

Sandia National Laboratories



Integrated Work Management System

Facilities Management
and Operations Center
(FMOC)

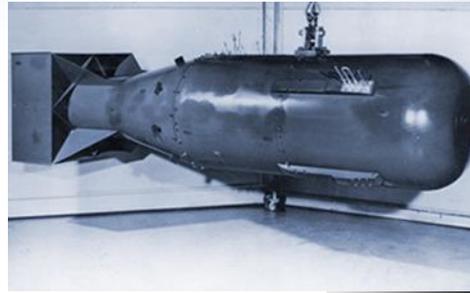
Presenters:
Ed Williams, CMRP
Karen Henry

FIMS Conference
June 17, 2010

Sandia National Laboratories is a multiprogram laboratory operated by Sandia Corporation, a wholly owned subsidiary of Lockheed Martin Corporation, for the U.S. Department of Energy's National Nuclear Security Administration under contract DE-AC04-94AL85000.

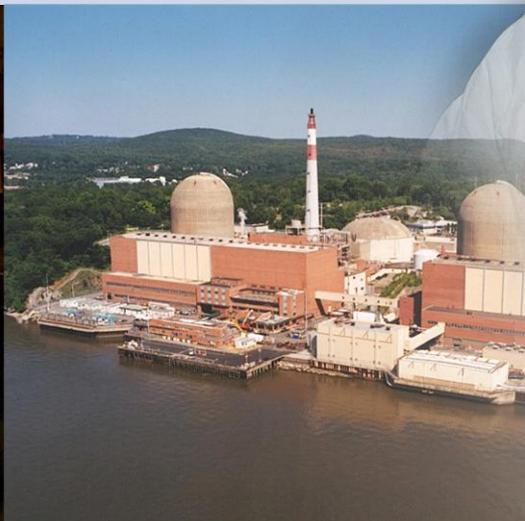


How It All Began



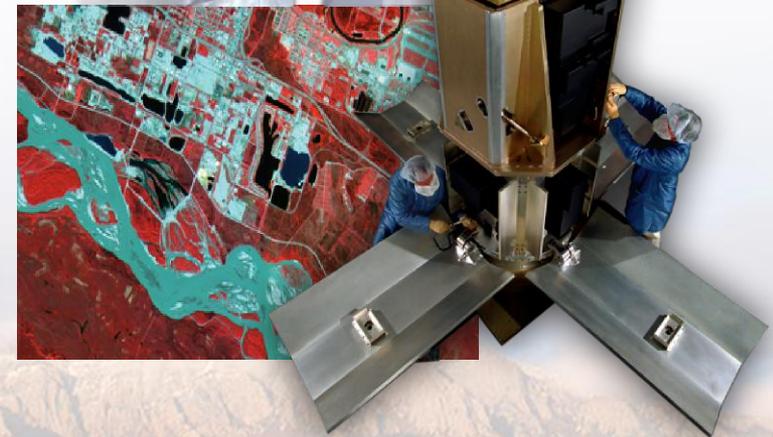
Mission Areas

- Nuclear Weapons
- Defense Systems and Assessments
- Energy, Resources, and Nonproliferation
- Homeland Security and Defense



Technologies for National Security

- We develop technologies to
 - Sustain, modernize, and protect our nuclear arsenal
 - Prevent the spread of weapons of mass destruction
 - Provide new capabilities to our armed forces
 - Protect our national infrastructure
 - Ensure the stability of our nation's energy and water supplies
 - Defend our nation against terrorist threats



Unparalleled Facilities and Test Capabilities

- User facilities
- Designated national capabilities
- Z-Machine and radiation effects
- Real-life physical test ranges



SNL Primary Sites

Albuquerque, New Mexico



- Onsite workforce: 11,415
- Regular employees: 8,225

Livermore, California



Kauai, Hawaii



Tonopah, Nevada



FMOOC Space Summary

| SNL Site | Buildings and Trailers | Offsite Leases | Gross Square Feet |
|-------------------------|------------------------|----------------|-------------------|
| Albuquerque, NM | 855 | 9 | 6,255,960 |
| Livermore, CA | 73 | 1 | 886,177 |
| Tonapah Test Range, NV | 98 | – | 127,422 |
| Kauai Test Facility, HI | 54 | – | 57,560 |
| Other SNL Sites | – | 14 | 79,032 |
| TOTAL | 1,080 | 24 | 7,406,151 |



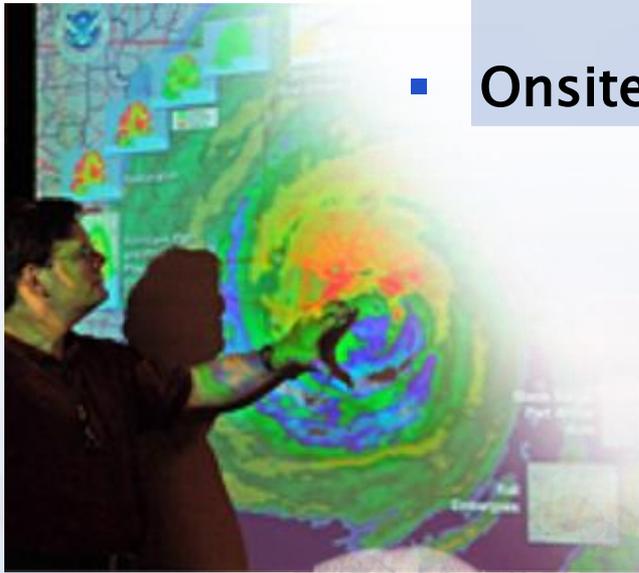
Utilities – SNL/NM Site Only

| | | |
|-------------------------------|---|------------|
| High-Voltage Electrical | 115kV and 46kV distribution lines | 17.2 miles |
| | 115kV/12.47kV and 46kV/5kV substations | 14 |
| | 115kV/46kV switching station | 1 |
| | 5kV/15kV underground distribution | 55 miles |
| | 600kW standby generators | 4 |
| Water and Fire Protection | 70 miles of line; 325 fire hydrants; 1,000 gate valves; 300 PIVs; 3 tanks; and a pumping station | |
| Sanitary Sewer | 41 miles of underground pipe, 550 manholes, 3 City of Albuquerque permit monitoring stations | |
| District Chilled-Water System | Includes all chilled-water systems supporting multiple buildings. Approximately 23,500 tons of cooling and 5 miles of underground pipe. | |
| Gas | 14 miles of distribution line and 210 valves | |
| Roads | 31 miles of paved roads, 58 miles of unpaved roads, and 140 acres of other paved surfaces | |
| Communications | 34 miles of underground duct-bank and 260 communication manholes | |
| Storm | 21 miles of pipe and channel, 280 manholes, 560 catch basins, and 10 detention basins | |



FMOC People

- Employees 149
 - Staff Aug. Contractors 85
 - Represented Craft 161
 - Represented Custodial 91
 - Students 11
 - Total FMOC Workforce 497
-
- Onsite Construction Contractors 2,013





Facility Management System (FMS)

- We identified the need for a single overarching Integrated Workplace Management System (IWMS) that would enable us to focus on customer missions and improve FMOC processes.
- Our team selected highly configurable commercial-off-the-shelf (COTS) software with out-of-the-box workflow processes that integrate strategic planning, project management, facility assessments, and space management, and can interface with existing systems, such as Oracle, PeopleSoft, Maximo, Bentley, and FileNet.
- We selected the Integrated Workplace Management System (IWMS) from Tririga, Inc.





Facility Management System (FMS)

- **FMS Benefits:**
 - Create a single reliable source for facility data.
 - Improve transparency with oversight organizations.
 - Streamline FMOC business processes with a single, integrated facility-management tool.
 - Give customers simple tools and real-time information.
 - Reduce indirect costs.
 - Replace approximately 30 FMOC systems and 60 homegrown tools (such as Microsoft Access databases) .
 - Integrate with FIMS.





FMS – Modules Purchased

- Facilities Management
- Projects Management
- Operations and Maintenance Management
- Facilities, Projects, and Operations and Maintenance Workplace Performance Management (WPM)
- Tririga Offline
- Tririga Real Estate and Environmental Sustainability (TREES)



Building Information in Tririga

Building > 802 - Windows Internet Explorer

Building > 802 [Print](#) [Preview](#)

General | Contact Details | Graphic | Area Measurements | Contracts | Assessment | Maintenance | Reserve | FIMS | Lease | Environmental | Notifications | Notes & Documents | System | GIS

Work Flow Instance | Includes | Reports | Associations | Audit Actions

▶ | (Required): General Information for this Building. [Revise](#) | [Retire](#) | [Close](#)

General

ID 1000464 **Status** Active **Image** 

* **Name** 802

Description Building No. 802 - Administration & Headquarters Building of the Sandia National Laboratories and the United States Department of Energy. The building is located in the west sector of TA-1. It is bordered by G Ave. on the north, H Ave. on the south, 7th St on the east and 5th St [bldg. 800 & 801] on the west on the Sandia National Laboratories site Albuquerque, New Mexico. Built in 1951, this four-story concrete building with a full basement level contains 161,275 square feet of administration space. The building is situated on a flat land parcel and resides within the high security portion of the Sandia TA I

Hierarchy Path \Locations\SNL - New Mexico\802

Details

Legal Name ADMIN & DEV LAB

Common Name W010802/PRMY/S&S

Parking Spaces (Open) 0 **Parking Spaces (Covered)** 0

* **Tenure** Owned

Primary Use

* **Building Type** Building

Zoning

Time Zone (GMT -7) Mountain Time (US, Canada) [US/Mountain]

FIMS?

SNL Area 001_Area I

Include in Space Audit?

Floors 5 **Floors Below Grade** 1

Number of Buildings 1 **Number of Trailers** 0

Land Use Permit

Limited Area?

As Used Capacity 411 **As Designed Capacity** 410

Secure Area?

eLocation Site

Name

Environmental Details

| | | | |
|---|---------------|----------------------------------|---------------|
| Carbon Calculation Method | | Carbon Calculation Region | |
| Total CO2e (Carbon Footprint) | 0 US Tons CO2 | Certification Level | |
| Total CO2e (Carbon Footprint) Equity Share | 0 US Tons CO2 | Equity Share (Percent) | 100 |
| Occupancy Rate (Percent) | 100 | Total Area Occupied | 0 square-feet |

FIMS Information in Tririga

Building > 802 - Windows Internet Explorer

Building > 802 [Print Preview](#)

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⏪ | ⏩ | (Required): General Information for the Federal Building [Revise](#) | [Retire](#) | ⏪

Real Property Type And Use

Real Property Use 101 Office **Real Property Type** Building

Legal Interest

Legal Interest

Reporting Source

Reporting Source ALH Lockheed Martin - Sandia National Labs

Using Organization

Organization Name Department of Energy (8900)

Agency Code **Bureau Code**

Hierarchy Path \Organizations\Department of Energy (8900)

Size

Size (Gross square-feet) 0 square-feet

Utilization

Utilize Category

A. Total Area Occupied 0 square-feet

B. Gross Area 0 square-feet

C. Utilize Percentage ((A/B)*100) 0 percent

Utilize Value

Condition Index

G. Cost of Repairs \$.00 US Dollars

H. Condition Index (((1-G/F)*100) 100 percent

Facility Condition Index Level 1 0

Value

D. Replacement Cost Per UOM \$109.84 US Dollars

E. Overhead Factor 0 percent

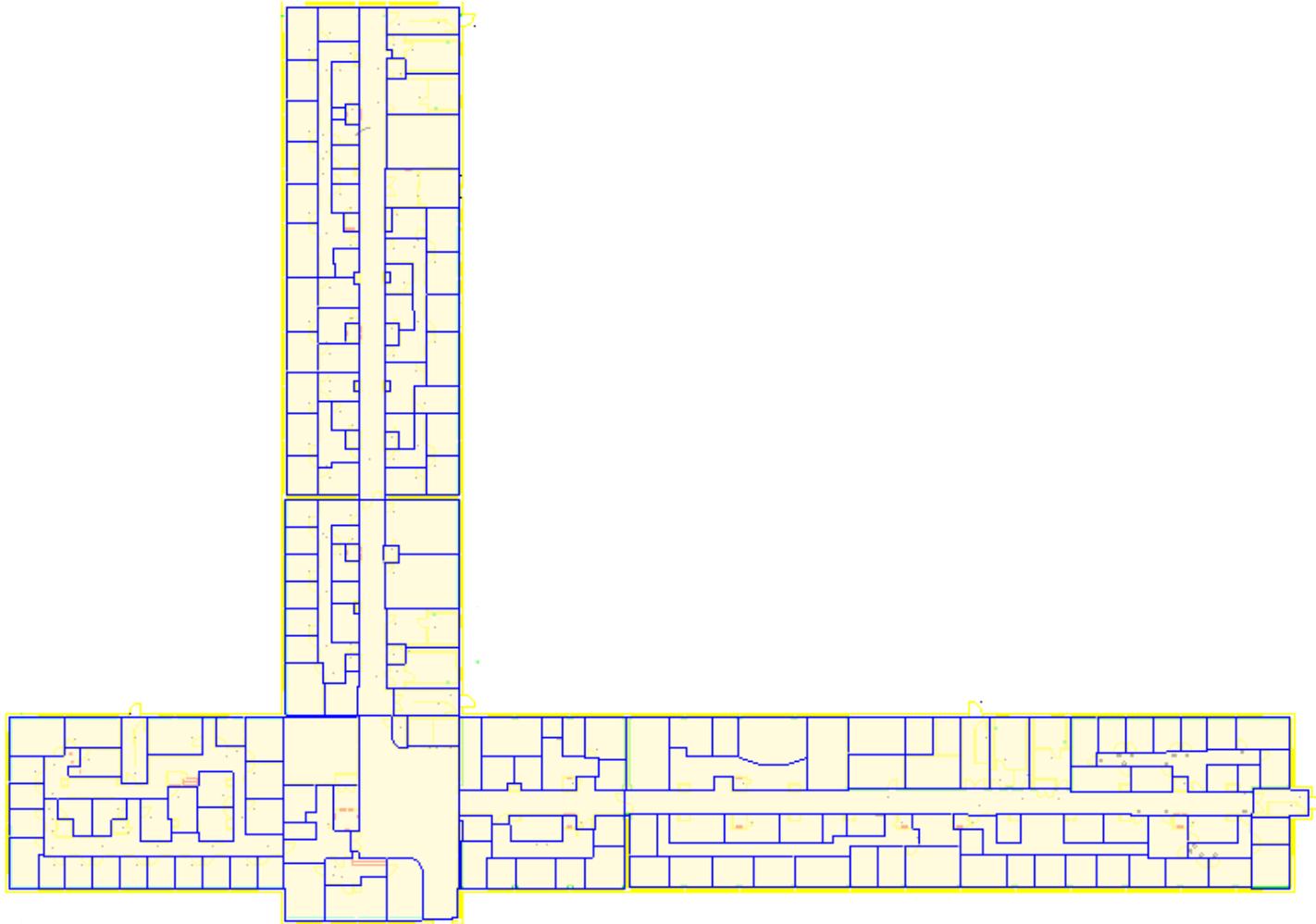
F. Total Value PRV (((B*D)+(B*D*(E*.01))*I)*J) \$35,277,695.11 US Dollars

Summary Condition Excellent

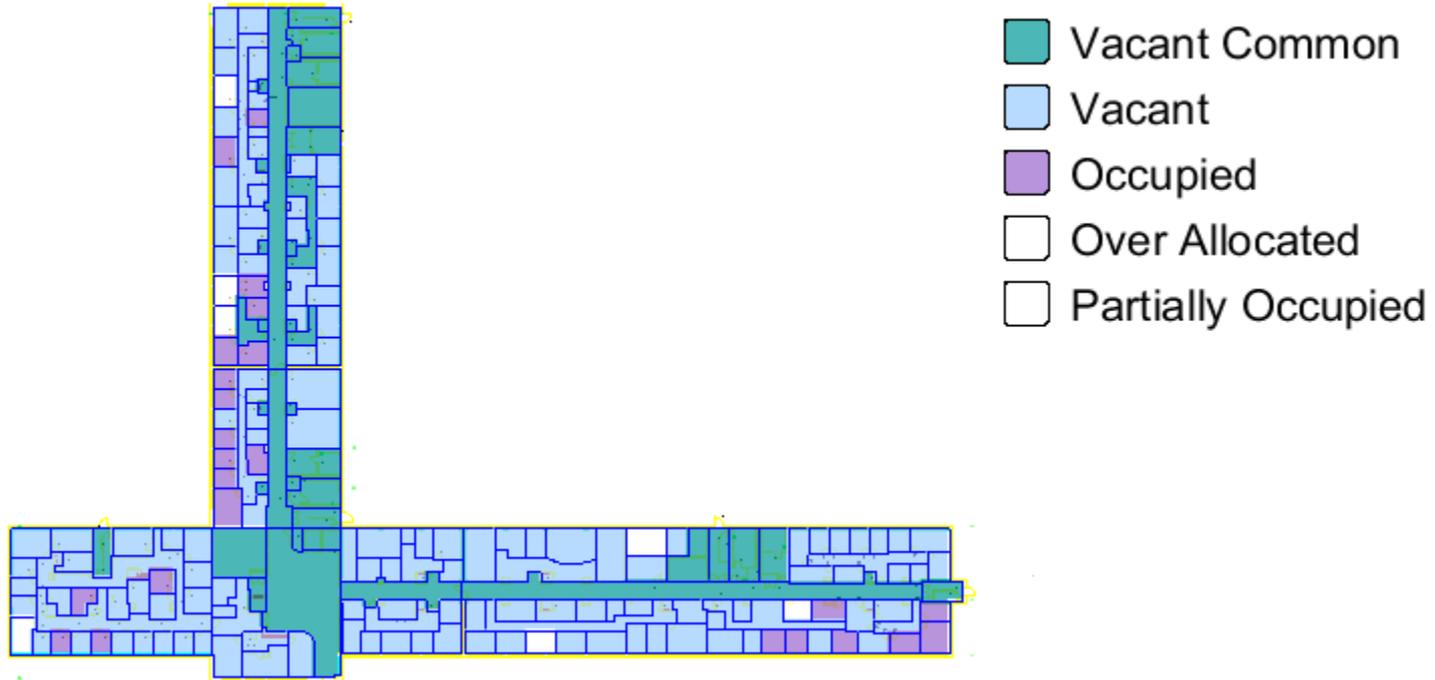
I. FIMS Site Factor 2.27

J. FIMS Geographv Factor 0.000

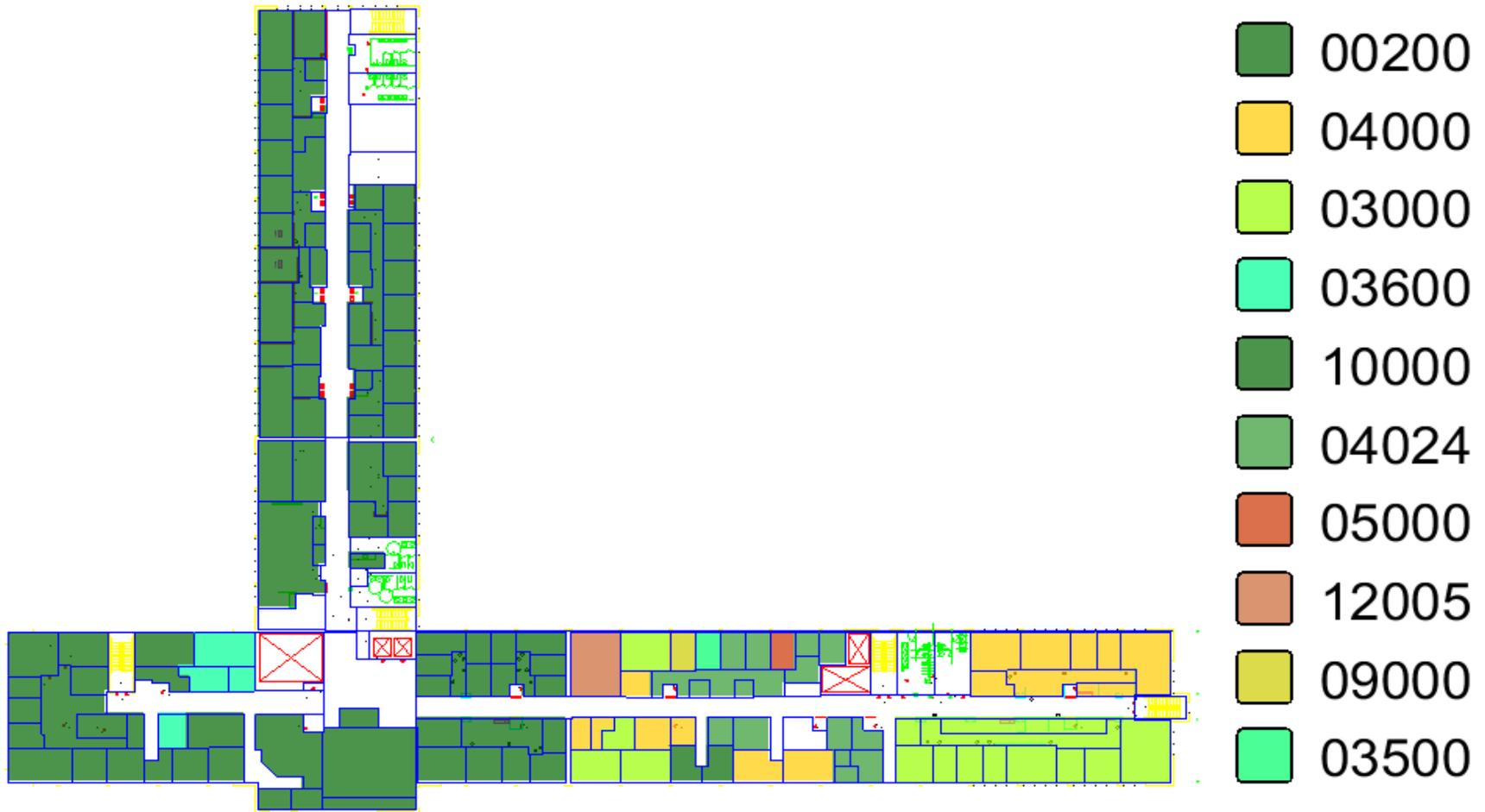
Building 802, First Floor



Building 802, First Floor, Occupancy



Building 802, First Floor, Org. Use



TREES – Carbon Footprint

TRIRIGA Real Estate Environmental Sustainability for Federal Government

TRIRIGA Real Estate Environmental Sustainability for Federal Government

Achieve agency environmental sustainability objectives through reduced energy consumption and emissions production from real property assets and operations in accordance with Executive Order 13423





End

