CONSTRUCTION AT NIST

BY THE NUMBERS

58
Average age of NIST buildings in need of major renovation

$300 million
In basic repairs are backlogged at NIST

39 milion
Mammograms per year are traceable to measurements made in NIST facilities

4,200+
Researchers were served by NIST user facilities in FY 2014

1,300+
Industry-serving standard reference materials are produced at NIST—from building materials to human DNA

In order to support the sophisticated research and development necessary to drive U.S. innovation and industrial competitiveness in the 21st century, NIST must continually adapt to increased demands for measurement precision and capacity. But many of its buildings, which date back to the 1950s and 1960s, have failing basic environmental controls. They need to be brought up to date to continue to meet standards of health, safety, access and sustainability.

Current Status of NIST Facilities

- External panels recommend major facility upgrades.
- NIST Facility Condition Assessment rating "poor."
- Maintenance budget significantly below the Federal Facility Council recommendation.
- Major upgrades are needed for the Radiation Physics Building in Gaithersburg and Boulder facilities that date back to the 1950s.
- Phase 1 of the Radiation Physics Building renovation is under way with a $60 million FY 2016 allocation.
- Recurring flooding and uncontrolled lab conditions are hindering essential NIST research and services required for:
  - next-generation "5G" wireless
  - calibrating NASA and NOAA solar satellites
  - monitoring radiation exposure of U.S. workers
  - quantitative medical imaging

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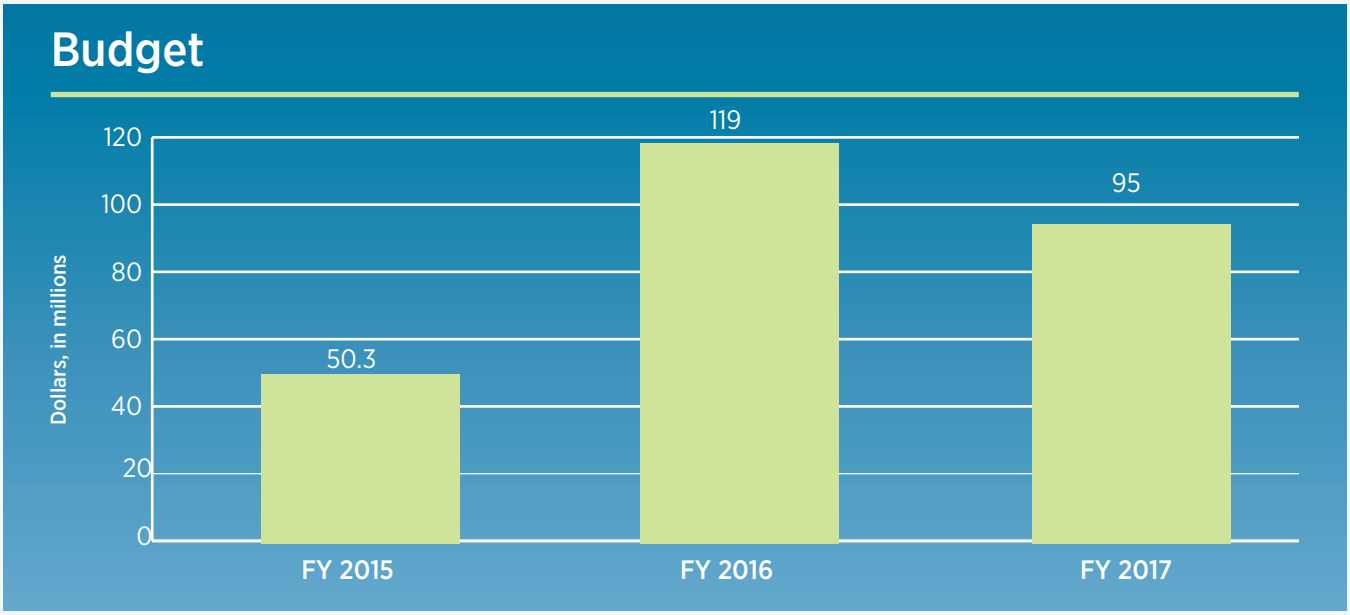
NIST
National Institute of Standards and Technology
U.S. Department of Commerce

Impact on Deliverables

- In 2010, productivity losses due to poor facility conditions in Boulder were assessed at $10 million annually, with an impact of $400 million in unrealized economic benefits to the country.
- Crumbling infrastructure slows productivity and causes increased uncertainty in NIST measurements.
- Lack of environmental controls and early-warning smoke detectors increase the risk of the loss of valuable infrastructure and delays in calibrations.
- FDA-required mammography calibrations delayed by one week per quarter, due to recurring uncontrolled humidity levels.
- Installation of a NIST nuclear forensics standards lab has been delayed by more than three years while upgrades to a modern air-handling system and clean chemistry rooms are pending.



New for FY 2017

The renovation of the Radiation Physics Building that began in 2016 is estimated to cost $322 million over the next eight years. The FY 2017 request includes $40 million to:

- Fund the excavation and waterproofing of existing spaces in the Radiation Physics building and the addition of a new wing.
- Begin improvements to humidity controls in laboratories, which would reduce delays in calibrations and enable installation of modern instrumentation.