NNSA National Nuclear Security Administration — Infrastructure Modernization

"An effective, responsive, and resilient nuclear weapons infrastructure is essential to the U.S. capacity to adapt flexibly to shifting requirements."
- 2018 Nuclear Posture Review

A Vast and Complex Enterprise

- Over 44,000 federal and contractor employees
- More than 50% of facilities are at least 40 years old
- 30% of facilities date back to the early Cold War era
- $2.5 billion in deferred maintenance
- 36 million square feet of facility space – equivalent to six Pentagons
- 2,100 square miles of land area – about the size of Delaware
- Consumes enough energy to power 225,000 homes for a year

Warhead Production and Strategic Materials

NNSA is recapitalizing its manufacturing capabilities to ensure a reliable supply of strategic materials to meet stockpile requirements. Work is underway in New Mexico, South Carolina, Tennessee, and Texas to renew production and processing capabilities related to high explosives, tritium, lithium, uranium, and plutonium. In an approach endorsed by the Nuclear Weapons Council, plutonium pit production will be carried out at two NNSA sites, Los Alamos National Laboratory and the Savannah River Site, to deliver no less than 80 pits per year by 2030 to the Department of Defense.

Plans are underway to repurpose the MOX project at the Savannah River Site

Plutonium Facility 4 at Los Alamos National Laboratory in New Mexico is being upgraded

Scientific Capabilities

Sierra supercomputer at Lawrence Livermore National Laboratory in California

All of NNSA's enduring national security missions are underpinned by state-of-the-art scientific capabilities. As these capabilities become more paramount in a National Defense Strategy focused on great power competition, NNSA continues work to stay ahead of the technology curve. A future gap in high performance computing is being addressed through a joint effort with the DOE's Office of Science to provide an exascale computing platform to the enterprise by fiscal year 2023. NNSA is also moving forward with a project to enhance the experimental capabilities at the Nevada National Security Site.

Across the Enterprise

- The John C. Drummond Center opened at the Pantex Plant in Amarillo, Texas, in March 2018, providing a modern work environment for more than 1,100 employees and replacing 52 Cold War-era facilities.
- A new Advanced Manufacturing Facility at the Kansas City National Security Campus opened in July 2018 to support additive manufacturing technologies.
- Ground was broken on the Albuquerque Complex Project in July 2018, a 333,000-square-foot project that will provide modern workspace for 1,200 employees.

Albuquerque Complex Project groundbreaking in New Mexico