

# **Oak Ridge National Laboratory Ten-Year Site Plan**

**Figures November-2004**

**Prepared by  
OAK RIDGE NATIONAL LABORATORY  
Oak Ridge, Tennessee 37831-6336  
managed by  
UT-BATTELLE, LLC  
for the  
U.S. DEPARTMENT OF ENERGY  
under contract DE-AC05-00OR22725**

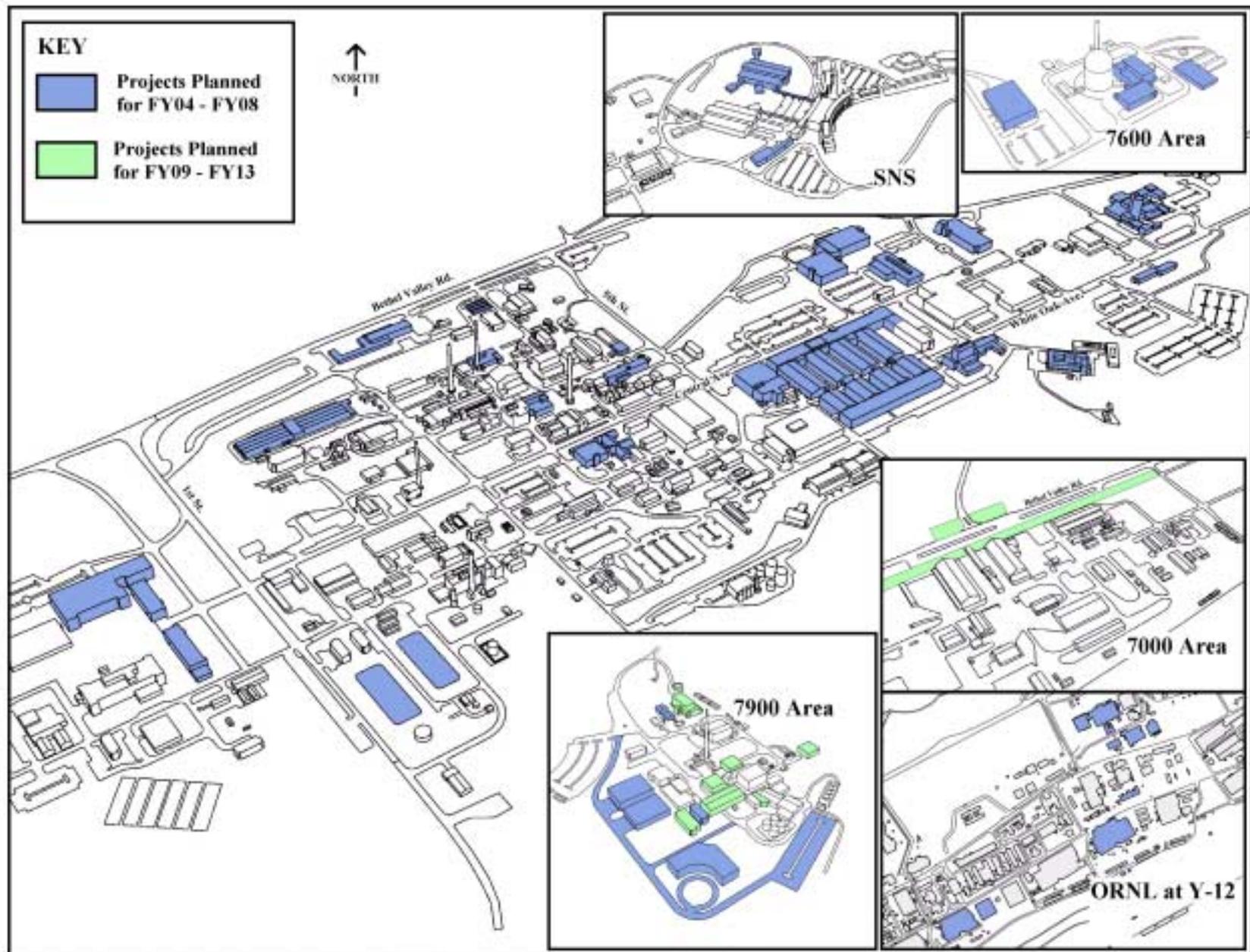


Fig. 1.1. Ten-year site plan for ORNL modernization

## ORNL Resource Needs

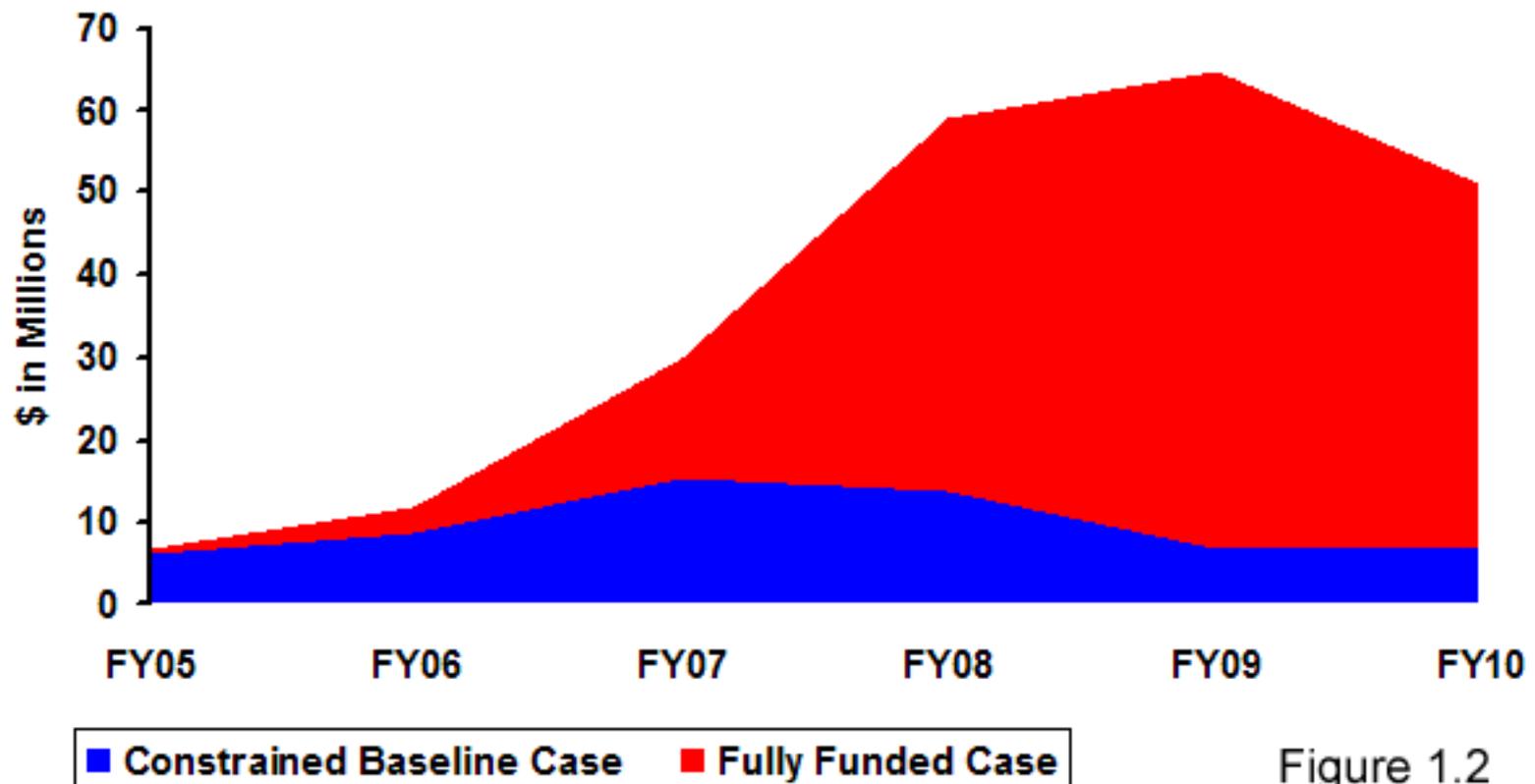


Figure 1.2

Fig. 2.1. Ongoing construction of the Research Support Center in the new ORNL East Campus.



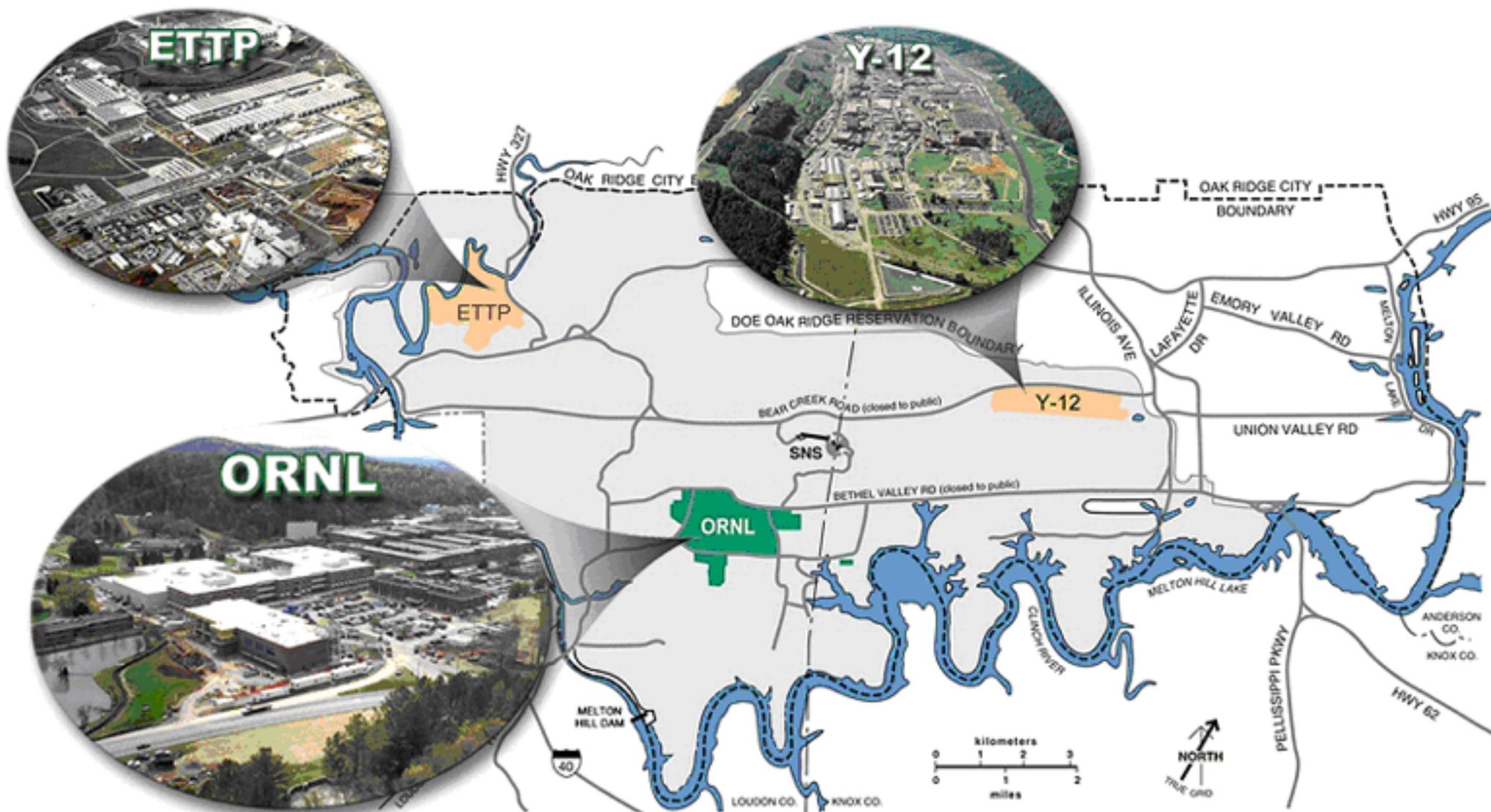


Fig. 2.2. Location of ORNL within the ORR and its relationship to other local DOE facilities

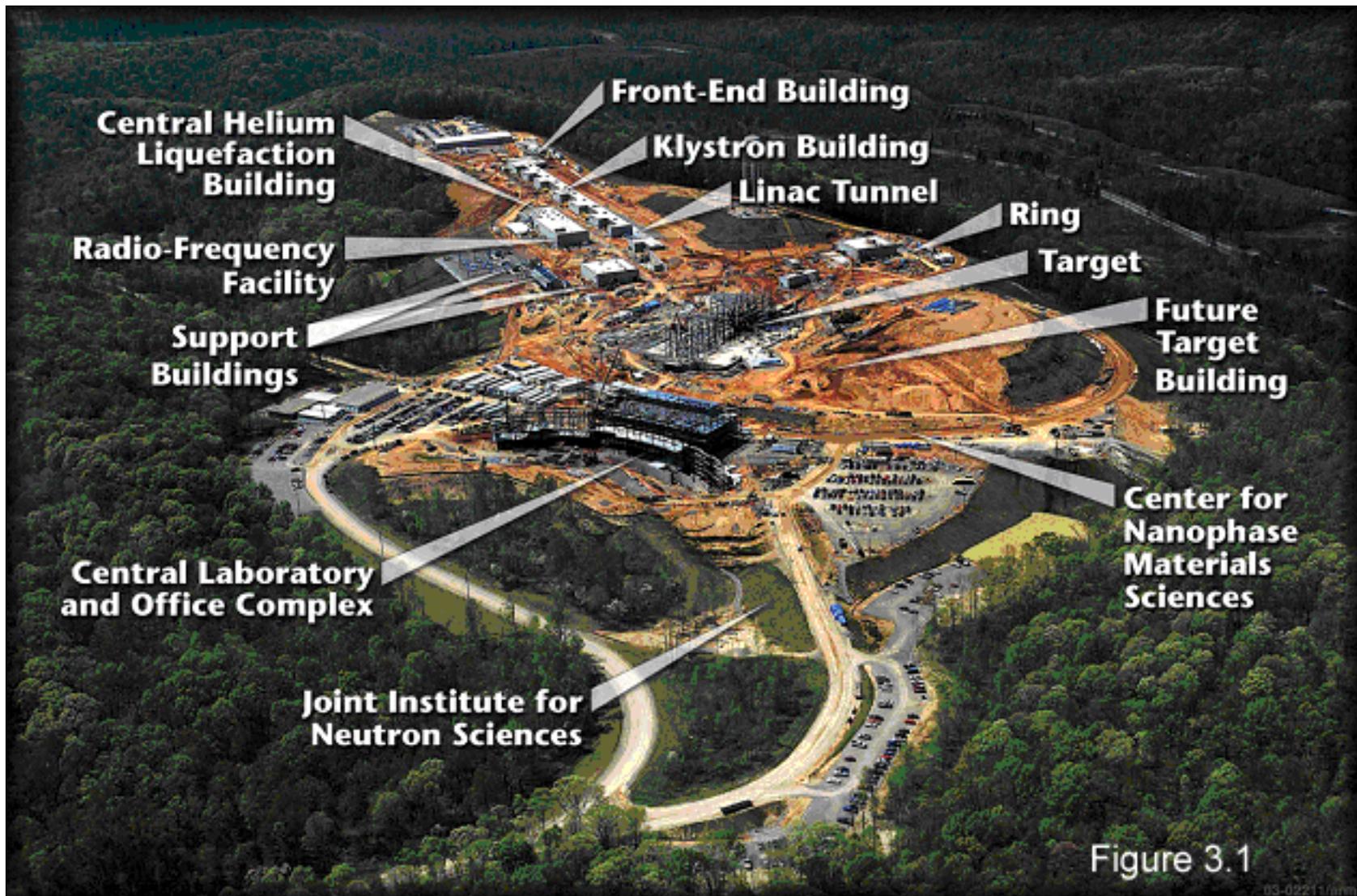


Figure 3.1

03-02211/awm



Figure 3.2



Figure 3.3

Fig. 3.4. The recently completed Joint Institute for Computational Sciences/Oak Ridge Center for Advanced Studies (JICS/ORCAS) at ORNL



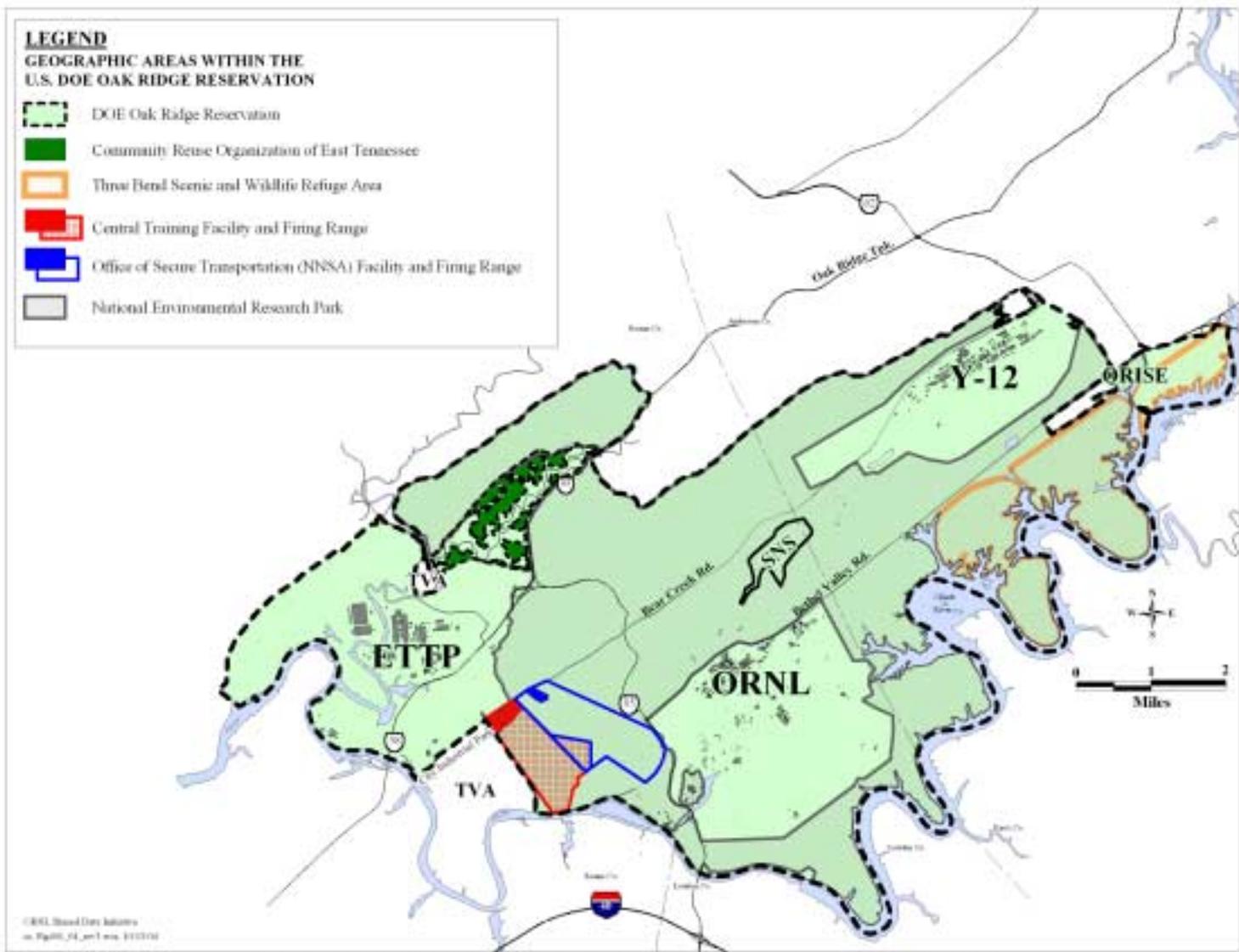


Fig. 4.1. Geographic areas within the U.S. DOE Oak Ridge Reservation

### Oak Ridge Research Park Users in FY 2003

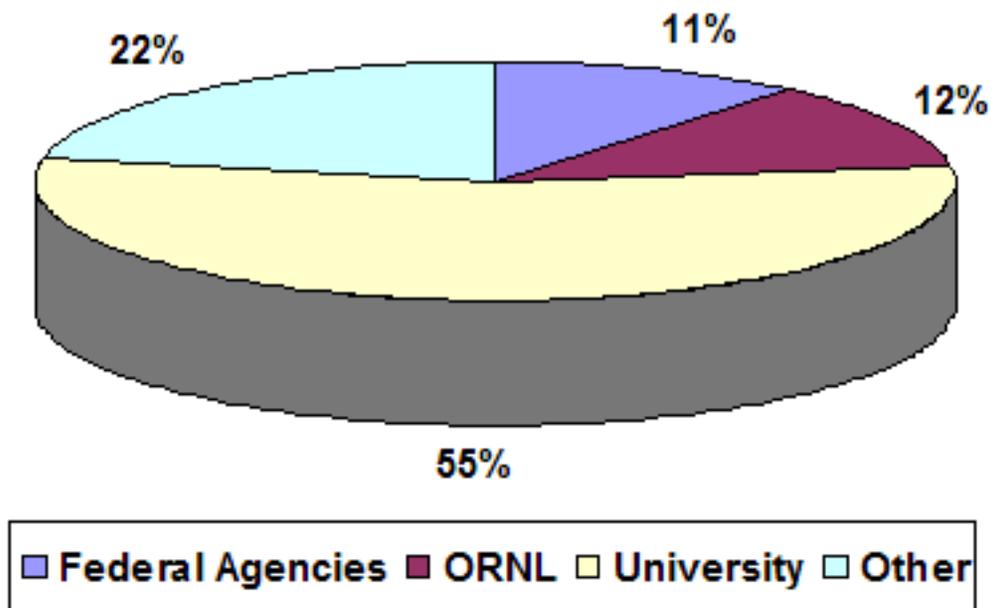


Figure 4.2

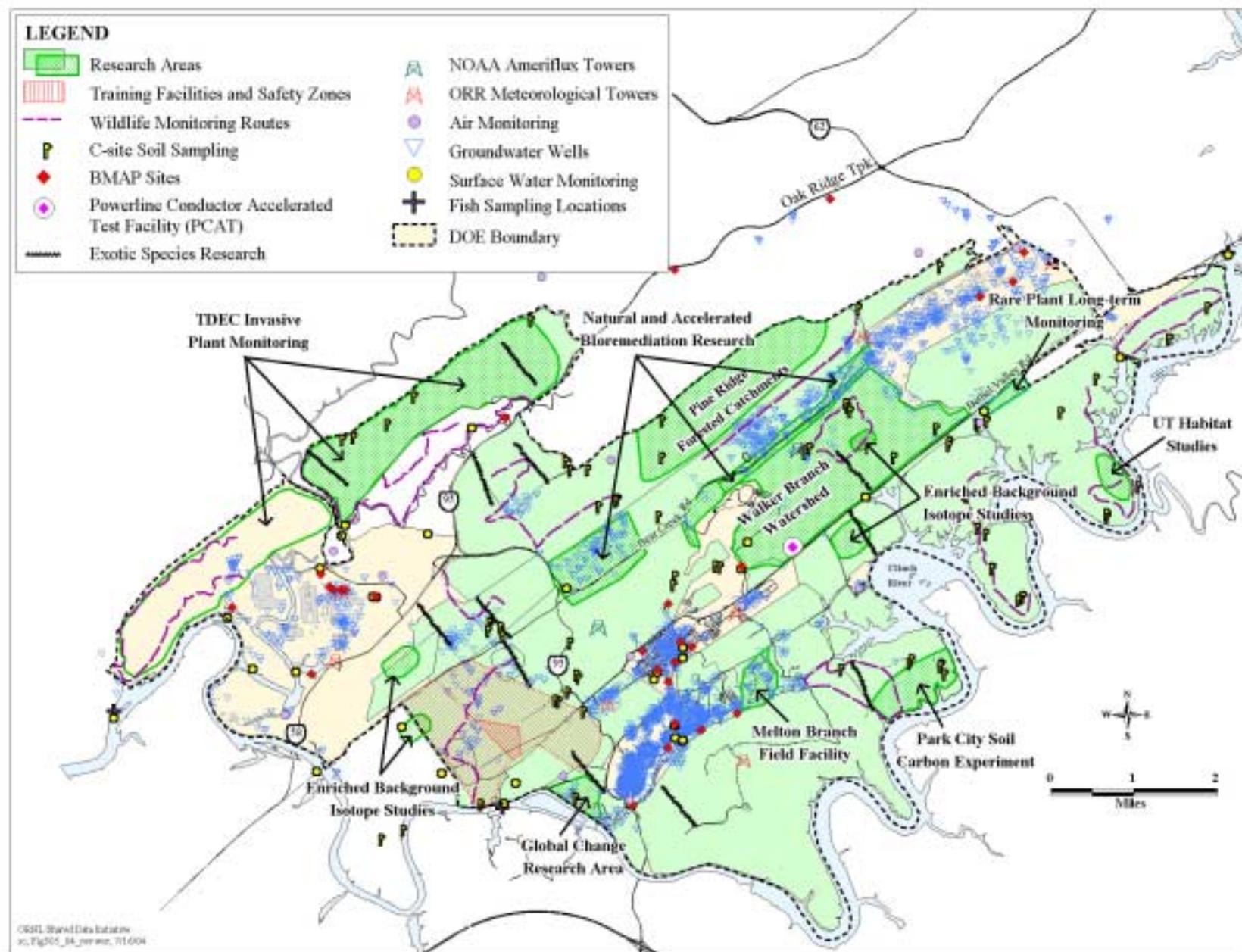


Fig. 4.3. Research areas on the Oak Ridge Reservation



Fig. 4.4 Geoprobe in use at the NABIR DOE Field Research Center.

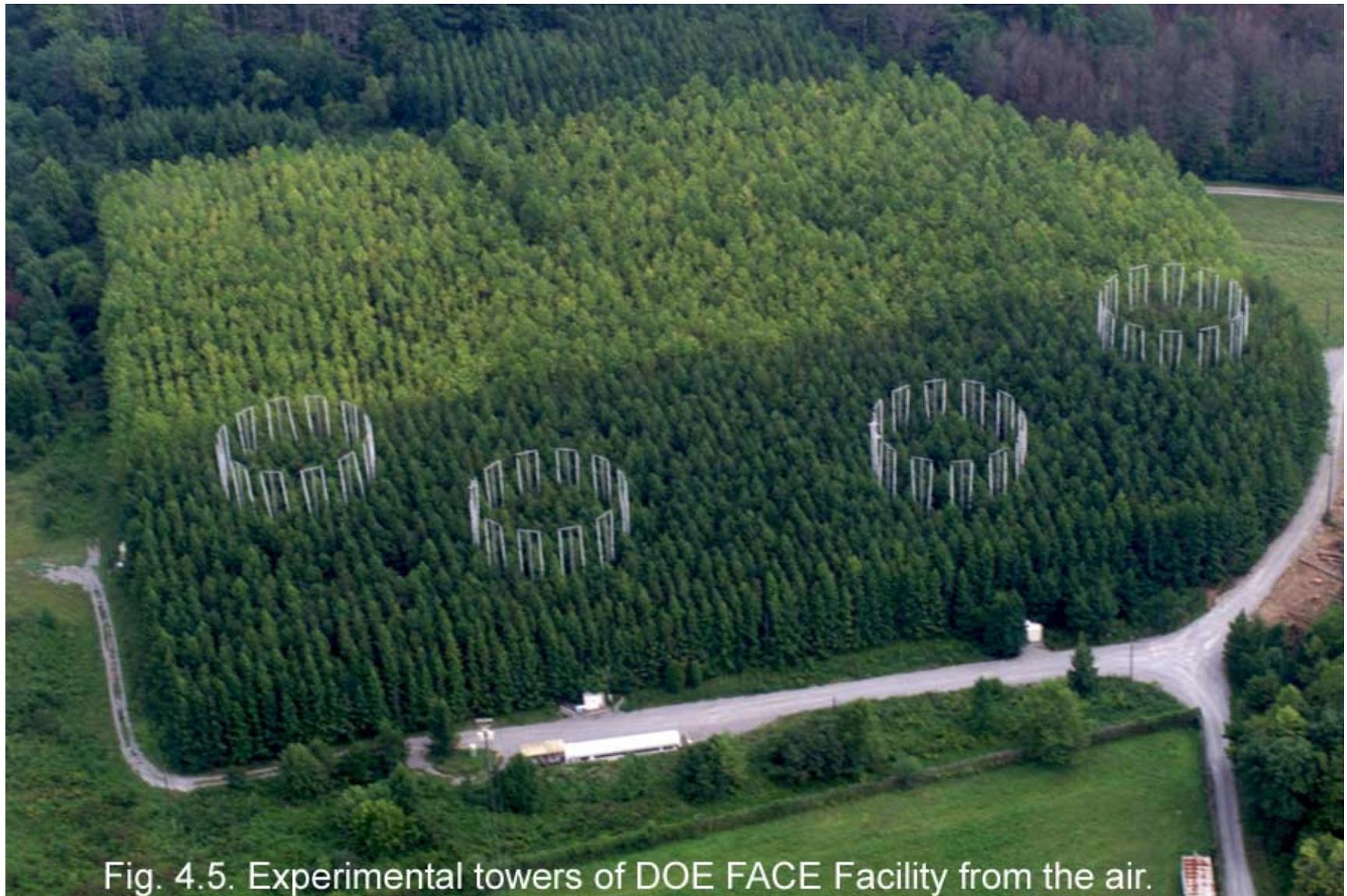


Fig. 4.5. Experimental towers of DOE FACE Facility from the air.

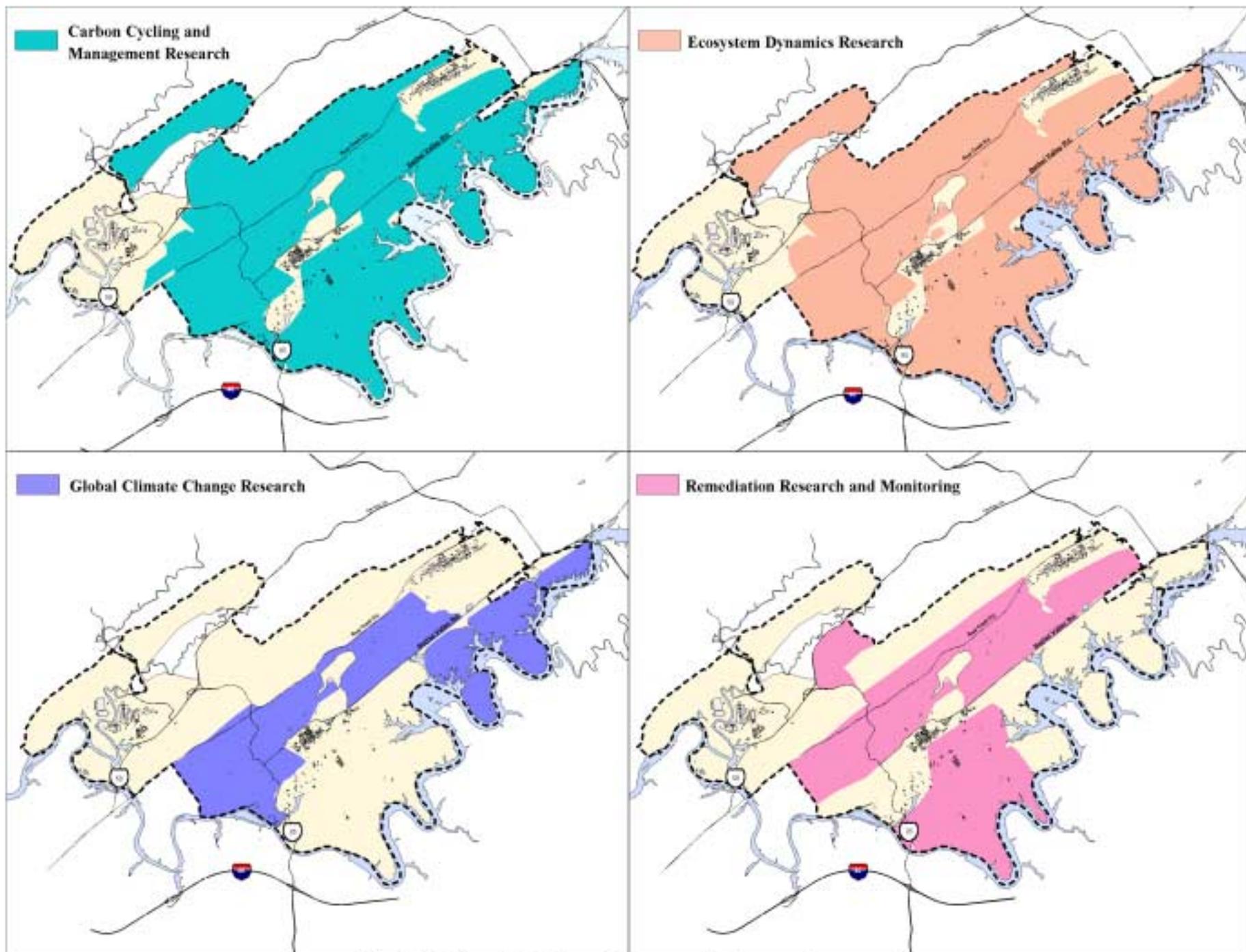


Fig. 4.6. Use of DOE lands for specific types of research



Fig. 4.7. Aerial view of the PCAT Facility



Fig. 4.8. An ORNL-developed helicopter-borne geophysics testing system was successfully demonstrated at Freels Bend in 2004



Fig. 5.1. New East Campus upgrades as part of the ORNL Facilities Modernization Initiative



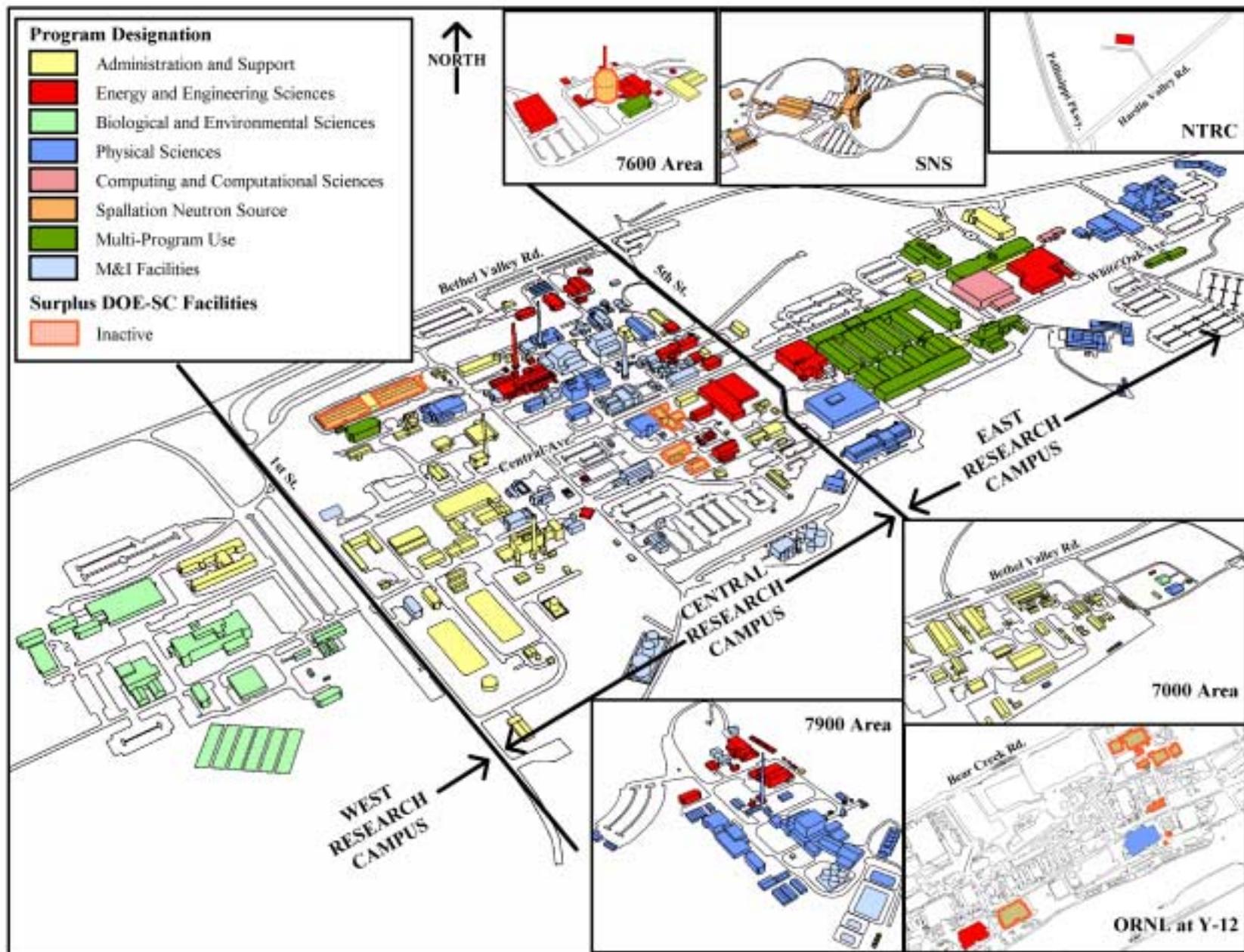


Fig. 5.2. Facility Use Index for ORNL's primary research facilities

Fig. 5.3. Age of ORNL operating buildings

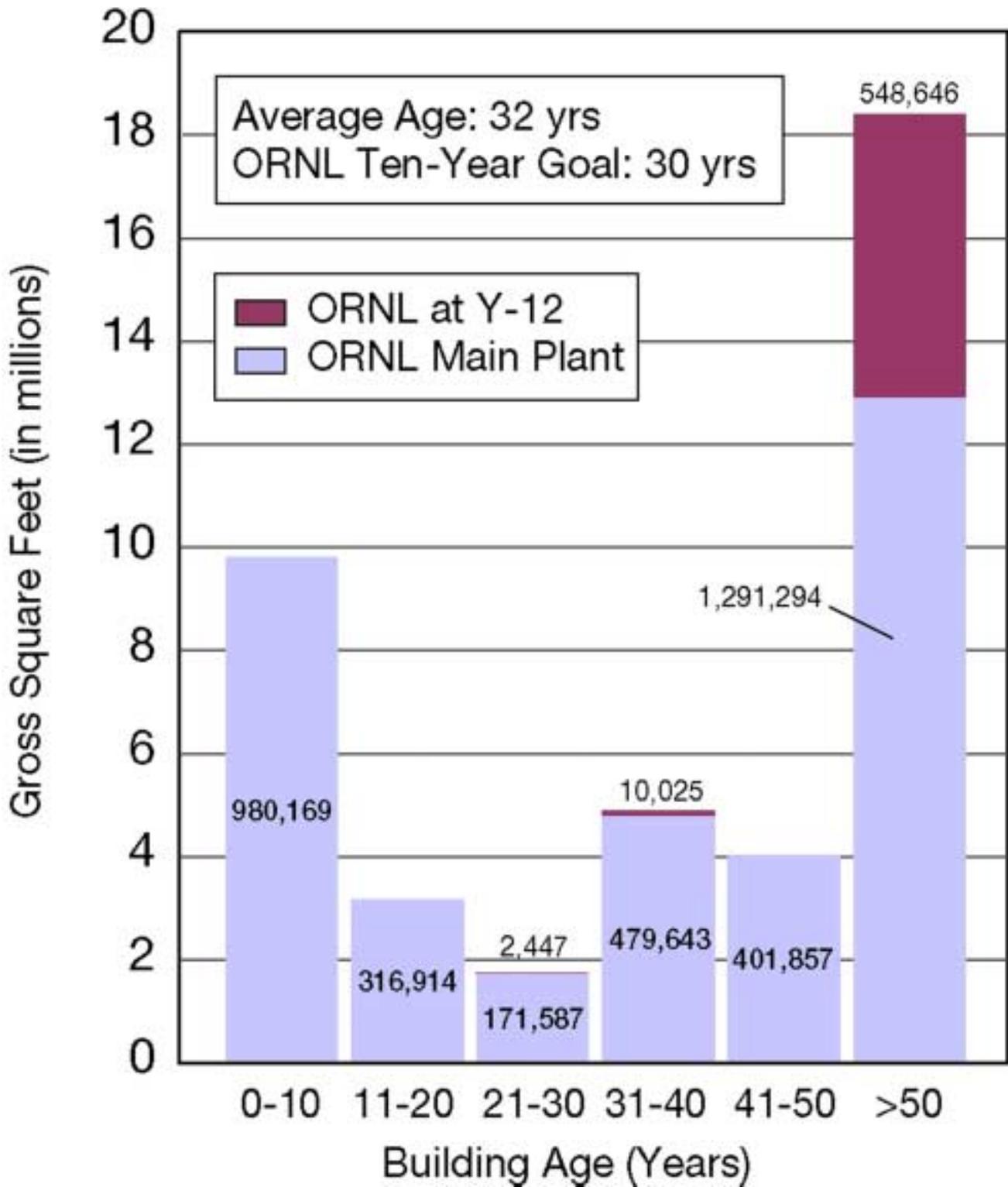
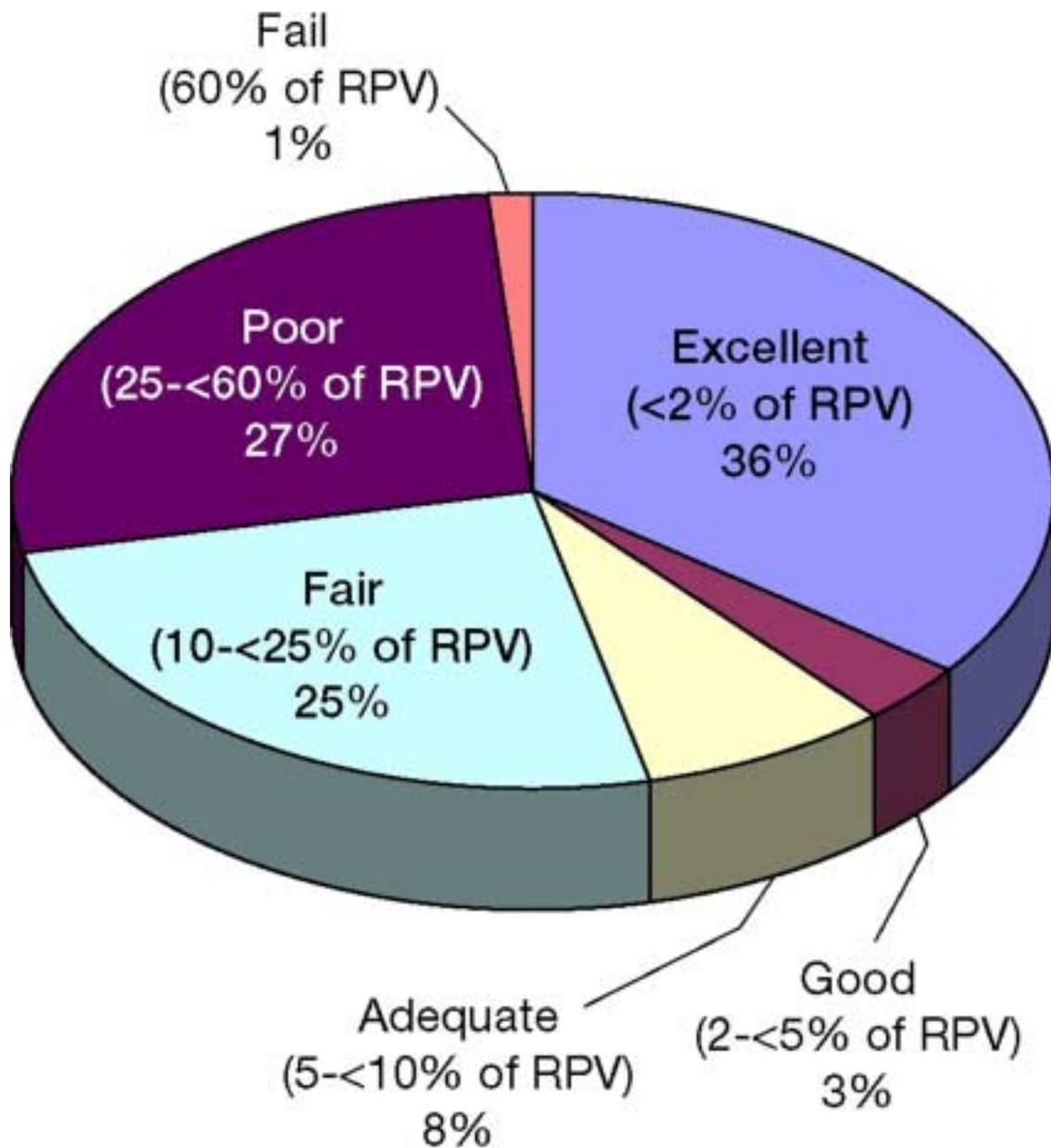


Fig. 5.4. Condition of space at ORNL DOE-owned and leased on-site buildings



# ORNL Conditioned Space Rate (Rate/SF/Year)

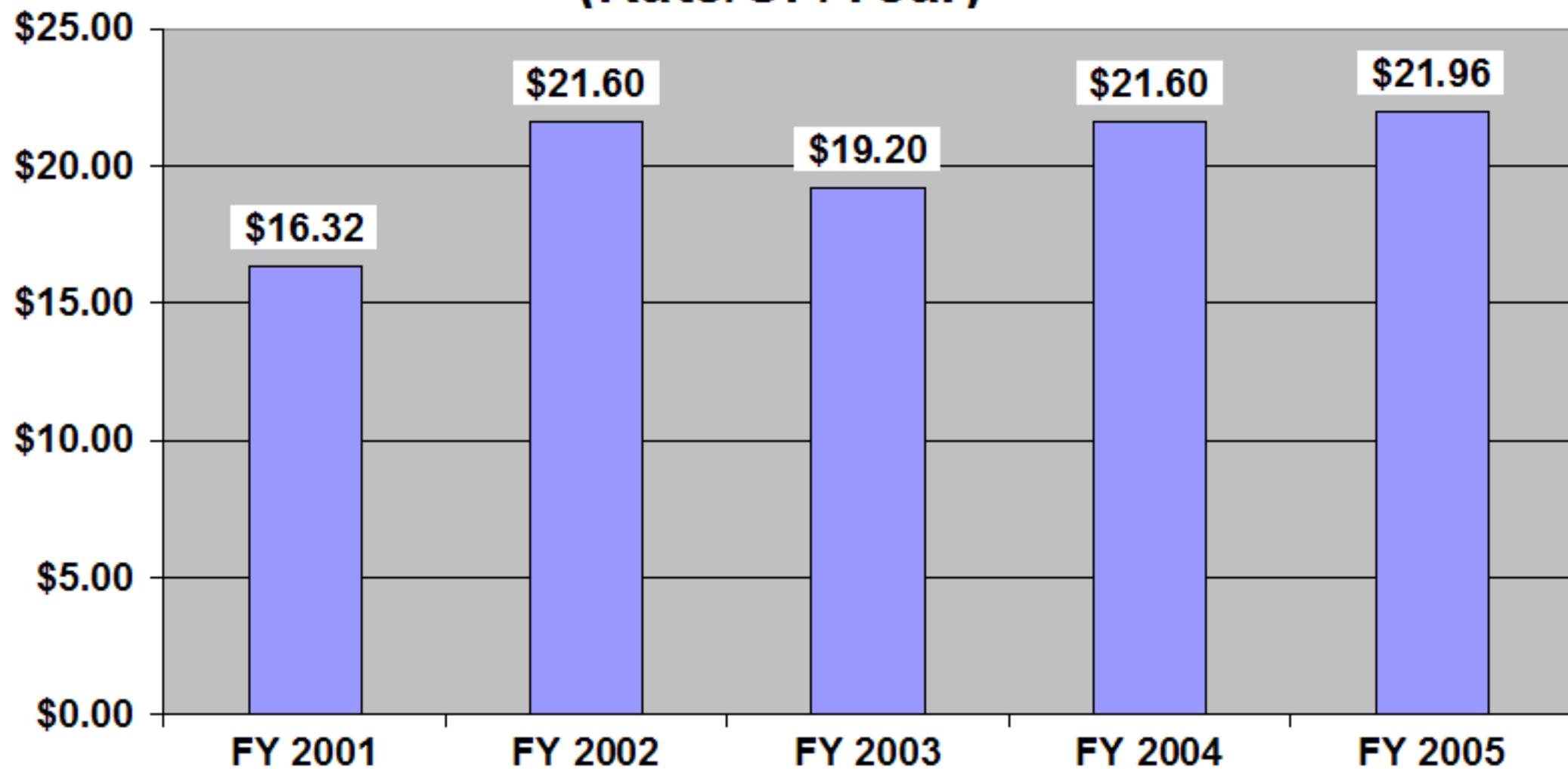
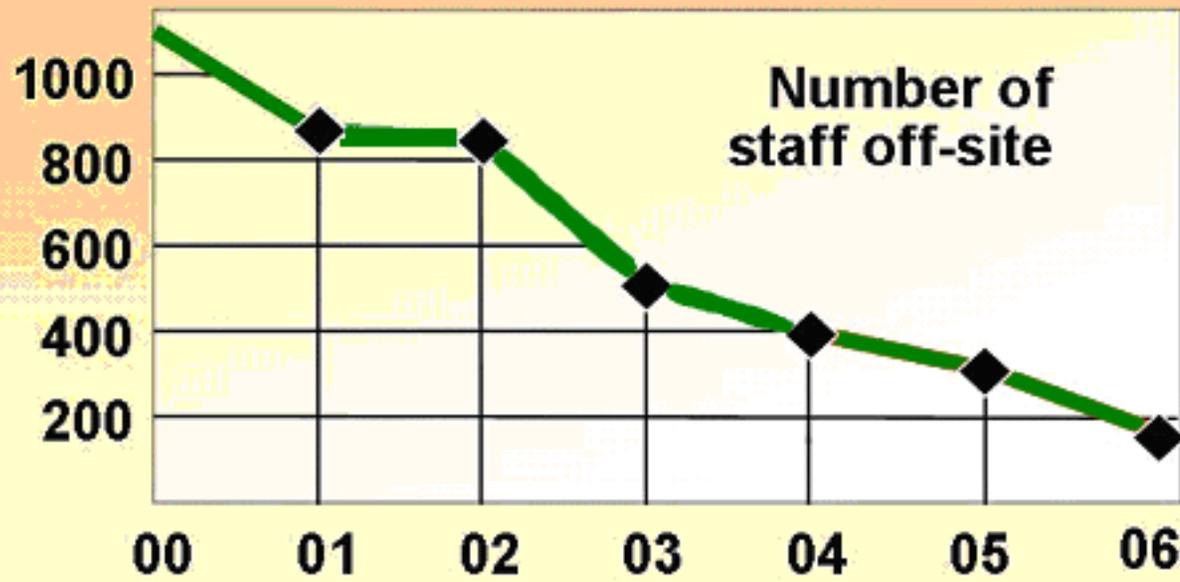


Figure 5.5

Figure 5.6



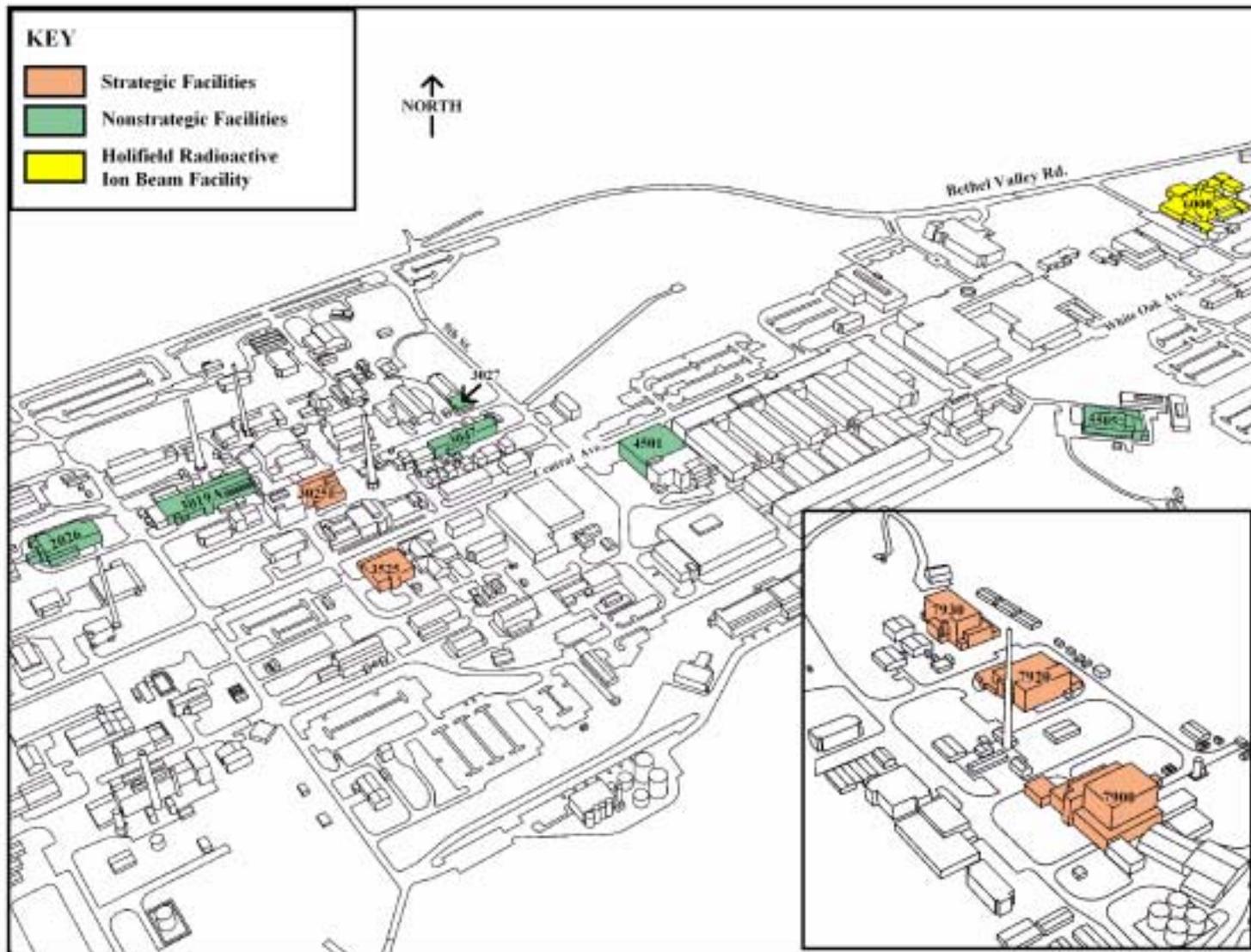


Fig. 5.7. Central Campus facility layout identifying key and nonstrategic nuclear facilities

Fig. 5.8. Timetable for hot cell consolidation

Facility	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
4501	Operate as Cat 2		Downgrade to Radiological Status			
3027	Deinventory		Deinventory, Reclassify as Non-Nuclear			
3019A	Operate as Cat 2		Transfer to Isotek Systems, LLC, for continued operations			
5505	Operate as Cat 3			Downgrade to Radiological Status		
2026	Operate as Cat 3			Shutdown		
3047	Operate as Cat 2	Operate as Cat 3			Commercialize	Shutdown
3025E	Operate as Cat 3					
3525	Operate as Cat 2					
7920	Operate as Cat 2					
7930	Operate as Cat 2					



Fig. 5.9. Demolition of Building 2013

Fig. 5.10. EM gaseous waste treatment and release point at the 3039 area





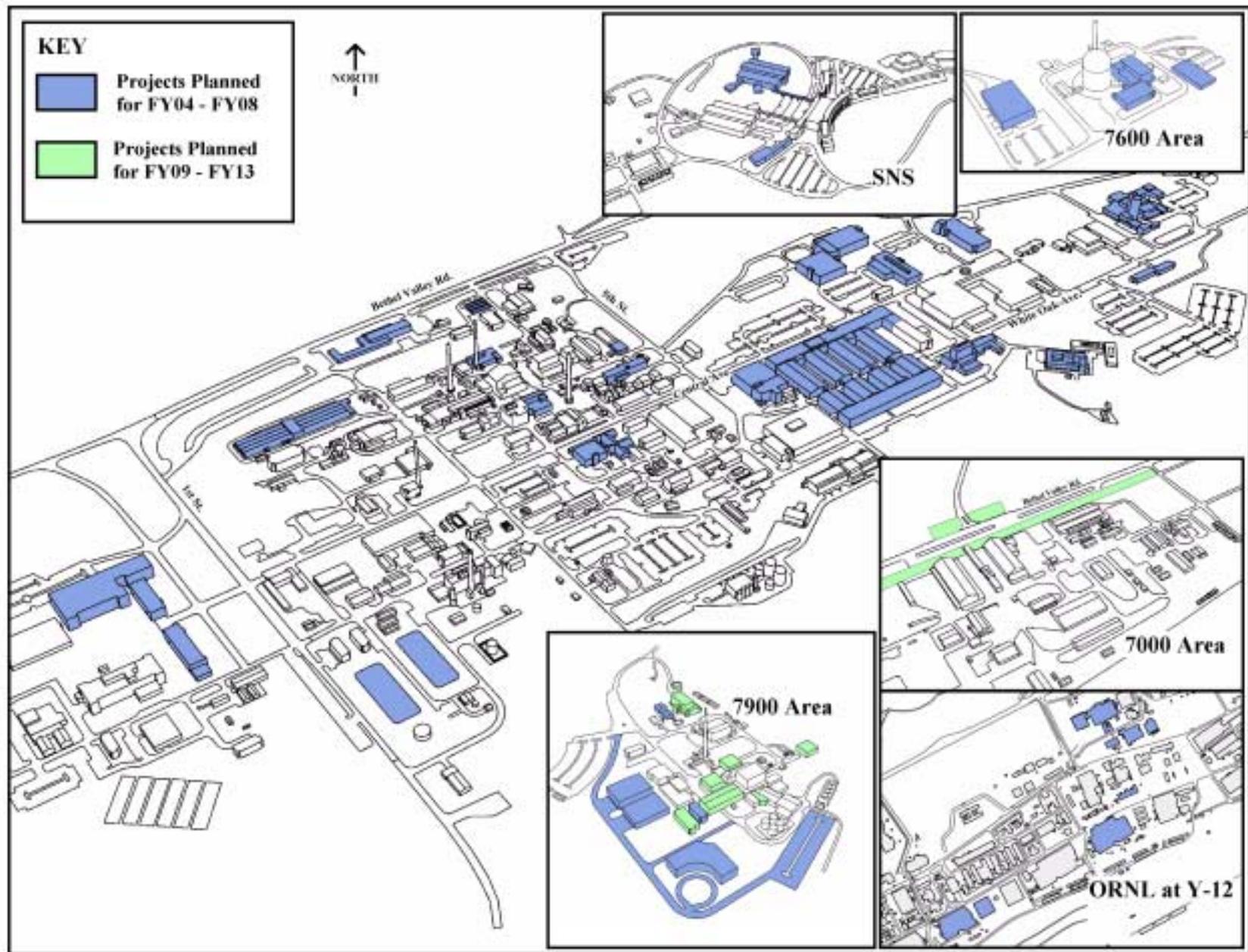


Fig. 6.1. Ten-year site plan for ORNL modernization

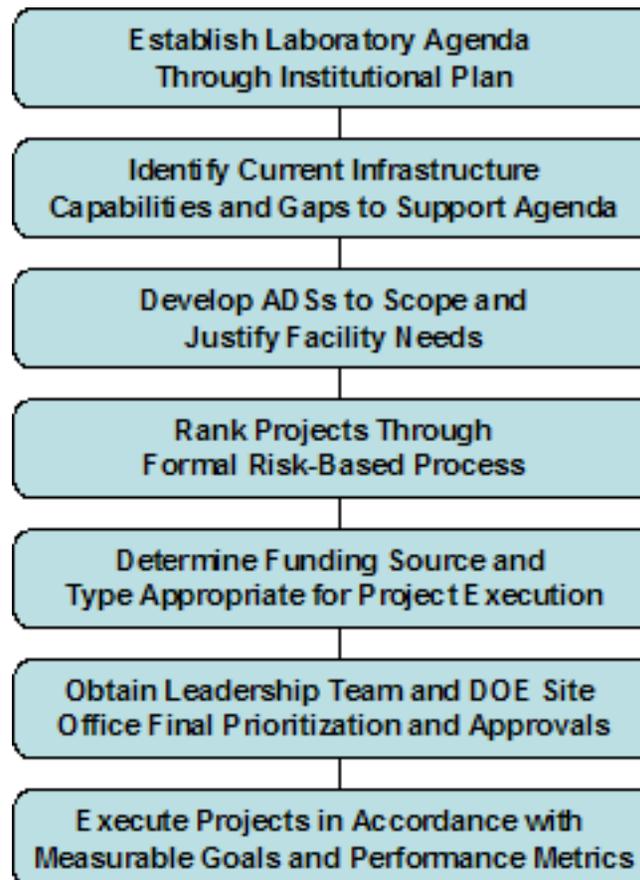


Figure 6.2

Fig. 6.3. New East-Campus upgrades



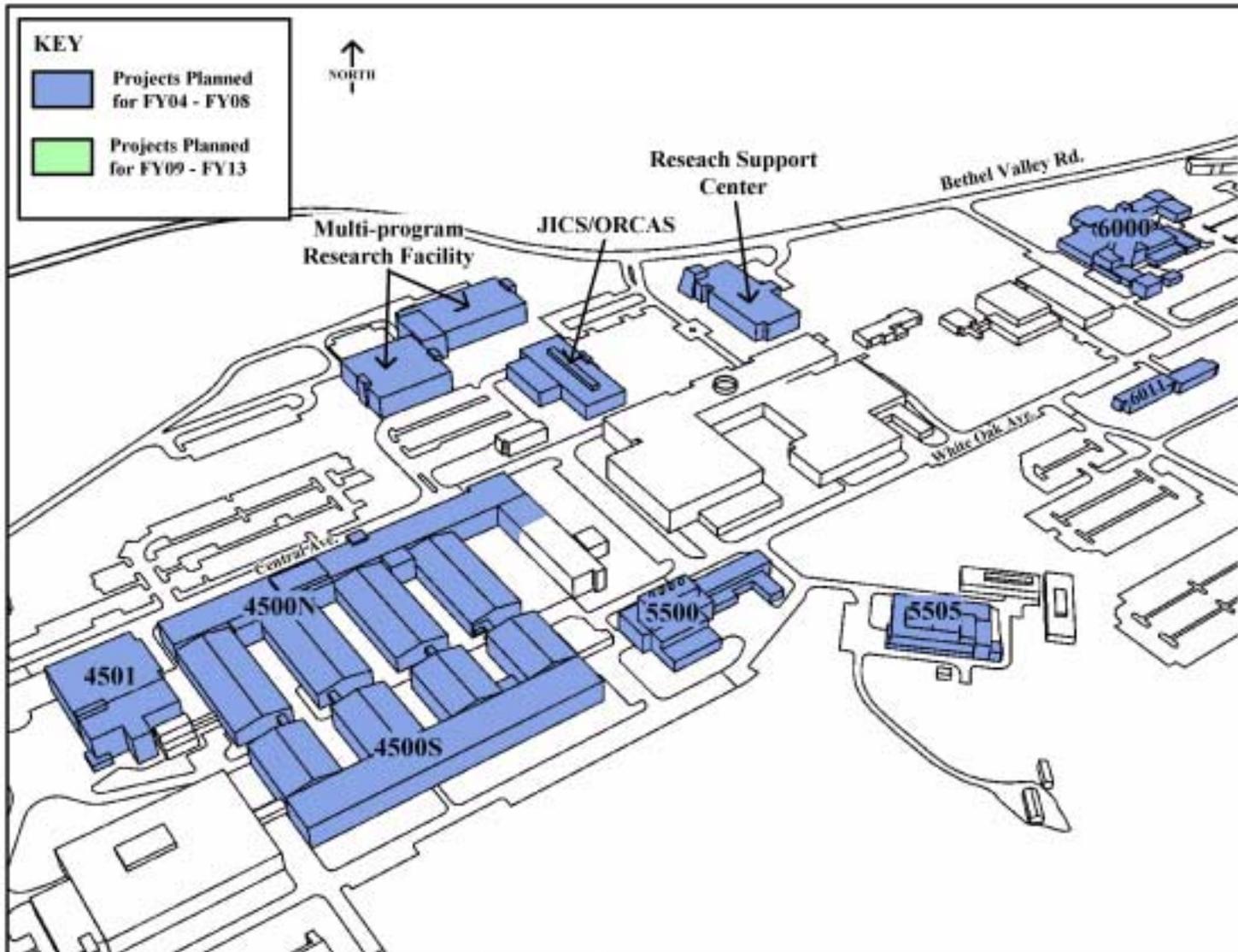


Fig. 6.4. East Campus Master Plan



Fig. 6.5. SC facilities in the Central Campus

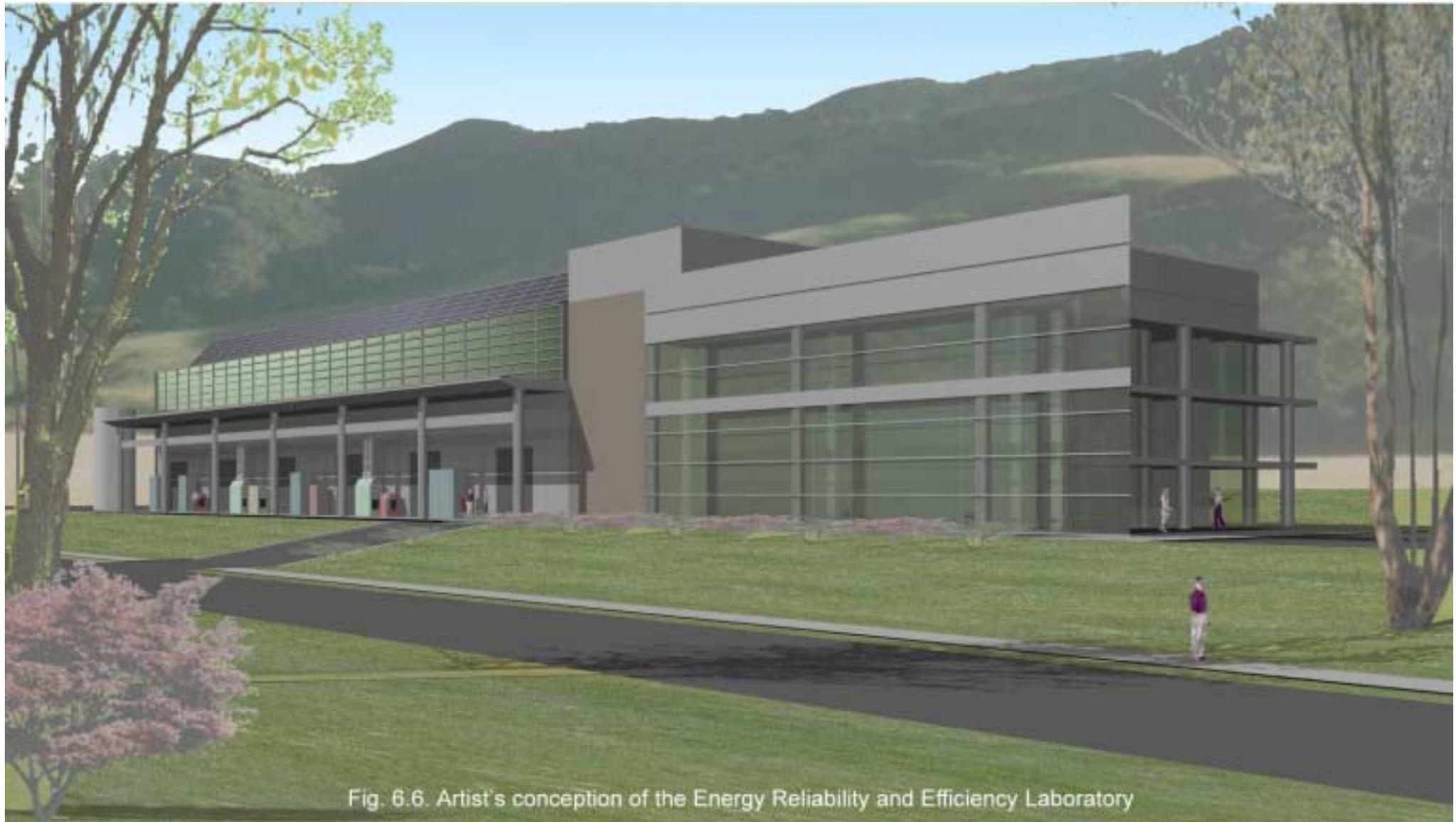


Fig. 6.6. Artist's conception of the Energy Reliability and Efficiency Laboratory

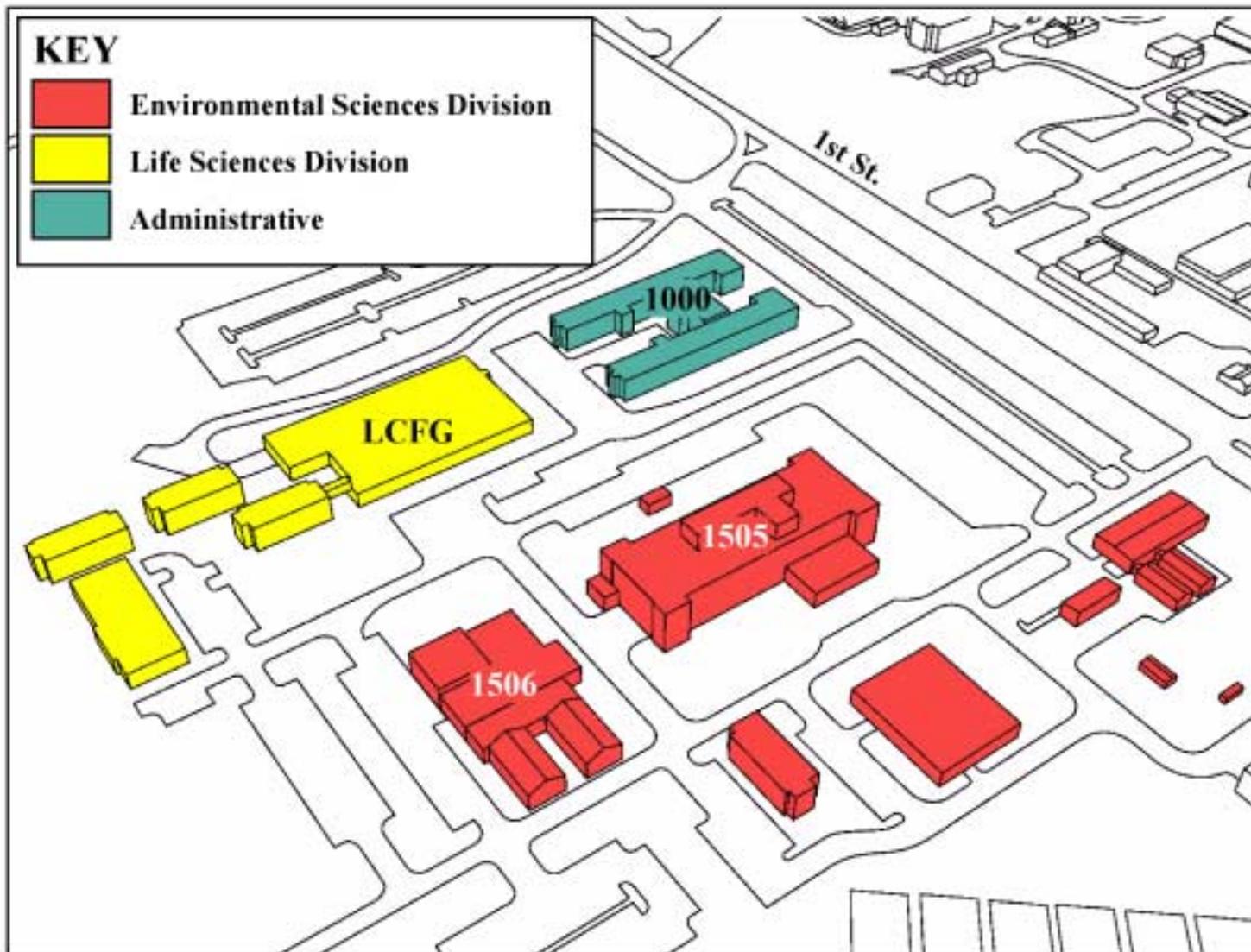
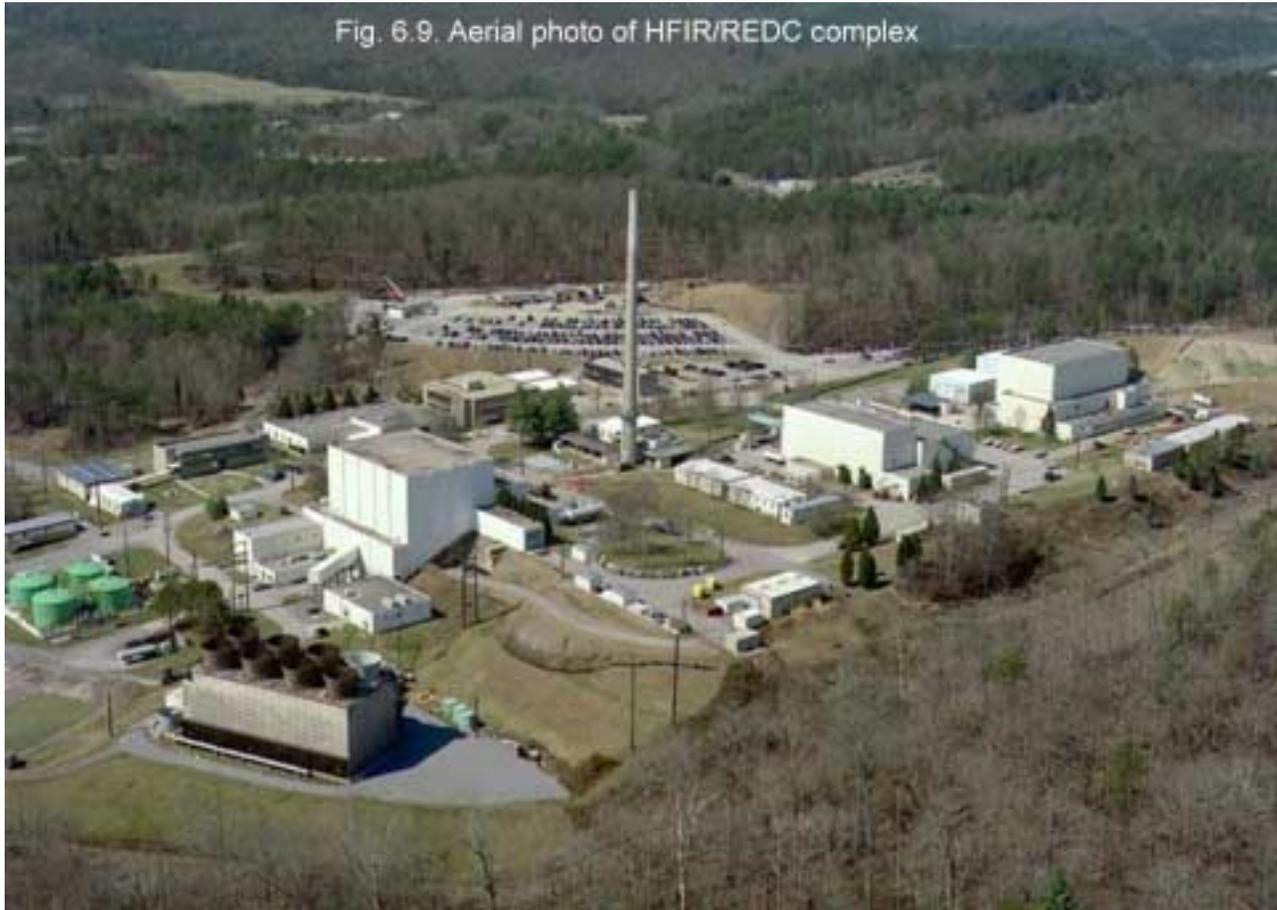


Fig. 6.7. Existing West Campus buildings

Fig. 6.8. Planned development for the ORNL West Campus



Fig. 6.9. Aerial photo of HFIR/REDC complex



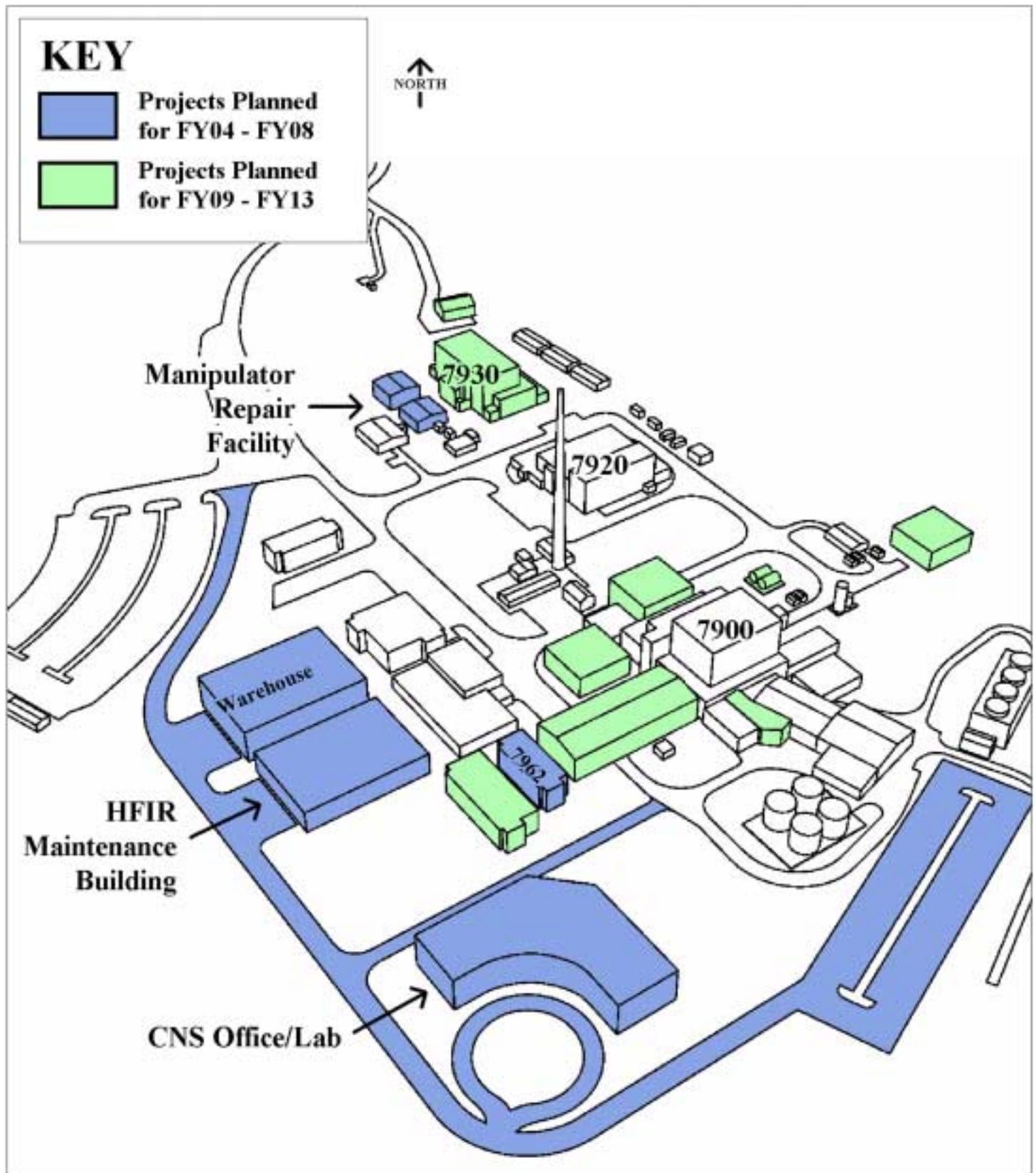


Fig. 6.10. Future site plan for the HFIR/REDC complex



Fig. 6.11. 7625 Highbay construction

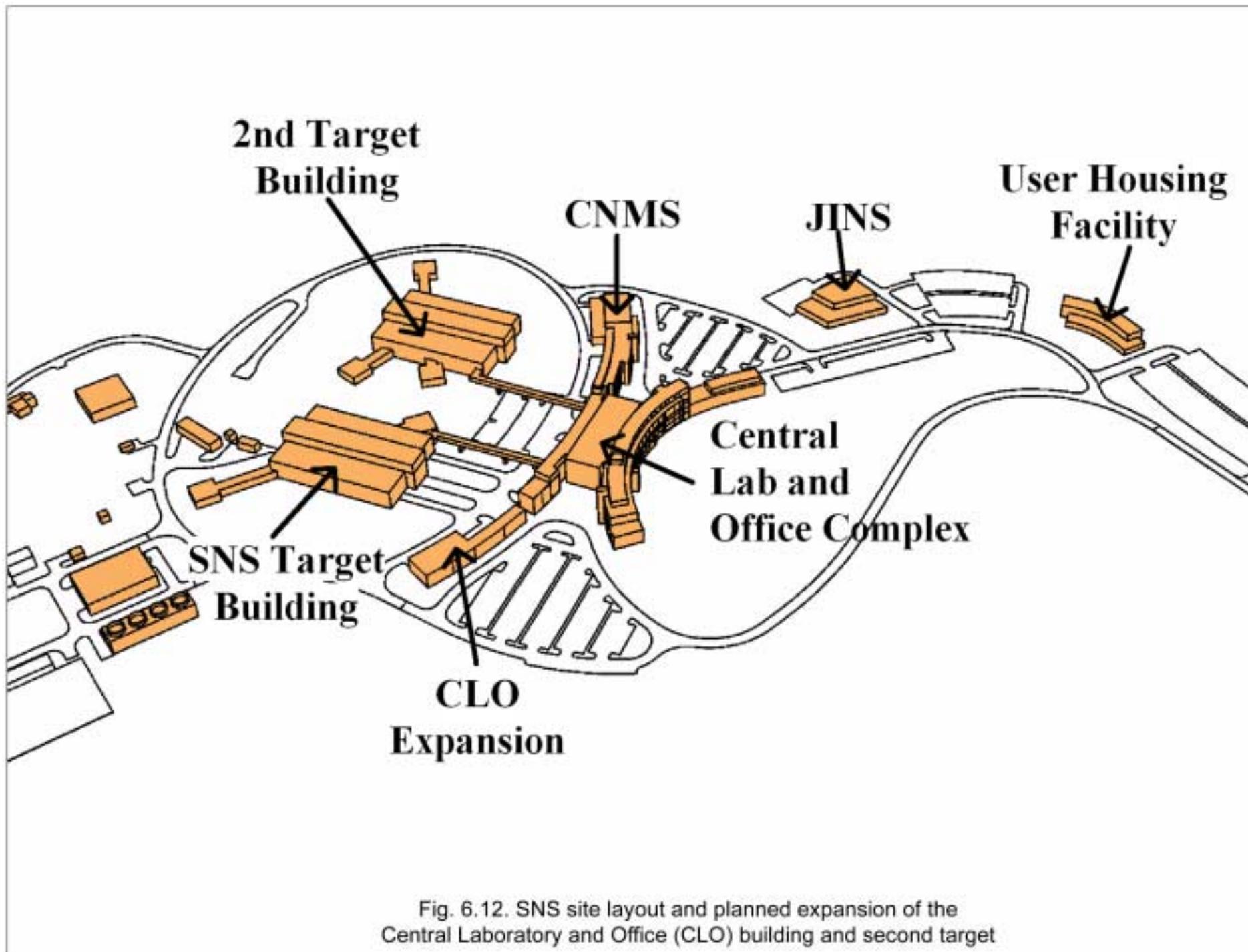


Fig. 6.12. SNS site layout and planned expansion of the Central Laboratory and Office (CLO) building and second target

Fig. 6.13. Aerial view of the Center for Nanophase Materials Sciences construction





Fig. 6.14. The proposed expansion at the National Transportation Research Center



Figure 6.15

## ORNL Resource Needs

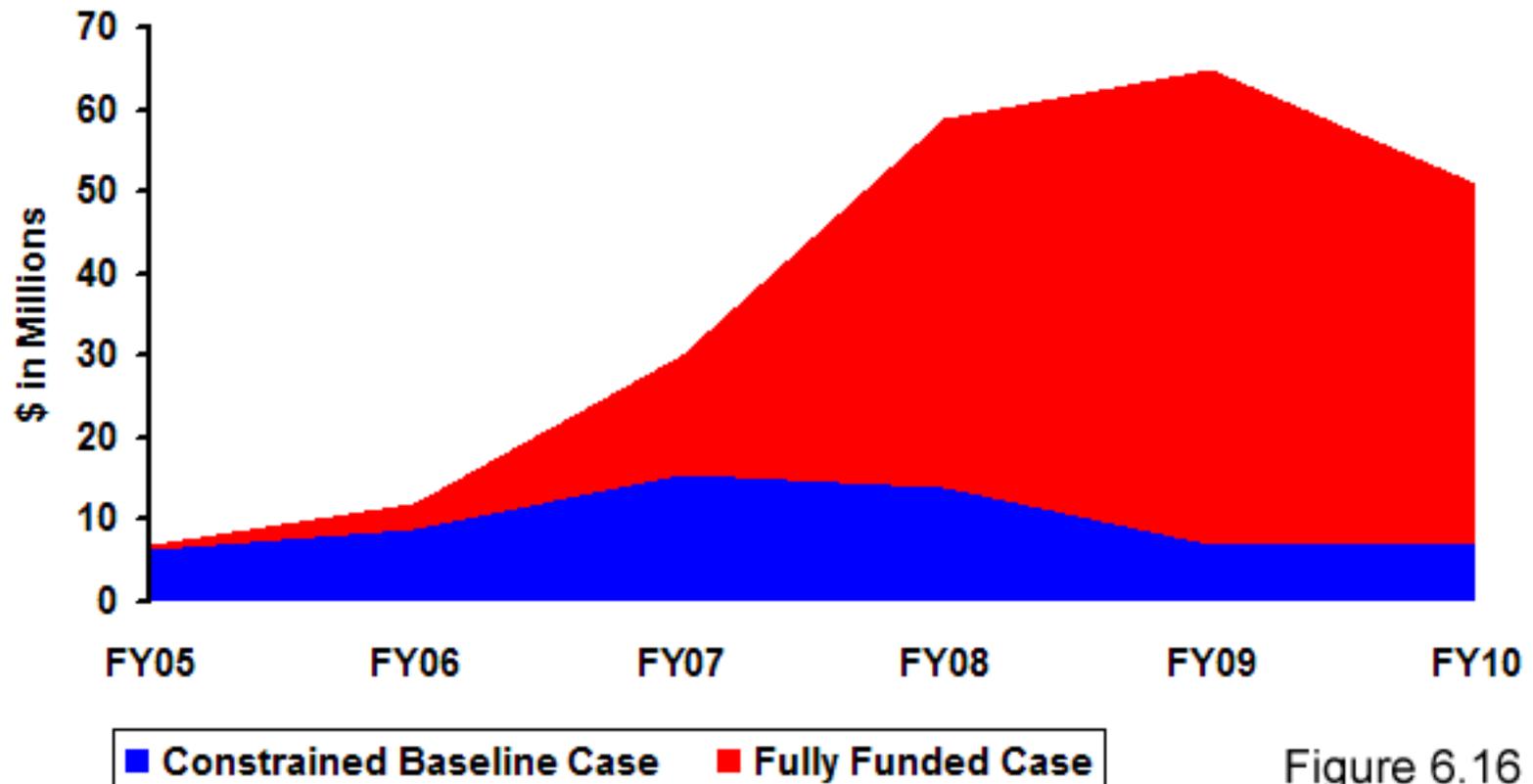


Figure 6.16

Figure A.1

### Laboratory Space Distribution

