



Enterprise Blueprint

What is the Enterprise Blueprint?

A 25-year NNSA roadmap that aligns timely delivery of specialized infrastructure with mission demands across the nuclear stockpile, global security, and naval nuclear propulsion missions.

- Address aging infrastructure and meet changing mission requirements and geopolitical conditions.
- Sequence timely delivery of specialized infrastructure that is not available, at risk, or limited in capability or capacity.
- Balance investment for production, stockpile, sustainment, and science.

The Blueprint is an enterprise-wide, collaborative approach to meet mission requirements and set the foundation for what the Nuclear Security Enterprise can deliver for decades to come.

Why the Blueprint?

- Over half of facilities are in poor condition and many date back to the Manhattan Project.
- The NSE must deliver the program of record and adapt to shifting demands and geopolitical conditions.
- New opportunities from modern technologies must be seized to improve efficiency, safety, and security.

The Essential Enterprise

The NSE must deliver on the program of record and adapt to shifting demands, recognizing that security on the global stage will be influenced by science and technology prowess alongside evolving nuclear deterrence strategy.

Time-phased investments in critical capabilities will deliver essential infrastructure for mission delivery, on time and at scale. This focused approach will provide the NSE with the capacity needed for the mission; improve worker safety; modernize technology; and advance scientific understanding. Major outcomes include:

- Pit manufacturing will be re-established at LANL and SRS to replace the capability lost when Rocky Flats was closed.
- Uranium and lithium processing capabilities will be modernized at Y-12 to provide modern equipment and safer environments.

- Subcritical test diagnostics will be improved at NNSA to better understand aging performance to certify the stockpile without nuclear explosive testing and collect data on nuclear materials and newly manufactured components.
- Insensitive high explosive synthesis and formulation capability will be established at Pantex to meet capacity requirements and resilience goals.
- Combined radiation environmental test capability will be established at SNL to replace an aged reactor, address current threat environments, and operate safely and predictably.
- Manufacturing R&D centers will be established at LLNL, KCNSC, Y-12, and SNL to address the fast pace of technological change and collaborate across the enterprise.
- Spent nuclear fuel handling and examination capabilities will be recapitalized at NRF and key laboratory capabilities consolidated at Bettis and KAPL.

From Vision to Reality

- The Blueprint informs planning and programming decisions and signals that infrastructure investments will require significant attention and resourcing to meet mission demands.
- Implementation requires significant, coordinated effort from Programs, Field elements and M&O partners.
- We must work collaboratively and innovatively on a larger scale and faster pace to reduce our reliance on decades-old facilities and the capabilities they house.
- The Blueprint is a living document that will be updated as needed to account for uncertainty and keep stakeholders informed.

For additional information or questions, contact the NA-1.1, Office of Policy and Strategic Planning at policyoffice@nnsa.doe.gov