NIST Budget Update

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FY 2024 Enacted Budget



STRS:

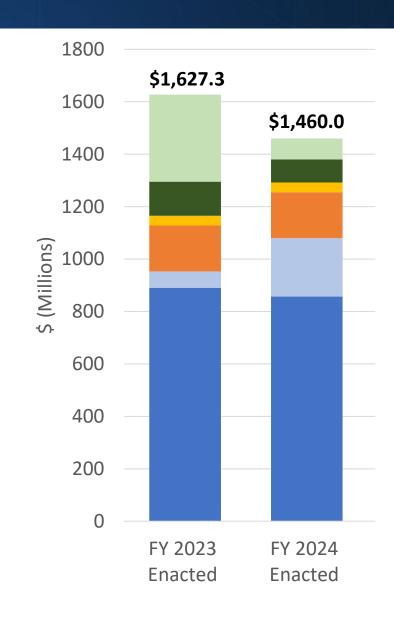
- NIST research program funding reduced from \$890M to \$857M
- Reprogram up to \$10M of the \$857M for U.S. Al Safety Institute
- Community projects funding (pass through) *increased* from \$62.5M to over \$222M

• CRF:

- NIST facilities funding reduced from \$130M to \$88M
- Community projects funding (pass through) reduced from \$332M to \$80M

• ITS:

 Flat funding for MFG USA (\$37M) and MEP (\$175M)



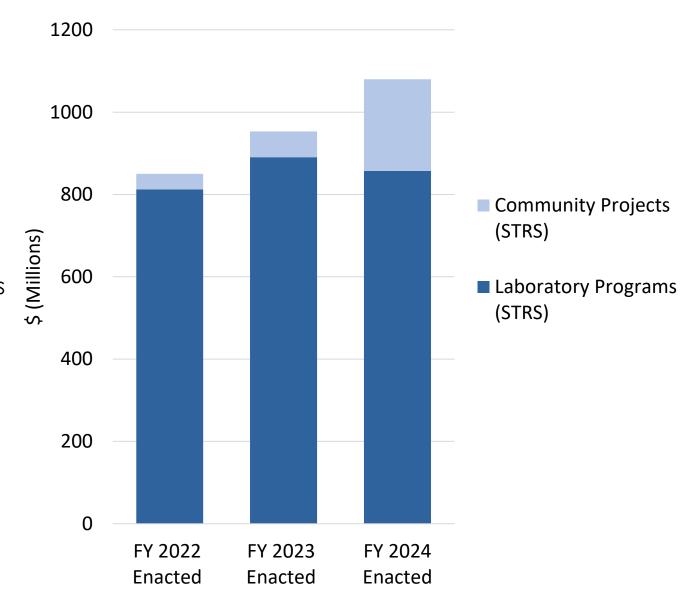
- Community Construction Projects (CRF)
- Construction of Research Facilities (CRF)
- Manufacturing USA
- Manufacturing Extension Partnership
- Community Projects (STRS)
- Laboratory Programs (STRS)

FY 2024 Enacted (STRS): \$1,080.0 M



Aligned with the FY 2024 appropriations bill and related explanatory statement(s), NIST will continue FY 2023 funding levels for:

- Quantum information science
- Biotechnology and bioeconomy
- Advanced communications
- Cybersecurity and privacy
- Forensic science research and related activities
- Standards for critical and emerging technologies
- Perfluoroalkyl/polyfluoroalkyl substances (PFAS)
- Circular economy
- Pyrrhotite
- Climate and energy portfolio
- Graphene research
- Robotics training
- UAV challenges and credentialing
- Measurement services
- DEIA-related activities
- Baldrige Performance Excellence Program



Artificial Intelligence (AI) (\$10.0 M)





Reprogramming of NIST base STRS funding to launch U.S. Al Safety Institute

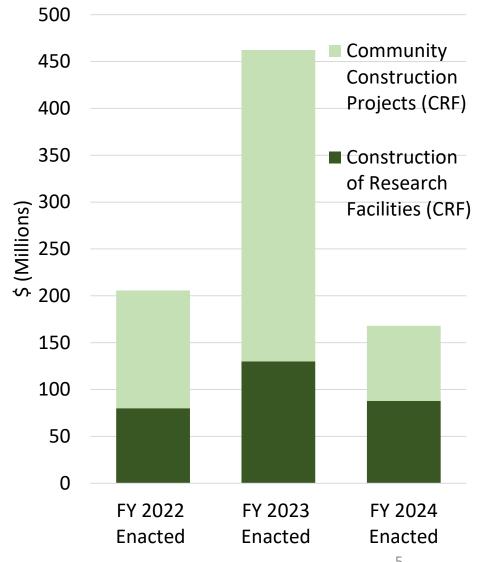
- NIST will continue to lead Federal efforts in standards development, measurement, and evaluation of safe, secure, and trustworthy Al
- The USAISI will advance:
 - Testing and evaluation of AI models' capabilities
 - Research on Al safety

FY 2024 Enacted (CRF): \$168.0 M



NIST will direct CRF funding (\$87.8 M) to address Safety, Capacity, Maintenance and Major Repairs (SCMMR), a decrease of \$42.2 M in FY 2024 to:

- Recurring annual costs (\$54.6 M)
- Utility infrastructure projects
- Life-safety, safety-related projects
- Gaithersburg underground utility infrastructure
- Façade and roofing projects to prevent water damage
- Additional projects as funding allows to address NIST's over \$1 billion FY 2023 deferred maintenance backlog



FY 2024 Enacted (ITS): \$212.0 M



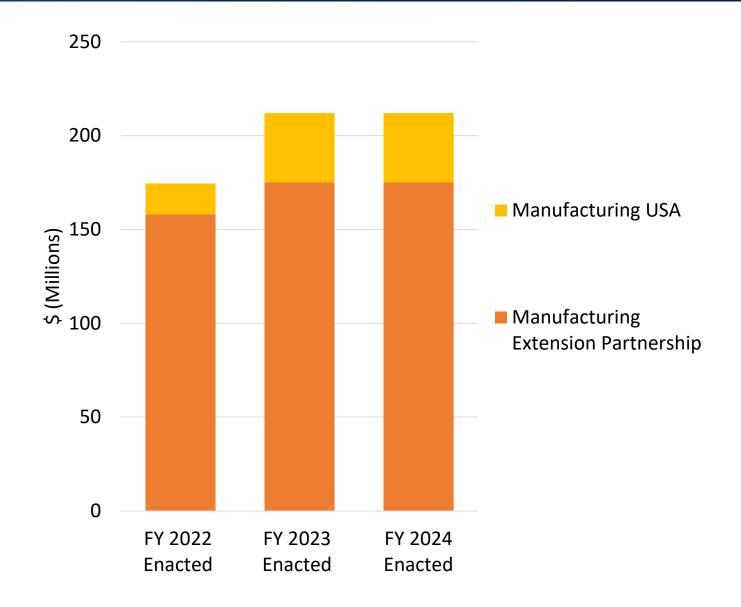
The FY 2024 enacted bill provides the same level of funding as FY 2023



\$37.0 M



\$175.0 M



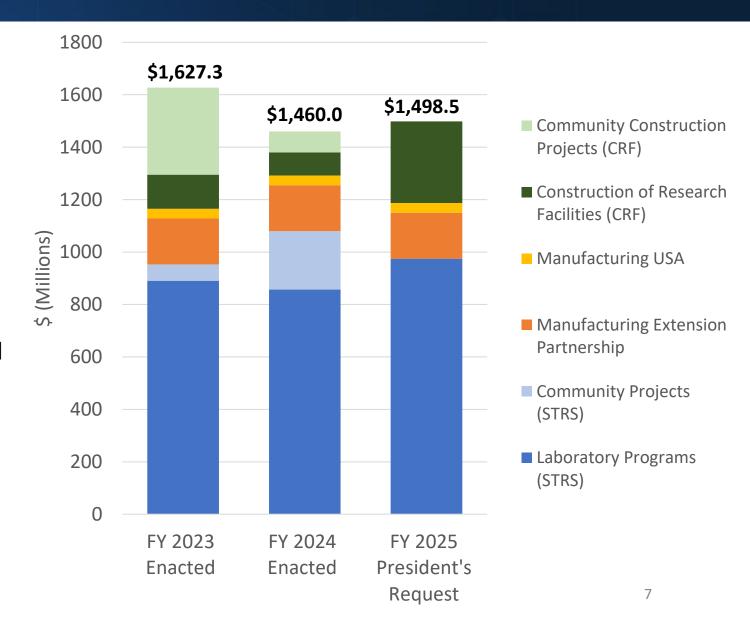
NIST 2025 Budget Request (\$1,498.5 M)



The FY 2025 budget request is an increase of \$38.5 M over FY 2024 enacted levels to address critical facilities needs, grow funding for critical mission areas, and fully fund inflationary adjustments to current programs

A **2.6** % **increase** from the FY 2024 enacted level positions NIST to address priorities in:

- Meeting the National Need for Artificial Intelligence Research, Testing, and Standards
- Advancing Quantum Information
 Science and Technology Readiness
- Critical Modernization of the NIST Radiation Physics Facility



FY 2025 Budget Request (STRS): \$975.0 M



The FY 2025 President's Budget targets funding of core measurement science and fully funds inflationary adjustments

- Ensures the global system of weights and measurements is grounded on scientific and technical principles
- Continues engagement with industry and government and meets demands for CETs including cybersecurity, advanced communications, and biotechnology
- Provides resources to support development of secure and robust domestic supply chains for economic and national security
- Continues NIST's unique standards and measurement services mission delivery to enable economic competitiveness

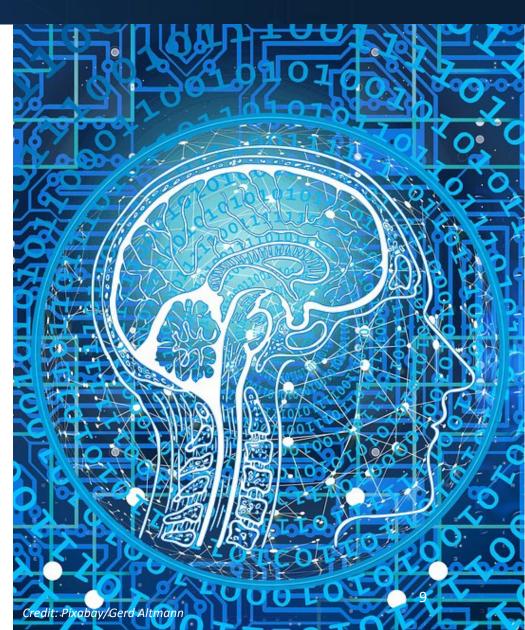


Advance Al Research, Standards, and Testing to Meet National Needs (+\$47.7 M)



Invest in the United States AI Safety Institute and expand upon Executive Order 14110 to:

- Conduct Al research to build the science necessary for safe development and responsible use of Al
- Establish testing infrastructure and advance methods to create benchmarks and measurements for AI system evaluation
- Develop technical guidance and facilitate the development of standards to measure and manage Al risks and enable responsible innovation
- Implement best practices and frameworks to support organizations in measuring AI risks and impacts

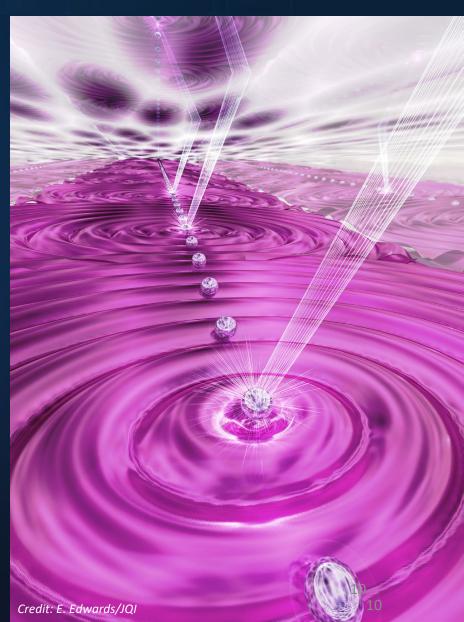


Advance Quantum Information Science and Technology Readiness (+\$13.9 M)

NST

NIST will enhance quantum technology research in critical technologies to support the nascent U.S. quantum industry by:

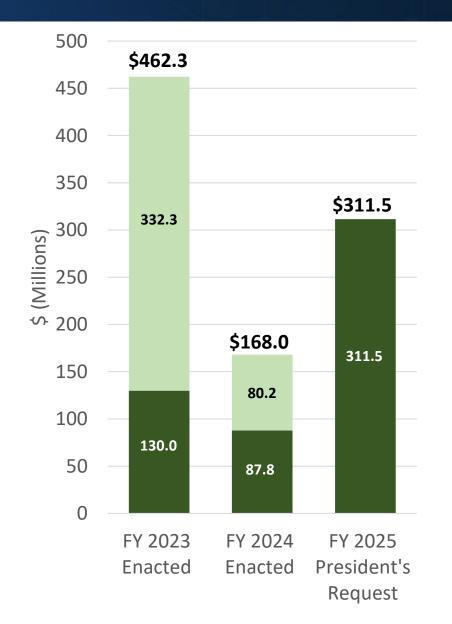
- Identifying and resisting quantum threats such as post-quantum cryptography (PQC)
- Developing metrology for large-scale quantum systems
- Identifying and mitigating limiting factors for highperformance quantum components
- Training a quantum-ready workforce
- Ensuring a leadership role in global quantum standards development



FY 2025 Budget Request (CRF): \$311.5 M

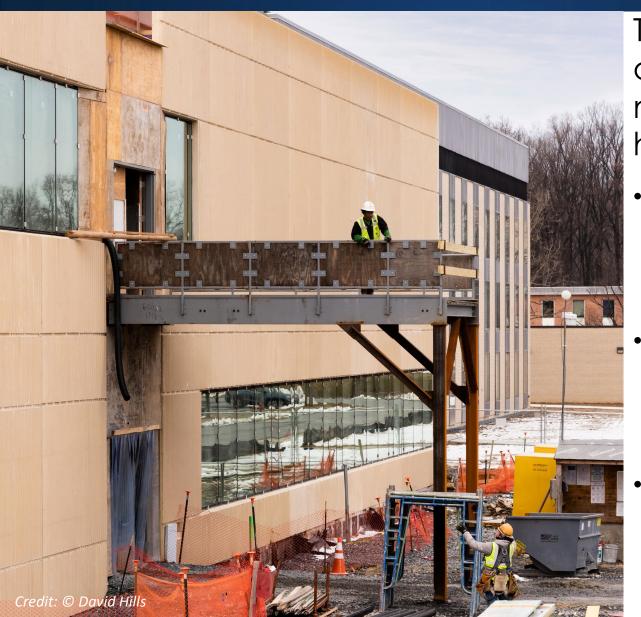


- The 2023 NASEM report recommends: a
 "... plan to recover from long-term,
 inadequate funding of all facility needs
 funded by CRF: sustainment, restoration,
 modernization, and expansion, including
 backlogged needs for expansion to
 support mission-growth."
- Building 245 Modernization (\$178.3 M)
 Modernize the Radiation Physics building to support critical measurements including ensuring the accuracy of every mammogram conducted in the country.
- Safety, Capacity, Maintenance and Major Repairs - SCMMR (\$133.2 M) address maintenance and renovation backlogs in decaying buildings and systems



- CommunityConstruction Projects(CRF)
- Construction of Research Facilities (CRF)

Construction and Major Renovations (CMR): Building 245 Modernization (+\$178.3 M)

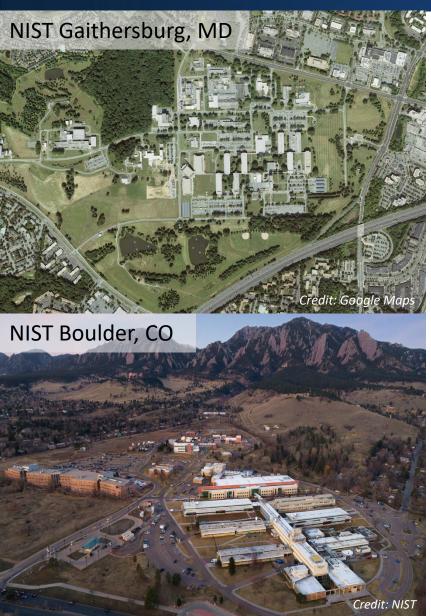


This request allows NIST to resume full delivery of reliable radiation measurements to support security, healthcare, energy, and research:

- Update Gamma-Ray Radiation Calibration facility to re-establish traceability for food safety, homeland security, and radiation protection applications
- Enhance research capabilities to provide measurement standards and calibrations for electromagnetic radiation and radioactivity used by USG and industry
 - Increase efficiency and decrease costs to the customers while ensuring protection of staff safety and specialized lab equipment

Safety, Capacity, Maintenance & Major Repairs (SCMMR) of NIST Facilities (+\$45.4 M)





This request provides for maintenance of NIST facilities and infrastructure to:

- Initiate safety-related projects to improve working conditions and improve safety culture
- Repair and revitalize NIST facilities and address maintenance backlogs (steam, electrical, water, etc.)
- Modernize IT networking infrastructure to deliver the speed, reliability, and capacity needed to meet future data and computing demands
- Support infrastructure improvements and research space enhancements across Gaithersburg and Boulder campuses
- Ensure that NIST is able to support a leading-edge research and development program that advances U.S. innovation in critical and emerging technologies

FY 2025 Budget Request (ITS): \$212.0 M



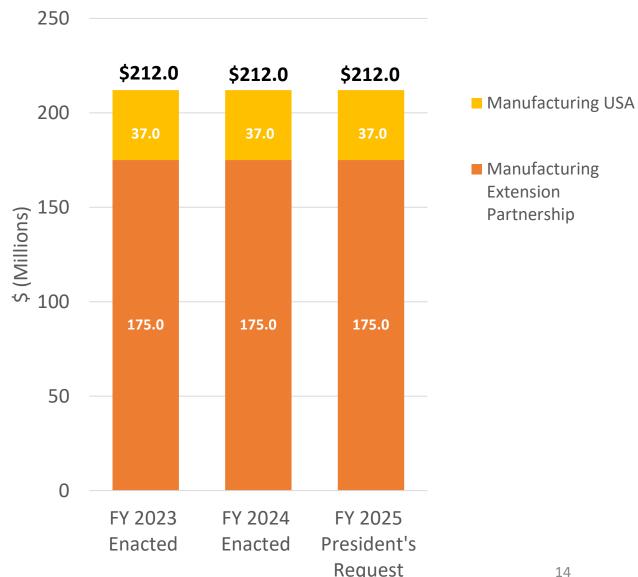
Manufacturing Extension Partnership (MEP)

- Maintains programs to narrow the workforce gap, mitigate supply chain vulnerabilities, and leverage advanced technologies
- Supports a network of 51 centers, one in every state and Puerto Rico

Manufacturing USA

- Provides support for the MFG USA institutes, including new institute on Al for resilient manufacturing
- Continues support for NIIMBL

Both programs increase engagement of underserved communities in the networks' workforce development programs



FY 2026 Budget Planning Has Begun



- Secretarial process (align request with DOC priorities)
- WH/OMB process (align request with Administration priorities)
- Separate House and Senate markups
- Resolution

 Considerations: last year's Fiscal Responsibility Act puts constraints on available funding



