

Infrastructure Reduction

The Y-12 National Security Complex is a sprawling landscape of over 800 acres within the city limits of Oak Ridge, Tennessee. Constructed in the early 1940s during the Manhattan Project, Y-12 was developed as a self-contained city with over 500 buildings, 26 miles of roads, 10 miles of electrical lines, and 35 miles of piping. This footprint, however, is much too large given the current and future mission of the site, and many of the facilities and services are nearing the end of their useful lives. Several buildings and systems have been out of service for years, and other parts of the infrastructure are beginning to deteriorate faster than they can be managed.

Responsible stewardship of Y-12 suggests that the site should be consolidated for the sake of efficiency, and that footprint reduction should be a major element of an overall strategy for modernization of the site—one that balances a program of capital investment with infrastructure reduction and technology development.

Part of a Balanced Strategy

While maintaining production, we will concentrate on deactivating and eliminating unnecessary infrastructure, finding efficiencies within the current ongoing processes. By eliminating nonessential equipment, processes, and systems, we will make room, physically and costwise, for beneficial upgrades. Priority will be placed on the removal of nonessential buildings and equipment that restrict consolidation activities or that occupy prime real estate. Savings in surveillance, analysis, maintenance, and security can be reinvested in the replacement of vital manufacturing and material science processes.

Infrastructure Reduction Goal

Infrastructure reduction is a planning-intensive process, the goal of which is to achieve a 500,000-ft² reduction in Y-12's footprint by September 2002. This will be accomplished through a facility reuse plan and a footprint reduction plan.

Benefits

The result of Y-12's infrastructure improvement approach will be a consolidated manufacturing footprint. Nuclear material storage will be consolidated, as well as the utilities infrastructure for the entire site. Over time, vacated facilities and utilities systems can be closed down, deactivated, and eliminated, and perimeter areas can be used for redevelopment. Infrastructure reduction will contribute to an overall goal of developing a more flexible core capability—one that is adaptable to changes in work scope and technology, is cost-efficient, and has the ability to attract and retain new talent.

With a combined strategy of recapitalization and reduction, Y-12 will be able to make significant progress toward its infrastructure improvement goals. Y-12's approach to improvement and modernization will result in a smaller, cleaner, more cost-effective complex that will then be able to serve national security needs well into the 21st century.



A reduced footprint (i.e., consolidated operations) reduces the amount of handling and transportation associated with various materials, which also reduces opportunities for accidents of all types.

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