



United States Department of Energy  
Oak Ridge Office  
*Accomplishing the Mission*



# Overview of United States Department of Energy Oak Ridge Office

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April 17, 2007

# Key Oak Ridge Missions

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➤ **Science and Technology**



➤ **Science Education**



➤ **Environmental Cleanup**



➤ **Energy & Nuclear Fuel Supply**

➤ **National Security**

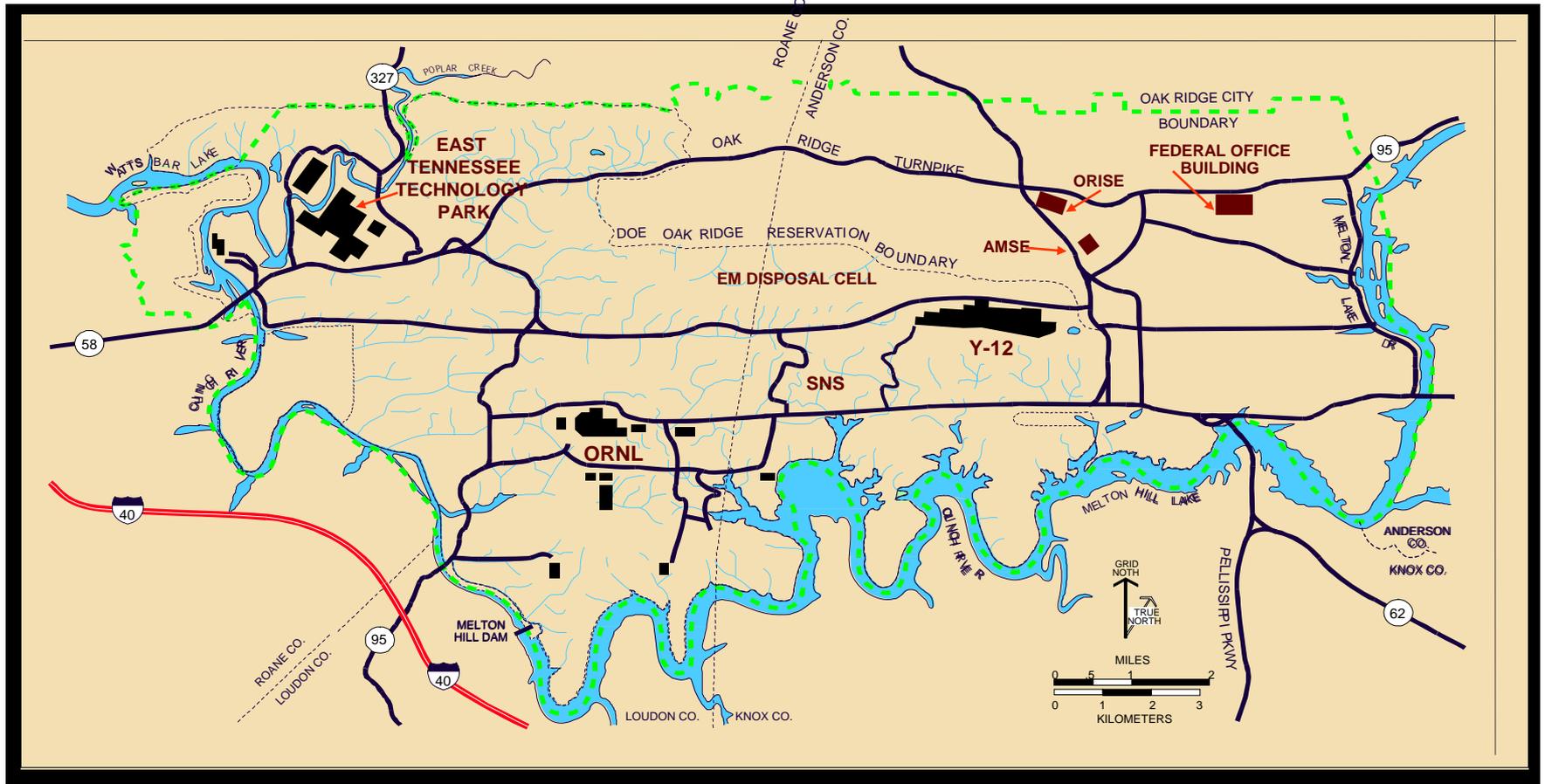


➤ **Reindustrialization**

➤ **Technology Transfer & Economic Development**



# Oak Ridge Reservation



33,725 acres in Anderson and Roane Counties within City of Oak Ridge limits



# Oak Ridge Reservation

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*Oak Ridge National  
Laboratory*



*Oak Ridge Office*



*Oak Ridge Institute for  
Science and Education*



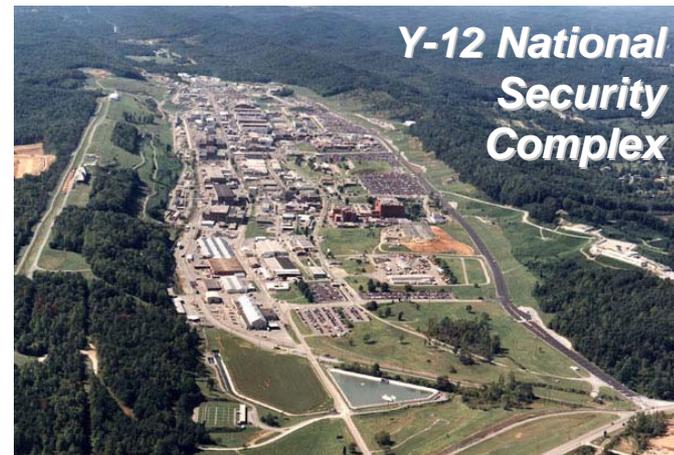
*Y-12 Site Office*



*East Tennessee  
Technology Park*



*Y-12 National  
Security  
Complex*



# Major Oak Ridge Contractors

**ORO**



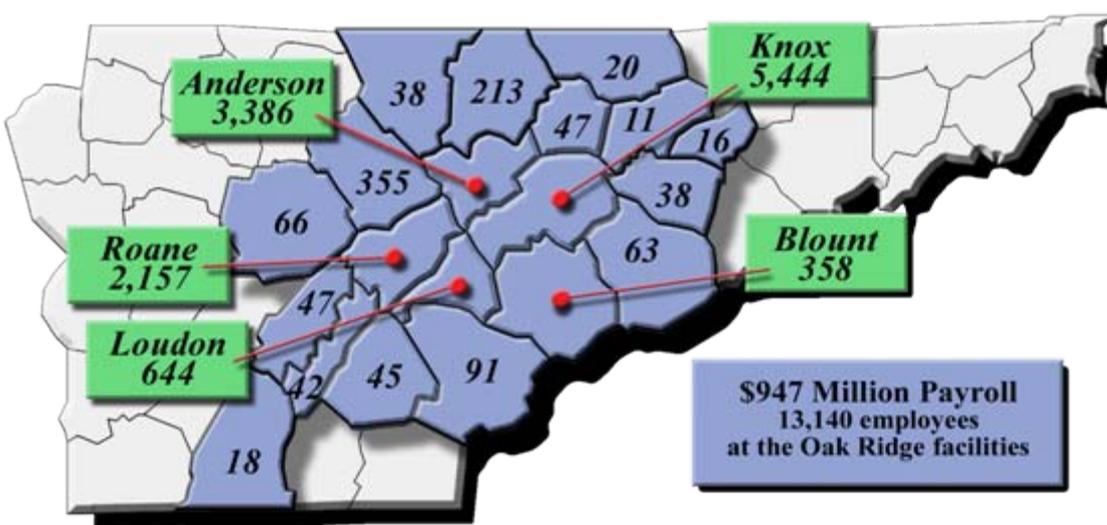
**NNSA**



# Economic Impact of DOE Programs in Tennessee

## ➤ Regional Impact

## ➤ Statewide Impact

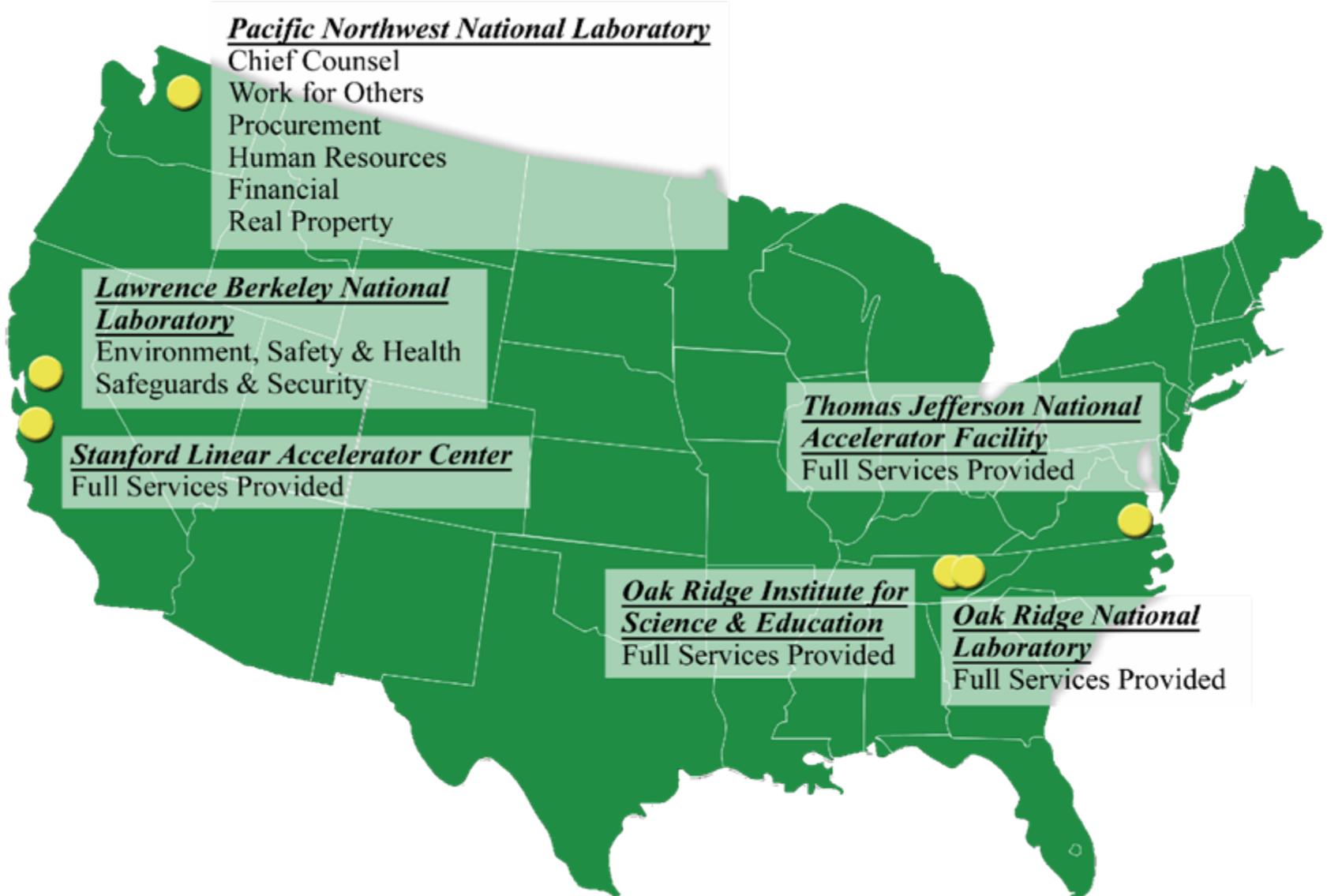


Misc. counties = 41

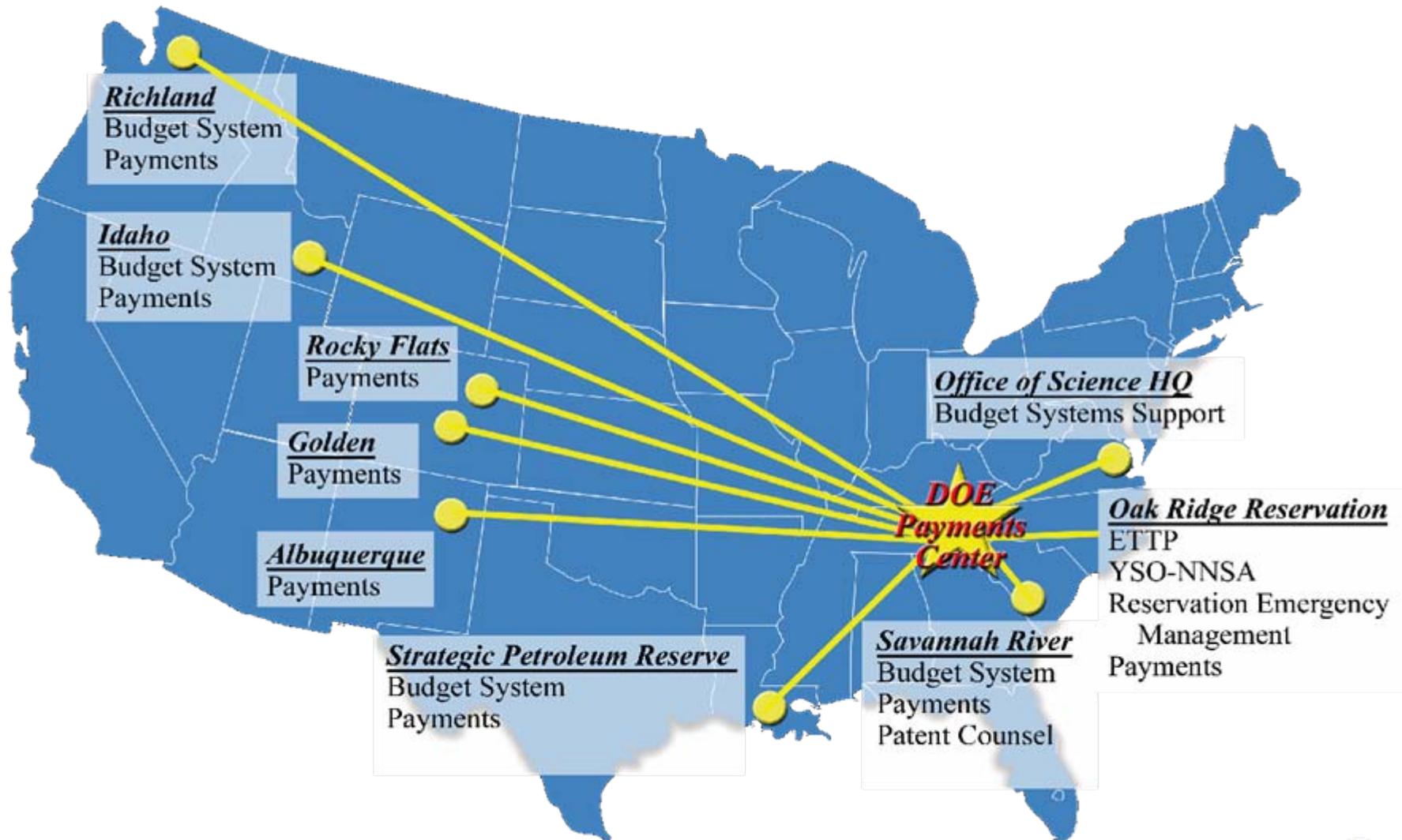
- \$3.7 billion – increase in gross state product
- 62,000 – full-time jobs supported
- \$75 million – state and local sales tax paid
- 4<sup>th</sup> – largest employer in the State of Tennessee



# ORO Support to Science Labs



# Payments Center Supports DOE Complex

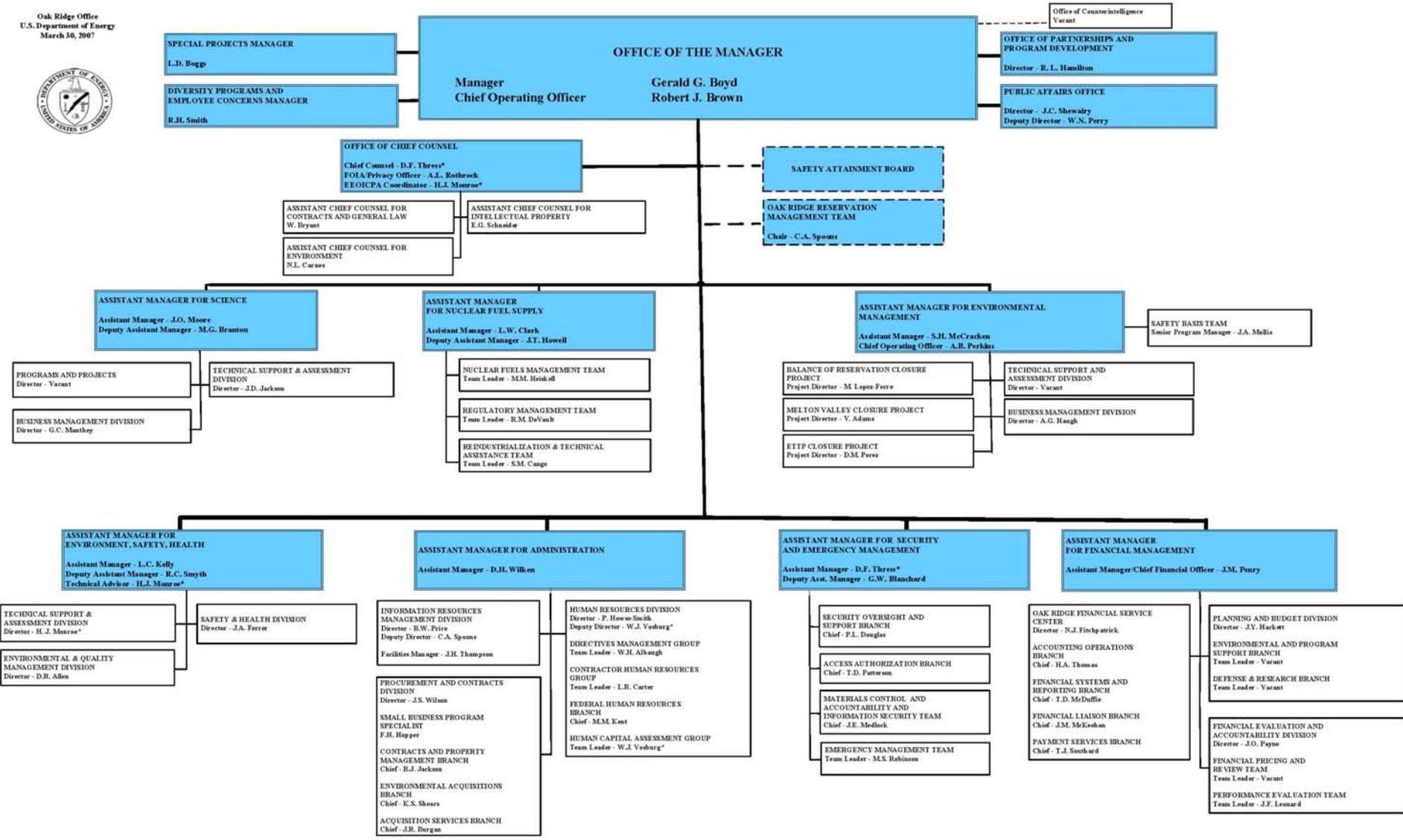


# Oak Ridge FY 2008 President's Budget Summary by Assistant Secretary

(Energy and Water  
Appropriations)  
(Budget Authority in  
Millions of Dollars)

<u>Assistant Secretary</u>	<u>FY 2006</u>	<u>FY 2007 Presidents Budget</u>	<u>FY 2007 Enacted</u>	<u>FY 2008</u>
<b><u>OAK RIDGE OFFICE</u></b>				
<b>Science</b>				
Leadership Computing Facility	53	80	74	77
ITER	19	60	60	160
Spallation Neutron Source	136	171	164	168
Other Research	331	349	328	360
Subtotal Science	<u>539</u>	<u>660</u>	<u>626</u>	<u>765</u>
Environmental Management (EM)	543	509	527	444
Uranium/Thorium Payments	20	20	20	20
Subtotal EM	<u>563</u>	<u>529</u>	<u>547</u>	<u>464</u>
Energy Efficiency and Renewable Energy (EERE)	107	95	85	95
Nuclear Energy	38	53	47	76
Defense Programs	24	24	24	24
Nuclear Nonproliferation	162	170	170	170
Other DOE ORO	33	27	31	31
Subtotal DOE ORO	<u>1,466</u>	<u>1,558</u>	<u>1,530</u>	<u>1,625</u>
Work for Others-ORO	373	375	375	375
Subtotal OAK RIDGE OFFICE	<u><u>1,839</u></u>	<u><u>1,933</u></u>	<u><u>1,905</u></u>	<u><u>2,000</u></u>





\* Dual Capacity  
--- Reports to HQ  
( ) Routing Symbol

# ORNL is DOE's largest multipurpose science laboratory

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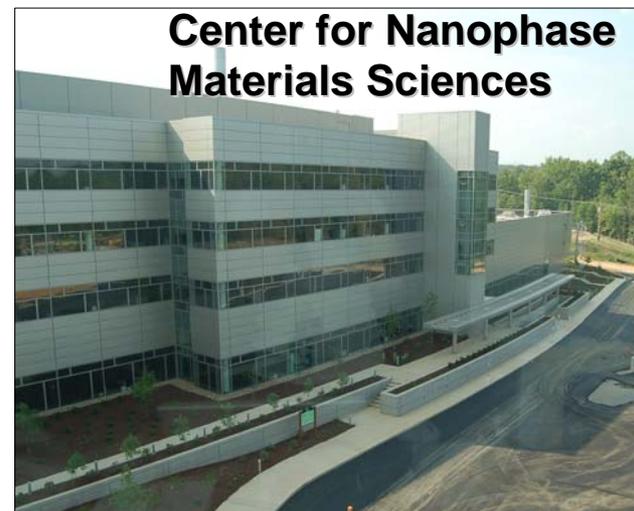
- **\$1.04 billion budget**
- **4,000 employees**
- **3,000 research guests annually**
- **Nation's largest unclassified scientific computing facility**
- **Nation's largest science facility: the \$1.4 billion Spallation Neutron Source**
- **Nation's largest concentration of open source materials research**
- **Nation's largest energy laboratory**
- **\$300 million modernization in progress**



# New Facilities to Support Science Mission



Cray XT4 "Jaguar"



Center for Nanophase  
Materials Sciences



Spallation Neutron Source



ORNL Central Campus





## Science and Education Mission

As a non-profit corporation, ORAU is focused on three key areas:

- Worker health and environmental assessment
- National preparedness and emergency response
- Science education, peer review management and research support



# Environmental Management



**EM is an accelerated cleanup program underway to correct the legacies remaining from more than 50 years.**



# BNG America - Three Building D&D Project

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- Project was completed in September 2005
- Approximately 4.35 million ft<sup>2</sup> of space was decontaminated in Buildings K-31 and K-33
- 159,000 tons of waste were dispositioned
- 1,531 converters were dispositioned from the three buildings
- 2,896 shipments were made to Envirocare
- 1,271 shipments were made to NTS
- 2,253 shipments were made to EMWMF and the Y-12 Landfill
- Total Project cost was \$356 million



# Nuclear Fuel Supply

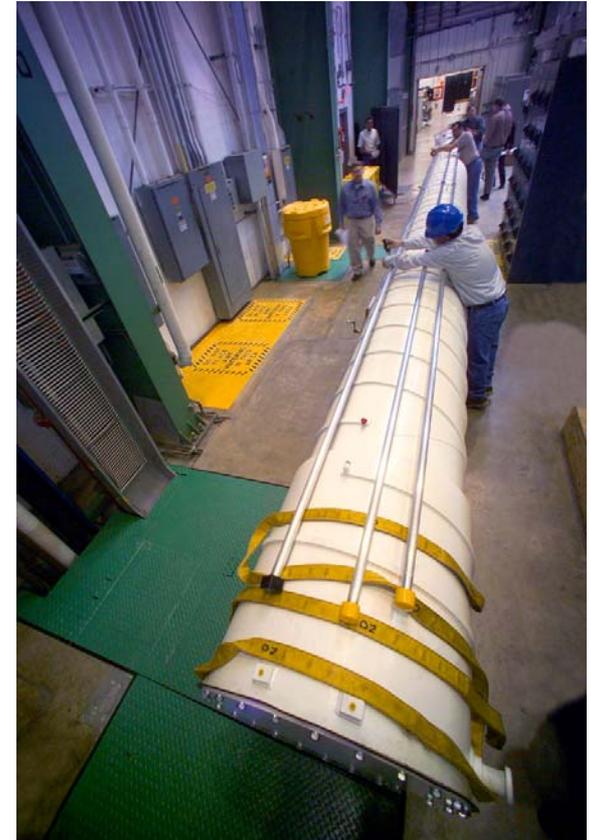


**Ensures that domestic uranium enrichment capabilities are maintained and transitions the Department's assets to the private sector to accelerate environmental cleanup while enhancing economic growth.**



# Centrifuge Deployment

- **Programmatic, Safety & Health, and Security oversight of United States Enrichment Corporation (USEC) Research, Development, Testing, and Deployment activities including those at:**
  - ➔ **Centrifuge Technology Center (CTC)**
  - ➔ **Centrifuge Testing, Building K-1600 at ETTP**
  - ➔ **Lead Cascade Demonstration (at PORTS)**
  - ➔ **Commercial Plant Deployment (at PORTS)**
  - ➔ **Operability/Viability Assurance (at PGDP)**
  - ➔ **Administration of \$240M CRADA**



# Where the Department is Headed

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- **Global Nuclear Energy Partnership (GNEP)**
- **Generation IV**
- **ITER**
- **Biofuels**
- **Nuclear Power Plants**



**Generation IV**

