

“The W80-4 Life Extension Program is vital to the bomber leg of the nuclear triad.”
 - Dr. Charles P. Verdon, Deputy Administrator for Defense Programs

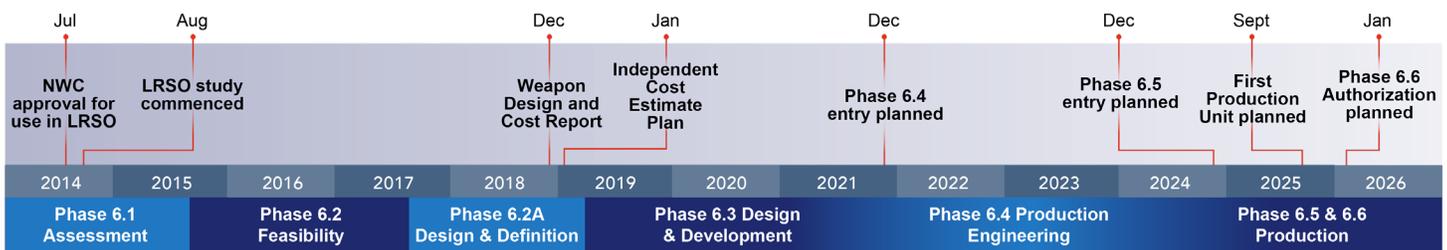
Overview

In close coordination with the Department of Defense, NNSA is extending the life of the W80-1 warhead through the W80-4 Life Extension Program (LEP) for use in the U.S. Air Force’s Long Range Standoff (LRSO) cruise missile. Together, the W80-4 and LRSO will help ensure the long-term effectiveness of the bomber leg of the Nation’s nuclear triad. The W80-4 LEP will also extend the warhead’s service life while enhancing its safety, security, and reliability.



Key design requirements of the W80-4, which extends the life of the W80-1 warhead, include use of the existing insensitive high explosive design, incorporation of modern components and safety features, extensive use of non-nuclear component technology developed for other LEPs, and parallel engineering with the U.S. Air Force on the warhead-missile interface. The program is currently in Phase 6.3, Development Engineering, commencing development, specifications, and design release of the W80-4 warhead. Entrance into Phase 6.3 synchronized alignment with the LRSO program, supporting U.S. Air Force timelines for achieving initial operational capability. The W80-4 LEP is expected to be completed by Fiscal Year 2031.

The LRSO, coupled with the W80-4 warhead, will play an important role in the Nation’s security by deterring adversaries and assuring allies and partners.



Enterprise Effort

Lawrence Livermore National Laboratory is leading the nuclear design for the W80-4 LEP, while **Sandia National Laboratories - California** is leading the non-nuclear design. Sites across the Nuclear Security Enterprise are participating in the development and production of the W80-4 warhead.

