

# “TRANSFORMATION OF THE Y-12 NATIONAL SECURITY COMPLEX”

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## Y-12: A unique national security asset



- Serves as the nation's *only* source of enriched uranium weapons components and nuclear fuel for the U.S. Navy
- Main U.S. storage facility for enriched uranium
- Leader in materials science and precision manufacturing

## Y-12 transformation objectives:

- Downsize, consolidate, & renew
- ES&H and security enhancements
- Emphasis on enriched uranium operations
- Responsive, flexible & affordable





## How Y-12 will achieve transformation:

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- Consolidate HEU into HEUMF -- Y-12's new uranium warehouse
- Achieve cost effective compliance with DBT
- Build and operate Uranium Processing Facility
- Reduce Y-12 footprint through D&D



# Y-12 Modernization: HEUMF Project:



**Scheduled for completion in July 2008**  
**Start of operations in 2010**



# Y-12 Modernization: Proposed Uranium Processing Facility







# Making Way for the Future

## Infrastructure reduction

- More than 1 million ft<sup>2</sup> of operational space reduced
- 244 buildings have been demolished or removed.
- 6.5 million pounds of scrap metal and miscellaneous items recycled.

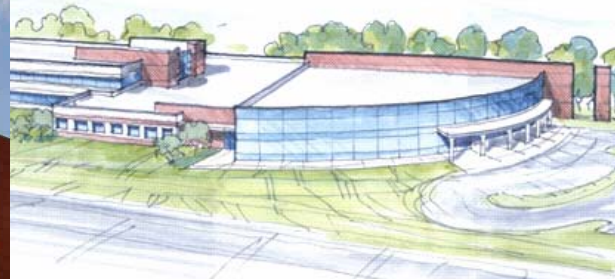
# New Support Facilities through Alternate Financing



**Jack Case Center**



**New Hope Center**



- Jack Case and New Hope Centers replaced aging facilities
- Complex Command Center has received CD-0 approval
  - Fire station
  - Plant Shift Superintendents complex
  - Technical Support Center—emergency response
- Additional needs being considered





# Y-12 D&D challenges



# Y-12 D&D challenges





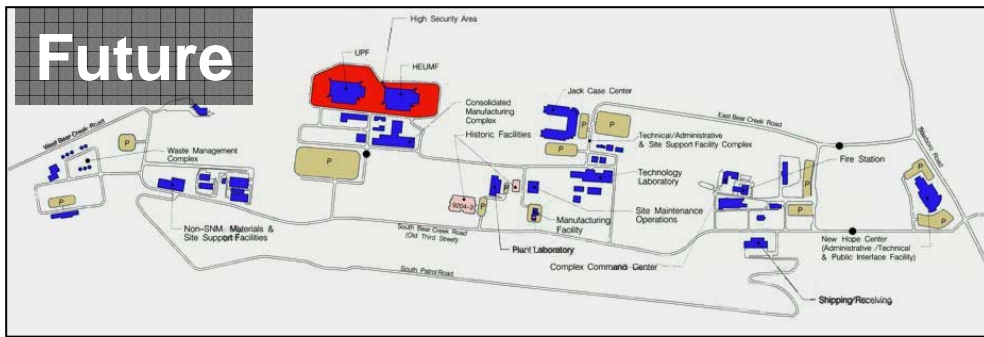
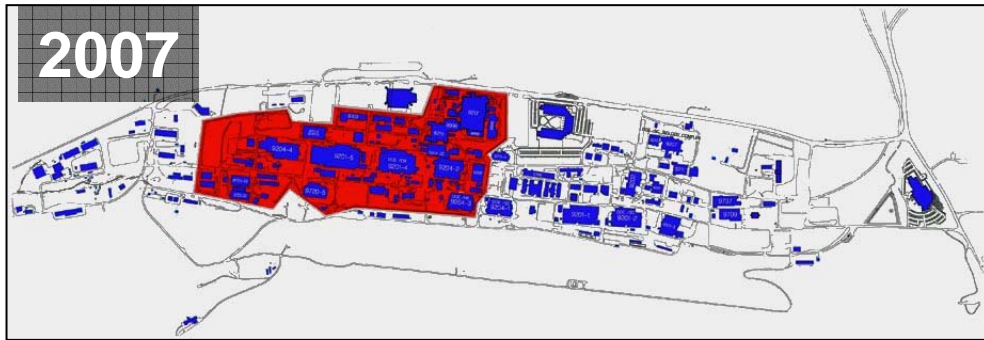
# Footprint Reduction at Y-12



	Number of Bldgs.	Gross Square Footage
Demolition Funded by FIRP Through FY 2007	265	1,108,010 S.F.
Demolition Funded by FIRP Through FY 2009	13	267,756 S.F.
D&D Funded in EM Oak Ridge Baseline	4	562,569 S.F.
<b>D&amp;D Proposed in Integrated Facility Disposition Project</b>	15	2,917,113 S.F.
<b>Totals</b>	<b>297</b>	<b>4,855,448 S.F.</b>



# Y-12



## Center of Excellence for Uranium and Canned Subassemblies

- Highly-Enriched Uranium (HEU) storage with HEU Materials Facility (HEUMF)
- HEU Production and R&D with Uranium Processing Facility (UPF)
- Production of remaining non-HEU components with consolidated manufacturing complex (CMC)

## Transformational Changes

- Special nuclear material consolidated
- 90% *reduction*: high security area
- 60% *reduction*: nuclear operations footprint
- 50% *reduction*: total building footprint (~3.1 million GSF gone including Production Bldg 9201-05 613K GSF; Production Bldg 9212 440K GSF; Production Bldg 9204-04 313K GSF)
- Over next decade, up to 30% *reduction* of staff directly supporting nuclear weapons activities



## Importance of D&D for Y-12:

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- Significantly reduces S&M costs
- Eliminates excessive ES&H liabilities
- Directly supports Y-12 Transformation
- Improves site remediation
- Improves plant security buffer
- Supports long range Y-12 national security mission

