

## **Plutonium Pit Production Mission**

"An effective, responsive, and resilient nuclear weapons infrastructure [that can] adapt flexibly to shifting requirements" - 2018 Nuclear Posture Review

## **Future**

### Recapitalized infrastructure to produce 80 pits per year in 2030 across two NNSA sites

To meet stockpile requirements, NNSA's recommended alternative is to repurpose the Mixed Oxide Fuel Fabrication Facility (MOX) at the Savannah River Site (SRS) to produce 50 pits per year with an enduring mission of at least 30 pits per year at Los Alamos National Laboratory (LANL)

- Maintains LANL as the Nation's Plutonium Center of Excellence for R&D
- Is the lowest risk approach
- · Improves resiliency, flexibility, and redundancy by not relying on a single site
- Meets requirements of Nuclear Weapons Council and direction of 2018 Nuclear Posture Review
- Informed by analysis of alternatives, engineering assessment, and workforce analysis conducted by internal and external experts



**Mixed Oxide Fuel Fabrication** Facility at Savannah River Site

### More Responsive and Flexible Infrastructure

#### Savannah River Site



**Mixed Oxide Fuel Fabrication Facility** 

### **Los Alamos National Laboratory**



Radiological Laboratory Utility Office Building



Plutonium Facility 4

#### **Activities**



Chemistry Characterization



Disassembly/ Metal Prep





Machining Aqueous Foundry

## Present

Aging infrastructure that poses significant risk to pit production mission and our national security

LANL's Cold War-era Plutonium Facility 4 is the only site presently capable of plutonium pit production



**Plutonium Facility 4 at Los** Alamos National Laboratory

# Past

A vast, costly infrastructure to support a large nuclear stockpile during the Cold War

1,000 pits per year were produced at Rocky Flats, which closed in 1992 and was supported by the Pinellas Plant, the Hanford Site, SRS, LANL, and Lawrence Livermore National Laboratory



**Rocky Flats Plant in Colorado**