



NNSA Initial Pit Production Total Acquisition Cost Estimate

April 2024

CONTROLLED UNCLASSIFIED INFORMATION (CUI)

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- NNSA's highest production modernization priority is reestablishing the capability to produce new plutonium pits.
 - Pit production capabilities will be needed to support the stockpile as long as nuclear weapons exist.
- NNSA committed to provide an initial pit production total acquisition cost estimate to Congress by April 2024.
- NNSA's initial total estimate includes all capital investments for 80 pits per year (PPY) capability (line items, minor construction, recapitalization).
- At current projections it is **\$28B-\$37B**, driven by SRPPF (\$18B - \$25B).
- NNSA is holding firm to SRPPF completion in 2032.

**Estimates will improve as designs near completion.
An improved baseline total acquisition cost estimate will follow project
baseline estimates for two pit production projects, expected in 2026.**

Pit Production Total Acquisition Cost Estimate

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- **Scope:** Ongoing and planned capital investments to establish 80 ppy production capability
- Aligns with GAO's recommended scope for pit production capital investments¹

Capital Investment	Description	Site
Line-items (LI)	Construction project with Total Project Cost (TPC) >\$50M	LANL, SRS
Enhanced Minor Construction (EMC)	Site commercial construction projects taking place outside of DOE O 413.3b, i.e. office and storage buildings	LANL, SRS
Recapitalization (Recap)	Includes capital equipment costs, MIEs, other minor construction, and additional known pit production investments such as IT, security, safety, etc.	LANL, LLNL

- **Methodology:** Cost estimates have been obtained from contractors, evaluated by NNSA project managers, and reviewed by NNSA's Office of Cost Estimation and Program Evaluation. Further evaluation and reconciliation is ongoing.

Results

- Current pit production total acquisition cost estimate is **\$28B-\$37B**.
- Prior estimate provided to GAO in Jan 2023 was ~\$18B-\$24B. Change is driven by new SRPPF estimates.



¹ GAO report ([Nuclear Weapons: NNSA Does Not Have a Comprehensive Schedule or Cost Estimate for Pit Production Capability | U.S. GAO](#))

Initial Pit Production Total Acquisition Cost Estimate Cost Elements

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Project	Project Total Cost (TY\$B)	% of Pit Production Total Cost*
Savannah River Plutonium Processing Facility (SRPPF)	18-25	65%
Enhanced Minor Construction at Savannah River Site (EMC-SRS)	0.3-0.4	1%
Savannah River Site Total	18.3-25.4	66%
Los Alamos Plutonium Pit Production Project (LAP4)	4.7-6.6	17%
Chemistry and Metallurgy Research Replacement (CMRR)	2.8	10%
TA-55 Reinvestment Project Phase III (TRP III)	0.2	< 1%
Transuranic Liquid Waste (TLW)	0.2	< 1%
Enhanced Minor Construction at Los Alamos National Laboratory (EMC-LANL)	0.3	1%
Recapitalization at Los Alamos National Laboratory (RE-LANL) <i>Includes: MIEs, Minor Construction, Capital Equipment</i>	1.1	4%
Los Alamos National Laboratory Total	9.4-11.3	34%
Recapitalization at Lawrence Livermore National Laboratory (RE-LLNL) <i>Includes: Minor Construction, Capital Equipment</i>	0.2	< 1%
Lawrence Livermore National Laboratory Total	0.2	<1%
<u>Grand Total</u>	<u>27.8-36.8</u>	<u>100%</u>

Current initial pit production total acquisition cost estimate is **\$28B-\$37B**

TY-Then Year

*Percent of total reflects midpoint of range

Summary and Next Steps

INNOVATE. COLLABORATE. DELIVER.

Results

- Initial pit production total acquisition cost estimate current forecast in Then Year (TY\$) is **\$28B-\$37B** and includes a \$18B-\$25B estimate for SRPPF. Reviews are ongoing.
- SRNS estimates turnover to operations will occur in 2032 or 2033, and NNSA's FY 2025 budget request supports an increasing pace of work to advance completion of SRPPF construction. SRNS is pursuing multiple opportunities to accelerate the SRPPF project and is aggressively targeting CD-4 in 2032.
- These estimates have significant uncertainties, and baseline cost and schedule estimates cannot be established until designs are nearer to completion.
 - An improved baseline total acquisition cost estimate, with smaller uncertainties, will follow establishment of baseline cost and schedule estimates for SRPPF and the LAP4, expected to complete in 2026.

Next Steps

- Near Term: Will discuss with NW Council and Energy Systems Acquisition Advisory Board
- Longer Term: NNSA will provide Congress an updated acquisition estimate in 2026 after SRPPF and LAP4 baselines are completed

**Initial pit production total acquisition estimate has a current forecast of \$28B-\$37B.
Estimates will improve as designs near completion.**