request for Artificial Intelligence is \$73 million, which is an increase of \$16.053 million to expand efforts within the Center for AI Standards and Innovation (CAISI) that will accelerate AI innovation, global adoption of American AI, and America’s technological and marketplace dominance over foreign competitors, as outlined in the President’s AI Action Plan. Specifically, this investment would resource the rapidly expanding demands on CAISI to lead U.S. testing and collaborative research related to harnessing and securing the potential of commercial AI systems, including for cybersecurity and chemical/biological-related threats, analyzing frontier People’s Republic of China (PRC) models and vulnerabilities, and assessing the state of AI progress both within the United States and around the world. Specifically, CAISI efforts would be expanded to focus on:

- Rapid testing to evaluate evolving AI systems developed both in the U.S. and abroad to identify their performance capabilities, vulnerabilities, and national security threats (\$11 million)
- Research and the publishing of evaluations of frontier models, promoting frontier AI that protects free speech and American values (\$5 million).

These program enhancements will allow NIST to continue to develop and improve testing and evaluation approaches and benchmarks to verify and validate AI systems in dynamic and unpredictable real-world environments and better align NIST’s ability to adapt to the rapid pace of private sector AI developments. The requested increase of \$16 million for CAISI is in addition to the existing base of \$11 million, for a total effort of \$27 million for this portion of NIST’s AI portfolio.

Performance Measures:

	2027	2028	2029	2030	2031
Performance Measure 1: Number of published rapid testing and evaluation reports of frontier AI models					
With increase	8	10	12	12	12
Without increase	4	4	5	5	5

**Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE PERSONNEL DETAIL**

Budget Program: Critical and Emerging Technology Measurement and Standards (CET)
Project Change: Critical and Emerging Technology Measurement and Standards (CET) - Artificial Intelligence

<u>Title</u>	<u>Grade</u>	<u>Number</u>	<u>Annual Salary</u>	<u>Total Salaries</u>
Full-time permanent				
AI Research Scientist	ZP IV	3	\$143,913	\$431,739
AI Research Scientist	ZP V	2	169,279	338,558
Research Engineer/Scientist	ZP IV	2	143,913	287,826
Research Engineer/Scientist	ZP V	2	169,279	338,558
AI Evaluations Scientist	ZP IV	3	143,913	431,739
AI Evaluations Scientist	ZP V	2	169,279	338,558
Senior Cyber Offense Specialist	ZP IV	1	143,913	143,913
Senior Cyber Offense Specialist	ZP V	1	169,279	169,279
Member of Technical Staff	ZP IV	1	143,913	143,913
Member of Technical Staff	ZP V	1	169,279	169,279
AI Standards Architect	ZP IV	1	143,913	143,913
Computer Scientist	ZP V	1	169,279	169,279
Computer Scientist	ZP IV	2	143,913	287,826
IT Specialist	ZP V	1	169,279	169,279
IT Specialist	ZP IV	2	143,913	287,826
Physical Scientist	ZP IV	2	143,913	287,826
Data Scientist	ZP IV	2	143,913	287,826
Program Manager	ZP IV	1	143,913	143,913
Management and Program Analyst	ZA IV	1	143,913	143,913
Administrative/technical support	ZA II	3	77,771	233,313
Subtotal		34		4,948,274
Less lapse, 25%		(9)		(1,237,068)
Total full-time permanent (FTE)		25		3,711,206
2027 Pay Adjustment (0.0%)				(0)
Total				3,711,206
<u>Personnel Data</u>				
Full-Time Equivalent Employment:				
Full-time permanent		25		
Authorized Positions:				
Full-time permanent		34		

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
 (Direct Obligations amounts in thousands)

Budget Program: Critical and Emerging Technology Measurement and Standards (CET)
 Project Change: Critical and Emerging Technology Measurement and Standards (CET) - Artificial Intelligence

	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
11.1	49,982	53,742	54,342	58,053	3,711
11.3	4,155	4,468	4,468	4,468	0
11.5	1,473	1,584	1,584	1,584	0
11.8	0	0	0	0	0
11.9	55,610	59,794	60,394	64,105	3,711
12.1	20,229	21,751	22,186	23,558	1,372
13	363	0	0	0	0
21	1,301	1,314	1,487	1,582	95
22	185	187	289	294	5
23					
23.1	0	0	0	0	0
23.2	214	216	218	218	0
23.3	2,696	2,723	5,750	7,668	1,918
24	85	86	87	101	14
25					
25.1	819	827	835	835	0
25.2	8,611	62,686	10,942	13,074	2,132
25.3	9,400	12,494	15,619	16,198	579
25.4				0	0
25.5	12,592	13,718	23,855	26,818	2,963
25.6				0	0
25.7	2,800	3,828	4,866	5,202	336
25.8				0	0
26	4,469	6,514	6,579	6,845	266
31	6,597	9,663	12,760	14,593	1,833
32	979	0	0	0	0
33	0	0	0	0	0
41	11,600	27,474	41,009	41,838	829
42	0	0	0	0	0
43	0	0	0	0	0
44	0	0	0	0	0
99.9	138,550	223,275	206,876	222,929	16,053

**Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGES FOR 2027**
(Dollar amounts in thousands)

Budget Program: Critical and Emerging Technology Measurement and Standards (CET)
Project Change: Critical and Emerging Technology Measurement and Standards (CET) – Quantum Information Science Reduction

		2027 Base		2027 Estimate		Increase/Decrease from 2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
CET - Quantum	Pos/BA	130	\$91,522	130	\$62,000	(0)	(\$29,522)
Information Science and Technology Reduction	FTE/Obl.	121	\$91,522	121	\$62,000	(0)	(\$29,522)

Critical and Emerging Technology Measurement and Standards (CET) - Quantum Information Science and Technology Reduction (-\$29.522 million, - 0 FTE / 0 Positions) – The FY 2027 President’s Budget request for Quantum Information Science and Technology is \$62 million, which is a 32% reduction from base levels – and is consistent with the Administration’s goals to enable agencies to fulfill their statutory responsibilities in the most cost-effective manner possible and to allow NIST to invest in core measurement science efforts that align with mission priorities in critical and emerging technologies. NIST will focus and prioritize research and development efforts in quantum measurement science techniques, tools, and standards that address critical national needs while helping train a robust U.S. quantum workforce. The proposed reductions in the Quantum Information Science and Technology activity within the Critical and Emerging Technology Measurements and Standards budget program include across the board reductions in labor and non-labor contracts, research and development contracts, grants, and supplies and equipment.

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
 (Direct Obligations amounts in thousands)

Budget Program: Critical and Emerging Technology Measurement and Standards (CET)
 Project Change: Critical and Emerging Technology Measurement and Standards (CET) – Quantum Information Science Reduction

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
11.1 Full-time permanent compensation	\$49,982	\$53,742	\$54,342	\$54,342	0
11.3 Other than full-time permanent	4,155	4,468	4,468	4,468	0
11.5 Other personnel compensation	1,473	1,584	1,584	1,584	0
11.8 Special personnel services payments	0	0	0	0	0
11.9 Total personnel compensation	55,610	59,794	60,394	60,394	0
12.1 Civilian personnel benefits	20,229	21,751	22,186	22,186	0
13 Benefits for former personnel	363	0	0	0	0
21 Travel and transportation of persons	1,301	1,314	1,487	1,203	(284)
22 Transportation of things	185	187	289	234	(55)
23 Rent, communications, and utilities	0	0	0	0	0
23.1 Rental payments to GSA	0	0	0	0	0
23.2 Rental payments to others	214	216	218	218	0
23.3 Communications, utilities, and misc. charges	2,696	2,723	5,750	5,750	0
24 Printing and reproduction	85	86	87	70	(17)
25 Other contractual services	0	0	0	0	0
25.1 Advisory and assistance services	819	827	835	675	(160)
25.2 Other services from non-Federal sources	8,611	62,686	10,942	6,455	(4,487)
25.3 Other goods and services from Federal sources	9,400	12,494	15,619	12,631	(2,988)
25.4 Operation and maintenance of facilities	0	0	0	0	0
25.5 Research and development contracts	12,592	13,718	23,855	19,291	(4,564)
25.6 Medical care	0	0	0	0	0
25.7 Operation and maintenance of equipment	2,800	3,828	4,866	3,935	(931)
25.8 Subsistence and support of persons	0	0	0	0	0
26 Supplies and materials	4,469	6,514	6,579	5,320	(1,259)
31 Equipment	6,597	9,663	12,760	10,318	(2,442)
32 Lands and structures	979	0	0	0	0
33 Investments and loans	0	0	0	0	0
41 Grants, subsidies and contributions	11,600	27,474	41,009	28,674	(12,335)
42 Insurance claims and indemnities	0	0	0	0	0
43 Interest and dividends	0	0	0	0	0
44 Refunds	0	0	0	0	0
99.9 Total obligations	138,550	223,275	206,876	177,354	(29,522)

**Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGES FOR 2027**
(Dollar amounts in thousands)

Budget Program: Critical and Emerging Technology Measurement and Standards (CET)
Project Change: Critical and Emerging Technology Measurement and Standards (CET) – Biotechnology and Biomanufacturing Reduction

		2027 Base		2027 Estimate		Increase/Decrease from 2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
CET – Biotechnology and Biomanufacturing Reduction	Pos/BA	150	\$58,407	150	\$38,000	(0)	(\$20,407)
	FTE/Obl.	140	\$58,407	140	\$38,000	(0)	(\$20,407)

Critical and Emerging Technology Measurement and Standards (CET) - Biotechnology and Biomanufacturing Reduction

(-\$20.407 million, 0 FTE / 0 Positions) – The FY 2027 President’s Budget request for Biotechnology and Biomanufacturing is \$38 million, which is a 35% reduction from base levels – and is consistent with the Administration’s goals to enable agencies to fulfill their statutory responsibilities in the most cost-effective manner possible and to allow NIST to invest in core measurement science efforts that align with mission priorities in critical and emerging technologies. NIST will focus and prioritize research efforts on advancing measurement science and standards for the design, development, and manufacturing of innovative biotechnology products, such as high-value biopharmaceuticals, specialty chemicals, and biomaterials. The proposed reductions in the Biotechnology and Biomanufacturing activity within the Critical and Emerging Technology Measurements and Standards budget program include across the board reductions from labor and non-labor contracts, research and development contracts, grants, and supplies and equipment.

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
 (Direct Obligations amounts in thousands)

Budget Program: Critical and Emerging Technology Measurement and Standards (CET)
 Project Change: Critical and Emerging Technology Measurement and Standards (CET) – Biotechnology and Biomanufacturing Reduction

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
11.1	\$49,982	\$53,742	\$54,342	\$54,342	0
11.3	4,155	4,468	4,468	4,468	0
11.5	1,473	1,584	1,584	1,584	0
11.8	0	0	0	0	0
11.9	55,610	59,794	60,394	60,394	0
12.1	20,229	21,751	22,186	22,186	0
13	363	0	0	0	0
21	1,301	1,314	1,487	1,229	(\$258)
22	185	187	289	239	(50)
23	0	0	0	0	0
23.1	0	0	0	0	0
23.2	214	216	218	218	0
23.3	2,696	2,723	5,750	5,750	0
24	85	86	87	72	(15)
25	0	0	0	0	0
25.1	819	827	835	690	(145)
25.2	8,611	62,686	10,942	8,012	(2,930)
25.3	9,400	12,494	15,619	12,912	(2,707)
25.4	0	0	0	0	0
25.5	12,592	13,718	23,855	19,721	(4,134)
25.6	0	0	0	0	0
25.7	2,800	3,828	4,866	4,023	(843)
25.8	0	0	0	0	0
26	4,469	6,514	6,579	5,439	(1,140)
31	6,597	9,663	12,760	10,548	(2,212)
32	979	0	0	0	0
33	0	0	0	0	0
41	11,600	27,474	41,009	35,036	(5,973)
42	0	0	0	0	0
43	0	0	0	0	0
44	0	0	0	0	0
99.9	138,550	223,275	206,876	186,469	(20,407)

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Budget Program: Digital Technology Measurements and Standards

Project/Activity		2025 Actual		2026 Enacted		2027 Base		2027 Estimate		Increase/Decrease over 2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Next-generation Communication and Networks	Pos./Approp	125	\$47,151	115	\$47,151	115	\$47,948	115	\$43,100	0	(\$4,848)
	FTE/Obl.	104	42,824	108	52,802	108	47,948	108	43,100	0	(4,848)
Cybersecurity and Privacy	Pos./Approp	216	88,034	199	88,034	199	89,522	199	85,000	0	(4,522)
	FTE/Obl.	179	82,769	186	95,858	186	89,522	186	85,000	0	(4,522)
Total	Pos./Approp	341	135,185	314	135,185	314	137,470	314	128,100	0	(9,370)
	FTE/Obl.	283	125,593	294	148,660	294	137,470	294	128,100	0	(9,370)

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
JUSTIFICATION OF PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

Budget Program: Digital Technology Measurements and Standards

Goal Statement

The goal of NIST's Digital Technology Measurements and Standards programmatic area is to conduct groundbreaking research and advance cutting-edge measurement science, standards, and technology in next-generation communications, cybersecurity, and privacy to drive U.S. innovation and global competitiveness.

Program Description

NIST is accelerating the development and deployment of digital technologies, such as next-generation communication technologies and information systems that are reliable, usable, interoperable, and secure. Secure, reliable, high-speed wireless communications are critical to the economic and national competitiveness of the United States. Integrated communications and networking technologies dramatically change how consumers, manufacturers, and governments provide and consume information, transact business, and provide and use essential services, shops, and more. The societal demand for connectivity, especially for faster and smarter networks, will continue to require significant advancements in communications technologies. NIST is a central player in the Nation's efforts to modernize the U.S. public safety communications infrastructure and is currently the U.S. government's leader in fundamental and applied research, standards, and government-academia-industry coordination for advanced communications technologies.

NIST strengthens trust in information technology and metrology -- the foundations that underpin the digital economy -- through resilient cybersecurity, privacy protection, interoperability, and usability. NIST carries out fundamental and applied research, develops measurement standards, and creates evaluation tools to accurately assess the capabilities and limitations of critical technologies—so that systems, organizations, and users can depend on them with greater confidence. NIST also develops cybersecurity and privacy standards, guidelines, best practices, and other resources to meet the needs of U.S. industry, federal agencies, and the general public. Work in cybersecurity and privacy ranges from longer-term research that anticipates advances in technologies to information that can immediately be put into practice to help organizations address their most pressing challenges. NIST also carries out specific cybersecurity and privacy assignments defined by federal statutes, executive orders, and policies.

Statement of Operating Objectives

NIST will continue to support the measurements, standards, and technology needs of the Nation for continued leadership in next-generation communications technologies, cybersecurity, and privacy amid growing international need in these areas, aligned with Administration, Department of Commerce, and NIST priorities.

Explanation and Justification

		2025 Actual		2026 Enacted		2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Digital Technology Measurements and Standards	Pos./BA	341	\$135,185	314	\$135,185	314	\$137,470
	FTE/Obl	283	125,593	294	148,660	294	137,470

Next-generation Communications and Networks: NIST will continue research and development in a broad range of key communications technologies, including a focus on spectrum science, radio frequency (RF) technology, new metrology and calibration services, wireless communications, and public safety communications research. NIST will continue to provide trusted spectrum data and electromagnetic research that informs decision-makers, enhances economic and national security, and supports U.S. industries in meeting global market demands. NIST will continue to play a key role in ensuring that American industry is well-positioned globally to meet the rising market demand for broadband technologies while also providing network solutions within NIST to advance the measurement science and standards mission.

Cybersecurity and Privacy: NIST will continue to focus on the development of cybersecurity and privacy standards, guidelines, best practices, and other resources to meet the needs of U.S. industry, federal agencies, and the general public. NIST’s research will continue to focus on cybersecurity and privacy risks and risk management approaches, cryptography, education and workforce, identity and access management, and human-centered cybersecurity. NIST will continue to play a critical role in federal cybersecurity policy, leading on cybersecurity and privacy issues, with products and services that comprise a portfolio bridging foundational cybersecurity research, applied cybersecurity R&D, and through the development of publicly available standards, frameworks, and technical guidelines.

To ensure that the United States continues to lead in digital technology measurements and standards, NIST will a) continue to collaborate directly with private and public sector stakeholders; b) support the private sector-led international standards ecosystem; c) create a work environment that fosters excellence in science and safety; and d) ensure NIST research, services, and products meet the needs of the American public so that the benefits of science and technology will reach every relevant sector of the economy.

**Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGES FOR 2027**
(Dollar amounts in thousands)

Budget Program: Digital Technology Measurements and Standards

Project Change: Digital Technology Measurements and Standards – Next-generation Communication and Networks Reduction

		2027 Base		2027 Estimate		Increase/Decrease from 2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Digital Technology Measurements and Standards --	Pos/BA	115	\$47,948	115	\$43,100	(0)	(\$4,848)
Next-generation Communication and Networks Reduction	FTE/Obl.	108	\$47,948	108	\$43,100	(0)	(\$4,848)

Digital Technology Measurements and Standards -- Next-generation Communication and Networks Reduction (-\$4.848 million, 0 FTE / 0 Positions) – The FY 2027 President’s Budget request Next-generation Communications and Networks is \$43.1 million, which is a 10% reduction from base levels – and is consistent with the Administration’s goals to enable agencies to fulfill their statutory responsibilities in the most cost-effective manner possible and to allow NIST to invest in core measurement science efforts that align with mission priorities in critical and emerging technologies. The proposed reductions in the Next-generation Communications and Networks project within the Digital Technology Measurements and Standards budget program include across the board reductions from labor and non-labor contracts, research and development contracts, grants, and supplies and equipment. NIST will focus and prioritize research and development efforts on a broad range of key communications technologies, including quantum communications, spectrum science, radio frequency (RF) technology, new metrology and calibration services, wireless communications, and public safety communications research. NIST will reduce or eliminate programs related to smart connected manufacturing systems and smart infrastructure and will streamline programmatic efforts to achieve operational efficiency and to align resources with mission priorities.

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations amounts in thousands)

Budget Program: Digital Technology Measurements and Standards

Project Change: Digital Technology Measurements and Standards – Next-generation Communication and Networks Reduction

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
11.1	\$43,682	\$45,380	\$45,380	\$45,380	0
11.3	3,631	3,772	3,772	3,772	0
11.5	1,287	1,337	1,337	1,337	0
11.8	0	0	0	0	0
11.9	48,600	50,489	50,489	50,489	0
12.1	17,644	18,330	18,697	18,697	0
13	185	0	0	0	0
21	1,287	1,300	1,313	1,212	(\$101)
22	75	76	77	71	(6)
23	0	0	0	0	0
23.1	0	0	0	0	0
23.2	160	162	164	164	0
23.3	2,016	2,036	2,056	2,056	0
24	24	24	24	20	(4)
25	0	0	0	0	0
25.1	979	989	999	933	(66)
25.2	9,786	21,721	13,603	12,689	(914)
25.3	11,231	13,343	13,476	12,814	(662)
25.4	0	0	0	0	0
25.5	15,044	15,194	13,346	11,971	(1,375)
25.6	0	0	0	0	0
25.7	3,346	3,379	3,413	3,135	(278)
25.8	0	0	0	0	0
26	1,702	1,719	1,736	1,580	(156)
31	3,054	3,085	3,116	2,910	(206)
32	744	0	0	0	0
33	0	0	0	0	0
41	9,716	16,813	14,961	13,881	(1,080)
42	0	0	0	0	0
43	0	0	0	0	0
44	0	0	0	0	0
99.9	\$125,593	\$148,660	\$137,470	\$132,622	(\$4,848)

**Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGES FOR 2027**
(Dollar amounts in thousands)

Budget Program: Digital Technology Measurements and Standards
Project Change: Digital Technology Measurements and Standards – Cybersecurity and Privacy Reduction

		FY 2027 Base		FY 2027 Estimate		Increase/Decrease from 2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Digital Technology Measurements and Standards -- Cybersecurity and Privacy Reduction	Pos/BA	199	\$89,522	199	\$85,000	(0)	(\$4,522)
	FTE/Obl.	186	\$89,522	186	\$85,000	(0)	(\$4,522)

Digital Technology Measurements and Standards --Cybersecurity and Privacy Reduction (-\$4,522 million, 0 FTE / 0 Positions) – The FY 2027 President’s Budget request for Cybersecurity and Privacy is \$85 million, which is a 5% reduction from base levels – and is consistent with the Administration’s goals to enable agencies to fulfill their statutory responsibilities in the most cost-effective manner possible and to allow NIST to invest in core measurement science efforts that align with mission priorities in critical and emerging technologies. The proposed reductions in the Cybersecurity and Privacy project within the Digital Technology Measurements and Standards budget program include across the board reductions from labor and non-labor contracts, research and development contracts, grants, and supplies and equipment. NIST will focus and prioritize efforts on the research development of cybersecurity and privacy standards, guidelines, best practices, and other resources, and will streamline programmatic efforts to achieve operational efficiency.

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations amounts in thousands)

Budget Program: Digital Technology Measurements and Standards

Project Change: Digital Technology Measurements and Standards – Cybersecurity and Privacy Reduction

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
11.1	\$43,682	\$45,380	\$45,380	\$45,380	0
11.3	3,631	3,772	3,772	3,772	0
11.5	1,287	1,337	1,337	1,337	0
11.8	0	0	0	0	0
11.9	48,600	50,489	50,489	50,489	0
12.1	17,644	18,330	18,697	18,697	0
13	185	0	0	0	0
21	1,287	1,300	1,313	1,237	(\$76)
22	75	76	77	72	(5)
23	0	0	0	0	0
23.1	0	0	0	0	0
23.2	160	162	164	164	0
23.3	2,016	2,036	2,056	2,056	0
24	24	24	24	21	(3)
25	0	0	0	0	0
25.1	979	989	999	950	(49)
25.2	9,786	21,721	13,603	12,876	(727)
25.3	11,231	13,343	13,476	12,938	(538)
25.4	0	0	0	0	0
25.5	15,044	15,194	13,346	12,282	(1,064)
25.6	0	0	0	0	0
25.7	3,346	3,379	3,413	3,205	(208)
25.8	0	0	0	0	0
26	1,702	1,719	1,736	1,620	(116)
31	3,054	3,085	3,116	2,962	(154)
32	744	0	0	0	0
33	0	0	0	0	0
41	9,716	16,813	14,961	13,379	(1,582)
42	0	0	0	0	0
43	0	0	0	0	0
44	0	0	0	0	0
99.9	\$125,593	\$148,660	\$137,470	\$132,948	(\$4,522)

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Budget Program: Core Metrology and Measurement Services

Project/Activity		2025		2026		2027		2027		Increase/Decrease	
		Actual		Enacted		Base		Estimate		over 2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Fundamental and Applied Metrology	Pos./Approp	982	\$309,909	886	\$253,075	886	\$257,352	886	\$204,495	0	(\$52,857)
	FTE/Obl.	822	312,798	829	266,857	829	257,352	829	204,495	0	(52,857)
Measurement Services	Pos./Approp	326	78,890	302	78,890	302	80,224	302	80,224	0	0
	FTE/Obl.	275	83,271	284	104,356	284	80,224	284	81,724	0	1,500
Total	Pos./Approp	1,308	388,799	1,188	331,965	1,188	337,576	1,188	284,719	0	(52,857)
	FTE/Obl.	1,097	396,069	1,113	371,213	1,113	337,576	1,113	286,219	0	(51,357)

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
JUSTIFICATION OF PROGRAM AND PERFORMANCE

(Dollar amounts in thousands)

Budget Program: Core Metrology and Measurement Services

Goal Statement

The goal of NIST's Core Metrology and Measurement Services programmatic area is to serve the Nation in NIST's unique weights and measures mission by advancing cutting-edge measurement science, standards, and technology across multiple technology areas and supporting accurate and compatible measurements to drive U.S. innovation and global competitiveness in nearly every sector of the economy.

Program Description

As the National Metrology Institute of the United States, NIST has the sole responsibility for the realization and dissemination of the authoritative values for the International System of Units (SI) base units in the United States. NIST is also the only entity in the United States with the mission to deliver the measurement science necessary for U.S. competitiveness and economic security. NIST conducts core measurement science research across all areas of technology, including measurements and standards efforts that underpin critical and emerging technologies.

NIST disseminates measurement-related standards through its calibration services, a critical link in the chain of traceability to international standards. In these services, NIST calibrates measurement equipment using techniques and products traceable to the seven fundamental units of measurement. NIST currently provides over 575 calibration services that impact us every day, including assurances of: the accuracy of altitude measurements in airplanes, the accuracy of GPS devices, and the safety of patients undergoing X-ray imaging. Calibration services cover nine areas: biomedical, dimensional, electromagnetic, environmental, ionizing radiation, mechanical, optical radiation, thermodynamic, and time and frequency. In this manner, calibration services fortify our domestic and international commerce.

NIST also supports accurate and compatible measurements by certifying and providing more than 1,000 Standard Reference Materials (SRMs) and Reference Materials (RMs) with well-characterized compositions, properties, or both. These materials developed and maintained at NIST address specific stakeholder needs and are used to perform instrument calibrations as part of overall quality assurance programs, verify the accuracy of specific measurements, support the development of new measurement methods, and help U.S. companies meet regulatory requirements. NIST develops and distributes high-quality Standard Reference Data (SRD) to assist industry, academia, and government researchers. SRM and SRD program products help industries ranging from semiconductor and healthcare companies to materials and chemical manufacturers, while supporting diverse measurements like food nutritional values and water or soil pollution levels.

NIST also has responsibility over coordinating the federal government’s activities in documentary standards development and conformity assessment. NIST supports Administration priorities addressing trade, technology, innovation, and competitiveness. NIST directly supports standards development by the participation of over 400 NIST technical staff in over 100 standards organizations, on more than 1600 different standards committees. NIST supports U.S. private sector engagement in international standards development for critical and emerging technology areas. NIST serves as the administrator for U.S. mirror committees (U.S. Technical Advisory Groups (TAGs) to International Technical Standards Committees, including in leadership positions within these areas. Within this budget program, NIST manages recognition programs for U.S. conformity assessment bodies (through the Telecommunications Mutual Recognition Agreements Program) and U.S. accreditation bodies (through the National Voluntary Conformity Assessment Systems Evaluation Program) that demonstrate conformance with specific regulatory telecommunications equipment requirements, facilitating regulatory acceptance of U.S. conformity assessment results and easing trade of telecommunications products by U.S. manufacturers in many countries.

Statement of Operating Objectives

NIST will continue to support the measurements, standards, and technology needs of the Nation through continued leadership in core metrology and measurement services amid growing global competition, aligned with the Administration, the Department of Commerce, and NIST priorities.

Explanation and Justification

		2025 Actual		2026 Enacted		2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Core Metrology and Measurement Services	Pos./BA	1,308	\$388,799	1,188	\$331,965	1,188	\$337,576
	FTE/Obl	1,097	396,069	1,113	371,213	1,113	337,576

Fundamental and Applied Metrology: NIST will continue to provide metrology, data, and standards essential to the Nation’s scientific and commercial enterprises across the entire NIST mission space, including underpinning measurement science that benefits the more specific aims of critical and emerging technologies, digital technologies, measurement services, advanced manufacturing, resilience and fire research, and platform technology development. NIST will continue to develop and deliver measurement knowledge and tools needed to enable innovation, improve trust and confidence, and foster data-driven decision making to stakeholders in nearly every economic sector. NIST’s forensic science program will continue to develop reference materials, assess key emerging technologies, and advance the implementation of scientifically valid analysis methods for DNA, drugs, and toxicology. NIST will continue to help advance the development of high-performing buildings by improving operations, occupant comfort and safety, and cost-effectiveness through advances in measurement science and the development and deployment of intelligent building systems.

Measurement Services: As the National Metrology Institute of the United States, NIST will continue to deliver on the sole responsibility for the realization and dissemination of the authoritative values for the International System of Units (SI) in the United States. NIST will continue to disseminate measurement-related standards through its calibration services, Standard Reference Materials (SRM®) and Standard Reference Data programs, as well as documentary standards across a range of technology areas in nearly every economic sector. NIST will continue to calibrate measurement equipment using techniques and products traceable to the seven fundamental units of measurement and continue to coordinate the production, documentation, deployment, and customer service functions for the NIST-wide SRM® and Standard Reference Data programs, including more than 1,100 SRMs, RMs, and research grade test materials that facilitate measurements and tests throughout the private sector and other government agencies. NIST's Standards Coordination Office (SCO) will continue to coordinate standards development, support interagency collaboration, manage databases, and facilitate international trade through standards agreements and engagements with international standards development organizations (SDOs).

To ensure that the United States continues to lead in these core metrology and measurement services within NIST's unique metrology mission, NIST will a) continue to collaborate directly with private and public sector stakeholders; b) support the private sector-led international standards ecosystem; c) create a work environment that fosters excellence in science and safety; and d) ensure NIST research, services, and products meet the needs of the American public so that the benefits of science and technology will reach every relevant sector of the economy.

**Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGES FOR 2027**
(Dollar amounts in thousands)

Budget Program: Core Metrology and Measurement Services
Project Change: Core Metrology and Measurement Services – Fundamental and Applied Metrology Reduction

		2027 Base		2027 Estimate		Increase/Decrease from 2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Core Metrology and Measurement Services -- Fundamental and Applied Metrology Reduction	Pos/BA	886	\$257,352	886	\$204,495	(0)	(\$52,857)
	FTE/Obl.	829	\$257,352	829	\$204,495	(0)	(\$52,857)

Core Metrology and Measurement Services -- Fundamental and Applied Metrology Reduction (-\$52.857 million, 0 FTE / 0 Positions) – The FY 2027 President’s Budget request for Fundamental and Applied Metrology is \$204.5 million, which is a 20.5% reduction from base levels – and is consistent with the Administration’s goals to enable agencies to fulfill their statutory responsibilities in the most cost-effective manner possible and to allow NIST to invest in core measurement science efforts that align with mission priorities in critical and emerging technologies. The proposed reductions in the Fundamental and Applied Metrology project within the Core Metrology and Measurement Services budget program include across the board reductions from labor and non-labor contracts, research and development contracts, grants, and supplies and equipment. NIST will focus and prioritize metrology, data, and standards essential to the Nation’s scientific and commercial enterprises across the entire NIST mission space, including fundamental and applied metrology underpinning multiple critical and emerging technology research and development programs across NIST. NIST will reduce or eliminate programs related to environmental metrology, computational chemistry and materials science, magnetic materials science, nanomaterials and related applications, firearm forensics, biophysics, and health science. NIST will additionally streamline programmatic efforts to achieve operational efficiency and to align resources with mission priorities.

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations amounts in thousands)

Budget Program: Core Metrology and Measurement Services

Project Change: Core Metrology and Measurement Services – Fundamental and Applied Metrology Reduction

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
11.1	\$168,672	\$134,863	\$134,900	\$134,900	0
11.3	14,021	11,625	11,694	11,694	0
11.5	4,972	3,879	5,246	5,246	0
11.8	0	0	0	0	0
11.9	187,665	150,367	151,840	\$151,840	0
12.1	68,764	51,358	52,048	52,048	0
13	2,880	3,464	3,464	3,464	0
21	2,730	2,762	2,632	1,574	(\$1,058)
22	518	539	455	272	(183)
23	0	0	0	0	0
23.1	161	158	2,995	2,995	0
23.2	1,225	1,260	1,296	1,296	0
23.3	15,303	14,103	11,948	11,948	0
24	182	185	191	114	(77)
25	0	0	0	0	0
25.1	936	952	1,002	599	(403)
25.2	10,347	34,643	18,967	5,133	(13,834)
25.3	10,750	8,568	9,016	5,391	(3,625)
25.4	0	0	0	0	0
25.5	14,404	30,473	22,947	13,720	(9,227)
25.6	0	0	0	0	0
25.7	3,204	2,394	1,557	931	(626)
25.8	0	0	0	0	0
26	3,498	2,107	2,342	1,400	(942)
31	6,538	4,189	1,544	602	(942)
32	2,852	0	0	0	0
33	0	0	0	0	0
41	63,610	63,189	52,830	30,890	(21,940)
42	0	0	0	0	0
43	2	2	2	2	0
94	500	500	500	500	0
99.9	396,069	371,213	337,576	284,719	(52,857)

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Budget Program: Exploratory Measurement Research and Development

Project/Activity		2025 Actual		2026 Enacted		2027 Base		2027 Estimate		Increase/Decrease over 2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Exploratory Measurement R&D	Pos./Approp	60	\$26,380	53	\$25,380	53	\$25,809	53	\$20,000	0	(\$5,809)
	FTE/Obl.	50	24,880	50	27,649	50	25,809	50	20,000	0	(5,809)
Total	Pos./Approp	60	26,380	53	25,380	53	25,809	53	20,000	0	(5,809)
	FTE/Obl.	50	24,880	50	27,649	50	25,809	50	20,000	0	(5,809)

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
JUSTIFICATION OF PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

Budget Program: Exploratory Measurement Research and Development

Goal Statement

The goal of NIST's Exploratory Measurement Research and Development programmatic area is to jumpstart and support technical programs in emerging and high-impact areas to underpin groundbreaking research and advance cutting-edge measurement science, standards, and technology that drive U.S. innovation and global competitiveness.

Program Description

NIST's Exploratory Measurement Research and Development Programs ensure that NIST stays at the forefront of emerging technologies and grows new capabilities in high-impact research areas that underpin U.S. innovation and global competitiveness. NIST invests in these research areas through the Innovation in Mission-driven Science (IMS) Program. The IMS Program focuses on higher-risk, potentially transformative projects that address significant scientific or technological challenges. Unlike standard research that may seek incremental improvements, IMS targets "leapfrog" advancements. These projects receive substantial backing—typically \$1 million to \$1.5 million annually for up to five years. Successful IMS investments are characterized by their:

- Strategic Impact: Investments that prioritize outcomes like recognized impacts on U.S. industry and/or government stakeholders.
- Breadth: Investments that span basic, applied, and translational research to ensure a realistic pathway to stated potential impacts.

Through these exploratory investments, NIST cultivates the deep expertise and foundational measurement science required to overcome technical barriers, lower costs for industry, and accelerate the development of products that define the 21st-century economy. This approach ensures that NIST remains the cornerstone of American industrial competitiveness well into the future. The IMS program ensures that NIST does not just react to the present state of measurement science, but actively shapes the future of industrial and scientific standards.

Statement of Operating Objectives

To fulfill its mission of promoting U.S. innovation and industrial competitiveness, NIST will continue to maintain a robust portfolio of exploratory measurement science investments. Central to advancing the possibilities of measurements and standards to increase U.S. innovation is the Innovation in Mission-driven Science (IMS) Program. The IMS Program will continue to focus on longer-term funding of new transformative internal NIST research projects that promote U.S. innovation, align with and significantly advance NIST's mission and strategic priorities, and have potential for high impact on a scientific, engineering, and/or technological challenge.

Explanation and Justification

		2025 Actual		2026 Enacted		2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Exploratory Measurement Research and Development	Pos./BA	60	\$26,380	53	\$25,380	53	\$25,809
	FTE/Obl	50	24,880	50	27,649	50	25,809

To ensure that the United States continues to lead in emerging and impactful science, innovation, and technology, NIST will a) continue to collaborate directly with private and public sector stakeholders; b) support the private sector-led international standards ecosystem; c) create a work environment that fosters excellence in science and safety; and d) ensure NIST research, services, and products meet the needs of the American public so that the benefits of science and technology will reach every relevant sector of the economy.

**Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGES FOR 2027**
(Dollar amounts in thousands)

Budget Program: Exploratory Measurement Research and Development
Project Change: Exploratory Measurement Research and Development Reduction

		FY 2027 Base		FY 2027 Estimate		Increase/Decrease from 2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Exploratory Measurement Research and Development Reduction	Pos/BA	53	\$25,809	53	\$20,000	(0)	(\$5,809)
	FTE/Obl.	50	\$25,809	50	\$20,000	(0)	(\$5,809)

Exploratory Measurement Research and Development Reduction (-\$5.809 million, 0 FTE / 0 Positions) – The FY 2027 President’s Budget request for Exploratory Measurement Research and Development is \$20 million, which is a 22.5% reduction from base levels – and is consistent with the Administration’s goals to enable agencies to fulfill their statutory responsibilities in the most cost-effective manner possible and to allow NIST to invest in core measurement science efforts that align with mission priorities in critical and emerging technologies. NIST will focus and prioritize Exploratory Measurement Research and Development budget program efforts through the Innovation in Mission-Driven Science (IMS) program that supports the transformative research and development of critical and emerging technologies but will eliminate the Strategic and Emerging Research Initiatives (SERI) program and includes across the board reductions from labor and non-labor contracts, research and development contracts, grants, and supplies and equipment.

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
 (Direct Obligations amounts in thousands)

Budget Program: Exploratory Measurement Research and Development
 Project Change: Exploratory Measurement Research and Development Reduction

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
11.1	\$7,554	\$7,630	\$7,630	\$7,630	0
11.3	628	634	634	634	0
11.5	223	225	225	225	0
11.8	0	0	0	0	0
11.9	8,405	8,489	8,489	8,489	0
12.1	3,085	3,116	3,178	3,178	0
13	0	0	0	0	0
21	199	201	203	97	(\$106)
22	19	19	19	10	(9)
23	0	0	0	0	0
23.1	0	0	0	0	0
23.2	40	40	40	40	0
23.3	500	505	510	511	1
24	9	9	9	2	(7)
25	0	0	0	0	0
25.1	208	210	212	123	(89)
25.2	2,187	4,730	2,717	1,172	(1,545)
25.3	2,387	2,411	2,435	1,436	(999)
25.4	0	0	0	0	0
25.5	3,198	3,230	3,262	1,862	(1,400)
25.6	0	0	0	0	0
25.7	711	718	725	496	(229)
25.8	0	0	0	0	0
26	1,098	1,109	1,120	593	(527)
31	1,732	1,749	1,766	1,187	(579)
32	0	0	0	0	0
33	0	0	0	0	0
41	1,102	1,113	1,124	804	(320)
42	0	0	0	0	0
43	0	0	0	0	0
44	0	0	0	0	0
99.9	\$24,880	\$27,649	\$25,809	\$20,000	(\$5,809)

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Budget Program: Advanced Manufacturing Research and Development

Project/Activity		2025 Actual		2026 Enacted		2027 Base		2027 Estimate		Increase/Decrease over 2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Advanced Manufacturing R&D	Pos./Approp	170	\$44,857	155	\$43,401	155	\$44,135	155	\$35,857	0	(\$8,278)
	FTE/Obl.	141	41,965	144	47,590	144	44,135	144	35,857	0	(8,278)
Total	Pos./Approp	170	44,857	155	43,401	155	44,135	155	35,857	0	(8,278)
	FTE/Obl.	141	41,965	144	47,590	144	44,135	144	35,857	0	(8,278)

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
JUSTIFICATION OF PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

Budget Program: Advanced Manufacturing Research and Development

Goal Statement

The goal of NIST's Advanced Manufacturing Research and Development programmatic area is to conduct groundbreaking research to advance cutting-edge measurement science, standards, and technology, and enable the next generation of innovative and competitive manufacturing through measurement science to drive U.S. innovation and global competitiveness in a variety of manufacturing sectors.

Program Description

As a partner to the U.S. manufacturing sector for more than a century, NIST helps American industries adopt innovative manufacturing methods and efficiently produce reliable and safe products. A strong domestic manufacturing enterprise as well as American-made equipment and materials for public infrastructure means economic and national security for all Americans.

NIST partners with members of U.S. industry to identify manufacturing challenges and provide solutions that benefit entire sectors. American manufacturers in every sector succeed in domestic and global markets because of NIST research, products, and services that:

- Accelerate innovation by developers and inventors. NIST's laboratory programs conduct measurements and analyses to contribute to a full understanding of novel materials and processes so that developers can use them for new and improved products.
- Speed the commercialization and adoption of beneficial technologies, including intelligent technologies. NIST's measurement science and evaluations help develop trust in new materials and technologies, like additive manufacturing and artificial intelligence. When new technology is trusted, it is adopted more broadly and rapidly, so more businesses benefit.
- Promote production efficiency and resilience, product quality, and consumer safety. NIST's measurement science, data, as well as calibrations and reference materials in the Core Metrology and Measurement Services programmatic area, help suppliers and manufacturers demonstrate the quality of their materials, equipment, and products, effectively building trust throughout supply chains. NIST products and services also help manufacturers monitor their production lines. NIST's tools for quality and production monitoring also help small and medium-sized manufacturers meet the requirements of the Department of War, contributing to resilient supply chains for national security.

Statement of Operating Objectives

NIST will continue to support the measurements, standards, and technology needs of the Nation for continued leadership in advanced manufacturing technologies amid growing global competition, aligned with Administration, Department of Commerce, and NIST priorities.

Explanation and Justification

		2025 Actual		2026 Enacted		2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Advanced Manufacturing Research and Development	Pos./BA	170	\$44,857	155	\$43,401	155	\$44,135
	FTE/Obl	141	41,965	144	47,590	144	44,135

NIST will continue to develop and deploy measurement science to help U.S. industries assess and reduce the risks of technology investments for advanced materials, advanced manufacturing, and automated systems. NIST will continue to establish the technical basis for the development of multiple manufacturing-related standards, including new high-impact standards for additive manufacturing (or 3D printing), automation and manufacturing robotics, and manufacturing data infrastructure and analytics as applied in areas such as circular economy and supply chain resilience (chemicals and feedstocks). Working in close partnership with the Office of Advanced Manufacturing, NIST labs will work to provide the technical foundations needed to support the growth of domestic manufacturing capacity in the critical industries of the future.

To ensure that the United States continues to lead in advanced manufacturing, NIST will a) continue to collaborate directly with private and public sector stakeholders; b) support the private sector-led international standards ecosystem; c) create a work environment that fosters excellence in science and safety; and d) ensure NIST research, services, and products meet the needs of the American public so that the benefits of advanced manufacturing research and technology will reach every relevant sector of the economy.

**Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGES FOR 2027**
(Dollar amounts in thousands)

Budget Program: Advanced Manufacturing Research and Development
Project Change: Advanced Manufacturing Research and Development Reduction

		2027 Base		2027 Estimate		Increase/Decrease from 2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Advanced Manufacturing Research and Development	Pos/BA	155	\$44,135	155	\$35,857	(0)	(\$8,278)
Reduction	FTE/Obl.	144	\$44,135	144	\$35,857	(0)	(\$8,278)

Advanced Manufacturing Research and Development Reduction (-\$8.278 million, 0 FTE / 0 Positions) – The FY 2027 President’s Budget request for Advanced Manufacturing Research and Development is \$35.8 million, which is an 18.8% reduction from base levels – and is consistent with the Administration’s goals to enable agencies to fulfill their statutory responsibilities in the most cost-effective manner possible and to allow NIST to invest in core measurement science efforts that align with mission priorities in critical and emerging technologies. The proposed reductions in the Advanced Manufacturing Research and Development budget program include across the board reductions from labor and non-labor contracts, research and development contracts, grants, and supplies and equipment, as well as targeted programmatic streamlining efforts to align staffing levels with mission priorities. NIST will focus and prioritize efforts, including robotics research and standards, that support the manufacture of emerging technologies and will reduce the capacity of programs related to systems integration and materials science as applied to manufacturing systems.

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations amounts in thousands)

Budget Program: Advanced Manufacturing Research and Development
Project Change: Advanced Manufacturing Research and Development Reduction

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
11.1 Full-time permanent compensation	\$17,032	\$17,202	\$17,202	\$17,202	0
11.3 Other than full-time permanent	1,416	1,430	1,430	1,430	0
11.5 Other personnel compensation	502	507	507	507	0
11.8 Special personnel services payments	0	0	0	0	0
11.9 Total personnel compensation	18,950	19,139	19,139	19,139	0
12.1 Civilian personnel benefits	6,539	6,604	6,736	6,736	0
13 Benefits for former personnel	36	0	0	0	0
21 Travel and transportation of persons	312	315	318	172	(\$146)
22 Transportation of things	27	27	27	15	(12)
23 Rent, communications, and utilities	0	0	0	0	0
23.1 Rental payments to GSA	0	0	0	0	0
23.2 Rental payments to others	74	75	76	76	0
23.3 Communications, utilities, and misc. charges	932	941	950	950	0
24 Printing and reproduction	9	9	9	5	(4)
25 Other contractual services	0	0	0	0	0
25.1 Advisory and assistance services	126	127	128	69	(59)
25.2 Other services from non-Federal sources	1,323	5,081	2,070	1,253	(817)
25.3 Other goods and services from Federal sources	1,445	1,959	1,979	1,073	(906)
25.4 Operation and maintenance of facilities	0	0	0	0	0
25.5 Research and development contracts	1,935	1,954	1,974	469	(1,505)
25.6 Medical care	0	0	0	0	0
25.7 Operation and maintenance of equipment	430	434	438	237	(201)
25.8 Subsistence and support of persons	0	0	0	0	0
26 Supplies and materials	2,258	2,281	2,304	1,251	(1,053)
31 Equipment	5,247	5,299	5,352	2,901	(2,451)
32 Lands and structures	0	0	0	0	0
33 Investments and loans	0	0	0	0	0
41 Grants, subsidies and contributions	2,322	3,345	2,635	1,511	(1,124)
42 Insurance claims and indemnities	0	0	0	0	0
43 Interest and dividends	0	0	0	0	0
44 Refunds	0	0	0	0	0
99.9 Total obligations	41,965	47,590	44,135	35,857	(8,278)

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Budget Program: Resilience and Fire Research

Project/Activity		2025 Actual		2026 Enacted		2027 Base		2027 Estimate		Increase/Decrease over 2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Resilience and Fire Research	Pos./Approp	193	\$52,787	173	\$51,196	173	\$52,062	173	\$42,200	0	(\$9,862)
	FTE/Obl.	156	53,891	160	51,758	160	52,062	160	42,200	0	(9,862)
Total	Pos./Approp	193	52,787	173	51,196	173	52,062	173	42,200	0	(9,862)
	FTE/Obl.	156	53,891	160	51,758	160	52,062	160	42,200	0	(9,862)

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
JUSTIFICATION OF PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

Budget Program: Resilience and Fire Research

Goal Statement

The goal of NIST's Resilience and Fire Research programmatic area is to conduct groundbreaking research and advance cutting-edge measurement science, standards, and technology to drive U.S. innovation and global competitiveness and enhance the resiliency of buildings, infrastructure, and communities.

Program Description

Cost-effective disaster resilience, including life-safety and property loss reduction, due to a wide range of hazards, is a recognized national need that requires scientific advances to enable technological innovation, enhance predictive capabilities, and improve codes, standards, best practices, and emergency response. A significant barrier to the consideration of innovative alternatives is the lack of measurement science for assessing the performance of infrastructure and building assets, along with validated cost-benefit tools that include reliable estimates of life cycle costs. Thus, measurement science needs to be developed to address: (a) resilience to multiple types of hazard events, including data collection from disaster events, and (b) the physical and economic performance of building and infrastructure materials that provide the Nation's primary defense against earthquakes, fires, floods, windstorms, and the effects of weathering / aging.

NIST additionally has statutory responsibilities for fire research (NIST Organic Act), the National Construction Safety Team (NCST Act), National Earthquake Hazards Reduction Program (NEHRP Act), and National Windstorm Impact Reduction Program (NWIRP Act). Through comprehensive programs in measurement, prediction, systems integration, and the study of fire dynamics in both built and natural environments, NIST leads in efforts to advance the science and practice of fire safety engineering, firefighting, fire investigation, fire testing, fire data management, and controlled burning of a range of material types. NIST utilizes the National Fire Research Laboratory (NFRL), a unique experimental facility dedicated to understanding fire behavior and structural response to fire, to collaborate with scientists and engineers from industry, academia, and government to address critical technical problems related to real-scale structural-fire measurements, generation of sufficient technical data to improve fire & building codes, validation of physics-based models, and post-fire investigations.

Statement of Operating Objectives

NIST will continue to support the measurements, standards, and technology needs of the Nation for continued leadership in resilience and fire research technologies amid growing global competition, aligned with Administration, Department of Commerce, and NIST priorities.

Explanation and Justification

		2025 Actual		2026 Enacted		2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Resilience and Fire Research	Pos./BA	193	\$52,787	173	\$51,196	173	\$52,062
	FTE/Obl	156	53,891	160	51,758	160	52,062

NIST will continue to focus on the impact of hazards on buildings and communities and on post-disaster studies to help improve standards, codes, and practices for buildings and infrastructure systems. NIST will continue to provide advancements in measurement science to address natural disasters like floods, windstorms, fires, and earthquakes, as well as human-made hazard events, and accounts, including for the recovery of economic, and physical systems. It includes the development of measurement science to assess the performance of engineered materials from chronic and episodic hazards on the built environment. NIST provides performance-based approaches, and science-based codes and standards, for Wildland Urban Interface (WUI) fire hazard mitigation through hardening structures, parcels, and communities to reduce losses in WUI fires. NIST will continue to assess building and infrastructure performance and emergency response and evacuation procedures in the wake of disaster and failure events that resulted in, or had the potential for, substantial loss of life, and develop forward-looking building codes, standards and guidelines for resilient buildings to provide the Nation’s primary defense against hazard events and future weather-related effects.

To ensure that the United States continues to lead in resilience and fire research, NIST will a) continue to collaborate directly with private and public sector stakeholders; b) support the private sector-led international standards ecosystem; c) create a work environment that fosters excellence in science and safety; and d) ensure NIST research, services, and products meet the needs of the American public so that the benefits of science and technology will reach every organization and sector of the economy.

**Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGES FOR 2027**
(Dollar amounts in thousands)

Budget Program: Resilience and Fire Research
Project Change: Resilience and Fire Research Reduction

		2027 Base		2027 Estimate		Increase/Decrease from 2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Resilience and Fire Research Reduction	Pos/BA	173	\$52,062	173	\$42,200	(0)	(\$9,862)
	FTE/Obl.	160	\$52,062	160	\$42,200	(0)	(\$9,862)

Resilience and Fire Research Reduction (-\$9.862 million, 0 FTE / 0 Positions) – The FY 2027 President’s Budget request for Resilience and Fire Research is \$42.2 million, which is an 18.9% reduction from base levels – and is consistent with the Administration’s goals to enable agencies to fulfill their statutory responsibilities in the most cost-effective manner possible and to allow NIST to invest in core measurement science efforts that align with mission priorities in critical and emerging technologies. The proposed reductions in the Resilience and Fire Research budget program include across the board reductions from labor and non-labor contracts, research and development contracts, grants, and supplies and equipment., as well as targeted programmatic streamlining efforts to align staffing levels with mission priorities. NIST will prioritize efforts to improve building codes and standards for more resilient infrastructure against natural disasters, as well as research on Wildland Urban Interface (WUI) fire hazard mitigation; however, NIST will reduce the overall capacity for resilience and fire-related research programs.

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations amounts in thousands)

Budget Program: Resilience and Fire Research
Project Change: Resilience and Fire Research Reduction

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
11.1 Full-time permanent compensation	\$19,322	\$19,515	\$19,515	\$19,515	0
11.3 Other than full-time permanent	1,606	1,622	1,622	1,622	0
11.5 Other personnel compensation	569	575	575	575	0
11.8 Special personnel services payments	0	0	0	0	0
11.9 Total personnel compensation	21,497	21,712	21,712	21,712	0
12.1 Civilian personnel benefits	7,534	7,609	7,761	7,761	0
13 Benefits for former personnel	0	0	0	0	0
21 Travel and transportation of persons	564	570	576	322	(\$254)
22 Transportation of things	77	78	79	44	(35)
23 Rent, communications, and utilities	0	0	0	0	0
23.1 Rental payments to GSA	0	0	0	0	0
23.2 Rental payments to others	133	134	135	135	0
23.3 Communications, utilities, and misc. charges	1,683	1,700	1,717	1,717	0
24 Printing and reproduction	7	7	7	4	(3)
25 Other contractual services	0	0	0	0	0
25.1 Advisory and assistance services	282	285	288	161	(127)
25.2 Other services from non-Federal sources	2,964	2,994	963	538	(425)
25.3 Other goods and services from Federal sources	3,236	2,896	4,913	2,745	(2,168)
25.4 Operation and maintenance of facilities	0	0	0	0	0
25.5 Research and development contracts	4,334	3,377	3,411	1,088	(2,323)
25.6 Medical care	0	0	0	0	0
25.7 Operation and maintenance of equipment	964	974	984	550	(434)
25.8 Subsistence and support of persons	0	0	0	0	0
26 Supplies and materials	3,311	2,844	2,872	1,604	(1,268)
31 Equipment	3,676	3,413	3,447	1,926	(1,521)
32 Lands and structures	0	0	0	0	0
33 Investments and loans	0	0	0	0	0
41 Grants, subsidies and contributions	3,629	3,165	3,197	1,893	(1,304)
42 Insurance claims and indemnities	0	0	0	0	0
43 Interest and dividends	0	0	0	0	0
44 Refunds	0	0	0	0	0
99.9 Total obligations	53,891	51,758	52,062	42,200	(9,862)

**Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS**
(Dollar amounts in thousands)

Budget Program: NIST Center for Neutron Research

Project/Activity	2025 Actual		2026 Enacted		2027 Base		2027 Estimate		Increase/Decrease over 2027 Base		
	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	
NIST Center for Neutron Research	Pos./Approp	218	\$55,045	194	\$53,345	194	\$54,247	194	\$45,283	0	(\$8,964)
	FTE/Obl.	172	57,573	177	55,597	177	54,247	177	45,283	0	(8,964)
Total	Pos./Approp	218	55,045	194	53,345	194	54,247	194	45,283	0	(8,964)
	FTE/Obl.	172	57,573	177	55,597	177	54,247	177	45,283	0	(8,964)

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
JUSTIFICATION OF PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

Budget Program: NIST Center for Neutron Research

Goal Statement

The goal of the NIST Center for Neutron Research (NCNR) is to conduct groundbreaking research, advance cutting-edge measurement science, standards, and technology, and provide world-class neutron measurement capabilities to meet the needs of researchers from industry, academia, and government for driving U.S. innovation and global competitiveness.

Program Description

The NIST Center for Neutron Research (NCNR) has been at the forefront of serving the Nation's needs for neutron science measurement capabilities across six decades. As a user facility, the NCNR can provide access to more than 3,000 research participants annually from industry, academia, and other agencies in a typical year and features world-class neutron instrumentation and expertise in the development and application of neutron measurement technologies, including neutron scattering, neutron imaging, and reflectometry.

Neutron-based measurements are an important capability that support technological breakthroughs arising from the discovery, development, and rational design of new materials. Specifically, the NCNR develops state-of-the-art neutron measurement capabilities to support national needs in the characterization of high-strength alloys, quantum materials, microelectronics, chemical catalysts, biopharmaceuticals, and standards that support U.S. innovation and commerce and underpin NIST's mission in measurement science, standards, and technology. Additionally, in the era of big data, artificial intelligence (AI), and combinatorial materials synthesis, neutrons are a leading research tool used to guide the design, discovery, and characterization of novel and advanced materials.

Statement of Operating Objectives

NIST will continue to support the measurements, standards, and technology needs of the Nation for continued leadership in neutron science and use of neutron measurements to provide insights into programmatic areas that align with Administration, Department of Commerce, and NIST priorities.

Explanation and Justification

		2025 Actual		2026 Enacted		2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
NIST Center for Neutron Research	Pos./BA	218	\$55,045	194	\$53,345	194	\$54,247
	FTE/Obl	172	57,573	177	55,597	177	54,247

The NIST Center for Neutron Research (NCNR) will continue to develop state-of-the-art neutron measurement capabilities to support national needs and will continue to provide four essential functions for NIST: (1) to support the production and certification of standard reference materials (SRMs) and data sets that underpin fair trade; (2) to support U.S. needs in technology development through a user program and industry-led partnerships; (3) to provide measurement services that support NIST, industry, other government agency, and academic needs; and (4) to discover, develop, and deploy new measurement capabilities that support U.S. economic leadership.

To ensure that the United States continues to lead in neutron science and neutron measurements, NIST will a) continue to collaborate directly with private and public sector stakeholders; b) create a work environment that fosters excellence in science and safety; and c) ensure NIST neutron research meets the needs of the American public so that the benefits of science and technology will reach every relevant sector of the economy.

**Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGES FOR 2027**
(Dollar amounts in thousands)

Budget Program: NIST Center for Neutron Research
Project Change: NIST Center for Neutron Research Reduction

		2027 Base		2027 Estimate		Increase/Decrease from 2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
NIST Center for Neutron Research Reduction	Pos/BA	194	\$54,247	194	\$45,283	(0)	(\$8,964)
	FTE/Obl.	177	\$54,247	177	\$45,283	(0)	(\$8,964)

NIST Center for Neutron Research Reduction (-\$8.964 million, 0 FTE / 0 Positions) – The FY 2027 President’s Budget request for the NIST Center for Neutron Research (NCNR) is \$45.2 million, which is a 16.5% reduction from the FY 2026 enacted level. The proposed reductions in the NCNR budget program include across the board reductions from labor and non-labor contracts, research and development contracts, grants, and supplies and equipment, as well as realigning staffing levels with mission priorities. NIST will focus and prioritize the NCNR’s unique role as a national user facility that supports the neutron science and neutron measurement needs of U.S. industry but will reduce the capacity of neutron instrument development and operations.

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations amounts in thousands)

Budget Program: NIST Center for Neutron Research
Project Change: NIST Center for Neutron Research Reduction

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
11.1 Full-time permanent compensation	\$21,728	\$21,945	\$21,945	\$21,945	0
11.3 Other than full-time permanent	1,806	1,824	1,824	1,824	0
11.5 Other personnel compensation	640	646	646	646	0
11.8 Special personnel services payments	0	0	0	0	0
11.9 Total personnel compensation	24,174	24,415	24,415	24,415	0
12.1 Civilian personnel benefits	8,963	9,053	9,234	9,234	0
13 Benefits for former personnel	0	0	0	0	0
21 Travel and transportation of persons	406	410	414	234	(\$180)
22 Transportation of things	87	88	89	50	(39)
23 Rent, communications, and utilities	0	0	0	0	0
23.1 Rental payments to GSA	0	0	0	0	0
23.2 Rental payments to others	132	133	134	134	0
23.3 Communications, utilities, and misc. charges	1,668	1,685	1,702	1,702	0
24 Printing and reproduction	8	8	8	5	(3)
25 Other contractual services	0	0	0	0	0
25.1 Advisory and assistance services	276	279	282	160	(122)
25.2 Other services from non-Federal sources	2,898	2,927	895	507	(388)
25.3 Other goods and services from Federal sources	3,164	2,145	2,166	1,226	(940)
25.4 Operation and maintenance of facilities	0	0	0	0	0
25.5 Research and development contracts	4,238	4,280	4,633	1,865	(2,768)
25.6 Medical care	0	0	0	0	0
25.7 Operation and maintenance of equipment	942	951	961	544	(417)
25.8 Subsistence and support of persons	0	0	0	0	0
26 Supplies and materials	2,719	2,746	2,773	1,570	(1,203)
31 Equipment	1,018	1,028	1,038	588	(450)
32 Lands and structures	0	0	0	0	0
33 Investments and loans	0	0	0	0	0
41 Grants, subsidies and contributions	6,880	5,449	5,503	3,049	(2,454)
42 Insurance claims and indemnities	0	0	0	0	0
43 Interest and dividends	0	0	0	0	0
44 Refunds	0	0	0	0	0
99.9 Total obligations	57,573	55,597	54,247	45,283	(8,964)

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Budget Program: Congressionally Directed Projects

Project/Activity	2025 Actual		2026 Enacted		2027 Base		2027 Estimate		Increase/Decrease over 2027 Base		
	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	
Congressionally Directed Projects	Pos./Approp	0	0	0	\$405,331	0	\$405,331	0	0	0	(\$405,331)
	FTE/Obl.	0	\$5,400	0	406,042	0	405,331	0	0	0	(405,331)
Total	Pos./Approp	0	0	0	405,331	0	405,331	0	0	0	(405,331)
	FTE/Obl.	0	5,400	0	406,042	0	405,331	0	0	0	(405,331)

**Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGES FOR 2027**
(Dollar amounts in thousands)

Budget Program: Congressionally Directed STRS Projects
Project Change: Removal of One-time Congressionally Directed STRS Projects

		2027 Base		2027 Estimate		Increase/Decrease from 2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Congressionally Directed STRS Projects	Pos/BA	0	\$405,331	0	0	0	(\$405,331)
	FTE/Obl.	0	\$405,331	0	0	0	(\$405,331)

Removal of One-time Congressionally Directed STRS Projects (-\$405,331,000 +0 FTE/+0 Position) - This budget program change removes funding for one-time congressionally directed projects provided in Division A – of the Commerce, Justice, Science; Energy and Water Development; Interior and Environment Appropriations Act, 2026 (PL 119-47).

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations amounts in thousands)

Budget Program: Congressionally Directed STRS Projects
Project Change: Removal of One-time Congressionally Directed STRS Projects

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
11.1	0	0	0	0	0
11.3	0	0	0	0	0
11.5	0	0	0	0	0
11.8	0	0	0	0	0
11.9	0	0	0	0	0
12.1	0	0	0	0	0
13	0	0	0	0	0
21	0	0	0	0	0
22	0	0	0	0	1
23	0	0	0	0	0
23.1	0	0	0	0	0
23.2	0	0	0	0	0
23.3	0	0	0	0	0
24	0	0	0	0	0
25	0	0	0	0	0
25.1	0	0	0	0	0
25.2	0	0	0	0	0
25.3	0	0	0	0	0
25.4	0	0	0	0	0
25.5	0	0	0	0	0
25.6	0	0	0	0	0
25.7	0	0	0	0	0
25.8	0	0	0	0	0
26	0	0	0	0	0
31	0	0	0	0	0
32	0	0	0	0	0
33	0	0	0	0	0
41	\$5,400	\$406,042	\$405,331	0	(\$405,331)
42	0	0	0	0	0
43	0	0	0	0	0
44	0	0	0	0	0
99.9	5,400	406,042	405,331	0	(405,331)

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
11 Personnel compensation					
11.1 Full-time permanent	\$327,972	\$300,277	\$300,914	\$304,625	\$3,711
11.3 Other than full-time permanent	27,263	25,375	25,444	25,444	0
11.5 Other personnel compensation	9,666	8,753	10,120	10,120	0
11.9 Total personnel compensation	364,901	334,405	336,478	340,189	3,711
12.1 Civilian personnel benefits	132,758	117,821	119,840	121,212	1,372
13 Benefits for former personnel	3,464	3,464	3,464	3,464	0
21 Travel and transportation of persons	6,799	6,872	6,943	4,575	(2,368)
22 Transportation of things	988	1,014	1,035	646	(389)
23.1 Rental payments to GSA	161	158	2,995	2,995	0
23.2 Rental payments to others	1,978	2,020	2,063	2,063	0
23.3 Communications, utilities, and miscellaneous charges	24,798	23,693	24,633	26,552	1,919
24 Printing and reproduction	324	328	335	216	(119)
25.1 Advisory and assistance services	3,626	3,669	3,746	2,526	(1,220)
25.2 Other services from non-Federal sources	38,116	134,782	50,157	27,722	(22,435)
25.3 Other goods and services from Federal sources	41,613	43,816	49,604	34,650	(14,954)
25.5 Research and development contracts	55,745	72,226	73,428	48,031	(25,397)
25.7 Operation and maintenance of equipment	12,397	12,678	12,944	9,113	(3,831)
26 Supplies and materials	19,055	19,320	19,726	12,328	(7,398)
31 Equipment	27,862	28,426	29,023	19,899	(9,124)
32 Land and structures	4,575	0	0	0	0
41 Grants, subsidies, and contributions	104,259	526,590	526,590	73,976	(452,614)
42 Insurance claims and indemnities	0	0	0	0	0
43 Interest and dividends	2	2	2	2	0
94 Financial transfers	500	500	500	500	0
99 Total Obligations	843,921	1,331,784	1,263,506	730,659	(532,847)

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
99 Total Obligations	\$843,921	\$1,331,784	\$1,263,506	\$730,659	(\$532,847)
Less Prior Year Recoveries	(10,206)	0	0	0	0
Less Prior Year Refunds	(570)	0	0	0	0
Less prior year unobligated balance	(51,231)	(81,045)	0	0	0
Plus Unobligated Balance, End of Year	81,045	0	0	0	0
Plus Unobligated Balance, Expired	0	0	0	0	0
Total Budget Authority	862,959	1,250,739	1,263,506	730,659	(532,847)
Transfers from DoJ for Office of Law Enforcement Standards	(1,500)	(1,500)	0	(1,500)	(1,500)
Transfer from GSA for IT modernization	(4,300)	0	0	0	0
Appropriation	857,159	1,249,239	1,263,506	729,159	(534,347)

Personnel Data

Full-time Equivalent Employment:

Full-time permanent	2,013	2,076	2,080	2,105	25
Other than full-time permanent	205	205	205	205	0
Total	2,218	2,281	2,285	2,310	25

Authorized Positions:

Full-time permanent	2,601	2,376	2,376	2,410	34
Other than full-time permanent	74	74	74	74	0
Total	2,675	2,450	2,450	2,484	34

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
Budget Program: Critical and Emerging Technology Measurement and Standards
(Dollar amounts in thousands)

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
11 Personnel compensation					
11.1 Full-time permanent	\$49,982	\$53,742	\$54,342	\$58,053	\$3,711
11.3 Other than full-time permanent	4,155	4,468	4,468	4,468	0
11.5 Other personnel compensation	1,473	1,584	1,584	1,584	0
11.9 Total personnel compensation	55,610	59,794	60,394	64,105	3,711
12.1 Civilian personnel benefits	20,229	21,751	22,186	23,558	1,372
13 Benefits for former personnel	363	0	0	0	0
21 Travel and transportation of persons	1,301	1,314	1,487	1,040	(447)
22 Transportation of things	185	187	289	189	(100)
23.1 Rental payments to GSA	0	0	0	0	0
23.2 Rental payments to others	214	216	218	218	0
23.3 Communications, utilities, and miscellaneous charges	2,696	2,723	5,750	7,668	1,918
24 Printing and reproduction	85	86	87	69	(18)
25.1 Advisory and assistance services	819	827	835	530	(305)
25.2 Other services	8,611	62,686	10,942	5,657	(5,285)
25.3 Purchases of goods and services from government accounts	9,400	12,494	15,619	10,503	(5,116)
25.5 Research and development contracts	12,592	13,718	23,855	18,120	(5,735)
25.7 Operation and maintenance of equipment	2,800	3,828	4,866	3,428	(1,438)
26 Supplies and materials	4,469	6,514	6,579	4,446	(2,133)
31 Equipment	6,597	9,663	12,760	9,939	(2,821)
32 Land and structures	979	0	0	0	0
41 Grants, subsidies, and contributions	11,600	27,474	41,009	23,530	(17,479)
42 Insurance claims and indemnities	0	0	0	0	0
43 Interest and dividends	0	0	0	0	0
94 Financial transfers	0	0	0	0	0
99 Total Obligations	138,550	223,275	206,876	173,000	(33,876)

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
99 Total Obligations	138,550	223,275	206,876	173,000	(33,876)
Less Prior Year Recoveries	(3,000)	0	0	0	0
Less Prior Year Refunds	(150)	0	0	0	0
Less Prior Year Unobligated Balance	(1,133)	(19,839)	0	0	0
Plus Unobligated Balance, End of Year	19,839	0	0	0	0
Plus Unobligated Balance, Expired	0	0	0	0	0
Total Budget Authority	154,106	203,436	206,876	173,000	(33,876)
Transfer from Election Assistance Commission	0	0	0	0	0
Transfers from DoJ for Office of Law Enforcement Standards	0	0	0	0	0
Transfer from GSA for IT modernization	0	0	0	0	0
Appropriation	154,106	203,436	206,876	173,000	(33,876)

Personnel Data

Full-time Equivalent Employment:

Full-time permanent	283	307	311	336	25
Other than full-time permanent	36	36	36	36	0
Total	319	343	347	372	25

Authorized Positions:

Full-time permanent	373	361	361	395	34
Other than full-time permanent	12	12	12	12	0
Total	385	373	373	407	34

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
Budget Program: Digital Technology Measurements and Standards
(Dollar amounts in thousands)

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
11 Personnel compensation					
11.1 Full-time permanent	\$43,682	\$45,380	\$45,380	\$45,380	0
11.3 Other than full-time permanent	3,631	3,772	3,772	3,772	0
11.5 Other personnel compensation	1,287	1,337	1,337	1,337	0
11.9 Total personnel compensation	48,600	50,489	50,489	50,489	0
12.1 Civilian personnel benefits	17,644	18,330	18,697	18,697	0
13 Benefits for former personnel	185	0	0	0	0
21 Travel and transportation of persons	1,287	1,300	1,313	1,136	(\$177)
22 Transportation of things	75	76	77	66	(11)
23.1 Rental payments to GSA	0	0	0	0	0
23.2 Rental payments to others	160	162	164	164	0
23.3 Communications, utilities, and miscellaneous charges	2,016	2,036	2,056	2,056	0
24 Printing and reproduction	24	24	24	17	(7)
25.1 Advisory and assistance services	979	989	999	884	(115)
25.2 Other services	9,786	21,721	13,603	11,962	(1,641)
25.3 Purchases of goods and services from government accounts	11,231	13,343	13,476	12,276	(1,200)
25.5 Research and development contracts	15,044	15,194	13,346	10,907	(2,439)
25.7 Operation and maintenance of equipment	3,346	3,379	3,413	2,927	(486)
26 Supplies and materials	1,702	1,719	1,736	1,464	(272)
31 Equipment	3,054	3,085	3,116	2,756	(360)
32 Land and structures	744	0	0	0	0
41 Grants, subsidies, and contributions	9,716	16,813	14,961	12,299	(2,662)
42 Insurance claims and indemnities	0	0	0	0	0
43 Interest and dividends	0	0	0	0	0
94 Financial transfers	0	0	0	0	0
99 Total Obligations	125,593	148,660	137,470	128,100	(9,370)

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
99 Total Obligations	125,593	148,660	137,470	128,100	(9,370)
Less Prior Year Recoveries	(2,000)	0	0	0	0
Less Prior Year Refunds	(100)	0	0	0	0
Less Prior Year Unobligated Balance	(1,783)	(13,475)	0	0	0
Plus Unobligated Balance, End of Year	13,475	0	0	0	0
Plus Unobligated Balance, Expired	0	0	0	0	0
Total Budget Authority	135,185	135,185	137,470	128,100	(9,370)
Transfer from Election Assistance Commission	0	0	0	0	0
Transfers from DoJ for Office of Law Enforcement Standards	0	0	0	0	0
Transfer from GSA for IT modernization	0	0	0	0	0
Appropriation	135,185	135,185	137,470	128,100	(9,370)

Personnel Data

Full-time Equivalent Employment:

Full-time permanent	259	270	270	270	0
Other than full-time permanent	24	24	24	24	0
Total	283	294	294	294	0

Authorized Positions:

Full-time permanent	333	306	306	306	0
Other than full-time permanent	8	8	8	8	0
Total	341	314	314	314	0

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
Budget Program: Core Metrology and Measurement Services
(Dollar amounts in thousands)

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
11 Personnel compensation					
11.1 Full-time permanent	\$168,672	\$134,863	\$134,900	\$134,900	0
11.3 Other than full-time permanent	14,021	11,625	11,694	11,694	0
11.5 Other personnel compensation	4,972	3,879	5,246	5,246	0
11.9 Total personnel compensation	187,665	150,367	151,840	151,840	0
12.1 Civilian personnel benefits	68,764	51,358	52,048	52,048	0
13 Benefits for former personnel	2,880	3,464	3,464	3,464	0
21 Travel and transportation of persons	2,730	2,762	2,632	1,574	(\$1,058)
22 Transportation of things	518	539	455	272	(183)
23.1 Rental payments to GSA	161	158	2,995	2,995	0
23.2 Rental payments to others	1,225	1,260	1,296	1,296	0
23.3 Communications, utilities, and miscellaneous charges	15,303	14,103	11,948	11,948	0
24 Printing and reproduction	182	185	191	114	(77)
25.1 Advisory and assistance services	936	952	1,002	599	(403)
25.2 Other services	10,347	34,643	18,967	6,633	(12,334)
25.3 Purchases of goods and services from government accounts	10,750	8,568	9,016	5,391	(3,625)
25.5 Research and development contracts	14,404	30,473	22,947	13,720	(9,227)
25.7 Operation and maintenance of equipment	3,204	2,394	1,557	931	(626)
26 Supplies and materials	3,498	2,107	2,342	1,400	(942)
31 Equipment	6,538	4,189	1,544	602	(942)
32 Land and structures	2,852	0	0	0	0
41 Grants, subsidies, and contributions	63,610	63,189	52,830	30,890	(21,940)
42 Insurance claims and indemnities	0	0	0	0	0
43 Interest and dividends	2	2	2	2	0
94 Financial transfers	500	500	500	500	0
99 Total Obligations	396,069	371,213	337,576	286,219	(51,357)

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
99 Total Obligations	396,069	371,213	337,576	286,219	(51,357)
Less Prior Year Recoveries	(5,206)	0	0	0	0
Less Prior Year Refunds	(320)	0	0	0	0
Less Prior Year Unobligated Balance	(33,692)	(37,748)	0	0	0
Plus Unobligated Balance, End of Year	37,748	0	0	0	0
Plus Unobligated Balance, Expired	0	0	0	0	0
Total Budget Authority	394,599	333,465	337,576	286,219	(51,357)
Transfer from Election Assistance Commission	0	0	0	0	0
Transfers from DoJ for Office of Law Enforcement Standards	(1,500)	(1,500)	0	(1,500)	(1,500)
Transfer from GSA for IT modernization	(4,300)	0	0	0	0
Appropriation	388,799	331,965	337,576	284,719	(52,857)

Personnel Data

Full-time Equivalent Employment:

Full-time permanent	994	1,010	1,010	1,010	0
Other than full-time permanent	103	103	103	103	0
Total	1,097	1,113	1,113	1,113	0

Authorized Positions:

Full-time permanent	1,285	1,165	1,165	1,165	0
Other than full-time permanent	23	23	23	23	0
Total	1,308	1,188	1,188	1,188	0

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
Budget Program: Exploratory Measurement R&D
(Dollar amounts in thousands)

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
11 Personnel compensation					
11.1 Full-time permanent	\$7,554	\$7,630	\$7,630	\$7,630	0
11.3 Other than full-time permanent	628	634	634	634	0
11.5 Other personnel compensation	223	225	225	225	0
11.9 Total personnel compensation	8,405	8,489	8,489	8,489	0
12.1 Civilian personnel benefits	3,085	3,116	3,178	3,178	0
13 Benefits for former personnel	0	0	0	0	0
21 Travel and transportation of persons	199	201	203	97	(\$106)
22 Transportation of things	19	19	19	10	(9)
23.1 Rental payments to GSA	0	0	0	0	0
23.2 Rental payments to others	40	40	40	40	0
23.3 Communications, utilities, and miscellaneous charges	500	505	510	511	1
24 Printing and reproduction	9	9	9	2	(7)
25.1 Advisory and assistance services	208	210	212	123	(89)
25.2 Other services	2,187	4,730	2,717	1,172	(1,545)
25.3 Purchases of goods and services from government accounts	2,387	2,411	2,435	1,436	(999)
25.5 Research and development contracts	3,198	3,230	3,262	1,862	(1,400)
25.7 Operation and maintenance of equipment	711	718	725	496	(229)
26 Supplies and materials	1,098	1,109	1,120	593	(527)
31 Equipment	1,732	1,749	1,766	1,187	(579)
32 Land and structures	0	0	0	0	0
41 Grants, subsidies, and contributions	1,102	1,113	1,124	804	(320)
42 Insurance claims and indemnities	0	0	0	0	0
43 Interest and dividends	0	0	0	0	0
94 Financial transfers	0	0	0	0	0
99 Total Obligations	24,880	27,649	25,809	20,000	(5,809)

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
99 Total Obligations	24,880	27,649	25,809	20,000	(5,809)
Less Prior Year Recoveries	0	0	0	0	0
Less Prior Year Refunds	0	0	0	0	0
Less Prior Year Unobligated Balance	(769)	(2,269)	0	0	0
Plus Unobligated Balance, End of Year	2,269	0	0	0	0
Plus Unobligated Balance, Expired	0	0	0	0	0
Total Budget Authority	26,380	25,380	25,809	20,000	(5,809)
Transfer from Election Assistance Commission	0	0	0	0	0
Transfers from DoJ for Office of Law Enforcement Standards	0	0	0	0	0
Transfer from GSA for IT modernization	0	0	0	0	0
Appropriation	26,380	25,380	25,809	20,000	(5,809)

Personnel Data

Full-time Equivalent Employment:

Full-time permanent	46	46	46	46	0
Other than full-time permanent	4	4	4	4	0
Total	50	50	50	50	0

Authorized Positions:

Full-time permanent	58	51	51	51	0
Other than full-time permanent	2	2	2	2	0
Total	60	53	53	53	0

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
Budget Program: Advanced Manufacturing Research and Development
(Dollar amounts in thousands)

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
11 Personnel compensation					
11.1 Full-time permanent	\$17,032	\$17,202	\$17,202	\$17,202	0
11.3 Other than full-time permanent	1,416	1,430	1,430	1,430	0
11.5 Other personnel compensation	502	507	507	507	0
11.9 Total personnel compensation	18,950	19,139	19,139	19,139	0
12.1 Civilian personnel benefits	6,539	6,604	6,736	6,736	0
13 Benefits for former personnel	36	0	0	0	0
21 Travel and transportation of persons	312	315	318	172	(\$146)
22 Transportation of things	27	27	27	15	(12)
23.1 Rental payments to GSA	0	0	0	0	0
23.2 Rental payments to others	74	75	76	76	0
23.3 Communications, utilities, and miscellaneous charges	932	941	950	950	0
24 Printing and reproduction	9	9	9	5	(4)
25.1 Advisory and assistance services	126	127	128	69	(59)
25.2 Other services	1,323	5,081	2,070	1,253	(817)
25.3 Purchases of goods and services from government accounts	1,445	1,959	1,979	1,073	(906)
25.5 Research and development contracts	1,935	1,954	1,974	469	(1,505)
25.7 Operation and maintenance of equipment	430	434	438	237	(201)
26 Supplies and materials	2,258	2,281	2,304	1,251	(1,053)
31 Equipment	5,247	5,299	5,352	2,901	(2,451)
32 Land and structures	0	0	0	0	0
41 Grants, subsidies, and contributions	2,322	3,345	2,635	1,511	(1,124)
42 Insurance claims and indemnities	0	0	0	0	0
43 Interest and dividends	0	0	0	0	0
94 Financial transfers	0	0	0	0	0
99 Total Obligations	41,965	47,590	44,135	35,857	(8,278)

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
99 Total Obligations	41,965	47,590	44,135	35,857	(8,278)
Less Prior Year Recoveries	0	0	0	0	0
Less Prior Year Refunds	0	0	0	0	0
Less Prior Year Unobligated Balance	(1,297)	(4,189)	0	0	0
Plus Unobligated Balance, End of Year	4,189	0	0	0	0
Plus Unobligated Balance, Expired	0	0	0	0	0
Total Budget Authority	44,857	43,401	44,135	35,857	(8,278)
Transfer from Election Assistance Commission	0	0	0	0	0
Transfers from DoJ for Office of Law Enforcement Standards	0	0	0	0	0
Transfer from GSA for IT modernization	0	0	0	0	0
Appropriation	44,857	43,401	44,135	35,857	(8,278)

Personnel Data

Full-time Equivalent Employment:

Full-time permanent	129	132	132	132	0
Other than full-time permanent	12	12	12	12	0
Total	141	144	144	144	0

Authorized Positions:

Full-time permanent	162	147	147	147	0
Other than full-time permanent	8	8	8	8	0
Total	170	155	155	155	0

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
Budget Program: Resilience and Fire Research
(Dollar amounts in thousands)

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
11 Personnel compensation					
11.1 Full-time permanent	\$19,322	\$19,515	\$19,515	\$19,515	0
11.3 Other than full-time permanent	1,606	1,622	1,622	1,622	0
11.5 Other personnel compensation	569	575	575	575	0
11.9 Total personnel compensation	<u>21,497</u>	<u>21,712</u>	<u>21,712</u>	<u>21,712</u>	<u>0</u>
12.1 Civilian personnel benefits	7,534	7,609	7,761	7,761	0
13 Benefits for former personnel	0	0	0	0	0
21 Travel and transportation of persons	564	570	576	322	(\$254)
22 Transportation of things	77	78	79	44	(35)
23.1 Rental payments to GSA	0	0	0	0	0
23.2 Rental payments to others	133	134	135	135	0
23.3 Communications, utilities, and miscellaneous charges	1,683	1,700	1,717	1,717	0
24 Printing and reproduction	7	7	7	4	(3)
25.1 Advisory and assistance services	282	285	288	161	(127)
25.2 Other services	2,964	2,994	963	538	(425)
25.3 Purchases of goods and services from government accounts	3,236	2,896	4,913	2,745	(2,168)
25.5 Research and development contracts	4,334	3,377	3,411	1,088	(2,323)
25.7 Operation and maintenance of equipment	964	974	984	550	(434)
26 Supplies and materials	3,311	2,844	2,872	1,604	(1,268)
31 Equipment	3,676	3,413	3,447	1,926	(1,521)
32 Land and structures	0	0	0	0	0
41 Grants, subsidies, and contributions	3,629	3,165	3,197	1,893	(1,304)
42 Insurance claims and indemnities	0	0	0	0	0
43 Interest and dividends	0	0	0	0	0
94 Financial transfers	0	0	0	0	0
99 Total Obligations	<u>53,891</u>	<u>51,758</u>	<u>52,062</u>	<u>42,200</u>	<u>(9,862)</u>

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
99 Total Obligations	53,891	51,758	52,062	42,200	(9,862)
Less Prior Year Recoveries	0	0	0	0	0
Less Prior Year Refunds	0	0	0	0	0
Less Prior Year Unobligated Balance	(1,666)	(562)	0	0	0
Plus Unobligated Balance, End of Year	562	0	0	0	0
Plus Unobligated Balance, Expired	0	0	0	0	0
Total Budget Authority	52,787	51,196	52,062	42,200	(9,862)
Transfer from Election Assistance Commission	0	0	0	0	0
Transfers from DoJ for Office of Law Enforcement Standards	0	0	0	0	0
Transfer from GSA for IT modernization	0	0	0	0	0
Appropriation	52,787	51,196	52,062	42,200	(9,862)

Personnel Data

Full-time Equivalent Employment:

Full-time permanent	144	148	148	148	0
Other than full-time permanent	12	12	12	12	0
Total	156	160	160	160	0

Authorized Positions:

Full-time permanent	183	163	163	163	0
Other than full-time permanent	10	10	10	10	0
Total	193	173	173	173	0

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
Budget Program: NIST Center for Neutron Research
(Dollar amounts in thousands)

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
11 Personnel compensation					
11.1 Full-time permanent	\$21,728	\$21,945	\$21,945	\$21,945	0
11.3 Other than full-time permanent	1,806	1,824	1,824	1,824	0
11.5 Other personnel compensation	640	646	646	646	0
11.9 Total personnel compensation	24,174	24,415	24,415	24,415	0
12.1 Civilian personnel benefits	8,963	9,053	9,234	9,234	0
13 Benefits for former personnel	0	0	0	0	0
21 Travel and transportation of persons	406	410	414	234	(\$180)
22 Transportation of things	87	88	89	50	(39)
23.1 Rental payments to GSA	0	0	0	0	0
23.2 Rental payments to others	132	133	134	134	0
23.3 Communications, utilities, and miscellaneous charges	1,668	1,685	1,702	1,702	0
24 Printing and reproduction	8	8	8	5	(3)
25.1 Advisory and assistance services	276	279	282	160	(122)
25.2 Other services	2,898	2,927	895	507	(388)
25.3 Purchases of goods and services from government accounts	3,164	2,145	2,166	1,226	(940)
25.5 Research and development contracts	4,238	4,280	4,633	1,865	(2,768)
25.7 Operation and maintenance of equipment	942	951	961	544	(417)
26 Supplies and materials	2,719	2,746	2,773	1,570	(1,203)
31 Equipment	1,018	1,028	1,038	588	(450)
32 Land and structures	0	0	0	0	0
41 Grants, subsidies, and contributions	6,880	5,449	5,503	3,049	(2,454)
42 Insurance claims and indemnities	0	0	0	0	0
43 Interest and dividends	0	0	0	0	0
94 Financial transfers	0	0	0	0	0
99 Total Obligations	57,573	55,597	54,247	45,283	(8,964)

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
99 Total Obligations	57,573	55,597	54,247	45,283	(8,964)
Less Prior Year Recoveries	0	0	0	0	0
Less Prior Year Refunds	0	0	0	0	0
Less Prior Year Unobligated Balance	(4,780)	(2,252)	0	0	0
Plus Unobligated Balance, End of Year	2,252	0	0	0	0
Plus Unobligated Balance, Expired	0	0	0	0	0
Total Budget Authority	55,045	53,345	54,247	45,283	(8,964)
Transfer from Election Assistance Commission	0	0	0	0	0
Transfers from DoJ for Office of Law Enforcement Standards	0	0	0	0	0
Transfer from GSA for IT modernization	0	0	0	0	0
Appropriation	55,045	53,345	54,247	45,283	(8,964)

Personnel Data

Full-time Equivalent Employment:

Full-time permanent	158	163	163	163	0
Other than full-time permanent	14	14	14	14	0
Total	172	177	177	177	0

Authorized Positions:

Full-time permanent	207	183	183	183	0
Other than full-time permanent	11	11	11	11	0
Total	218	194	194	194	0

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
Budget Program: Congressionally Directed Projects
(Dollar amounts in thousands)

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
11 Personnel compensation					
11.1 Full-time permanent	0	0	0	0	0
11.3 Other than full-time permanent	0	0	0	0	0
11.5 Other personnel compensation	0	0	0	0	0
11.9 Total personnel compensation	0	0	0	0	0
12.1 Civilian personnel benefits	0	0	0	0	0
13 Benefits for former personnel	0	0	0	0	0
21 Travel and transportation of persons	0	0	0	0	0
22 Transportation of things	0	0	0	0	0
23.1 Rental payments to GSA	0	0	0	0	0
23.2 Rental payments to others	0	0	0	0	0
23.3 Communications, utilities, and miscellaneous charges	0	0	0	0	0
24 Printing and reproduction	0	0	0	0	0
25.1 Advisory and assistance services	0	0	0	0	0
25.2 Other services	0	0	0	0	0
25.3 Purchases of goods and services from government accounts	0	0	0	0	0
25.5 Research and development contracts	0	0	0	0	0
25.7 Operation and maintenance of equipment	0	0	0	0	0
26 Supplies and materials	0	0	0	0	0
31 Equipment	0	0	0	0	0
32 Land and structures	0	0	0	0	0
41 Grants, subsidies, and contributions	\$5,400	\$406,042	\$405,331	0	(\$405,331)
42 Insurance claims and indemnities	0	0	0	0	0
43 Interest and dividends	0	0	0	0	0
94 Financial transfers	0	0	0	0	0
99 Total Obligations	5,400	406,042	405,331	0	(405,331)

Object Class		2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
99	Total Obligations	5,400	406,042	405,331	0	(405,331)
	Less Prior Year Recoveries	0	0	0	0	0
	Less Prior Year Refunds	0	0	0	0	0
	Less Prior Year Unobligated Balance	(6,111)	(711)	0	0	0
	Plus Unobligated Balance, End of Year	711	0	0	0	0
	Plus Unobligated Balance, Expired	0	0	0	0	0
	Total Budget Authority	0	405,331	405,331	0	(405,331)
	Transfer from Election Assistance Commission	0	0	0	0	0
	Transfers from DoJ for Office of Law Enforcement Standards	0	0	0	0	0
	Transfer from GSA for IT modernization	0	0	0	0	0
	Appropriation	0	405,331	405,331	0	(405,331)

Personnel Data

Full-time Equivalent Employment:

Full-time permanent				0	0	0
Other than full-time permanent				0	0	0

Total	0	0	0	0	0	0
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Authorized Positions:

Full-time permanent				0	0	0
Other than full-time permanent				0	0	0

Total	0	0	0	0	0	0
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**Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
BUDGET PROGRAM CHANGE CROSSWALK
Part 1 - 2026 Structure
(Dollar amounts in thousands)**

<u>Activity/Subactivity</u>	<u>2027 Direct Obligations</u>	<u>Proposed Changes</u>
Measurement Science, Services, and Programs		No change.
Laboratory Programs	\$649,013	Split its function in to the newly created seven activity-based focus research and services areas.
Corporate Services	15,188	Split its function in to the newly created seven activity-based focus research and services areas.
Standards Coordination and Special Programs	66,494	Split its function in to the newly created seven activity-based focus research and services areas.
Total STRS direct obligations	730,695	

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
BUDGET PROGRAM CHANGE CROSSWALK
Part 2 - 2027 Structure
(Dollar amounts in thousands)

<u>Budget Program</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>
Critical and Emerging Technology Measurement and Standards	138,550	223,275	171,303
Digital Technology Measurements and Standards	125,593	148,660	129,617
Core Metrology and Measurement Services	396,069	371,213	286,715
Exploratory Measurement R&D	24,880	27,649	19,846
Advanced Manufacturing R&D	41,965	47,590	35,774
Resilience and Fire Research	53,891	51,758	42,092
NIST Center for Neutron Research	57,573	55,597	45,312
Congressionally Directed Projects	5,400	406,042	0
Total STRS Direct Obligations	843,921	1,331,784	730,659

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
APPROPRIATION LANGUAGE AND CODE CITATIONS

1. For necessary expenses of the National Institute of Standards and Technology,

15 U.S.C. 272; 273; 278b-j; p

15 U.S.C. 290b-f

15 U.S.C. 1151-52

15 U.S.C. 1454(d-e)

15 U.S.C. 1511, 1512

15 U.S.C. 3710a-d

15 U.S.C. 3711a

15 U.S.C. 7301-7313

15 U.S.C. 7406

15 U.S.C. 7506(a)

15 U.S.C. 272; 273; 278b-j; provides basic authority for the performance of the functions and activities of the National Institute of Standards and Technology, authorizes appropriations for these purposes to be provided to the general public and specific institutions, governments, firms, and individuals, and requires the notification of Congress of a reprogramming of funds that exceeds a limit specified in public law.

15 U.S.C. 290b-f directs the Secretary of Commerce to provide for the collection, compilation, critical evaluation, publication, and dissemination of standard reference data and the authority to establish a non-agricultural technology office.

15 U.S.C. 1151-1152 establishes within the Department of Commerce, a central clearinghouse for technical information useful to American business and industry and provides for the dissemination of this technical, scientific information via the National Technical Information Service.

15 U.S.C. 1454(d-e) provides NIST with the authority to request that manufacturers and distributors of a commodity participate in voluntary product standards when there is undue proliferation of weights, measures, and quantities. Reports and recommendations to Congress are to be made upon industry failure to adopt these standards.

15 U.S.C. 1511, 1512 specifies that all bureaus of the Department of Commerce come under the authority of the Secretary of Commerce and that such bureaus including NIST shall be subject to the authority of the Secretary of Commerce.

15 U.S.C. 3710a-d provides the authority to enter into CRADAs, to make cash awards to scientific personnel for inventions, to retain royalties and to distribute royalties for inventions, and to communicate and coordinate for the Offices of Research and Technology Applications in Federal laboratories.

15 U.S.C. 3711a provides the authority for the Baldrige National Quality Award.

15 U.S.C. 7301-7313 establishes National Construction Safety Teams within NIST to respond to building and structural emergencies.

15 U.S.C. 7406 provides authority for NIST to conduct Cyber Security Research and Development to minimize security risks associated with computer systems used by the Federal government.

15 U.S.C. 7506(a) provides for the establishment of a nanotechnology research and development program within NIST.

P.L. 110-143 121 STAT 1809 provides NIST to assist in developing a research program to establish guidelines for the remediation of former methamphetamine laboratories in the United States as well as developing new detection technologies and appropriate Standard Reference Materials for methamphetamine detection testing.

2. \$729,159,000 to remain available until expended,
3. of which not to exceed \$9,000,000 may be transferred to the "Working Capital Fund." 15 U.S.C. 278b 15 U.S.C. 278b provides in part: "The National Institute of Standards and Technology is authorized to utilize in the performance of its functions the Working Capital Fund".
4. Public Law 110-69, America Competes Act, 121 Stat 572, passed August 9, 2007 reauthorizes the Scientific and Technical Research and Services appropriation through 2010. Public Law 111-358, America Competes Reauthorization Act, 2010, 124 Stat 3982, passed January 4, 2011 reauthorized the Scientific and Technical Research and Standards appropriation through 2013. In addition, an Emergency Communication and Tracking Technologies Research initiative and a Green Manufacturing and Construction initiative were authorized to develop advanced technologies in these areas.
5. Public Law 111-5, American Recovery and Reinvestment Act of 2009, made available funding to include \$20,000,000 via transfer from the Department of Health and Human Services for continued work on advancing health care information enterprise integration.
6. Public Law 113-274 Cybersecurity Enhancement Act of 2014 amended Section 2c of the National Institute of Standards and Technology Act (15 U.S.C. 272(c) and established a Public-Private collaboration on Cybersecurity by designating the Director of the Institute activities that facilitate and support on an ongoing basis the development of a voluntary, consensus-based, industry-led set of standards, guidelines, best practices, methodologies, procedures, and processes to cost-effectively reduce cyber risks to the critical infrastructure of the United States.
7. Public Law 116-136, The Coronavirus Aid, Relief, and Economic Security Act, (CARES Act), as enacted March 27, 2020 made available funding, \$6,000,000 for Scientific and Technical Research and Services "to remain available until September 30, 2021, to prevent, prepare for, and respond to coronavirus, domestically or internationally, by supporting continuity of operations, including measurement science to support viral testing and bio-manufacturing."
8. Public Law 117-43, Extending Government Funding and Delivering Emergency Assistance Act made available funding to include \$22,000,000 to remain available until September 30, 2023, and specific to carrying out investigations of building failures pursuant to the National Construction Safety Team Act of 2002.

9. Public Law 117-328, Consolidated Appropriations Act, 2023 made available funding to include \$40,000,000 to remain available until expended, and specific to investigate the impacts of hurricanes, typhoons, and wildfires in calendar year 2022 to support the development of resilience standards with regard to weather and climate disasters, in addition to the underlying research to support those standards, and for necessary expenses to carry out investigations of building failures pursuant to the National Construction Safety Team Act of 2002.

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
ADVISORY AND ASSISTANCE SERVICES
(Obligations in thousands of dollars)

	FY 2025 <u>Actual</u>	FY 2026 <u>Enacted</u>	FY 2027 <u>Estimate</u>
Consulting Services			
Management and professional support services.....	\$1,871	\$1,887	\$707
Studies, analyses, and evaluations.....	993	1,018	1,039
Engineering and technical services	<u>762</u>	<u>764</u>	<u>780</u>
Total.....	3,626	3,669	2,526

Significant Activities

Advisory and assistance services funded by the STRS appropriation include the review and evaluation of the technical functions and operations of NIST by the Board on Assessment of the National Academy of Sciences. The evaluation panels consider the importance and relative priority of projects, quality of staff, equipment needs, and finances, and the relation of the programs to the mission of NIST.

Need for Advisory and Assistance Services

The need for advisory and assistance services stems from the NIST role in dealing with the private sector, professional organizations, and the public sector. Inputs must be obtained from consultants who can bring their individual expertise to bear and help NIST in assessing its program plans to meet the needs of its customers. The alternative to utilizing these services is to make no attempt to have expertise from sources outside NIST and risk degradation of the working and professional relationship with those in the business of using the products and services offered by NIST.

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**Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services ^{1/}
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)**

	Positions	FTE	Budget Authority	Direct Obligations	Appropriation
Enacted, 2026	123	115	\$212,000	\$299,610	\$212,000
Less: Unobligated balance from prior year	0	0	0	(87,610)	0
2027 Base	123	115	212,000	212,000	212,000
Plus: Inflationary Adjustments to Base	0	0	492	492	492
Less: 2027 Program changes	(89)	(67)	(175,492)	(175,492)	(175,492)
Plus: Carryover from HMEP	0	0	0	6,000	0
2027 Estimate	34	48	37,000	43,000	37,000

Comparison by Budget Program with totals by Program

		2025 Actual		2026 Enacted		2027 Base		2027 Estimate		Increase/Decrease from 2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Hollings Manufacturing Extension Partnership	Pos./Approp	87	\$175,000	89	\$175,000	89	\$175,387	0	0	(89)	(\$175,387)
	FTE/Obl.	70	133,907	82	222,310	82	175,387	15	\$6,000	(67)	(169,387)
Manufacturing USA	Pos./Approp	34	37,000	34	37,000	34	37,105	34	37,000	0	(105)
	FTE/Obl.	33	35,679	33	77,300	33	37,105	33	37,000	0	(105)
TOTALS	Pos./Approp	121	212,000	123	212,000	123	212,492	34	37,000	(89)	(175,492)
	FTE/Obl.	103	169,586	115	299,610	115	212,492	48	43,000	(67)	(169,492)
Adjustments for											
Recoveries			(1,691)		0		0		0		0
Refunds			0		0		0		0		0
Unobligated balance, start of year			(43,505)		(87,610)		0		0		0
Unobligated balance, end of year			87,610		0		0		0		0
Budget Authority/Appropriation			212,000		212,000		212,492		43,000		(169,492)
Adjustments for											
Plus restoration of cancellation of anticipated recoveries			0		0		0		0		0
Plus restoration of unobligated balances rescission			0		0		0		0		0
Appropriation			0		212,000		212,492		43,000		(169,492)

^{1/} Doesn't include obligations of \$6,118.6M in FY 2026, and \$3,521.1M in FY 2027 funded by Mandatory CHIPS.

Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services
ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

	Positions	Amount
Transfers of Estimates		0
Adjustments		0
Financing		0
<hr/>		
Other Changes		
2026 Pay raise		67
2027 Pay raise		0
Awards		89
Full-year cost in 2027 of positions financed for part-year in 2026		0
Change in compensable days		0
Civil Service Retirement System (CSRS)		(3)
Federal Employees Retirement System (FERS)		(111)
Thrift Savings Plan		(21)
Federal Insurance Contribution Act (FICA) – OASDI		24
Health Insurance		195
Employees Compensation Fund		0
Travel:		
Mileage		0
Per Diem		3
GSA Furniture and IT Program (FIT)		0
Postage (Included in GPL adjustment)		0
Working Capital Fund, Departmental Management		0
Cybersecurity (Non-Add in WCF)		[0]
National Archives and Records Administration (NARA)		0
General Pricing Level (GPL) Adjustment		182
Telecommunications Services – Enterprise Infrastructure Services (EIS)		0
Human Resources – Pay, PAR, Benefits Direct Bill		0
HCHB Utilities		0
Federal Protective Service		0
Other changes unique to certain bureaus (e.g., grants, ship and aircraft costs)		67
Electricity / Natural Gas Rates		
Subtotal, other changes	0	492
Total, adjustments to base	0	492

Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Budget Program: Hollings Manufacturing Extension Partnership

		2025 Actual		2026 Enacted		2027 Base		2027 Estimate		Increase/Decrease from 2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Hollings Manufacturing	Pos./Approp	87	\$175,000	89	\$175,000	89	\$175,387	0	0	(89)	(\$175,387)
Extension Partnership	FTE/Obl.	70	133,907	82	222,310	82	175,387	15	\$6,000	(67)	(169,387)

Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services
JUSTIFICATION OF PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

Budget Program: Hollings Manufacturing Extension Partnership Program

Goal Statement

The Hollings Manufacturing Extension Partnership Program (MEP) is a public-private partnership program that provides U.S. small and medium-sized manufacturers (SMMs) with access to industry experts, resources, and technology. NIST MEP's mission is to enhance the productivity and technological performance of U.S. manufacturing. The MEP program serves SMMs through the MEP National Network that includes NIST MEP staff, MEP Centers located across the U.S. and Puerto Rico, and other federal, state, local, academic, and industry partners.

Base Program

MEP Centers are funded through a cost-sharing arrangement consisting of support from the Federal government, non-Federal sources including state and local government/entities, and fees charged to the manufacturing clients for services provided by the MEP Centers. The national network of MEP Centers developed a wide range of services and initiatives to enable manufacturers to identify opportunities that will accelerate and strengthen growth and competitiveness in the global marketplace. Each MEP Center works directly with area manufacturers to provide expertise and services such as product and market development tools and resources, lean consulting to improve operations and processes, supply chain optimization and domestic sourcing, growth services, and customized workforce development services. MEP Centers are the program's "boots-on-the-ground" and work directly with their local manufacturing communities to strengthen the competitiveness of the U.S. manufacturing base; in fiscal year 2025, MEP Centers reported nearly 1,400 manufacturing experts at 450 service delivery locations supporting manufacturers. MEP Centers also connect SMMs to new technologies, technical infrastructure, and specialized knowledge. NIST MEP provides technical assistance in food safety best practices, accelerating the adoption of advanced manufacturing technologies, addressing emerging manufacturing needs, exporting and international business, adapting to artificial intelligence (AI) capabilities from industry, advising on cybersecurity of supply chains, and transferring technology from NIST Laboratories and other Federal research organizations.

In 1988, Congress passed the Omnibus Trade and Competitiveness Act of 1988 (P.L. 100-418) that created a program within NIST to assist U.S. manufacturing through cooperative efforts. The statute was amended in the America COMPETES Acts of 2007 and 2010 and MEP was reauthorized through the American Innovation and Competitiveness Act (P.L. 114-329), which was signed into law January 2017.

Statement of Operating Objectives

MEP serves as the primary source of assistance for growth-oriented U.S.-based SMMs, supporting operational resiliency and preparedness in responding to critical immediate and long-term needs.

Explanation and Justification

		2025 Actual		2026 Enacted		2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Hollings Manufacturing Extension Partnership Program	Pos./BA	89	\$175,000	89	\$175,000	89	\$175,387
	FTE/Obl	70	133,907	82	222,310	82	175,387

**Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services
PROGRAM CHANGES FOR 2027**
(Dollar amounts in thousands)

Budget Program: Hollings Manufacturing Extension Partnership Program
Project Change: Hollings Manufacturing Extension Partnership Program Elimination

		2027 Base		2027 Estimate		Increase/Decrease from 2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Hollings Manufacturing Extension	Pos/BA	89	\$175,387	0	0	(89)	(\$175,387)
Partnership Program Elimination	FTE/Obl.	82	\$175,387	15	\$6,000	(67)	(\$169,387)

Hollings Manufacturing Extension Partnership Program Elimination (-\$175,387 -67 FTE/-89 Positions) – The FY 2027 President’s Budget eliminates federal funding for NIST MEP and requests that FY 2026 carryover funds be used to cover the costs associated with an orderly shutdown of the program. MEP centers receive funding under five-year cooperative agreements with a federal/non-federal cost share; no federal center funding will be provided in FY 2027 and centers will be required to change to an entirely self-supporting basis.

**Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services
PROGRAM CHANGE PERSONNEL DETAIL**

Budget Program: Hollings Manufacturing Extension Partnership Program
Project Change: Hollings Manufacturing Extension Partnership Program Elimination

<u>Full-time permanent</u>					
Title		Grade	Number	Annual Salary	Total Salaries
ADMIN SUPPORT CLK OA		ZS II	(1)	\$54,160	(\$54,160)
ADMV OFFCR		ZA IV	(2)	187,093	(374,186)
ADMV SPECLST		ZA III	(2)	133,142	(266,284)
ADMV SPECLST		ZA II	(1)	101,097	(101,097)
DEP DIR MFG EXT PARTNERSHIP PROG		ZA V	(1)	197,200	(197,200)
GEN BUS SPECLST		ZA IV	(2)	187,093	(374,186)
GEN BUS SPECLST		ZA III	(3)	133,142	(399,426)
GEN ENGR		ZP III	(3)	133,142	(399,426)
INDL SPECLST		ZA V	(1)	197,200	(197,200)
INDL SPECLST		ZA IV	(6)	187,093	(1,122,558)
INDL SPECLST		ZA III	(3)	133,142	(399,426)
INF SPECLST		ZA IV	(4)	187,093	(748,372)
INF SPECLST		ZA III	(1)	133,142	(133,142)
IT PROJ MGR		ZP IV	(2)	187,093	(374,186)
IT SPECIALIST (SECURITY)		ZP IV	(3)	187,093	(561,279)
ITSPEC (CUSTSPT)		ZP III	(2)	133,142	(266,284)
ITSPEC (SYSANALYSIS)		ZP IV	(2)	187,093	(374,186)
MGMT & PROG ANAL		ZA IV	(22)	187,093	(4,116,046)
MGMT & PROG ANAL		ZA III	(2)	133,142	(266,284)
PHYS SCNTST		ZP IV	(2)	187,093	(374,186)
STATCN		ZP III	(2)	133,142	(266,284)
SUPVY ADMIN & FINANCIAL MGMT SPECLST		ZA V	(2)	197,200	(394,400)
SUPVY BUSINESS & IND SPECLST		ZA V	(3)	197,200	(591,600)
SUPVY GEN ENGR		ZP V	(2)	197,200	(394,400)
SUPVY INDL SPECLST		ZA V	(2)	197,200	(394,400)

SUPVY INDL SPECLST		ZA IV	(2)	187,093	(374,186)
SUPVY MGMT & PROG ANAL		ZA V	(1)	197,200	(197,200)
SUPVY MGMT & PROG ANAL		ZA IV	(5)	187,093	(935,465)
SUPVY PROG MGR		ZA V	(1)	197,200	(197,200)
Administrative/technical support		ZA II	(4)	93,603	(374,412)
Total			(89)		(15,218,661)
Less lapse	25%		22		3,804,665
Total full-time permanent (FTE)			(67)		(11,413,996)
2027 pay Adjustment (0.0%)					0
					(11,413,996)
Personnel Data Summary					
<u>Full-time Equivalent Employment (FTE)</u>					
Full-time permanent			(67)		
Part-time permanent			0		
Full-time temporary			0		
Part-time temporary			0		
Total FTE			(67)		
<u>Authorized Positions</u>					
Full-time permanent			(89)		
Part-time permanent			0		
Full-time temporary			0		
Part-time temporary			0		
Total Authorized Positions			(89)		

Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations amounts in thousands)

Budget Program: Hollings Manufacturing Extension Partnership Program
Project Change: Hollings Manufacturing Extension Partnership Program Elimination

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
11.1 Full-time permanent compensation	\$10,470	\$12,477	\$12,308	\$2,200	(\$10,108)
11.3 Other than full-time permanent	1,190	1,280	883	0	(883)
11.5 Other personnel compensation	289	342	423	0	(423)
11.8 Special personnel services payments	0	0	0	0	0
11.9 Total personnel compensation	11,949	14,099	13,614	2,200	(11,414)
12.1 Civilian personnel benefits	4,326	5,073	5,156	800	(4,356)
13 Benefits for former personnel	300	0	0	0	0
21 Travel and transportation of persons	150	305	308	0	(308)
22 Transportation of things	4	6	6	0	(6)
23 Rent, communications, and utilities	0	0	0	0	0
23.1 Rental payments to GSA	8	9	9	0	(9)
23.2 Rental payments to others	0	0	0	0	0
23.3 Communications, utilities, and misc. charges	1,065	1,353	1,410	0	(1,410)
24 Printing and reproduction	7	5	5	0	(5)
25 Other contractual services	0	0	0	0	0
25.1 Advisory and assistance services	8	0	0	0	0
25.2 Other services from non-Federal sources	1,569	3,992	48,686	2,500	(46,186)
25.3 Other goods and services from Federal sources	1,602	1,718	1,722	500	(1,222)
25.4 Operation and maintenance of facilities	0	0	0	0	0
25.5 Research and development contracts	0	0	2	0	(2)
25.6 Medical care	0	0	0	0	0
25.7 Operation and maintenance of equipment	51	750	381	0	(381)
25.8 Subsistence and support of persons	0	0	0	0	0
26 Supplies and materials	71	555	567	0	(567)
31 Equipment	52	625	470	0	(470)
32 Lands and structures	0	0	0	0	0
33 Investments and loans	0	0	0	0	0
41 Grants, subsidies and contributions	112,745	193,820	103,051	0	(103,051)
42 Insurance claims and indemnities	0	0	0	0	0
43 Interest and dividends	0	0	0	0	0
44 Refunds	0	0	0	0	0
99.9 Total obligations	\$133,907	\$222,310	\$175,387	\$6,000	(\$169,387)

Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Budget Program: Manufacturing USA

		2025 Actual		2026		2027 Base		2027 Estimate		Increase/Decrease from 2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Manufacturing USA	Pos./Approp	34	\$37,000	34	\$37,000	34	\$37,105	34	\$37,000	0	(\$105)
	FTE/Obl.	33	35,679	33	77,300	33	37,105	33	37,000	0	(105)

Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services
JUSTIFICATION OF PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

Budget Program: Manufacturing USA

Goal Statement

The primary goal of the Manufacturing USA program is to accelerate the development of new manufacturing technologies for rapid scale up of U.S. discoveries. Industry and academic researchers work together to create advanced manufacturing products and processes that benefit entire industry sectors in areas of critical national needs. The Manufacturing USA program also focuses on workforce training and upskilling current workers in new and advanced technologies, including training veterans and incumbent workers for high-skill, high-paying jobs for the advanced manufacturing workforce.

Program Description

The base request provides funds for Federal investment in the Manufacturing USA program, which increases U.S. global competitiveness by creating an effective public-private manufacturing research environment for U.S. industry to solve critical manufacturing challenges. Manufacturing USA consists of industry-led institutes with Federal funding matched by an equal or greater amount of non-Federal support over a 5 to 7-year period. Federal sponsorship may be renewed after a rigorous assessment process.

Each institute has a unique technical concentration that can benefit an entire industry sector. Industry, academia, and government partners leverage existing resources, co-invest in collaborative projects to drive manufacturing innovation and accelerate commercialization. As an anchor for sustained manufacturing innovation partnerships, the institutes create, showcase, and deploy new capabilities, new products, and new processes. They build workforce skills at all levels and enhance manufacturing capabilities in companies (large and small). Base funding allows continued support for program operations. Within the institutes, stakeholders collaborate to co-invest to mature technology in industrially relevant settings. The outcome is derisked technology lowering investment barriers for commercial application of new manufacturing processes.

The budget request continues program coordination and network support of Manufacturing USA institutes, which by the end of FY 2026 should stand at two institutes sponsored by the Department of Commerce, nine by the Department of War, and seven by the Department of Energy. Critically, the budget includes funding for two Commerce-sponsored institutes to accelerate innovation for biopharmaceuticals and AI for resilient manufacturing. These investments support manufacturing technology development in emerging priority areas.

Other Manufacturing USA program accomplishments and industry impacts can be found at: <https://www.manufacturingusa.com/>.

Statement of Operating Objectives

As part of efforts to revitalize U.S. manufacturing and ensure U.S. global leadership, NIST proposed and Congress authorized a network of manufacturing innovation institutes where researchers, companies, universities, community colleges, and entrepreneurs come together to develop new manufacturing technologies with broad applications. These institutes also train the workforce, including returning veterans, needed to address a shortage of qualified workers in advanced manufacturing industries. The primary objective is to ensure that American innovations and inventions, currently going offshore for production, would be scaled up from laboratory experiments to an industrial level in the U.S. by developing new manufacturing processes to be used by entire industry sectors. The program is designed to meet broad industry needs across sectors, with priority given to address national advanced manufacturing-related needs, such as artificial intelligence, cybersecurity, quantum information, and bio technologies.

Each Manufacturing USA institute will continue to have a unique technology focus with the objective of creating robust regional manufacturing hubs that have national impact. The institutes support an ecosystem of manufacturing activity in regions of the U.S., enabling redevelopment of domestic supply chains in areas of advanced technology. The Manufacturing USA institutes support manufacturing technology commercialization by helping to bridge the gap from the laboratory to the market, and address core gaps in scaling U.S. manufacturing process technologies.

Explanation and Justification

		2025 Actual		2026 Enacted		2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Manufacturing USA	Pos./BA	34	\$37,000	34	\$37,000	34	\$37,105
	FTE/Obl	33	35,679	33	77,300	33	37,105

Manufacturing USA will continue to promote direct and broad collaboration on industry-relevant research and development to make sure that innovations developed in the U.S. are also manufactured in the U.S. rather than other countries. Institutes will continue to facilitate the adoption of new manufacturing technologies, tools, and methodologies that make U.S. manufacturers more competitive. Manufacturing USA emphasizes outreach and engagement with manufacturing enterprises of all sizes. DOC’s industry-driven Innovation Institutes bridge a key market failure in the U.S. innovation ecosystem, which is even more pronounced in advanced manufacturing. U.S. manufacturers individually are challenged to fund these technological development functions, and small manufacturers especially struggle with individually investing in prototyping and scale up of new technologies and products. NIST is required by Congress to convene, support, and coordinate the network of all Manufacturing USA institutes, including the existing institutes at the Department of War and Department of Energy.

**Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services
PROGRAM CHANGES FOR 2027**
(Dollar amounts in thousands)

Budget Program: Manufacturing USA Program
Project Change: Manufacturing USA Program Reduction of Offset Inflationary Costs

		2027 Base		2027 Estimate		Increase/Decrease from 2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Manufacturing USA Program	Pos/BA	34	\$37,105	34	\$37,000	0	(\$105)
Reduction of Offset Inflationary Costs	FTE/Obl.	33	\$37,105	33	\$37,000	0	(\$105)

Manufacturing USA Program Reduction to Offset Inflationary Costs (-\$105 thousand, 0 FTE / 0 Position) – Manufacturing USA will maintain the external funding levels for existing Institutes at the FY 2026 levels. However, to offset inflationary costs in FY 2027, the program will reduce internal spending within the program’s Institute coordination budget by \$105 thousand.

Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations amounts in thousands)

Budget Program: Manufacturing USA
Project Change: Manufacturing USA Program Reduction of Offset Inflationary Costs

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
11.1 Full-time permanent compensation	\$4,761	\$5,016	\$5,028	\$5,028	0
11.3 Other than full-time permanent	481	559	560	560	0
11.5 Other personnel compensation	129	178	187	187	0
11.8 Special personnel services payments	0	0	0	0	0
11.9 Total personnel compensation	5,371	5,753	5,775	5,775	0
12.1 Civilian personnel benefits	1,974	2,268	2,285	2,285	0
13 Benefits for former personnel	0	0	0	0	0
21 Travel and transportation of persons	139	140	141	141	0
22 Transportation of things	14	14	14	14	0
23 Rent, communications, and utilities	0	0	0	0	0
23.1 Rental payments to GSA	3	3	3	3	0
23.2 Rental payments to others	0	0	0	0	0
23.3 Communications, utilities, and misc. charges	424	432	450	450	0
24 Printing and reproduction	5	5	5	5	0
25 Other contractual services	0	0	0	0	0
25.1 Advisory and assistance services	8	8	8	8	0
25.2 Other services from non-Federal sources	1,506	1,507	1,540	1,435	(\$105)
25.3 Other goods and services from Federal sources	718	730	739	739	0
25.4 Operation and maintenance of facilities	0	0	0	0	0
25.5 Research and development contracts	0	0	0	0	0
25.6 Medical care	0	0	0	0	0
25.7 Operation and maintenance of equipment	88	96	98	98	0
25.8 Subsistence and support of persons	0	0	0	0	0
26 Supplies and materials	77	78	80	80	0
31 Equipment	60	63	64	64	0
32 Lands and structures	0	0	0	0	0
33 Investments and loans	0	0	0	0	0
41 Grants, subsidies and contributions	25,292	66,203	25,903	25,903	0
42 Insurance claims and indemnities	0	0	0	0	0
43 Interest and dividends	0	0	0	0	0
44 Refunds	0	0	0	0	0
99.9 Total obligations	\$35,679	\$77,300	\$37,105	\$37,000	(\$105)

Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
11 Personnel compensation					
11.1 Full-time permanent	\$15,231	\$17,493	\$17,336	\$7,228	(\$10,108)
11.3 Other than full-time permanent	1,671	1,839	1,443	560	(883)
11.5 Other personnel compensation	418	520	610	187	(423)
11.9 Total personnel compensation	<u>17,320</u>	<u>19,852</u>	<u>19,389</u>	<u>7,975</u>	<u>(11,414)</u>
12.1 Civilian personnel benefits	6,300	7,341	7,441	3,085	(4,356)
13 Benefits for former personnel	300	0	0	0	0
21 Travel and transportation of persons	289	445	449	141	(308)
22 Transportation of things	18	20	20	14	(6)
23.1 Rental payments to GSA	11	12	12	3	(9)
23.2 Rental payments to others	0	0	0	0	0
23.3 Communications, utilities, and miscellaneous charges	1,489	1,785	1,860	450	(1,410)
24 Printing and reproduction	12	10	10	5	(5)
25.1 Advisory and assistance services	16	8	8	8	0
25.2 Other services from non-Federal sources	3,075	5,499	50,226	3,935	(46,291)
25.3 Other goods and services from Federal sources	2,320	2,448	2,461	1,239	(1,222)
25.5 Research and development contracts	0	0	2	0	(2)
25.7 Operation and maintenance of equipment	139	846	479	98	(381)
26 Supplies and materials	148	633	647	80	(567)
31 Equipment	112	688	534	64	(470)
32 Land and structures	0	0	0	0	0
41 Grants, subsidies, and contributions	138,037	260,023	128,954	25,903	(103,051)
43 Interest and dividends	0	0	0	0	0
99 Total Obligations	<u>169,586</u>	<u>299,610</u>	<u>212,492</u>	<u>43,000</u>	<u>(169,492)</u>

Object Class		2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
99	Total Obligations	\$169,586	\$299,610	\$212,492	\$43,000	(\$169,492)
	Prior year recoveries	(1,691)	0		0	0
	Less prior year refunds	0	0	0	0	0
	Less prior year unobligated balance	(43,505)	(87,610)	0	0	0
	Plus unobligated balance end of year	87,610	0	0	0	0
	Anticipated recoveries	0	0	0	0	0
	Total Budget Authority/Appropriation	212,000	212,000	212,492	43,000	(169,492)

Personnel Data

Full-time equivalent employment:

Full-time permanent	99	111	112	47	(65)
Other than full-time permanent	4	4	3	1	(2)
Total	103	115	115	48	(67)

Authorized Positions:

Full-time permanent	118	118	118	32	(86)
Other than full-time permanent	5	5	5	2	(3)
Total	123	123	123	34	(89)

Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services
Budget Program: Hollings Manufacturing Extension Partnership
SELECT ACTIVITIES BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
11 Personnel compensation					
11.1 Full-time permanent	\$10,470	\$12,477	\$12,308	\$2,200	(\$10,108)
11.3 Other than full-time permanent	1,190	1,280	883	0	(883)
11.5 Other personnel compensation	289	342	423	0	(423)
11.9 Total personnel compensation	11,949	14,099	13,614	2,200	(11,414)
12.1 Civilian personnel benefits	4,326	5,073	5,156	800	(4,356)
13 Benefits for former personnel	300	0	0	0	0
21 Travel and transportation of persons	150	305	308	0	(308)
22 Transportation of things	4	6	6	0	(6)
23.1 Rental payments to GSA	8	9	9	0	(9)
23.2 Rental payments to others	0	0	0	0	0
23.3 Communications, utilities, and miscellaneous charges	1,065	1,353	1,410	0	(1,410)
24 Printing and reproduction	7	5	5	0	(5)
25.1 Advisory and assistance services	8	0	0	0	0
25.2 Other services from non-Federal sources	1,569	3,992	48,686	2,500	(46,186)
25.3 Other goods and services from Federal sources	1,602	1,718	1,722	500	(1,222)
25.5 Research and development contracts	0	0	2	0	(2)
25.7 Operation and maintenance of equipment	51	750	381	0	(381)
26 Supplies and materials	71	555	567	0	(567)
31 Equipment	52	625	470	0	(470)
32 Land and structures	0	0	0	0	0
41 Grants, subsidies, and contributions	112,745	193,820	103,051	0	(103,051)
43 Interest and dividends	0	0	0	0	0
99 Total Obligations	133,907	222,310	175,387	6,000	(169,387)

Object Class		2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
99	Total Obligations	\$133,907	\$222,310	\$175,387	\$6,000	(\$169,387)
	Less prior year recoveries	(1,576)	0	0	0	0
	Less prior year refunds	0	0	0	0	0
	Less prior year unobligated balance	(4,641)	(47,310)	0	0	0
	Plus unobligated balance end of year	47,310	0	0	0	0
	Less anticipated recoveries	0	0	0	0	0
	Total Budget Authority/Appropriation	175,000	175,000	175,387	6,000	(169,387)

Personnel Data

Full-time equivalent employment:

Full-time permanent	68	80	80	15	(65)
Other than full-time permanent	2	2	2	0	(2)
Total	70	82	82	15	(67)

Authorized Positions:

Full-time permanent	86	86	86	0	(86)
Other than full-time permanent	3	3	3	0	(3)
Total	89	89	89	0	(89)

Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services
Budget Program: Manufacturing USA
SELECT ACTIVITIES BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
11 Personnel compensation					
11.1 Full-time permanent	\$4,761	\$5,016	\$5,028	\$5,028	0
11.3 Other than full-time permanent	481	559	560	560	0
11.5 Other personnel compensation	129	178	187	187	0
11.9 Total personnel compensation	<u>5,371</u>	<u>5,753</u>	<u>5,775</u>	<u>5,775</u>	<u>0</u>
12.1 Civilian personnel benefits	1,974	2,268	2,285	2,285	0
13 Benefits for former personnel	0	0	0	0	0
21 Travel and transportation of persons	139	140	141	141	0
22 Transportation of things	14	14	14	14	0
23.1 Rental payments to GSA	3	3	3	3	0
23.2 Rental payments to others	0	0	0	0	0
23.3 Communications, utilities, and miscellaneous charges	424	432	450	450	0
24 Printing and reproduction	5	5	5	5	0
25.1 Advisory and assistance services	8	8	8	8	0
25.2 Other services from non-Federal sources	1,506	1,507	1,540	1,435	(\$105)
25.3 Other goods and services from Federal sources	718	730	739	739	0
25.5 Research and development contracts	0	0	0	0	0
25.7 Operation and maintenance of equipment	88	96	98	98	0
26 Supplies and materials	77	78	80	80	0
31 Equipment	60	63	64	64	0
32 Land and structures	0	0	0	0	0
41 Grants, subsidies, and contributions	25,292	66,203	25,903	25,903	0
42 Insurance claims and indemnities	0	0	0	0	0
43 Interest and dividends	0	0	0	0	0
99 Total Obligations	<u>35,679</u>	<u>77,300</u>	<u>37,105</u>	<u>37,000</u>	<u>(105)</u>

Object Class		2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
99	Total Obligations	\$35,679	\$77,300	\$37,105	\$37,000	(\$105)
	Less prior year recoveries	(115)	0	0	0	0
	Less prior year refunds	0	0	0	0	0
	Less prior year unobligated balance	(38,864)	(40,300)	0	0	0
	Plus unobligated balance end of year	40,300	0	0	0	0
			0			
	Total Budget Authority/Appropriation	37,000	37,000	37,105	37,000	(105)
	Offset or recoveries of prior year obligations (P.L. 115-31)	0	0	0	0	0
	Plus Unobligated Balance Rescission	0	0	0	0	0
	Total Appropriation	37,000	37,000	37,105	37,000	(105)

Personnel Data

Full-time equivalent employment:

Full-time permanent	31	31	32	32	0
Other than full-time permanent	2	2	1	1	0
Total	33	33	33	33	0

Authorized Positions:

Full-time permanent	32	32	32	32	0
Other than full-time permanent	2	2	2	2	0
Total	34	34	34	34	0

**Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services
APPROPRIATION LANGUAGE AND CODE CITATIONS**

1. For necessary expenses of the Industrial Technology Services appropriation of the National Institute of Standards and Technology,

15 U.S.C. 271 et seq.
15 U.S.C. 272(b)(1) and (b)(4)
15 U.S.C. 278b
15 U.S.C. 278k
15 U.S.C. 278l
15 U.S.C. 278n
15 U.S.C. 278r
15 U.S.C. 7506(a)(2)

15 U.S.C. 271 et seq. provides NIST's organic authorities.

15 U.S.C. 272(b)(1) authorizes the Secretary, through the Director of NIST, to assist industry in the development of technology and procedures needed to improve quality, to modernize manufacturing processes, to ensure product reliability, manufacturability, functionality, and cost-effectiveness, and to facilitate more rapid commercialization, especially by small- and medium-sized companies throughout the United States, of products based on new scientific discoveries in fields such as automation, electronics, advanced materials, biotechnology, and optical technologies.

15 U.S.C. 272(b)(4) authorizes the Secretary, through the Director of NIST, to enter into contracts, including cooperative research and development arrangements and grants and cooperative agreements, in furtherance of the purposes of the NIST Act.

15 U.S.C. 278b provides for a Working Capital Fund to support NIST activities.

15 U.S.C. 278k directs the Secretary, through the Director of NIST, to provide assistance for the creation of Regional Centers for the Transfer of Manufacturing Technology.

15 U.S.C. 278l provides authority for technical assistance to State technology programs.

15 U.S.C. 278n established the Advanced Technology Program within NIST to assist U.S. businesses in applying generic technology and research results to commercialize scientific discoveries and refine manufacturing technologies. Public Law 110-69 signed on August 9, 2007 has now abolished the Advanced Technology Program (ATP).

15 U.S.C. 7506(a)(2) instructs the NIST Director to utilize the Manufacturing Extension Partnership program to the extent possible to ensure that basic research on issues related to the development and manufacture of nanotechnology, including metrology; reliability and quality assurance; processes control; and manufacturing best practices reaches small- and medium-sized manufacturing companies.

2. For necessary expenses for industrial technology services, \$37,000,000, to remain available until expended, of which zero shall be for the Hollings Manufacturing Extension Partnership, and of which \$37,000,000 shall be for the Manufacturing USA Program (formerly known as the National Network for Manufacturing Innovation).
3. Public Law 110-69, America Competes Act, 121 Stat 572, enacted August 9, 2007 reauthorized the Industrial Technology Services appropriation through 2010. In addition, it eliminated the Advanced Technology Program (ATP) and established the Technology Innovation Program (TIP) which provides grants to eligible companies or joint ventures whose proposed technology has strong potential to address critical national needs. It also amended 15 U.S.C. 3711 by changing the name of the National Medal of Technology from "Technology Medal" to "Technology and Innovation Medal".
4. Public Law 111-358, America Competes Reauthorization Act, 2010, 124 Stat 3982, enacted January 4, 2011 reauthorized the Industrial Technology Services appropriation through 2013 to include the Manufacturing Extension Partnership Program (MEP) and the Malcolm Baldrige National Quality Award program. In addition, authorization is provided for an Innovative Services Initiative to assist small and medium-sized manufacturers within the MEP program.
5. Public Law 112-55, Consolidated and Further Continuing Appropriations Act, 2012, 125 Stat 552, enacted November 18, 2011 did not contain funding for the Technology Innovation Program (TIP) and the Baldrige Performance Excellence Program (BPEP).
6. Public Law 113-235, Consolidated and Further Continuing Appropriations Act, 2015, 128 Stat 2130, enacted December 16, 2014 amends 15 U.S.C. 271 et seq by establishing the Network for Manufacturing Innovation Program within the Industrial Technology Services appropriation to facilitate access to capital-intensive infrastructure in order to transition innovative technologies into scalable, cost-effective, and high-performing manufacturing capabilities thereby stimulating U.S. leadership in advanced manufacturing research, innovation, and technology. As part of the program, the Secretary shall establish a network of centers for manufacturing innovation. Funding for the program is as follows: "to the extent provided for in advance by appropriations Acts the Secretary may use not to exceed \$5,000,000 for each of the fiscal years 2015 through 2024 to carry out this section from amounts appropriated to the Institute for Industrial Technical Services" and, "to the extent provided for in advance by appropriations Acts, the Secretary of Energy may transfer to the Institute not to exceed \$250,000,000 for the period encompassing fiscal years 2015 through 2024 from amounts appropriated for advanced manufacturing research and development within the Energy Efficiency and Renewable Energy account for the Department of Energy."
7. Public Law 114-113, Consolidated Appropriations Act, 2016, enacted on December 18, 2015 did not contain funding for the Advanced Manufacturing Technology Consortia. The accompanying Explanatory Statement contained language which moved the program into the National Network for Manufacturing Innovation as follows: "The agreement also merges the activities of the Advanced Manufacturing Technology Consortia (AMTech) into NNMI (National Network for Manufacturing Innovation)."

8. Public Law 116-136, The Coronavirus Aid, Relief, and Economic Security Act, (CARES Act), as enacted March 27, 2020 made available funding, \$60,000,000 for Industrial Technology Services, “to remain available until September 30, 2021, to prevent, prepare for, and respond to coronavirus, domestically or internationally: *Provided*, That of the amount provided under this heading in this Act, \$50,000,000 shall be for the Hollings Manufacturing Extension Partnership to assist manufacturers to prevent, prepare for, and respond to coronavirus and \$10,000,000 shall be for the National Network for Manufacturing Innovation (also known as “Manufacturing USA”) to prevent, prepare for, and respond to coronavirus, including to support development and manufacturing of medical counter-measures and biomedical equipment and supplies.”
9. Public Law 117-238, Consolidated Appropriations Act, 2023 made available funding to include \$27,000,000 to remain available until expended, and specific to implement the Research and Development, Competition, and Innovation Act (division B of Public Law 117-167), of which \$13,000,000 shall be for the Hollings Manufacturing Extension Partnership, and of which \$14,000,000 shall be for the Manufacturing USA Program.
10. Division B of Public Law 117-167, Research and Development, Competition, and Innovation Act, 136 Stat 1366, passed August 9, 2022 reauthorized the Industrial Technology Services appropriation through 2027.

**Department of Commerce
National Institute of Standards and Technology
Industrial Technology Services
ADVISORY AND ASSISTANCE SERVICES**
(Obligations in thousands of dollars)

	FY 2025 <u>Actual</u>	FY 2026 <u>Enacted</u>	FY 2027 <u>Estimate</u>
Consulting Services			
Management and professional support services.....	0	0	0
Studies, analyses, and evaluations.....	0	0	0
Engineering and technical services	<u>\$16</u>	<u>\$8</u>	<u>\$8</u>
Total.....	0	0	0

Significant Activities

Advisory and assistance services funded by the Industrial Technology Services appropriation are used to conduct evaluations of the programmatic outcomes, service delivery efficiency, and internal infrastructure requirements of the MEP Program and Manufacturing USA Program.

Need for Advisory and Assistance Services

The need for advisory and assistance services stems from the role of NIST’s extramural programs with its outside partners and small businesses to relate to the private sector, professional organizations, and the public sector. Inputs must be obtained from consultants who can bring their individual expertise to bear and help NIST in assessing its program plans to meet the needs of its customers. These services provide for economic assessment and external evaluation of NIST’s extramural programs.

**Department of Commerce
National Institute of Standards and Technology
Construction of Research Facilities
SUMMARY OF RESOURCE REQUIREMENTS**
(Dollar amounts in thousands)

	Positions	FTE	Budget Authority	Direct Obligations	Appropriation
Enacted, 2026	156	151	\$385,897	\$402,507	\$385,897
Less: Unobligated balance from prior year	0	0	0	(16,610)	0
2027 Adjustments to Base					
Plus: Inflationary adjustments to base	0	0	2,354	2,354	2,354
2027 Base	156	151	388,251	388,251	388,251
Less: Inflationary adjustments to base			(2,354)	(2,354)	(2,354)
Less: 2027 Program changes	(4)	(3)	(298,139)	(298,139)	(298,139)
2027 Estimate	152	148	87,758	87,758	87,758

**Comparison by Budget Program
with totals by Project**

		2025		2026		2027		2027		Increase/Decrease	
		Actual		Enacted		Base		Estimate		from 2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Construction and Major Renovations											
CMR, SCMMR and	Pos/Approp	148	\$87,758	156	\$385,897	156	\$388,251	152	\$87,758	(4)	(\$300,493)
External Projects	FTE/Obl.	144	89,323	151	402,507	151	388,251	148	87,758	(3)	(300,493)
Adjustments for											
Recoveries			(2,437)		0		0		0		0
Refunds			0		0		0		0		0
Unobligated balance, start of year			(15,738)		(16,610)		0		0		0
Unobligated balance, end of year			16,610		0		0		0		0
Financing from transfers:											
Transfers to other accounts (+)			0		0		0		0		0
Budget Authority/Appropriation			87,758		385,897		388,251		87,758		(300,493)

Department of Commerce
National Institute of Standards and Technology
Construction of Research Facilities
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

Comparison by Budget Program		2025		2026		2027		2027		Increase/Decrease	
		Actual		Enacted		Base		Estimate		from 2027 Base	
	Pos/Approp	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Construction and Major Renovations											
Safety, Capacity, Maintenance and		0	0	0	0	0	0	0	0	0	0
Major Repairs	FTE/Obl.	0	\$988	0	\$1,108	0	0	0	0	0	0

Department of Commerce
National Institute of Standards and Technology
Construction of Research Facilities
SUMMARY OF FINANCING
(Dollar amounts in thousands)

	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
Total Obligations	\$90,311	\$402,507	\$388,251	\$87,758	(\$300,493)
Offsetting collections from:					
Non-Federal sources	(988)	0	0	0	0
Total offsetting collections	(988)	0	0	0	0
Recoveries (Direct)	(2,437)	0	0	0	0
Prior year recoveries (Reimbursable)	0	0	0	0	0
Refunds (Direct)	0	0	0	0	0
Unobligated balance, start of year (Direct)	(15,738)	(16,610)	0	0	0
Unobligated balance, start of year (Reimbursable)	0	0	0	0	0
Unobligated balance, end of year (Direct)	16,610	0	0	0	0
Unobligated balance, end of year (Reimbursable)	0	0	0	0	0
Budget Authority/Appropriation	87,758	385,897	388,251	87,758	(300,493)

Department of Commerce
National Institute of Standards and Technology
Construction of Research Facilities
ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

	Positions	Amount
Transfers of Estimates		0
Adjustments		0
Financing		0
<hr/>		
Other Changes		
2026 Pay raise		58
2027 Pay raise		0
Awards		35
Full-year cost in 2027 of positions financed for part-year in 2026		0
Change in compensable days		0
Civil Service Retirement System (CSRS)		(2)
Federal Employees Retirement System (FERS)		(97)
Thrift Savings Plan		(19)
Federal Insurance Contribution Act (FICA) – OASDI		21
Health Insurance		192
Employees Compensation Fund		0
Travel:		
Mileage		0
Per Diem		1
GSA Furniture and IT Program (FIT)		0
Postage (Included in GPL adjustment)		0
Working Capital Fund, Departmental Management		0
Cybersecurity (Non-Add in WCF)		0
National Archives and Records Administration (NARA)		0
General Pricing Level (GPL) Adjustment		2,122
Telecommunications Services – Enterprise Infrastructure Services (EIS)		0
Human Resources – Pay, PAR, Benefits Direct Bill		0
HCHB Utilities		0
Federal Protective Service		0
Other changes unique to certain bureaus (e.g., grants, ship and aircraft costs)		43
Electricity / Natural Gas Rates		
Subtotal, other changes	0	2,354
Total, adjustments to base	0	2,354

Department of Commerce
National Institute of Standards and Technology
Construction of Research Facilities
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Budget Program: Construction and Major Renovations

Project/Activity		2025 Actual		2026 Enacted		2027 Base		2027 Estimate		Increase/Decrease from 2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Construction and Major Renovations	Pos/Approp	0	0	0	0	0	0	0	0	0	0
	FTE/Obl.	0	0	0	0	0	0	0	0	0	0
Safety, Capacity, Maintenance and Major Repairs	Pos/Approp	148	\$87,758	152	\$128,000	152	\$130,354	152	\$87,758	0	(\$42,596)
	FTE/Obl.	144	88,555	148	141,252	148	130,354	148	87,758	0	(42,596)
External Projects	Pos/Approp	0	0	4	257,897	4	257,897	0	0	(4)	(257,897)
	FTE/Obl.	0	768	3	261,255	3	257,897	0	0	(3)	(257,897)
Total	Pos/Approp	148	87,758	156	385,897	156	388,251	152	87,758	(4)	(300,493)
	FTE/Obl.	144	89,323	151	402,507	151	388,251	148	87,758	(3)	(300,493)

Department of Commerce
National Institute of Standards and Technology
Construction of Research Facilities
JUSTIFICATION OF PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

Goal Statement

The goal of Construction of Research Facilities (CRF) funding is to provide the facilities and infrastructure that enable scientists and researchers to fulfill NIST's mission – "To promote U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology in ways that enhance economic security and improve our quality of life."

Base Program

The CRF appropriation funds construction activities, including maintenance, repairs, improvements, and major renovations, of facilities occupied or used by NIST in Gaithersburg, Maryland; Boulder and Fort Collins, Colorado; and Kaua'i, Hawai'i with the intent to meet current and future advancements in measurement science, standards, and critical emerging technologies to promote innovation and industrial competitiveness for the Nation. The CRF appropriation is made up of two subcomponents: Construction and Major Renovations (CMR) and Safety, Capacity, Maintenance and Major Repairs (SCMMR).

CMR is utilized for renewal of existing facilities and construction of significant new real property assets. These are projects that exceed a single award amount greater than \$40 million or an addition/option to an existing CMR project for a lesser awarded amount, where the scope and costs are sufficient in size that such projects may be identified as an individual budget line item. The clear separation between CMR and SCMMR is that CMR is for major new construction or renovation projects, whereas SCMMR is intended to address existing buildings and building systems to maintain the facilities for the purpose constructed as well as minor new construction and renovation projects.

SCMMR funding supports construction, sustainment, restoration, maintenance (preventative and corrective), modernization, alteration, and repairs of new and existing facilities and campus wide/building utility equipment systems upgrades, grounds, and site projects across NIST campuses to the extent of funding that is available, and individual award values generally do not exceed \$40 million.

The request of \$87.758 million for Safety, Capacity, Maintenance and Major Repairs (SCMMR) covers annual operating costs of \$53.8 million. The remaining \$33.9 million allows NIST to address the below six projects, which are the most pressing utility infrastructure, safety and structural deficiencies, and as funding allows, additional projects to address NIST's deferred maintenance backlog. Components of this include:

1. \$8.6 million for upgrading building automation for the High accuracy systems in the Advanced Measurement Laboratory (AML)
2. \$7.7 million Heating, Ventilation, and Air Conditioning (HVAC) projects,

3. \$4.0 million in building envelope projects, including roof repairs/replacements and exterior waterproofing for the Radiation Physics Laboratory,
4. \$5.5 million in emergency repairs,
5. \$5.5 million in elevator modernization projects supporting the Radiation Physics Laboratory and the NIST Center for Neutron Research (NCNR), and
6. \$2.6 million for life safety projects including Phase 1 of a Fire Alarm replacement upgrade projects at the NCNR.

The FY 2027 base amount below includes an additional \$42.596 million in SCMMR funding which NIST has eliminated using the cost-savings measures described later.

NCNR: The NIST Center for Neutron Research is a national user facility that advances economic and technical excellence in the U.S. by providing world class neutron measurement capabilities to meet the needs of researchers from industry, academia, and government.

AML Complex: Completed in 2004, the Advanced Measurement Laboratory Complex has few, if any, equals among the world's research facilities. It offers an unprecedented combination of features designed to virtually eliminate environmental interferences that undermine research at the very tip of the leading edge of measurement science and technology. Consisting of five wings, including two that are entirely underground, the complex houses 338 reconfigurable laboratory modules, including a NanoFab laboratory space. The NanoFab, which comprises over 10% of the facilities, includes a cleanroom, in which 40% of the area is at Class 100/ISO 5. The environmental control requirements of the AML are tailored to categories of scientific need; no other facility of this size has successfully achieved the combined features of strict temperature and humidity control, vibration isolation, air cleanliness, and quality of electric power.

Radiation Physics Laboratory: The facilities in the Radiation Physics Building are the foundation of radioactivity and dose measurements, calibrations, and neutron dosimetry for American industry, medicine, research and government.

Statement of Operating Objectives

In the 1950s and 1960s, the U.S. Government recognized the need to invest in science and technology and built state-of-the-art scientific facilities to support the research mission of NIST (then the National Bureau of Standards [NBS]), breaking ground at NBS's Boulder site in 1951 and at the NBS's new main site in Gaithersburg in 1961. Well over half a century later, both sites manage a mix of new as well as aging and deteriorating buildings and infrastructure.

A SCMMR funding level of \$87,758,000 in FY 2027 would address the most critical sustainment and repair work on NIST facilities while NIST's Office of Facilities and Property Management continues to strategically evolve its long-term planning for future CMR opportunities.

Explanation and Justification

		2025 Actual		2026 Enacted		2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Construction and Major Renovations	Pos./BA	0	0	0	0	0	0
	FTE/Obl	0	0	0	0	0	0
Safety, Capacity, Maintenance and Major Repairs	Pos./BA	148	\$87,758	152	\$128,000	152	\$130,354
	FTE/Obl	144	88,555	148	140,743	148	130,354
External Projects	Pos./BA	0	0	4	257,897	4	257,897
	FTE/Obl	0	768	3	261,764	3	257,897
Total	Pos./BA	148	87,758	156	385,897	156	388,251
	FTE/Obl	144	89,323	151	385,897	151	388,251

**Department of Commerce
National Institute of Standards and Technology
Construction of Research Facilities
PROGRAM CHANGES FOR 2027**
(Dollar amounts in thousands)

Budget Program: Construction and Major Renovations
Project Change: Removal of One-time Congressionally Directed CRF Projects

		2027 Base		2027 Estimate		Increase/Decrease from 2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
One-time Congressionally Directed CRF Projects	Pos/BA	4	\$257,897	0	0	(4)	(\$257,897)
	FTE/Obl.	3	\$257,897	0	0	(3)	(\$257,897)

Removal of One-time Congressionally Directed CRF Projects (-\$257.8 million, -3 FTE/-4 Positions) – This program change removes funding for one-time congressionally directed projects provided in Division A – of the Commerce, Justice, Science; Energy and Water Development; Interior and Environment Appropriations Act, 2026 the FY 2026 enacted bill (PL 119-47).

**Department of Commerce
National Institute of Standards and Technology
Construction of Research Facilities
PROGRAM CHANGE PERSONNEL DETAIL**

Budget Program: Construction and Major Renovations
Project Change: Removal of One-time Congressionally Directed CRF Projects

<u>Title</u>	<u>Grade</u>	<u>Number</u>	<u>Annual Salary</u>	<u>Total Salaries</u>
Contract Specialist	ZP III	(2)	(\$103,439)	(\$206,878)
Construction Grants Specialist	ZP IV	(2)	(145,352)	(290,704)
Subtotal		(4)		(497,582)
Less lapse	25 %	1		124,396
Total full-time permanent (FTE)		(3)		(373,186)
2027 Pay Adjustment (0.0%)				(0)
Total				(373,186)

Personnel Data

Full-Time Equivalent Employment:

Full-time permanent (3)

Authorized Positions:

Full-time permanent (4)

Department of Commerce
National Institute of Standards and Technology
Construction of Research Facilities
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations amounts in thousands)

Budget Program: Construction and Major Renovations
Project Change: Removal of One-time Congressionally Directed CRF Projects

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
11.1 Full-time permanent compensation	\$15,589	\$17,333	\$17,374	\$16,996	(\$378)
11.3 Other than full-time permanent	1,143	0	0	0	0
11.5 Other personnel compensation	1,277	1,139	1,175	1,175	0
11.8 Special personnel services payments	0	0	0	0	0
11.9 Total personnel compensation	18,009	18,472	18,549	18,171	(378)
12.1 Civilian personnel benefits	6,289	7,155	7,267	7,129	(138)
13 Benefits for former personnel	125	0	0	0	0
21 Travel and transportation of persons	116	198	199	121	(78)
22 Transportation of things	13	29	29	10	(19)
23 Rent, communications, and utilities					
23.1 Rental payments to GSA	3	0	0	0	0
23.2 Rental payments to others	0	0	0	0	0
23.3 Communications, utilities, and misc. charges	468	1,256	1,303	1,303	0
24 Printing and reproduction	2	15	15	6	(9)
25 Other contractual services					
25.1 Advisory and assistance services	10	2	2	2	0
25.2 Other services from non-Federal sources	31,408	112,455	97,824	96,189	(1,635)
25.3 Other goods and services from Federal sources	719	1,566	1,577	1,286	(291)
25.4 Operation and maintenance of facilities	0	0	0	0	0
25.5 Research and development contracts	0	0	0	0	0
25.6 Medical care	0	0	0	0	0
25.7 Operation and maintenance of equipment	88	2,626	2,681	2,662	(19)
25.8 Subsistence and support of persons	0	0	0	0	0
26 Supplies and materials	1,446	3,027	3,090	3,074	(16)
31 Equipment	144	392	401	401	0
32 Lands and structures	30,482	0	0	0	0
33 Investments and loans	0	0	0	0	0
41 Grants, subsidies and contributions	0	255,314	255,314	0	(255,314)
42 Insurance claims and indemnities	0	0	0	0	0
43 Interest and dividends	1	0	0	0	0
44 Refunds	0	0	0	0	0
99.9 Total obligations	89,323	402,507	388,251	130,354	(257,897)

**Department of Commerce
National Institute of Standards and Technology
Construction of Research Facilities
PROGRAM CHANGES FOR 2027**
(Dollar amounts in thousands)

Budget Program: Construction and Major Renovations
Project Change: SCMMR Program Reduction

		2027 Base		2027 Estimate		Increase/Decrease from 2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
SCMMR Program Reduction	Pos/BA	152	\$130,354	152	\$87,758	0	(\$42,596)
	FTE/Obl.	148	\$130,354	148	\$87,758	0	(\$42,596)

SCMMR Program Reduction (-\$42.596 million, 0 FTE / 0 Positions) – NIST will maintain the same overall spending levels as for FY 2025 while allowing for inflationary costs of \$1.509 million for the balance of the program. NIST will cut costs from a majority of one-time funding activities for facility projects funded in FY 2026 by delaying the start of lower-priority projects and spreading the completion of higher priority projects over a longer time frame. The highest priority projects, including life-safety projects, continue to be funded at rates necessary to remediate impairments as swiftly as available resources permit. All federal personnel remain engaged to execute these projects.

Department of Commerce
National Institute of Standards and Technology
Construction of Research Facilities
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations amounts in thousands)

Budget Program: Construction and Major Renovations
Project Change: SCMMR Program Reduction

Object Class		2025	2026	2027	2027	Increase/Decrease
		Actual	Enacted	Base	Estimate	from 2027 Base
11.1	Full-time permanent compensation	\$15,589	\$17,333	\$17,374	\$17,374	0
11.3	Other than full-time permanent	1,143	0	0	0	0
11.5	Other personnel compensation	1,277	1,139	1,175	1,175	0
11.8	Special personnel services payments	0	0	0	0	0
11.9	Total personnel compensation	18,009	18,472	18,549	18,549	0
12.1	Civilian personnel benefits	6,289	7,155	7,267	7,267	0
13	Benefits for former personnel	125	0	0	0	0
21	Travel and transportation of persons	116	198	199	174	(\$25)
22	Transportation of things	13	29	29	28	(1)
23	Rent, communications, and utilities					0
23.1	Rental payments to GSA	3	0	0	0	0
23.2	Rental payments to others	0	0	0	0	0
23.3	Communications, utilities, and misc. charges	468	1,256	1,303	515	(788)
24	Printing and reproduction	2	15	15	11	(4)
25	Other contractual services					0
25.1	Advisory and assistance services	10	2	2	2	0
25.2	Other services from non-Federal sources	31,408	112,455	97,824	56,400	(41,424)
25.3	Other goods and services from Federal sources	719	1,566	1,577	1,424	(153)
25.4	Operation and maintenance of facilities	0	0	0	0	0
25.5	Research and development contracts	0	0	0	0	0
25.6	Medical care	0	0	0	0	0
25.7	Operation and maintenance of equipment	88	2,626	2,681	2,593	(88)
25.8	Subsistence and support of persons	0	0	0	0	0
26	Supplies and materials	1,446	3,027	3,090	3,020	(70)
31	Equipment	144	392	401	358	(43)
32	Lands and structures	30,482	0	0	0	0
33	Investments and loans	0	0	0	0	0
41	Grants, subsidies and contributions	0	255,314	255,314	255,314	0
42	Insurance claims and indemnities	0	0	0	0	0
43	Interest and dividends	1	0	0	0	0
44	Refunds	0	0	0	0	0
99.9	Total obligations	89,323	402,507	388,251	345,655	(42,596)

Department of Commerce
National Institute of Standards and Technology
Construction of Research Facilities
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
11 Personnel compensation					
11.1 Full-time permanent	\$15,589	\$17,333	\$17,374	\$16,996	(\$378)
11.3 Other than full-time permanent	1,143	0	0	0	0
11.5 Other personnel compensation	1,277	1,139	1,175	1,175	0
11.9 Total personnel compensation	18,009	18,472	18,549	18,171	(378)
12.1 Civilian personnel benefits	6,289	7,155	7,267	7,129	(138)
13 Benefits for former personnel	125	0	0	0	0
21 Travel and transportation of persons	116	198	199	96	(103)
22 Transportation of things	13	29	29	9	(20)
23.1 Rental payments to GSA	3	0	0	0	0
23.2 Rental payments to others	0	0	0	0	0
23.3 Communications, utilities, and miscellaneous charges	468	1,256	1,303	515	(788)
24 Printing and reproduction	2	15	15	2	(13)
25.1 Advisory and assistance services	10	2	2	2	0
25.2 Other services from non-Federal sources	31,408	112,455	97,824	54,765	(43,059)
25.3 Other goods and services from Federal sources	719	1,566	1,577	1,133	(444)
25.5 Research and development contracts	0	0	0	0	0
25.7 Operation and maintenance of equipment	88	2,626	2,681	2,574	(107)
26 Supplies and materials	1,446	3,027	3,090	3,004	(86)
31 Equipment	144	392	401	358	(43)
32 Land and structures	30,482	0	0	0	0
41 Grants, subsidies, and contributions	0	255,314	255,314	0	(255,314)
42 Insurance claims and indemnities	0	0	0	0	0
43 Interest and dividends	1	0	0	0	0
99 Total Obligations	89,323	402,507	388,251	87,758	(300,493)

	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
Object Class					
99 Total Obligations	\$89,323	\$402,507	\$388,251	\$87,758	(\$300,493)
Less prior year recoveries	(2,437)	0	0	0	0
Less prior year refunds	0	0	0	0	0
Less prior year unobligated balance	(15,738)	(16,610)	0	0	0
Plus unobligated balance end of year	16,610	0	0	0	0
Total Budget Authority/Appropriation	87,758	385,897	388,251	87,758	(300,493)
Plus Transfers from Other Accounts	0	0	0	0	0
Appropriation	87,758	385,897	388,251	87,758	(300,493)

Personnel Data

Full-time equivalent employment:

Full-time permanent	144	151	151	148	(3)
Other than full-time permanent	0	0	0	0	0
Total	144	151	151	148	(3)

Authorized Positions:

Full-time permanent	148	156	156	152	(4)
Other than full-time permanent	0	0	0	0	0
Total	148	156	156	152	(4)

**Department of Commerce
National Institute of Standards and Technology
Construction of Research Facilities
APPROPRIATION LANGUAGE AND CODE CITATIONS**

1. For construction of new research facilities, including architectural and engineering design, and for renovation and maintenance of existing facilities, not otherwise provided for the National Institute of Standards and Technology, as authorized by 15 U.S.C. 278c-278e.

15 U.S.C. 278c authorizes the Secretary of Commerce to acquire land for such field sites as are necessary for the proper and efficient conduct of the activities authorized.

15 U.S.C. 278d authorizes the Secretary of Commerce to undertake such construction of buildings and other facilities and to make such improvements to existing buildings, grounds, and other facilities as are necessary for the proper and efficient conduct of authorized activities.

15 U.S.C. 278e provides in the performance of the functions of the National Institute of Standards and Technology the Secretary of Commerce is authorized to undertake: the care, maintenance, protection, repair, and alteration of Institute buildings and other plant facilities, equipment, and property.

2. \$87,758,000 to remain available until expended.
3. Public Law 110-69, America Competes Act, 121 Stat 572, passed August 9, 2007 reauthorizes the Construction of Research Facilities appropriation through 2010. It also provided for the Retention of Fees to the Construction of Research Facilities account. "The Director is authorized to retain all building use and depreciation surcharge fees collected pursuant to OMB Circular A-25. Such fees shall be collected and credited to the Construction of Research Facilities Appropriation Account for use in maintenance and repair of the Institute's existing facilities". Public Law 111-358, America Competes Reauthorization Act, 2010, 124 Stat 3982, passed January 4, 2011 reauthorized the Construction of Research Facilities appropriation through 2013. Division B of Public Law 117-167, Research and Development, Competition, and Innovation Act, 136 Stat 1366, passed August 9, 2022 reauthorized the Construction of Research Facilities appropriation through 2027.

Department of Commerce
National Institute of Standards and Technology
Construction of Research Facilities
ADVISORY AND ASSISTANCE SERVICES
(Obligations in thousands of dollars)

	FY 2025 <u>Actual</u>	FY 2026 <u>Enacted</u>	FY 2027 <u>Estimate</u>
Consulting Services			
Management and professional support services	\$2	\$2	\$2
Studies, analyses, and evaluations	0	0	0
Engineering and technical services	<u>\$8</u>	<u>0</u>	<u>0</u>
Total	\$10	\$2	\$2

Significant Activities

Advisory and assistance services funded by the Construction of Research Facilities appropriation includes assisting the development of program requirements for addition, replacement, and consolidation of existing facilities and structures, services for interior and exterior signage standards, and conceptual design for new facilities.

Need for Advisory and Assistance Services

NIST uses outside professional support and engineering and technical services whenever necessary expertise is not available in-house to ensure the safety of NIST staff and visitors. These services provided for Construction of Research Facilities mainly relate to building construction architectural systems, facilities capital planning, and safety.

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Department of Commerce
National Institute of Standards and Technology
Working Capital Fund
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

	Positions	FTE	Budget Authority	Direct Obligations
Enacted, 2026	580	580	0	0
Adjustment of staffing	0	0	0	0
2027 Base	580	580	0	0
Transfer from STRS program changes for equipment investments	0	0	0	0
2027 Estimate	580	580	0	0

Department of Commerce
National Institute of Standards and Technology
Working Capital Fund
SUMMARY OF REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

Comparison by Budget Program	2025		2026		2027		2027		Increase/Decrease	
	FTE	Amount	FTE	Amount	FTE	Amount	FTE	Amount	FTE	Amount
Critical and Emerging Technology Measurement and Standards										
WCF transfer		0		0		0		0		0
Reimbursables	7	\$1,795	7	\$1,891	7	\$1,870	7	\$1,870	0	0
WCF investments	<u>0</u>	<u>341</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Subtotal	7	2,136	7	1,891	7	1,870	7	1,870	0	0
Digital Technology Measurements and Standards										
WCF transfer		0		0		0		0		0
Reimbursables	34	11,552	36	11,111	36	10,986	36	10,986	0	0
WCF investments	<u>0</u>	<u>995</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Subtotal	34	12,547	36	11,111	36	10,986	36	10,986	0	0
Core Metrology and Measurement Services										
WCF transfer		0		0		0		0		0
Reimbursables	500	157,131	527	152,100	527	152,549	527	152,549	0	0
WCF investments	<u>0</u>	<u>15,672</u>	<u>0</u>	<u>2,205</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Subtotal	500	172,803	527	154,305	527	152,549	527	152,549	0	0
Exploratory Measurement R&D										
WCF transfer		0		0		0		0		0
Reimbursables	0	0	0	0	0	0	0	0	0	0
WCF investments	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Subtotal	0	0	0	0	0	0	0	0	0	0
Advanced Manufacturing R&D										
WCF transfer		0		0		0		0		0
Reimbursables	0	50	0	44	0	44	0	44	0	0
WCF investments	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Subtotal	0	50	0	44	0	44	0	44	0	0
Resilience and Fire Research										
WCF transfer		0		0		0		0		0
Reimbursables	4	862	4	1,133	4	1,120	4	1,120	0	0
WCF investments	<u>0</u>	<u>417</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Subtotal	4	1,279	4	1,133	4	1,120	4	1,120	0	0

	2025 Actual		2026 Enacted		2027 Base		2027 Estimate		Increase/Decrease from 2027 Base	
	FTE	Amount	FTE	Amount	FTE	Amount	FTE	Amount	FTE	Amount
NIST Center for Neutron Research										
WCF transfer		0		0		0		0		0
Reimbursables	5	1,668	5	1,477	5	1,461	5	1,461	0	0
WCF investments	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Subtotal	5	1,668	5	1,477	5	1,461	5	1,461	0	0
Manufacturing USA										
WCF transfer		0		0		0		0		0
Reimbursables	0	0	0	0	0	0	0	0	0	0
WCF investments	<u>0</u>	<u>(189)</u> ^{1/}	<u>0</u>	<u>(21)</u> ^{1/}	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Subtotal	0	(189)	0	(21)	0	0	0	0	0	0
Hollings Manufacturing Extension Partnership										
WCF transfer		0		0		0		0		0
Reimbursables	1	285	1	300	1	300	1	300	0	0
WCF investments	<u>0</u>	<u>482</u>	<u>0</u>	<u>(4)</u> ^{1/}	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Subtotal	1	767	1	296	1	300	1	300	0	0
Creating Helpful Incentives to Produce Semiconductors										
WCF transfer		0		0		0		0		0
Reimbursables	0	1,183	0	0	0	0	0	0	0	0
WCF investments	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Subtotal	0	1,183	0	0	0	0	0	0	0	0
Total, NIST Reimbursable Services										
WCF transfer	0	0	0	0	0	0	0	0	0	0
Reimbursables	551	\$174,526	580	\$168,056	580	\$168,330	580	\$168,330	0	0
WCF investments	<u>0</u>	<u>17,718</u>	<u>0</u>	<u>2,180</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Grand Total	551	192,244	580	170,236	580	168,330	580	168,330	0	0

^{1/} Repayment of loan principal for past invested equipment over current year's investment, resulting a net negative amount.

Department of Commerce
National Institute of Standards and Technology
Working Capital Fund
SUMMARY OF FINANCING
(Dollar amounts in thousands)

	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
Total Obligations	\$192,244	\$170,236	\$168,330	\$168,330	0
Offsetting collections from:					
Federal funds	(82,612)	(110,250)	(110,581)	(110,581)	0
Non-Federal sources	(68,478)	(59,986)	(57,749)	(57,749)	0
Total offsetting collections	(151,090)	(170,236)	(168,330)	(168,330)	0
Unobligated balance, start of year	(214,544) ^{1/}	(181,306)	(181,306)	(181,306)	0
Unobligated balance rescinded	0	0			
Unobligated balance, end of year	181,306	181,306	181,306	181,306	0
Change in uncollected customer	(7,916)	0	0	0	0
Unobligated balance returned to Treasury	0	0			
Budget Authority	0	0	0	0	0
Financing:					
Transfer from other accounts	0	0	0	0	0
Appropriation	0	0	0	0	0

^{1/} Revised from (\$213,244k) to match the latest SF -133 revision.

Department of Commerce
National Institute of Standards and Technology
Working Capital Fund
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

Activity: NIST Reimbursable Services

Comparison by Budget Program		2025		2026		2027		2027		Increase/Decrease	
		Actual		Enacted		Base		Estimate		from 2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Critical and Emerging Technology Measurement and Standards											
Artificial Intelligence	Pos./BA	0	\$0	0	\$0	0	\$0	0	\$0	0	0
	FTE/Obl.	0	0	0	0	0	0	0	0	0	0
Quantum Science and Technology	Pos./BA	6	1,930	6	1,709	6	1,690	6	1,690	0	0
	FTE/Obl.	6	1,930	6	1,709	6	1,690	6	1,690	0	0
Biotechnology and Biomufacturing	Pos./BA	1	206	1	182	1	180	1	180	0	0
	FTE/Obl.	<u>1</u>	<u>206</u>	<u>1</u>	<u>182</u>	<u>1</u>	<u>180</u>	<u>1</u>	<u>180</u>	<u>0</u>	<u>0</u>
Subtotal	Pos./BA	7	2,136	7	1,891	7	1,870	7	1,870	0	0
	FTE/Obl.	7	2,136	7	1,891	7	1,870	7	1,870	0	0
Digital Technology Measurements and Standards											
Next-generation Communication and Networks	Pos./BA	32	10,346	32	9,162	32	9,059	32	9,059	0	0
	FTE/Obl.	30	10,346	32	9,162	32	9,059	32	9,059	0	0
Cybersecurity and Privacy	Pos./BA	4	2,201	4	1,949	4	1,927	4	1,927	0	0
	FTE/Obl.	<u>4</u>	<u>2,201</u>	<u>4</u>	<u>1,949</u>	<u>4</u>	<u>1,927</u>	<u>4</u>	<u>1,927</u>	<u>0</u>	<u>0</u>
Subtotal	Pos./BA	36	12,547	36	11,111	36	10,986	36	10,986	0	0
	FTE/Obl.	34	12,547	36	11,111	36	10,986	36	10,986	0	0
Core Metrology and Measurement Services											
Fundamental and Applied Metrology	Pos./BA	484	160,780	484	143,658	484	142,022	484	142,022	0	0
	FTE/Obl.	459	160,780	484	143,658	484	142,022	484	142,022	0	0
Measurement Services	Pos./BA	43	12,023	43	10,647	43	10,527	43	10,527	0	0
	FTE/Obl.	<u>41</u>	<u>12,023</u>	<u>43</u>	<u>10,647</u>	<u>43</u>	<u>10,527</u>	<u>43</u>	<u>10,527</u>	<u>0</u>	<u>0</u>
Subtotal	Pos./BA	527	172,803	527	154,305	527	152,549	527	152,549	0	0
	FTE/Obl.	500	172,803	527	154,305	527	152,549	527	152,549	0	0
Exploratory Measurement Research and Development	Pos./BA	0	0	0	0	0	0	0	0	0	0
	FTE/Obl.	0	0	0	0	0	0	0	0	0	0
Advanced Manufacturing Research and Development	Pos./BA	0	50	0	44	0	44	0	44	0	0
	FTE/Obl.	0	50	0	44	0	44	0	44	0	0

		2025		2026		2027		2027		Increase/Decrease	
		Actual		Enacted		Base		Estimate		from 2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Resilience and Fire Research	Pos./BA	4	1,279	4	1,133	4	1,120	4	1,120	0	0
	FTE/Obl.	4	1,279	4	1,133	4	1,120	4	1,120	0	0
NIST Center for Neutron Research	Pos./BA	5	1,668	5	1,477	5	1,461	5	1,461	0	0
	FTE/Obl.	5	1,668	5	1,477	5	1,461	5	1,461	0	0
Manufacturing USA	Pos./BA	0	(189) ^{1/}	0	(21) ^{1/}	0	0	0	0	0	0
	FTE/Obl.	0	(189) ^{1/}	0	(21) ^{1/}	0	0	0	0	0	0
Hollings Manufacturing Extension Partnership	Pos./BA	1	767	1	296	1	300	1	300	0	0
	FTE/Obl.	1	767	1	296	1	300	1	300	0	0
Creating Helpful Incentives to Produce Semiconductors	Pos./BA	0	1,183	0	0	0	0	0	0	0	0
	FTE/Obl.	0	1,183	0	0	0	0	0	0	0	0
WCF investments	Pos./BA	580	192,244	580	170,236	580	168,330	580	168,330	0	0
Total	FTE/Obl.	551	192,244	580	170,236	580	168,330	580	168,330	0	0

^{1/} Repayment of loan principal for past invested equipment over current year's investment, resulting a net negative amount.

**Department of Commerce
National Institute of Standards and Technology
Working Capital Fund
JUSTIFICATION OF PROGRAM AND PERFORMANCE**

Budget Program: NIST Working Capital Fund

This Working Capital Fund (WCF) reflects the full-time equivalent employment and reimbursable obligations associated with the reimbursable work performed by NIST for other agencies, the public, and WCF investments. NIST's reimbursable services consist of technical work performed for other Federal agencies; state and local governments; and the private sector, including calibrations and special tests, advisory services, the sale of Standard Reference Materials and Baldrige Performance Excellence Program fees.

The unique measurement and standards expertise, developed with appropriated funding, gives NIST the capability to perform these services on a reimbursable basis. NIST accepts other agency work, based on an established set of criteria, which include: (1) the need for traceability of measurements to national standards; (2) the need for work which cannot or will not be addressed by the private sector; (3) work supported by legislation that authorizes or mandates certain services; (4) work which would result in an unavoidable conflict of interest if carried out by the private sector or regulatory agencies; and (5) requests by the private sector for NIST action or services.

Department of Commerce
National Institute of Standards and Technology
Working Capital Fund
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
11 Personnel compensation					
11.1 Full-time permanent	\$75,826	\$76,776	\$79,847	\$79,847	0
11.3 Other than full-time permanent	6,421	6,496	6,755	6,755	0
11.5 Other personnel compensation	1,185	1,185	1,185	1,185	0
11.9 Total personnel compensation	83,432	84,457	87,787	87,787	0
12.1 Civilian personnel benefits	30,612	30,794	31,384	31,384	0
13 Benefits for former personnel	503	0	0	0	0
21 Travel and transportation of persons	1,105	381	345	345	0
22 Transportation of things	261	68	62	62	0
23.1 Rental payments to GSA	36	36	36	36	0
23.2 Rental payments to others	0	0	0	0	0
23.3 Communications, utilities, and miscellaneous charges	5,047	4,806	4,777	4,777	0
24 Printing and reproduction	51	42	38	38	0
25.1 Advisory and assistance services	0	0	0	0	0
25.2 Other services from non-Federal sources	12,450	6,656	6,023	6,023	0
25.3 Other goods and services from Federal sources	8,837	7,972	7,705	7,705	0
25.5 Research and development contracts	20,891	13,182	11,928	11,928	0
25.7 Operation and maintenance of equipment	6,813	4,793	4,337	4,337	0
26 Supplies and materials	10,694	4,796	4,409	4,409	0
31 Equipment	3,147	5,327	3,147	3,147	0
32 Land and structures	895	895	895	895	0
41 Grants, subsidies, and contributions	7,468	6,029	5,455	5,455	0
42 Insurance claims and indemnities	0	0	0	0	0
43 Interest and dividends	2	2	2	2	0
99 Total Obligations	192,244	170,236	168,330	168,330	0

<u>Personnel Data</u>	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
Full-time equivalent employment:					
Full-time permanent	532	532	532	532	0
Other than full-time permanent	48	48	48	48	0
Total	580	580	580	580	0
Authorized Positions:					
Full-time permanent	534	563	563	563	0
Other than full-time permanent	17	17	17	17	0
Total	551	580	580	580	0

**Department of Commerce
National Institute of Standards and Technology
Working Capital Fund
ADVISORY AND ASSISTANCE SERVICES**
(Obligations in thousands of dollars)

	FY 2025 <u>Actual</u>	FY 2026 <u>Enacted</u>	FY 2027 <u>Estimate</u>
Consulting Services			
Management and professional support services.....	0	0	0
Studies, analyses, and evaluations.....	0	0	0
Engineering and technical services	<u>0</u>	<u>0</u>	<u>0</u>
Total.....	0	0	0

Significant Activities

Advisory and assistance services funded by the Working Capital Fund represent services funded by reimbursable funds in support of reimbursable work conducted at NIST.

Need for Advisory and Assistance Services

Advisory and Assistance services have been necessary to obtain additional expertise for conducting activities like the technical evaluation of the Department of War in its Manufacturing Innovation Institutes, for example.

**Department of Commerce
National Institute of Standards and Technology
Creating Helpful Incentives to Produce Semiconductors
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)**

	Positions	FTE	Budget Authority	Direct Obligations	Appropriation
President's Budget, 2026	468	416	\$6,595,000	\$5,640,674	\$6,600,000
Less: Unobligated balance from prior year	0	0	0	0	0
2027 Adjustments to Base					
Other Changes:					
Less: Mandatory non-base adjustments	(468)	(416)	(6,595,000)	(5,640,674)	(6,600,000)
2027 Base	0	0	0	0	0
Plus: Obligations from carryover	468	414	0	5,135,300	0
2027 Estimate	468	414	0	5,135,300	0

Comparison by Budget Program with totals by Program

		2025 Actual		2026 Enacted		2027 Base		2027 Estimate		Increase/Decrease from 2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
CHIPS Incentives Program	Pos./Approp	290	\$4,990,585	153	\$4,996,000	0	0	163	0	163	0
	FTE/Obl.	229	29,988,660	136	4,193,000	0	0	145	\$3,287,118	145	\$3,287,118
CHIPS Research & Development	Pos./Approp	182	1,099,000	182	1,599,000	0	0	71	0	71	0
	FTE/Obl.	276	663,571	173	6,364,600	0	0	62	\$3,693,792	62	\$3,693,792
TOTALS	Pos./Approp	472	6,089,585 ^{1/}	335	6,595,000 ^{1/}	0	0	234	0	234	0
	FTE/Obl.	505	30,652,231	309	10,557,600	0	0	207	6,980,910	207	6,980,910
Adjustments for											
Recoveries			(192,687)		0		0		0		0
Refunds			(797)		0		0		0		0
Unobligated balance, start of year			(35,773,936)		(11,404,774)		0		(7,436,759)		(7,436,759)
Unobligated balance, end of year			11,404,774		7,436,759		0		455,849		455,849
Budget Authority/Appropriation			6,089,585		6,589,585		0		0		0
Adjustments for											
Plus appropriation transferred to OIG			5,000		5,000		0		0		0
Plus appropriations permanently reduced - sequestration			5,415		5,415		0		0		0
Appropriation			6,100,000		6,600,000		0		0		0

^{1/} Enacted CHIPS appropriation here does not include transfer to Office of Inspector General (OIG) and appropriation permanently reduced.

Department of Commerce
National Institute of Standards and Technology
Creating Helpful Incentives to Produce Semiconductors
ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

	Positions	Amount
Transfers of Estimates		0
Adjustments		0
Financing		0
<hr/>		
Other Changes		
2026 Pay raise		119
2027 Pay raise		0
Awards		0
Full-year cost in 2027 of positions financed for part-year in 2026		0
Change in compensable days		0
Personnel Benefits		42
Travel and transportation of persons		22
Rental Payments to GSA		0
Working Capital Fund, Departmental Management		0
National Archives and Records Administration (NARA)		0
General Pricing Level (GPL) Adjustment		824
<hr/>		
Subtotal, other changes	0	1,007
<hr/>		
Total, adjustments to base	0	1,007
<hr/>		

Department of Commerce
National Institute of Standards and Technology
Creating Helpful Incentives to Produce Semiconductors
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Budget Program: CHIPS Incentives Program and Incentive Loans

		2025		2026		2027		2027		Increase/Decrease	
		Actual		Enacted		Base		Estimate		from 2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
CHIPS Incentives	Pos./Approp	0	\$4,901,000	0	\$4,901,000	0	0	0	0	0	0
	FTE/Obl.	0	29,894,937	0	4,025,400	0	0	0	\$3,203,518	0	\$3,203,518
CHIPS Incentives Admin	Pos./Approp	290	89,585	153	95,000	0	0	163	0	163	0
	FTE/Obl.	<u>229</u>	<u>93,723</u>	<u>136</u>	<u>74,600</u>	<u>0</u>	<u>0</u>	<u>145</u>	<u>74,600</u>	<u>145</u>	<u>74,600</u>
Incentives Program Subtotal	Pos./Approp	290	4,990,585	153	4,996,000	0	0	163	0	163	0
	FTE/Obl.	229	29,988,660	136	4,100,000	0	0	145	3,278,118	145	3,278,118
CHIPS Incentive Loans	Pos./Approp	0	0	0	0	0	0	0	0	0	0
	FTE/Obl.	0	0	0	93,000	0	0	0	9,000	0	9,000
Total	Pos./Approp	290	4,990,585	153	4,996,000	0	0	163	0	163	0
	FTE/Obl.	229	29,988,660	136	4,193,000	0	0	145	3,287,118	145	3,287,118

**Department of Commerce
National Institute of Standards and Technology
Creating Helpful Incentives to Produce Semiconductors
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS**
(Dollar amounts in thousands)

Budget Program: CHIPS Research & Development

		2025		2026		2027		2027		Increase/Decrease	
		Actual		Enacted		Base		Estimate		from 2027 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
CHIPS Metrology (Admin by STRS)	Pos./Approp	111	\$23,000	111	\$8,000	0	0	0	0	0	0
	FTE/Obl.	126	62,029	111	196,600	0	0	0	\$124,500	0	\$124,500
CHIPS R&D Admin (Admin by STRS)	Pos./Approp	71	21,000	71	31,000	0	0	71		71	0
	FTE/Obl.	<u>150</u>	<u>51,659</u>	<u>62</u>	<u>49,400</u>	<u>0</u>	<u>0</u>	<u>62</u>	<u>48,200</u>	<u>62</u>	<u>48,200</u>
Mandatory CHIPS - STRS Subtotal	Pos./Approp	182	44,000	182	39,000	0	0	71	0	71	0
	FTE/Obl.	276	113,688	173	246,000	0	0	62	172,700	62	172,700
CHIPS NSTC (Admin by ITS)	Pos./Approp	0	1,030,000	0	1,474,000	0	0	0	0	0	0
	FTE/Obl.	0	60,175	0	4,000,000	0	0	0	2,788,292	0	2,788,292
CHIPS NAPMP (Admin by ITS)	Pos./Approp	0	0	0	0	0	0	0	0	0	0
	FTE/Obl.	0	301,667	0	2,000,000	0	0	0	732,800	0	732,800
CHIPS MUSA (Admin by ITS)	Pos./Approp	0	25,000	0	86,000	0	0	0	0	0	0
	FTE/Obl.	<u>0</u>	<u>188,041</u>	<u>0</u>	<u>118,600</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Mandatory CHIPS - ITS Subtotal	Pos./Approp	0	1,055,000	0	1,560,000	0	0	0	0	0	0
	FTE/Obl.	0	549,883	0	6,118,600	0	0	0	3,521,092	0	3,521,092
Total	Pos./Approp	182	1,099,000	182	1,599,000	0	0	71	0	71	0
	FTE/Obl.	276	663,571	173	6,364,600	0	0	62	3,693,792	62	3,693,792

**Department of Commerce
National Institute of Standards and Technology
Mandatory Account: Creating Helpful Incentives to Produce Semiconductors for America
JUSTIFICATION OF PROGRAM AND PERFORMANCE**

Budget Program: Creating Helpful Incentives to Produce Semiconductors for America

Goal Statement

The CHIPS for America program, housed within NIST, intends to revitalize the domestic semiconductor industry and spur innovation while creating good-paying American jobs. Investments from the program will catalyze long-term growth in the domestic semiconductor industry in support of national and economic security.

The Department has established the following strategic goals for the CHIPS for America program:

1. Invest in U.S. production of strategically important semiconductor chips, including mature and leading-edge technologies, and strengthen the resilience and security of the domestic semiconductor supply chain.
2. Strengthen U.S. semiconductor research and development (R&D) leadership to catalyze and enable critical technologies, applications and industries.
3. Grow a vibrant semiconductor workforce and create good-paying American jobs.

Base Program

There is no base funding for this program.

Within sections 9902 and 9906 of Title XCIX (“Creating Helpful Incentives to Produce Semiconductors for America”) of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021, Public Law No. 116-283 (hereinafter, “the NDAA”) authorizes the Secretary of Commerce to establish certain semiconductor manufacturing and R&D activities collectively called the “CHIPS program”, subject to the availability of appropriations. The CHIPS Act of 2022, Division A of Public Law 117-167 amends P.L. the NDAA and appropriates \$50 billion to the Department of Commerce through the Creating Helpful Incentives to Produce Semiconductors (CHIPS) for America Fund to implement the semiconductor programs. These funds provide for the CHIPS Act of 2022 related activities at NIST.

Section 9902 of the 2021 NDAA authorizes the Department to provide funding to eligible applicants to incentivize investment in facilities and equipment in the United States for the fabrication, assembly, testing, advanced packaging, production, or research and development of semiconductors, materials used to manufacture semiconductors, or semiconductor manufacturing equipment. The Department may provide funding in various forms, including grants, cooperative agreements, other transactions, loans, and loan guarantees. The CHIPS Act of 2022 appropriates \$39 billion for these purposes. With these funds, the Department will establish an incentives program to support the expansion of manufacturing capacity for mature nodes and to attract large-scale investments in advanced technologies such as leading-edge logic and memory.

Section 9906 of the 2021 NDAA authorizes the Department to establish a National Semiconductor Technology Center (NSTC) to conduct research and prototyping of advanced semiconductor technology and to establish a National Advanced Packaging Manufacturing Program (the “Advanced Packaging” program or “NAPMP”) led by the director of NIST. Section 9906 also authorizes NIST to establish up to three Manufacturing USA institutes to advance research and commercialization of semiconductor manufacturing technologies, and to carry out an R&D program to advance measurement science, standards, material characterization, instrumentation, testing, and manufacturing capabilities. The CHIPS Act of 2022 appropriates \$11 billion for these purposes.

Department of Commerce
National Institute of Standards and Technology
Creating Helpful Incentives to Produce Semiconductors (CHIPS)
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
11 Personnel compensation					
11.1 Full-time permanent	\$37,677	\$23,400	0	\$14,400	14,400
11.3 Other than full-time permanent	39,383	24,221	0	18,095	18,095
11.5 Other personnel compensation	615	373	0	350	350
11.9 Total personnel compensation	77,675	47,994	0	32,845	32,845
12.1 Civilian personnel benefits	28,577	17,660	0	12,047	12,047
13 Benefits for former personnel	390	393	0	410	410
21 Travel and transportation of persons	1,060	1,066	0	1,107	1,107
22 Transportation of things	242	243	0	252	252
23.1 Rental payments to GSA	0	0	0	0	0
23.2 Rental payments to others	0	0	0	0	0
23.3 Communications, utilities, and miscellaneous charges	4,987	5,052	0	5,372	5,372
24 Printing and reproduction	71	72	0	75	75
25.1 Advisory and assistance services	15,000	0	0	0	0
25.2 Other services from non-Federal sources	30,490,441	10,358,269	0	6,885,034	6,885,034
25.3 Other goods and services from Federal sources	2,858	2,886	0	3,038	3,038
25.5 Research and development contracts	2,091	2,091	0	2,135	2,135
25.7 Operation and maintenance of equipment	4,022	4,045	0	4,206	4,206
26 Supplies and materials	4,164	4,169	0	4,274	4,274
31 Equipment	17,915	17,920	0	18,312	18,312
32 Land and structures	280	282	0	295	295
33 Investments and loans	0	93,000	0	9,000	9,000
41 Grants, subsidies, and contributions	2,458	2,458	0	2,508	2,508
42 Insurance claims and indemnities	0	0	0	0	0
43 Interest and dividends	0	0	0	0	0
99 Total Obligations	30,652,231	10,557,600	0	6,980,910	6,980,910

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
99 Total Obligations	\$30,652,231	\$10,557,600	0	\$6,980,910	6,980,910
Adjustments for:					
Recoveries	(192,687)	0	0	0	0
Refunds of prior year paid obligations	(797)	0	0	0	0
Unobligated balance from offsetting collections, start of year	(35,273,936)	(11,404,774)	0	(7,436,759)	(7,436,759)
Unobligated balance transfer to CHIPS Loan Program	(500,000)				0
Unobligated balance from offsetting collections, end of year	11,404,774	7,436,759	0	455,849	455,849
Budgetary Resources - Mandatory Account	6,089,585	6,589,585	0	0	0
Less: Offsetting collections	0	0	0	0	0
Net Budget Authority - Mandatory Account	6,089,585	6,589,585	0	0	0
Plus Transfers to Other Accounts					
Appropriation transferred to OIG	5,000	5,000	0	0	0
Plus appropriations permanently reduced - sequestration	5,415	5,415	0	0	0
Appropriation	6,100,000	6,600,000	0	0	0

Personnel Data

Full-time equivalent employment:

Full-time permanent:	343	203	0	96	96
Other than full-time permanent	162	106	0	111	111
Total	505	309	0	207	207

Authorized Positions:

Full-time permanent	448	311	0	210	210
Other than full-time permanent	24	24	0	24	24
Total	472	335	0	234	234

Department of Commerce
National Institute of Standards and Technology
Creating Helpful Incentives to Produce Semiconductors (CHIPS) Incentives Program
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
11 Personnel compensation					
11.1 Full-time permanent	13,606	\$8,161	0	\$8,884	\$8,884
11.3 Other than full-time permanent	21,401	12,837	0	13,974	13,974
11.5 Other personnel compensation	493	296	0	322	322
11.9 Total personnel compensation	35,500	21,294	0	23,180	23,180
12.1 Civilian personnel benefits	12,976	7,783	0	8,472	8,472
13 Benefits for former personnel	120	123	0	134	134
21 Travel and transportation of persons	279	285	0	310	310
22 Transportation of things	60	61	0	66	66
23.1 Rental payments to GSA	0	0	0	0	0
23.2 Rental payments to others	0	0	0	0	0
23.3 Communications, utilities, and miscellaneous charges	3,109	3,174	0	3,455	3,455
24 Printing and reproduction	26	27	0	29	29
25.1 Advisory and assistance services	0	0	0	0	0
25.2 Other services from non-Federal sources	29,933,593	4,064,193	0	3,239,140	3,239,140
25.3 Other goods and services from Federal sources	1,310	1,338	0	1,457	1,457
25.5 Research and development contracts	0	0	0	0	0
25.7 Operation and maintenance of equipment	1,101	1,124	0	1,224	1,224
26 Supplies and materials	256	261	0	284	284
31 Equipment	235	240	0	261	261
32 Land and structures	95	97	0	106	106
41 Grants, subsidies, and contributions	0	0	0	0	0
42 Insurance claims and indemnities	0	0	0	0	0
43 Interest and dividends	0	0	0	0	0
99 Total Obligations	29,988,660	4,100,000	0	3,278,118	3,278,118

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
99 Total Obligations	\$29,988,660	\$4,100,000	0	\$3,278,118	3,278,118
Adjustments for:					
Recoveries	(358)	0	0	0	0
Refunds of prior year paid obligations	(26)	0	0	0	0
Unobligated balance from offsetting collections, start of year	(27,385,224)	(2,387,533)	0	(3,278,118)	(3,278,118)
Unobligated balance transfer to CHIPS Loan Program	0	0	0	0	0
Unobligated balance from offsetting collections, end of year	2,387,533	3,278,118	0	0	0
Budgetary Resources - Mandatory Account	4,990,585	4,990,585	0	0	0
Less: Offsetting collections	0	0	0	0	0
Net Budget Authority - Mandatory Account	4,990,585	4,990,585	0	0	0
Plus Transfers to Other Accounts					
Appropriation transferred to STRS	44,000	39,000	0	0	0
Appropriation transferred to ITS	1,055,000	1,560,000	0	0	0
Appropriation transferred to OIG	5,000	5,000	0	0	0
Plus appropriations permanently reduced - sequestration	5,415	5,415	0	0	0
Appropriation	6,100,000	6,600,000	0	0	0

Personnel Data

Full-time equivalent employment:

Full-time permanent:	90	53	0	57	0
Other than full-time permanent	139	83	0	88	0
Total	229	136	0	145	0

Authorized Positions:

Full-time permanent	290	153	0	163	0
Other than full-time permanent	0	0	0	0	0
Total	290	153	0	163	0

Department of Commerce
National Institute of Standards and Technology
Creating Helpful Incentives to Produce Semiconductors (CHIPS) - STRS
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
11 Personnel compensation					
11.1 Full-time permanent	\$24,071	\$15,239	0	\$5,516	\$5,516
11.3 Other than full-time permanent	17,982	11,384	0	4,121	4,121
11.5 Other personnel compensation	122	77	0	28	28
11.9 Total personnel compensation	42,175	26,700	0	9,665	9,665
12.1 Civilian personnel benefits	15,601	9,877	0	3,575	3,575
13 Benefits for former personnel	270	270	0	276	276
21 Travel and transportation of persons	781	781	0	797	797
22 Transportation of things	182	182	0	186	186
23.1 Rental payments to GSA	0	0	0	0	0
23.2 Rental payments to others	0	0	0	0	0
23.3 Communications, utilities, and miscellaneous charges	1,878	1,878	0	1,917	1,917
24 Printing and reproduction	45	45	0	46	46
25.1 Advisory and assistance services	0	0	0	0	0
25.2 Other services from non-Federal sources	22,065	175,576	0	124,902	124,902
25.3 Other goods and services from Federal sources	1,548	1,548	0	1,581	1,581
25.5 Research and development contracts	2,091	2,091	0	2,135	2,135
25.7 Operation and maintenance of equipment	2,921	2,921	0	2,982	2,982
26 Supplies and materials	3,908	3,908	0	3,990	3,990
31 Equipment	17,680	17,680	0	18,051	18,051
32 Land and structures	185	185	0	189	189
41 Grants, subsidies, and contributions	2,358	2,358	0	2,408	2,408
42 Insurance claims and indemnities	0	0	0	0	0
43 Interest and dividends	0	0	0	0	0
99 Total Obligations	113,688	246,000	0	172,700	172,700

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
99 Total Obligations	\$113,688	\$246,000	0	\$172,700	\$172,700
Adjustments for:					
Recoveries	(1,594)	0	0	0	0
Refunds of prior year paid obligations	(5)	0	0	0	0
Unobligated balance from offsetting collections, start of year	(505,638)	(437,549)	0	(230,549)	(230,549)
Unobligated balance from offsetting collections, end of year	437,549	230,549	0	57,849	57,849
Budgetary Resources - Mandatory Account	44,000	39,000	0	0	0
Plus Transfers from Other Accounts	(44,000)	(39,000)	0	0	0
Appropriation	0	0	0	0	0

Personnel Data

Full-time equivalent employment:

Full-time permanent:	253	150	0	39	0
Other than full-time permanent	23	23	0	23	0
Total	276	173	0	62	0

Authorized Positions:

Full-time permanent	158	158	0	47	0
Other than full-time permanent	24	24	0	24	0
Total	182	182	0	71	0

Department of Commerce
National Institute of Standards and Technology
Creating Helpful Incentives to Produce Semiconductors (CHIPS) - ITS
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
11 Personnel compensation					
11.1 Full-time permanent	0	0	0	0	0
11.3 Other than full-time permanent	0	0	0	0	0
11.5 Other personnel compensation	0	0	0	0	0
11.9 Total personnel compensation	0	0	0	0	0
12.1 Civilian personnel benefits	0	0	0	0	0
13 Benefits for former personnel	0	0	0	0	0
21 Travel and transportation of persons	0	0	0	0	0
22 Transportation of things	0	0	0	0	0
23.1 Rental payments to GSA	0	0	0	0	0
23.2 Rental payments to others	0	0	0	0	0
23.3 Communications, utilities, and miscellaneous charges	0	0	0	0	0
24 Printing and reproduction	0	0	0	0	0
25.1 Advisory and assistance services	\$15,000	0	0	0	0
25.2 Other services from non-Federal sources	534,783	\$6,118,500	0	\$3,520,992	\$3,520,992
25.3 Other goods and services from Federal sources	0	0	0	0	0
25.5 Research and development contracts	0	0	0	0	0
25.7 Operation and maintenance of equipment	0	0	0	0	0
26 Supplies and materials	0	0	0	0	0
31 Equipment	0	0	0	0	0
32 Land and structures	0	0	0	0	0
41 Grants, subsidies, and contributions	100	100	0	100	100
42 Insurance claims and indemnities	0	0	0	0	0
43 Interest and dividends	0	0	0	0	0
99 Total Obligations	549,883	6,118,600	0	3,521,092	3,521,092

Object Class		2025 Actual	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
99	Total Obligations	\$549,883	\$6,118,600	0	\$3,521,092	\$3,521,092
	Adjustments for:					
	Recoveries	(190,735)	0	0	0	0
	Refunds of prior year paid obligations	(766)	0	0	0	0
	Unobligated balance from offsetting collections, start of year	(7,383,074)	(8,079,692)	0	(3,521,092)	(3,521,092)
	Unobligated balance from offsetting collections, end of year	8,079,692	3,521,092	0	0	0
	Budgetary Resources - Mandatory Account	1,055,000	1,560,000	0	0	0
	Less: Offsetting collections	0	0	0	0	0
	Net Budget Authority - Mandatory Account	1,055,000	1,560,000	0	0	0
	Plus Transfers from Other Accounts	(1,055,000)	(1,560,000)	0	0	0
	Appropriation	0	0	0	0	0

Personnel Data

Full-time equivalent employment:

Full-time permanent:	0	0	0	0	0
Other than full-time permanent	0	0	0	0	0
Total	0	0	0	0	0

Authorized Positions:

Full-time permanent	0	0	0	0	0
Other than full-time permanent	0	0	0	0	0
Total	0	0	0	0	0

Department of Commerce
National Institute of Standards and Technology
Creating Helpful Incentives to Produce Semiconductors (CHIPS) - Incentive Loans Program
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	2025 Enacted	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
11 Personnel compensation					
11.1 Full-time permanent	0	0	0	0	0
11.3 Other than full-time permanent	0	0	0	0	0
11.5 Other personnel compensation	0	0	0	0	0
11.9 Total personnel compensation	0	0	0	0	0
12.1 Civilian personnel benefits	0	0	0	0	0
13 Benefits for former personnel	0	0	0	0	0
21 Travel and transportation of persons	0	0	0	0	0
22 Transportation of things	0	0	0	0	0
23.1 Rental payments to GSA	0	0	0	0	0
23.2 Rental payments to others	0	0	0	0	0
23.3 Communications, utilities, and miscellaneous charges	0	0	0	0	0
24 Printing and reproduction	0	0	0	0	0
25.1 Advisory and assistance services	0	0	0	0	0
25.2 Other services from non-Federal sources	0	0	0	0	0
25.3 Other goods and services from Federal sources	0	0	0	0	0
25.5 Research and development contracts	0	0	0	0	0
25.7 Operation and maintenance of equipment	0	0	0	0	0
26 Supplies and materials	0	0	0	0	0
31 Equipment	0	0	0	0	0
32 Land and structures	0	0	0	0	0
33 Investments and loans	0	93,000	0	9,000	9,000
41 Grants, subsidies, and contributions	0	0	0	0	0
42 Insurance claims and indemnities	0	0	0	0	0
43 Interest and dividends	0	0	0	0	0
99 Total Obligations	0	93,000	0	9,000	9,000

Object Class	2025 Enacted	2026 Enacted	2027 Base	2027 Estimate	Increase/Decrease from 2027 Base
99 Total Obligations	0	93,000	0	9,000	9,000
Adjustments for:					
Recoveries	0	0	0	0	0
Refunds of prior year paid obligations	0	0	0	0	0
Unobligated balance from offsetting collections, start of year	0	(\$500,000)	0	(\$407,000)	(\$407,000)
Unobligated balance transfer from CHIPS Incentives Program	(\$500,000)	0	0	0	0
Unobligated balance from offsetting collections, end of year	500,000	407,000	0	398,000	398,000
Budgetary Resources - Mandatory Account	0	0	0	0	0
Less: Offsetting collections	0	0	0	0	0
Net Budget Authority - Mandatory Account	0	0	0	0	0
Plus Transfers to Other Accounts					0
Appropriation	0	0	0	0	0

Personnel Data

Full-time equivalent employment:

Full-time permanent:	0	0	0	0	0
Other than full-time permanent	0	0	0	0	0

Total	0	0	0	0	0
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Authorized Positions:

Full-time permanent	0	0	0	0	0
Other than full-time permanent	0	0	0	0	0

Total	0	0	0	0	0
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Department of Commerce
National Institute of Standards and Technology
Creating Helpful Incentives to Produce Semiconductors (CHIPS)
ADVISORY AND ASSISTANCE SERVICES
(Obligations in thousands of dollars)

	FY 2025 <u>Actual</u>	FY 2026 <u>Enacted</u>	FY 2027 <u>Estimate</u>
Consulting Services			
Management and professional support services	\$15,000	0	0
Studies, analyses, and evaluations	0	0	0
Engineering and technical services	<u>0</u>	<u>0</u>	<u>0</u>
Total	\$15,000	0	0

Significant Activities

Advisory and assistance services funded by mandatory resources through the Creating Helpful Incentives to Produce Semiconductors (CHIPS) for America Fund to implement semiconductor programs.

Need for Advisory and Assistance Services

Advisory and Assistance services have been necessary to obtain additional expertise to conduct research and develop new standards, technologies and applications to implement the semiconductor programs in support of requirements in the Creating Helpful Incentives to Produce Semiconductors (CHIPS) Act.

Summary of National Institute of Standards and Technology (NIST)

The operations of the NIST Working Capital Fund are reported in a program and financing schedule printed in the President's Budget, as well as reflected in the reimbursable amounts throughout this budget. The fund finances the initial costs of work performed by NIST and is reimbursed by applicable appropriations and advances or reimbursements from other agencies. A detailed cost accounting system is used to ensure that the actual cost of work performed for each job or task is recorded and identified with the appropriate source of financing. In addition to its function as a revolving fund, the Working Capital Fund is also used to handle annual and sick leave on an accrued basis, to acquire equipment as an investment to be recovered through amortization charges to programs, to distribute indirect costs to programs as overhead, to carry the recoverable costs associated with the production of Standard Reference Materials, and to carry supply inventories until issued for program use.

The table below summarizes the total NIST program, according to the source of financing. Following this table is a summary of the NIST reimbursable program by sponsor and source of support.

Summary of Total NIST Discretionary Program ^{1/}

(Obligations in thousands)

Source and Use of Funds Spent	FY 2025			FY 2026			FY 2027			Approp. Requested
	Perm. Pos. ^{2/}	FTE	Obliq.	Perm. Pos. ^{2/}	FTE	Obliq.	Perm. Pos. ^{2/}	FTE	Obliq.	
Direct Funding										
Scientific and technical research and services	2,675	2,218	843,921	2,450	2,281	\$1,331,784	2,486	2,310	\$730,659	\$729,159
Industrial technology services	121	103	169,586	123	115	299,610	34	48	43,000	37,000
Construction of research facilities	<u>148</u>	<u>144</u>	<u>89,223</u>	<u>156</u>	<u>151</u>	<u>402,507</u>	<u>152</u>	<u>148</u>	<u>87,758</u>	<u>87,758</u>
Total, direct funding	2,944	2,465	1,102,730	2,729	2,547	2,033,901	2,672	2,506	861,417	853,917
Reimbursable Funding and WCF Investments										
Construction of research facilities - building surcharge	0	0	988	0	0	1,109	0	0	0	
Research, development and supporting services:										
Federal government	377	357	112,996	377	377	110,250	377	377	110,581	
Calibrations and tests, technical and advisory services:										
Federal government	20	19	7,126	20	20	6,227	20	20	6,219	
Public and non-federal government	<u>75</u>	<u>71</u>	<u>26,866</u>	<u>75</u>	<u>75</u>	<u>23,476</u>	<u>75</u>	<u>75</u>	<u>23,446</u>	
Subtotal, Services	95	90	33,992	95	95	29,703	95	95	29,665	
National Voluntary Laboratory Accreditation Program	17	17	3,992	17	17	4,322	17	17	4,322	
Standard reference materials (SRMs):										
SRM Sales:										
Federal government	0	0	51	0	0	56	0	0	56	
Public and non-federal government	<u>91</u>	<u>87</u>	<u>21,720</u>	<u>91</u>	<u>91</u>	<u>23,725</u>	<u>91</u>	<u>91</u>	<u>23,706</u>	
Subtotal, SRM sales	91	87	21,771	91	91	23,781	91	91	23,762	
SRM investment adjustment	<u>0</u>	<u>0</u>	<u>1,775</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	
Subtotal, SRM	91	87	23,546	91	91	23,781	91	91	23,762	
Total, Reimbursable program	580	551	175,514 ^{3/}	580	580	169,165 ^{3/}	580	580	168,330	
WCF Investments and Operating Adjustments										
WCF investments	0	0	41,537	0	0	16,099	0	0	15,925	
WCF operating adjustments	<u>0</u>	<u>0</u>	<u>(1,608)</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	
Total, WCF Investments and operating adjustments	0	0	39,929	0	0	16,099	0	0	15,925	
Total, NIST program	3,524	3,016	1,318,173	3,309	3,127	2,219,165	3,252	3,086	1,045,672	
Offsetting adjustment for amortization of equipment	<u>0</u>	<u>0</u>	<u>(22,211)</u>	<u>0</u>	<u>0</u>	<u>(13,919)</u>	<u>0</u>	<u>0</u>	<u>(15,925)</u>	
Adjusted total, NIST program	3,524	3,016	1,295,962	3,309	3,127	2,205,246	3,252	3,086	1,029,747	

^{1/} For comparison reason, mandatory programs funded by Creating Helpful Incentives to Produce Semiconductors (CHIPS) are not included.

^{2/} Most NIST scientists and engineers are not engaged solely on one research project. Individuals may divide their time between two or more projects financed by different sources of support. Also, salary costs of many staff members are charged to an overhead account and subsequently prorated to all directly funded projects. For these reasons, it is not possible to report employment directly for any source of financing. The Permanent Positions above are statistically-derived numbers, based on the estimated work years distribution for NIST programs.

^{3/} Total reimbursable numbers are different from the next section due to inclusion of CRF reimbursable obligations.

Department of Commerce
National Institute of Standards and Technology
REIMBURSABLE PROGRAM AND WORKING CAPITAL FUND INVESTMENTS
(Dollar amounts in thousands)

	FY 2025 Actual	FY 2026 Enacted	FY 2027 Estimate
Department of Defense			
Air Force	\$11,383	\$11,700	\$11,700
Army	2,229	1,925	1,925
Navy	4,294	4,066	4,176
Other, Department of Defense	22,429	21,766	21,156
Subtotal, Department of Defense	40,335	39,457	38,957
Department of Agriculture	229	200	150
Department of Commerce	33,709	31,607	31,582
Department of Energy	2,138	2,775	2,975
Dept. of Health & Human Services	3,993	3,971	3,900
Dept. of Homeland Security	15,468	15,736	16,009
Department of the Interior	24	100	150
Department of Justice	5,609	5,900	6,000
Department of State	1,289	50	50
Department of Transportation	376	400	450
Department of the Treasury	339	300	250
Department of Veterans Affairs	54	200	150
National Aeronautics & Space Admin.	5,120	4,980	5,050
National Science Foundation	1,518	2,524	2,599
Nuclear Regulatory Commission	649	500	509
Other	2,146	1,550	1,800
Subtotal, Other Agency	112,996	110,250	110,581

	FY 2025 Actual	FY 2026 Enacted	FY 2027 Estimate
Calibrations & Testing	\$6,502	\$6,895	\$7,120
Technical & Advisory Services	31,482	27,130	26,867
Standard Reference Materials	23,546	23,781	23,762
Subtotal, Other Reimbursables	61,530	57,806	57,749
Total, Reimbursable Program	174,526	168,056	168,330
Equipment Investments	41,537	16,099	15,925
IE Amortization	(22,211)	(13,919)	(15,925)
WCF Operating Adjustments	(1,608)	0	0
Total, WCF Investments	17,718	2,180	0
Total Reimbursable Program and WCF Investments	192,244	170,236	168,330

Department of Commerce
National Institute of Standards and Technology
PERIODICALS, PAMPHLETS, AND AUDIOVISUAL PRODUCTS
(Obligations in thousands of dollars)

	2025 Actual	2026 Enacted	2027 Estimate
Periodicals	\$0	\$0	\$0
Pamphlets	\$15	\$20	\$20
Audiovisuals	\$182	\$182	\$182
Total	\$197	\$202	\$202

NIST's mission is to promote U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology in ways that enhance economic security and improve our quality of life. In order for our efforts to stimulate innovation, foster industrial competitiveness, and improve the quality of life, we need to broadly disseminate our work. NIST mainly accomplishes this through its primary public web site, www.nist.gov, and other subsidiary sites. We also produce collateral and audiovisual materials, almost all of which direct individuals back to the www.nist.gov resource for additional information.

NIST produces a small number of printed products to be distributed at conferences where NIST exhibits. These products include postcards, a print periodic table with more information about NIST science, metric conversion cards, and laptop stickers.

NIST's audiovisual products, typically under five minutes, include videos, animations, and social media content that highlight NIST's discoveries, science, people and/or history. The use of video in science communications is increasingly popular as a way to effectively convey complex information and make it more engaging and accessible to a wider audience. These products are mainly distributed via the NIST website, YouTube and other social media channels and shared at conferences where NIST is exhibiting. We anticipate continuing to produce high-quality visual content that supports the agency's needs, particularly in priority areas such as quantum science, AI and health and biosciences.

**Department of Commerce
National Institute of Standards and Technology
AVERAGE SALARY AND BENEFITS**

	2025 Actual	2026 Enacted	2027 Estimate
Average ES	\$289,633	\$292,529	\$292,529
Average scientific and professional	\$287,284	\$290,157	\$290,157
Average career path	\$124,029	\$125,269	\$125,269
Average ungraded positions	\$175,161	\$176,912	\$176,912

FY 2026 average salaries include the 1% pay raise and FY 2027 average salaries reflect a 0% pay raise. Benefits rate of 35% is used per the OPM rate assumption.

**Department of Commerce
National Institute of Standards and Technology
IMPLEMENTATION STATUS OF GAO AND OIG RECOMMENDATIONS**

31 U.S.C. 720, as amended January 3, 2019, requires the head of a federal agency to submit a written statement of the actions taken or planned on Government Accountability Office (GAO) recommendations to the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 180 calendar days after the date of the report.

The Good Accounting Obligation in Government Act (GAO-IG Act), passed on January 3, 2019, (P.L. 115-414) requires each agency to include, in its annual budget justification, a report that identifies each public recommendation issued by GAO and the agency's office of the inspector general (OIG) which has remained unimplemented for one year or more from the annual budget justification submission date. In addition, the Act requires a reconciliation between the agency records and the IGs' Semiannual Report to Congress.

Section 1. Recommendations for which action plans were finalized since the last appropriations request.

Report Number	None
Report Title	
Issue Date	
Recommendation Number	
Recommendation	
Action(s) Planned	
Action Status (Planned, In-Progress, or Complete)	
Target Completion Date	
Recommendation Status (Planned, In-Progress, or Complete)	

Section 2. Implementation of GAO public recommendations issued no less than one year ago that are designated by GAO as 'Open' or 'Closed-Unimplemented.'

Open Recommendation(s) the Department has decided not to implement.

Report Number	Report Title	Issue Date	Recommendation Number	Recommendation	Reason for the Decision Not to Implement
GAO-17-3	Climate Change: Improved Federal Coordination Could Facilitate Use of Forward-Looking Climate Information in Design Standards, Building Codes, and Certifications	11/30/2016	1	To help reduce Federal fiscal exposure by enhancing the resilience of infrastructure to extreme weather, we recommend that the Secretary of Commerce, through the Director of the National Institute of Standards and Technology (NIST), in consultation	NIST has no upcoming plans related to this recommendation. To date, NIST has not received any stakeholder interest in convening a discussion related to forward-looking climate information for use by the standards community.

				with the Mitigation Framework Leadership Group (MitFLG) and the United States Global Change Research Program (USGCRP), convene Federal agencies for an ongoing governmentwide effort to provide the best available forward-looking climate information to standards-developing organizations for their consideration in the development of design standards, building codes, and voluntary certifications.	
GAO-25-107165	Textile Waste: Federal Entities Should Collaborate on Reduction and Recycling Efforts	12/12/2024	2	The Director of NIST, in conjunction with EPA, OSTP, NSF, and the U.S. Departments of State and Energy, should establish an interagency mechanism to coordinate federal efforts on textile circularity, reducing textile waste, and advancing textile recycling in the US. This interagency mechanism should identify and involve federal participants and should consider leading collaboration practices, including clearly defining common outcomes and identifying data and resource needs.	NIST has no upcoming plans related to this recommendation. NIST will work with the Department of Commerce to determine the level of involvement and engagement if an interagency mechanism is established to coordinate federal efforts on textile circularity.

Open Recommendation(s) the Department plans to implement.

Report Number	Report Title	Issue Date	Recommendation Number	Recommendation	Target Implementation Date	Closure Request Pending with GAO (Yes/No)	Clear Budget Implications (Yes/No)
GAO-19-409	Advanced Manufacturing: Innovation Institutes Have Demonstrated Initial Accomplishments, but Challenges Remain in Measuring Performance and Ensuring Sustainability	5/23/2019	1	The Secretary of Commerce should direct the NIST Director to work with other sponsoring federal agencies to develop and implement network-wide performance goals for the Manufacturing USA program with measurable targets and time frames.	September 2027	No	No

Report Number	Report Title	Issue Date	Recommendation Number	Recommendation	Target Implementation Date	Closure Request Pending with GAO (Yes/No)	Clear Budget Implications (Yes/No)
GAO-19-409	Advanced Manufacturing: Innovation Institutes Have Demonstrated Initial Accomplishments, but Challenges Remain in Measuring Performance and Ensuring Sustainability	5/23/2019	2	The Secretary of Commerce should direct the NIST Director to work with other sponsoring federal agencies to ensure that the Manufacturing USA network-wide performance measures are directly aligned with the network-wide performance goals, the Manufacturing USA strategic objectives and program goals, and the statutory purposes of the RAMI Act.	September 2027	No	No
GAO-22-105016	Earthquakes: Opportunities Exist to Further Assess Risk, Build Resilience, and Communicate Research	05/04/2022	1	The Director of NIST should, in collaboration with FEMA, NSF, and USGS and in coordination with federal, state, local, territorial, and tribal governments and stakeholders, conduct a national risk assessment to identify the progress made by communities to strengthen earthquake resilience since 2015, and the gaps in resilience that remain.	September 2028	No	No
GAO-22-105016	Earthquakes: Opportunities Exist to Further Assess Risk, Build Resilience, and Communicate Research	05/04/2022	5	The Director of NEHRP should, in collaboration with NIST, NSF, USGS, and FEMA, follow leading practices to develop performance measures linked to priority research outcomes, and to track and monitor research to ensure research priorities are being met.	September 2026	No	No
GAO-22-105016	Earthquakes: Opportunities Exist to Further Assess Risk, Build Resilience, and Communicate Research	05/04/2022	6	The Director of NEHRP should, in collaboration with NIST, NSF, USGS, and FEMA, follow leading practices to identify and leverage the Program's resources needed to achieve research priority outcomes.	September 2026	No	No
GAO-22-105016	Earthquakes: Opportunities Exist to Further Assess Risk, Build Resilience, and Communicate Research	05/04/2022	7	The Director of NIST should, in collaboration with NSF, document and implement a comprehensive plan to better ensure that all state, local, territorial and tribal governments and stakeholders are aware of the mechanisms and practices used by NSF and NIST for disseminating research.	September 2026	No	No

Report Number	Report Title	Issue Date	Recommendation Number	Recommendation	Target Implementation Date	Closure Request Pending with GAO (Yes/No)	Clear Budget Implications (Yes/No)
GAO-23-105521	National Institute of Standards and Technology: Improved Workforce Planning Needed to Address Recruitment and Retention Challenges	2/28/2023	1	The Office of Human Resources Management (OHRM) Division Chiefs should track how often flexibility has been used—including how often incentive payments have been offered and paid—to evaluate their success.	September 2026	No	No
GAO-23-105521	National Institute of Standards and Technology: Improved Workforce Planning Needed to Address Recruitment and Retention Challenges	2/28/2023	2	The OHRM Division Chiefs should develop and implement a succession planning framework, and link leadership development programs and technical training to succession planning efforts.	September 2026	No	No
GAO-23-105521	National Institute of Standards and Technology: Improved Workforce Planning Needed to Address Recruitment and Retention Challenges	2/28/2023	3	Directors of NIST's key operating units, including its HR office and laboratories, should collaborate to develop and implement an agency-wide strategic workforce process, which addresses recruitment, retention, DEIA, and succession planning.	September 2026	No	No
GAO-23-105945	Cybersecurity Workforce: National Initiative Needs to Better Assess its Performance	7/27/2023	1	The Director of NIST should ensure that the Director of NICE develops a program performance plan with goals that are measurable.	October 2025	Yes	No
GAO-23-105945	Cybersecurity Workforce: National Initiative Needs to Better Assess its Performance	7/27/2023	2	The Director of NIST should ensure that the Director of NICE updates the program's environmental scan documentation to include an assessment of how the outcomes and impacts of the identified programs, projects, and initiatives may affect the program's achievement of its performance plan and the strategic plan goals.	August 2025	Yes	No
GAO-23-105945	Cybersecurity Workforce: National Initiative Needs to Better Assess its Performance	7/27/2023	3	The Director of NIST should ensure that the Director of NICE assesses and justifies the resources that the program requires to achieve its performance plan and the strategic plan goals.	September 2025	Yes	No

Report Number	Report Title	Issue Date	Recommendation Number	Recommendation	Target Implementation Date	Closure Request Pending with GAO (Yes/No)	Clear Budget Implications (Yes/No)
GAO-23-105945	Cybersecurity Workforce: National Initiative Needs to Better Assess its Performance	7/27/2023	4	The Director of NIST should ensure that the Director of NICE establishes performance measures with a plan to collect the data needed to assess progress toward each performance goal.	October 2025	Yes	No
GAO-23-105945	Cybersecurity Workforce: National Initiative Needs to Better Assess its Performance	7/27/2023	5	The Director of NIST should ensure that the Director of NICE regularly collects program performance information that is measurable, timely, accurate, and useful.	October 2025	Yes	No
GAO-23-105945	Cybersecurity Workforce: National Initiative Needs to Better Assess its Performance	7/27/2023	6	The Director of NIST should ensure that the Director of NICE reports measurable program performance information to stakeholders.	December 2025	Yes	No
GAO-23-105945	Cybersecurity Workforce: National Initiative Needs to Better Assess its Performance	7/27/2023	7	The Director of NIST should ensure that the Director of NICE assesses progress toward achieving program performance goals with measurable performance information.	January 2026	Yes	No
GAO-23-105945	Cybersecurity Workforce: National Initiative Needs to Better Assess its Performance	7/27/2023	8	The Director of NIST should ensure that the Director of NICE uses performance information to manage the program, including to identify opportunities to improve program results, as appropriate.	January 2026	Yes	No
GAO-24-106074	National Institute of Standards and Technology: Strengthening Disclosure Requirements and Assessing Training Could Improve Research Security	12/14/2023	2	The Director of NIST should, consistent with applicable statutes and regulations, collect and review disclosures from domestic associates – including information on positions and appointments, current and pending research support, and participation in foreign talent recruitment programs – and require updates to these disclosures, as appropriate.	May 2026	No	No

Recommendations designated by GAO as “Closed-Unimplemented” for the past 5 years (2015-2019). Future reports will cover a one-year period.

Report Number	None
Report Title	
Issue Date	
Recommendation Number	
Recommendation	
Reason Not Implemented	

Section 3. Implementation of OIG public recommendations issued no less than one year for which Final Action has not been Taken or Action Not Recommended has been Taken

Report Number	Report Title	Issue Date	Recommendation Number	Recommendation	Target Implementation Date	Reason no Final Action Taken or Action Not recommended taken	Closure Request Pending (Yes/No)
OIG-23-014-I	NIST Must Improve Monitoring of MEP to Prevent Waste of Financial Resources	3/13/23	1	Change policy to ensure (1) UPI is strategically reinvested into MEP and (2) if UPI is not reinvested into MEP, withhold federal funds until UPI is used to pay down allowable project expenses.	TBD	Revised action plan submitted to OIG, pending resolution with OIG to complete action.	No
OIG-23-014-I	NIST Must Improve Monitoring of MEP to Prevent Waste of Financial Resources	3/13/23	2	Conduct a thorough review of executive compensation for reasonableness as required by Departmental and NIST criteria.	TBD	Revised action plan submitted to OIG, pending resolution with OIG to complete action.	No

OIG-23-014-I	NIST Must Improve Monitoring of MEP to Prevent Waste of Financial Resources	3/13/23	3	Establish policy limits on executive compensation for MEP, including restrictions on Center and subrecipient salaries.	TBD	Revised action plan submitted to OIG, pending resolution with OIG to complete action.	No
OIG-23-014-I	NIST Must Improve Monitoring of MEP to Prevent Waste of Financial Resources	3/13/23	4	Establish procedures to (1) ensure recipients disclose in writing any potential conflict of interest to NIST consistent with award terms and (2) promptly review any such disclosures.	TBD	Revised action plan submitted to OIG, pending resolution with OIG to complete action.	No
OIG-23-014-I	NIST Must Improve Monitoring of MEP to Prevent Waste of Financial Resources	3/13/23	5	Review all disclosed related party activities identified by us and previously reported to NIST and take any action deemed appropriate.	TBD	Revised action plan submitted to OIG, pending resolution with OIG to complete action.	No
OIG-24-023-I	NIST Surpassed Hiring Goals for CHIPS But Did Not Develop a Comprehensive Workforce Plan	5/20/2024	1	We recommend that the Director of the CHIPS Program Office and the Acting Director of the CHIPS Research and Development Office collaborate with the Director of the NIST Office of Human Resources Management to develop a comprehensive workforce plan that includes a skills assessment, vacancy analysis, and risk assessment.	September 2026	No	No
OIG-24-037-I	NIST Overstated MEP's Economic Impacts to Congress and Other Stakeholders	9/25/2024	2	Establish procedures for NIST personnel to ensure data reliability (reasonably free from error and bias), including but not limited to (1) formal policies requiring staff to diligently review significant impacts for accuracy and connection to services provided by Centers and (2) techniques to analyze survey data for anomalies before it is finalized.	January 2027	No	No

OIG-24-037-I	NIST Overstated MEP's Economic Impacts to Congress and Other Stakeholders	9/25/2024	3	Establish and implement procedures for Centers and subrecipients to (1) comply with NIST guidelines and (2) ensure data reliability (reasonably free from error and bias), including but not limited to techniques that hold Centers accountable, such as including consequences for noncompliance and certification of Center executives confirming integrity, independence, and due diligence that the reported economic impacts represent what they are intended to: actual economic benefits realized over the last 12 months that are attributable to the services provided.	January 2028	No	No
OIG-24-037-I	NIST Overstated MEP's Economic Impacts to Congress and Other Stakeholders	9/25/2024	4	Establish procedures that hold centers accountable for monitoring subrecipient compliance with NIST survey guidelines and ensuring data reliability (reasonably free from error and bias), including consequences for noncompliance.	January 2027	No	No
OIG-24-037-I	NIST Overstated MEP's Economic Impacts to Congress and Other Stakeholders	9/25/2024	5	Revise MEP's economic impact reports for FYs 2020 through 2023 to (1) accurately reflect NIST's return on investment and (2) clearly articulate that total federal investment does not include other federal funding sources that may contribute to reported economic impacts.	January 2027	No	No
OIG-24-037-I	NIST Overstated MEP's Economic Impacts to Congress and Other Stakeholders	9/25/2024	6	Establish procedures for NIST personnel to ensure future economic impact reports accurately reflect NIST's return on investment.	January 2027	No	No
OIG-24-037-I	NIST Overstated MEP's Economic Impacts to Congress and Other Stakeholders	9/25/2024	7	Remove from NIST reporting guidelines statements that currently direct Centers to write the expectation of completing the MEP survey into contracts.	January 2027	No	No
OIG-24-037-I	NIST Overstated MEP's Economic Impacts to Congress and Other Stakeholders	9/25/2024	8	Direct Centers and their subrecipients to remove contract clauses requiring clients to take the MEP survey.	January 2027	No	No

OIG-25-011-I	OIG's Evaluation of MEP's Economic Impact Reporting Process Also Identified Instances of Noncompliance at Centers, Led to NIST Action	2/25/2025	1	Recover \$1,578,816.73 from the California Center as stated in NIST's notice of material noncompliance and demand for repayment.	Completed February 2026	Yes	No
OIG-25-011-I	OIG's Evaluation of MEP's Economic Impact Reporting Process Also Identified Instances of Noncompliance at Centers, Led to NIST Action	2/25/2025	2	Determine and recover any additional amounts owed by the California Center because of underreporting program income by its subrecipients.	Completed February 2026	Yes	No
OIG-25-011-I	OIG's Evaluation of MEP's Economic Impact Reporting Process Also Identified Instances of Noncompliance at Centers, Led to NIST Action	2/25/2025	3	Recover \$378,052.65 from the Maryland Center as stated in NIST's notice of material noncompliance and demand for repayment.	Completed September 2025	Yes	No
OIG-25-011-I	OIG's Evaluation of MEP's Economic Impact Reporting Process Also Identified Instances of Noncompliance at Centers, Led to NIST Action	2/25/2025	4	Determine and recover any additional amounts owed by the Maryland Center as a result of incorrectly providing cash reimbursements to clients on other NIST awards.	Completed September 2025	Yes	No

Section 4. Discrepancies between this report and the semiannual reports submitted by the Commerce Office of Inspector General or reports submitted by the GAO

Report Number	None
Report Title	
Issue Date	
Recommendation Number	
Recommendation	
Discrepancy	
Reason for Discrepancy	

**Department of Commerce
National Institute of Standards and Technology
Description of Tribal Consultations**

N/A – NIST does not have any Tribal Consultations to report.