Ten-Year Site Plan FY09 - FY18

LOS ALAMOS NATIONAL LABORATORY















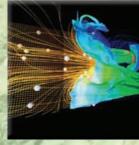


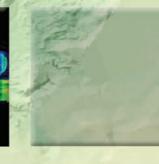






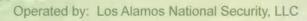












September 2008

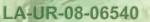


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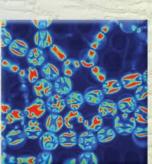
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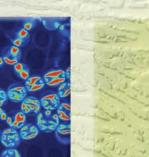
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Chapters













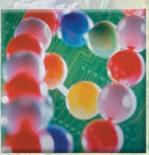












Chapter I. Executive Summary/Future State

Los Alamos National Laboratory views the FY2009-2018 Ten-Year Site Plan (TYSP) as a vital component for planning to meet the National Nuclear Security Administration (NNSA) commitment to ensure the United States (U.S.) has a safe, secure, and reliable nuclear deterrent. The Laboratory also uses the TYSP as an integrated planning tool to help develop an efficient and responsive infrastructure that effectively supports the Laboratory mission and workforce. This TYSP reflects the Laboratory's role as a prominent contributor to NNSA missions through its programs and campaigns that develop unique science, design, engineering, computing, testing, and manufacturing capabilities required for long-term stewardship of the stockpile and for other national security needs.

Los Alamos National Security, LLC (LANS), a team composed of Bechtel National, Inc., the University of California, the Babcock & Wilcox Company (formerly BWX Technologies, Inc.),

and URS Corporation (formerly Washington Group International, Inc.), manages the Laboratory. LANS is committed to making targeted infrastructure-related improvements and changes to operations and management that prepare the Laboratory for challenges in its future.

The mission of the Laboratory is to develop and apply science and technology to ensure the safety, security, and reliability of the United States nuclear deterrent; reduce the threat of weapons of mass destruction, proliferation, and terrorism; and solve national problems in defense, energy, and the environment.



This TYSP, the eighth annual submittal, discusses the Laboratory's evolving mission and the potential effects on facilities and infrastructure

(F&I) as the NNSA Complex (the Complex) transforms to meet the nation's nuclear deterrence requirements of the post-Cold War era. The transformation is defined in the NNSA Draft Complex Transformation Supplemental Programmatic Environmental Impact Statement (SPEIS) released in December 2007.

To provide focus, the Laboratory has developed 12 specific goals that help ensure success in meeting broader Complex goals. These goals bolster the Laboratory's ability to apply our outstanding science, engineering, and technology to national security and will ultimately position the Laboratory to effectively serve the Complex and the nation during these dynamic times by establishing itself as the premier national security science laboratory.

"Being the premier national security science laboratory requires unparalleled science and engineering through excellence in leadership, innovation, and operations."

Michael R. Anastasio

LANS Management Goals:

- Safe, Secure Workplace. Make safety and security integral to every activity we do. We will work to make safety and security the personal responsibility of all of us, develop programs and engineered controls to improve safety and security Laboratory-wide, and make Los Alamos a safer place through employee involvement and continually improved leadership.
- **©** *Exemplary Cybersecurity.* Implement a cybersecurity system that reduces risk while providing exemplary service and productivity. We will assure that the entire Laboratory is tackling cybersecurity, that we have reduced risk, and that we are planning for the future.
- G Environmental Stewardship. Establish excellence in environmental stewardship. We will assure audiences that the Laboratory is a good environmental steward by cleaning up contaminated sites, using the NMED Consent Order as our guide to cleanup and minimizing impacts on natural resources.
- © *Reliable Nuclear Deterrence*. Assess the safety, reliability, and performance of the Laboratory's weapons systems. We constantly assess the nuclear weapons stockpile for safety, security, and reliability; maintain the stockpile through life extension, alternative design, pit manufacturing, and system surveillance; and endeavor to hire and keep the best technical experts in the weapons field.
- G The Future Weapons Complex. Transform the Laboratory and the nation's nuclear weapons stockpile to successfully achieve Complex Transformation. We continually evaluate existing infrastructure and make needed changes, strive to meet our future needs, and achieve the best in science and engineering.
- G Anticipate Threats with Science and Technology. Leverage our science and technology advantage to anticipate, counter, and defeat global threats and meet national priorities, including energy security. Los Alamos science enhances global security, creates a science future, and understands national priorities in nuclear, critical infrastructure, energy, and environmental security.
- Stational Security Science Laboratory. Be the premier national security science laboratory and realize our vision for a capabilities-based organization. We will realize a capabilities-based approach to science for the needs of U.S. national security, understanding national security science needs and supporting capabilities-based science by providing intellectual, financial, and functional resources.
- © *Responsive Infrastructure*. Provide efficient, responsive, and secure infrastructure as well as disciplined operations that effectively support the Laboratory mission and its workforce. We will overcome aging infrastructure to maintain world-class science and technology, provide new software and tracking tools coupled with standardized operations to make tracking maintenance and repairs easier and more cost effective, and eliminate and consolidate unused space to boost cost effectiveness of Laboratory facilities.
- G Drive Superior Performance. Implement a performance-based management system that drives mission and operational excellence. We are developing a clear Laboratory-wide performance baseline, increasing our capability to develop and use forward-looking measures, and implementing tools to systematically drive process improvement.
- **Business Excellence.** Deliver improved business processes, systems, and tools that meet the needs of our employees, reduce the cost of doing business, and improve the Laboratory's mission performance. We will implement modern tools to meet the needs of employees, implement efficient processes to provide integration and perform our work, demonstrate compliance, and manage our costs while meeting mission goals safely and securely.
- Effective Communication. Communicate effectively with our employees, customers, community, stakeholders, and the public at large. Communications will be as highly regarded as our science and technology; employees, customers, and stakeholders will see us as integral to their success; and stakeholders will regard us as responsible and responsive.
- © *Successful Workforce.* Develop employees and create a work environment to achieve employee and Laboratory success. We will develop employees to help better meet the Laboratory's mission, implement efficient processes to better meet the needs of the Laboratory, and enhance the workplace environment.

Major Challenges

The Laboratory currently faces several significant issues and opportunities and the Laboratory's approach to proactively address these issues and opportunities will define the Laboratory's future. For the purpose of this TYSP these issues and opportunities are captured in the context of five major challenges, presented as themes throughout this document. These challenges are Complex Transformation, Stewardship of the Physical Infrastructure, Enhanced Laboratory Security, Consent Order Compliance, and Diversification of Missions.

Vision of the future Nuclear Complex

"A smaller, safer, and less expensive Complex that leverages the scientific and technical capabilities of NNSA's workforce, meets today's national security requirements, and is responsive to tomorrow's needs."

Thomas P. D'Agostino, NNSA Administrator

Complex Transformation. The draft SPEIS addresses the challenge of managing and maintaining the long-term safety, security, and reliability of today's Cold War stockpile and the reduced stockpile required for the future. This TYSP describes the developing Laboratory plans and processes to align a sustainable and integrated physical infrastructure with the future interdependent and consolidated weapons complex.

The Laboratory is currently responsible for seven mission areas. Under the draft SPEIS preferred alternative, the Laboratory will only be tasked with 3 weapons related mission areas. The Laboratory is designated as the Center of Excellence for Nuclear Design and Engineering, the Center of Excellence for Plutonium, and a host site for supercomputing platforms. The mission areas that will be modified and migrate, in part or entirely, to other sites are Non-Nuclear Design and Engineering, Major Environmental Testing, High Hazard Testing, and Tritium Operations. Through this transition the Laboratory will continue to produce high explosive (HE) detonators and conduct contained HE Research and Development (R&D).

The Laboratory supports NNSA's Complex Transformation and will play a leadership role in the consolidation and revitalization efforts for development and stewardship of the future stockpile. Stewardship of the Physical Infrastructure. This TYSP discusses the Laboratory's strategy to create a responsive physical infrastructure using an integrated planning process and an aggressive set of initiatives. The Laboratory will focus its investment in high-value facilities. An example is the initiative to dramatically reduce the site facility footprint, eliminating some of the oldest facilities and freeing up recapitalization and maintenance funding for investment in remaining facilities. While these efforts largely coincide with Complex Transformation, they were separately initiated and represent the Laboratory's commitment to facility stewardship.

This TYSP specifically captures a majority of the facilities to be dispositioned in support of Complex Transformation, but it is expected that others will be added or substituted through a change control process as conditions and plans evolve. Regardless, the Laboratory will reduce NNSA weapons program holdings by approximately 20 percent as described by the SPEIS preferred alternative (see Table and Figure 1-1).

In addition to reducing footprint, efforts are ongoing to improve maintenance efficiency and facility conditions to effectively support the Complex in the long term. Implementation of cost recovery models for the Laboratory's plutonium infrastructure is

another strategy designed to meet the long term infrastructure needs. As the Laboratory continues to evolve its infrastructure support efforts, outcomes will reflect a site designed to meet the intent of Complex Transformation and the long-term goals of the Laboratory. The result will be a responsive infrastructure that can be sustained within projected levels of future funding to support the DOE's continuing missions.

Enhanced Laboratory Security. The Laboratory is committed to aggressive implementation of its enhanced security initiative, particularly with regard to cybersecurity. Additional priority areas include 2005 Design Basis Threat (DBT) implementation and improved physical security controls. These priorities are reflected in the projects discussed in this TYSP, which include efforts to strengthen perimeter security at Technical Area (TA)-3 and new consolidated classified computing centers to enhance classified media management. The 2008 Graded Security Protection Planning (08 GSP) Policy recently superseded the 05 DBT and is expected to drive infrastructure upgrades similar to those proposed under the 05 DBT implementation plan.

Consent Order Compliance. The Laboratory is currently focused on meeting the compliance requirements of New Mexico and Federal environmental laws and regulations, specifically:

- the Compliance Order on Consent (Consent Order) signed March 1, 2005, with the State of New Mexico addressing legacy contamination at the site
- the Federal Facilities Compliance Agreement (FFCA), addressing storm water pollution management

Under the established schedule, the scope of work defined in the Consent Order (such as investigations, evaluations, and corrective measures) must be completed by December 2015 with stipulated penalties on certain deliverables if the Department of Energy (DOE) and the Laboratory do not meet the prescribed schedule. To comply with the long term stewardship requirements of the FFCA and other environmental management commitments beyond the Consent Order, the Laboratory has established a Long-Term Stewardship (LTS) program to implement a defined set of systematic monitoring and environmental management processes as well as continued upgrades of F&I.

Diversification of Missions. As described in the NNSA Strategic Planning Guidance for FY 2010 - FY 2014, April 2008, the Laboratory must foster a broader array of national security efforts that "ensure continuity and stability" to support the core nuclear-deterrent mission and 21st century national security challenges. Not only will this allow the pursuit of tangential scientific and technical efforts that support national security, but it should allow weapons programs to focus their resources on specific programmatic outcomes. While the NNSA operations are consolidating, the Laboratory sees potential growth in areas such as threat reduction, homeland security, and national problems in defense, energy, and the environment. The Laboratory is in a strong position to support the science and technology base essential for R&D capabilities for national security. The above being said, additional and improved mechanisms for supporting and allowing work-for-others facilities at the Laboratory need to be established.

The Laboratory is focused on balancing the broad scientific pursuits that often provide rich rewards in technology development with a pragmatic business approach required in these uncertain times. To ensure the Laboratory continues providing the nation with world-class technologies that enhance our nation's security, a concerted effort is being made to ensure the Laboratory has the necessary tools and resources to innovate and continue a tradition of scientific and technological excellence through initiatives such as the Science Complex, and Matter-Radiation Interactions in Extremes (MaRIE).

Future State

The vision for the Laboratory's future state is consistent with the proposed Complex Transformation and includes the following goals:

- a reduced overall footprint and consolidated nuclear and non-nuclear infrastructure that is flexible and responsive to support dynamic program needs
- a security posture that is largely insensitive to DBT changes
- an infrastructure that can be maintained within projected resources
- implementation of the best business practices in the management of facilities, projects, and programs
- continuous strategic investment to support an infrastructure transformation that will ultimately support the final configuration of Complex Transformation

Complex Transformation

Highlights of the Laboratory's approach to align with the Complex Transformation challenge include the following:

Constructing the Chemistry and Metallurgy **Research Replacement Facilities.** When completed, the new Chemistry and Metallurgy Research Replacement (CMRR) facilities will consolidate Special Nuclear Material (SNM), analytical chemistry and materials characterization (AC/MC), actinide R&D capabilities, and SNM storage capabilities. The CMRR will support plutonium operations at the Laboratory, closure of the existing Chemistry and Metallurgy Research (CMR) facility, and removal of security Category I/II SNM from Lawrence Livermore National Laboratory (LLNL). As such, the CMRR is essential for the Laboratory to become the Center of Excellence for Plutonium.

Highlights of Future State

Complex Transformation

- Constructing the CMRR
- Refurbishing LANSCE
- Upgrading TA-55 plutonium facilities
- Completing the Roadrunner Advanced Architecture project
- Enhanced SVTR
- Pursuing the Science Complex
- Focus on NNSA integration efforts

Long-Term Institutional Development

- Footprint reduction
- Enhanced physical security infrastructure
- Diversification of core-based capabilities
- Implementing infrastructure related best practices
- Long-term environmental systems and stewardship

Refurbishing the Los Alamos Neutron Science Center. LANSCE Refurbishment (LANSCE-R) will result in a modern and operationally reliable facility used for a variety of experimental science and stockpile stewardship applications.

Upgrading TA-55 Plutonium Facilities. The upgrade at TA-55 will support pit production requirements within the Center of Excellence for Plutonium.

Completing the Roadrunner Advanced Architecture Project. Roadrunner will be the supercomputing host platform for the Center of Excellence for Nuclear Design and Engineering.

Enhanced Super Vault-Type Room. The Laboratory is committed to the consolidation and control of classified information. In 2006, a security incident highlighted the need for an aggressive schedule to implement the Laboratory's enhanced security initiative, particularly with regard to cybersecurity. In response, a prototype Super Vault-Type Room (SVTR) concept was tested in fiscal year FY07. Successful demonstration of the prototype led to the approval of an FY08 project to construct an enhanced SVTR. This technology efficiently and effectively enables authorized programmatic access and launches the Laboratory into leading-edge cybersecurity operations.

Pursuing the Science Complex. The proposed Science Complex will provide state-ofthe-art facilities to support critical NNSA and mission-related scientific efforts. Fostering DP R&D technology, the Science Complex will be a multidisciplinary and collaborative setting that improves efficiencies, outcomes and attracts top talent.

Focus on NNSA Integration Efforts.

Complex-wide integration efforts will be an area of significant focus as the Complex Transformation strategy is implemented. The transfer of four mission areas within the Complex will require careful planning for optimum allocation of resources and necessary modification of infrastructure. The Laboratory will be integrated with other Centers of Excellence to insure that capability gaps or duplications are properly addressed and do not interfere with the Complex's ability to complete mission deliverables.

Long-Term Institutional Development

The following long-term institutional development initiatives enable the Laboratory to meet the NNSA's vision to be a smaller, safer, and less expensive Complex.

Footprint Reduction. An ongoing effort seeks to eliminate approximately two million square feet of Laboratory space. This initiative will build on current efforts to consolidate nuclear facilities and to close aging facilities at the Laboratory. See Table 1-1 and Figure 1-1 for a detailed quantification of footprint reduction efforts. It will eliminate a number of underutilized facilities with limited value to future activities and missions of the Laboratory. Footprint reduction will focus maintenance efforts and improve recapitalization of high-valued F&I. This effort, combined with improved efforts and strategies in infrastructure management and maintenance, will gradually provide a more reliable infrastructure to support the Laboratory's capabilities. It will also position the Laboratory, as a flexible and responsive supplier of R&D services, to meet dynamic NNSA program needs.

		Net Change in gsf from	Cumulative Changes from Start FY2008 to End FY2018			
	Site gsf Baseline Based on FIMS Snapshot Taken at End of FY2005	FY2006 through FY2007 Based on FIMS Snapshot Taken at End of FY2007	Cumulative Additions (Construction, New Leases, Transfers) (gsf)	Cumulative Reductions (Disposition, Sale, Transfer, Lease Termination) (gsf)	Projected Footprint at End of FY2018 (gsf)	Change from Start of FY2006 to End of FY2018 (gsf)
OWNED GROSS SQUARE FOOTAGE						
Weapons Activities Account Owned	8,429,033	60,387	379,518	-2,300,905	6,568,033	-1,861,000
Other NNSA Owned (NA-20)	244,750	249,099	37,823		531,672	286,922
Other DOE Owned	18,077	34,945		-18,077	34,945	16,868
Non-DOE Owned	0	0			0	0
Total	8,691,860	344,431	417,341	-2,318,982	7,134,650	-1,557,210
LEASED GROSS SQUARE FOOTAGE						
Weapons Activities Account Leased	501,116	-29,994	450,901	-125,679	796,344	295,228
Other NNSA Leased (NA-20)	0	0			0	0
Other DOE Leased	0	0			0	0
Non-DOE Leased	0	0			0	0
Total	501,116	-29,994	450,901	-125,679	796,344	295,228
OWNED & LEASED GROSS SQUARE FOOTAGE						
Weapons Activities Account Owned & Leased	8,930,149	30,393	830,419	-2,426,584	7,364,377	-1,565,772
Other NNSA Owned & Leased (NA-20)	244,750	249,099	37,823	0	531,672	286,922
Other DOE Owned & Leased	18,077	34,945	0	-18,077	34,945	I 6,868
Non-DOE Owned & Leased	0	0	0	0	0	0
Total	9,192,976	314,437	868,242	-2,444,661	7,930,994	-1,261,982

Table I-I. LANL – Gross Square Footage Summary Table

NOTES:

- Data provided in the "Site GSF Baseline" column is derived from the FIMS Snapshot taken at the end of FY05.
- Data provided in the "Net Change in GSF from FY06 through FY07" column is derived from the FIMS Snapshot taken at the end of FY07.
- Leased Gross Square Footage includes: DOE Leased, Contractor Leased, Permit space, including the future Science Complex.

FY09 TYSP

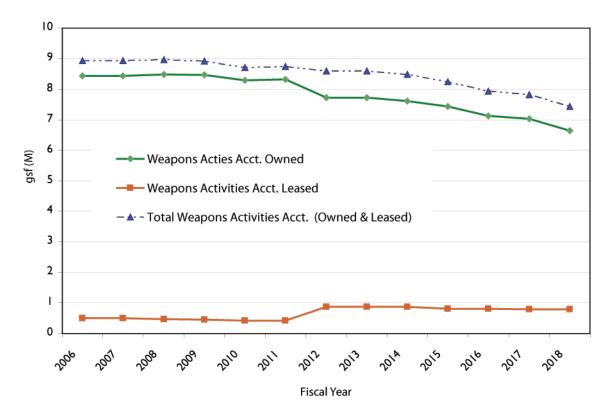


Figure 1-1. The Laboratory–NNSA weapons activities account footprint (owned and leased).

Plutonium Infrastructure Cost Recovery. Cost recovery is the funding contribution of the resident or user programs to support infrastructure and activities. Implementation of cost recovery allows for investment projects to address deficiencies and upgrade or replace facilities and infrastructure. The Laboratory developed the cost recovery models and associated management processes to ensure fair, equitable, transparent, simple, flexible and sustainable execution and drive desired behaviors. Cost recovery is implemented across the Laboratory with inclusion of all stakeholders and complies with all accounting regulations. Management and administration systems provide both the necessary oversight and reporting, maintain both the models and the cost recovery program management plan under change control, and define the steps necessary to establish additional cost recovery models. Three cost recovery plans currently exist in the areas of the Laboratory's plutonium

infrastructure: the TA-55 Plutonium Facility, the CMR Facility, and the radioactive waste processing activities.

Enhanced Physical Security Infrastructure. The post 9/11 operations environment requires enhanced Laboratory safeguards and security. Physical protection strategies are being developed and implemented in accordance with the 2003 and 2005 DBT, which significantly increased the threat parameters for which protection must be provided. These protection strategies align security infrastructure improvements with Laboratory mission assets defined in the draft SPEIS. The high level of protection achieved under the current policies position the Laboratory for continuing compliance under future DBT policies.

Diversification of Core-Based Capabilities. Diversification is supported through several major physical infrastructure developments. Among these efforts are the following:

- the MaRIE signature facility proposed to achieve and maintain leadership in materials-centric national security science
- revitalized radiological capabilities to support threat reduction and other national security R&D activities, a major institutional commitment that addresses one of the Laboratory Director's seven "Grand Challenges" for science and engineering
- planning support for the next generationenhanced energy security nuclear fuel cycle

Using its unique competencies for performing NNSA DP work as a foundation, the Laboratory is exploiting opportunities to apply its broad science capabilities to ensure that the Nation is equipped to deal with new and unforeseen national security threats. This broad based capability will support effective implementation of actions detailed in the draft SPEIS and will ensure that the Laboratory can robustly respond to the national security environment of the 21st century.

Implementing Infrastructure Best Practices. The Laboratory is focused on implementing best practices in F&I management by satisfying the requirements and intent of the several directives, including:

- Executive Order 13327, Federal Real Property Asset Management
- Executive Order 13423, Strengthening Federal Environmental, Energy, and Transportation Management
- The President's Management Agenda, Real Property Asset Management Initiative
- DOE Order 430.1B, Real Property Asset Management
- DOE Order 430.2B, Departmental Energy, Renewable Energy and Transportation Management
- DOE Order 450.1, Environmental Protection Program

• Congressional and DOE real property reporting requirements

The Laboratory will implement best practices by adhering to the recommendations of Secretary Bodman's Transformation Energy Action Management (TEAM) Initiative, and recommendations of DOE's High Performance Sustainable Buildings Working Group (HPSBWG) where possible. The design process of all new Line-Item construction and renovation projects at the Laboratory will include Leadership in Energy and Environmental Design (LEED) Gold Certification as the standard for addressing environmental issues and energy efficiency as a comprehensive design strategy. Beyond pursuit of LEED certifications, the Laboratory has identified renewable energy generation as a near term project goal. Renewable projects will follow as economics and demand allow.

The CMRR project was established prior to the recommendations. The first phase of the project, the CMRR-Radiological Laboratory, Utility, and Office Building (RLUOB) is pursuing a LEED Silver Certification. The CMRR-Nuclear Facility (CMRR-NF) is pursuing LEED Certification. Attaining LEED certification for the Nuclear Facility will be the first LEED Certification ever achieved for a building of its type.

Environmental Management System. DOE Order 450.1, Environmental Protection Program, requires all sites "To implement sound stewardship practices that are protective of the air, water, land, and other natural and cultural resources impacted by DOE operations and by which DOE cost effectively meets or exceeds compliance with applicable environmental; public health; and resource protection laws, regulations, and DOE requirements." The DOE Order states that this objective must be accomplished by implementing Environmental Management Systems (EMS) at DOE sites. To address this requirement, the Laboratory has implemented an EMS that complies with the International Standardization Organization (ISO) 14001

international specifications for EMSs. The Laboratory EMS was ISO 14001 certified in 2006. The EMS is a systematic method for determining environmental impacts of Laboratory operations and mission activities, while prioritizing environmental improvements that reduce impacts and designing metrics that measure results for continuous improvement. The EMS provides a framework for the Laboratory to meet its commitment to protecting the environment while enhancing mission accomplishment.

Summary

This TYSP narrates a roadmap for the Laboratory's physical infrastructure

transformation into two primary NNSA Centers of Excellence within the eight interdependent centers for the Complex, and one of two supercomputing platform hosts. While the impact of Complex Transformation on F&I will be broad and significant, in many ways it complements efforts already implemented at the Laboratory. Many challenges and opportunities will be generated over the next 10 years. The Laboratory has, in part, anticipated these developments and is prepared to lead the Complex to solve the national security technical challenges of the future.

It is emphasized that the TYSP is solely a planning document and represents possible paths to support the stockpile scenarios envisioned. It is recognized that the Record of Decision (ROD) for the SPEIS, describing the future configuration of the Complex and the Laboratory, will ultimately drive the planning and activities for many nuclear and non-nuclear facilities at the Laboratory. The Final 2008 SWEIS, describing operational alternatives for the Laboratory, was issued on May 16, 2008. A ROD was issued on September 19, 2008.

Chapter 2. Assumptions

2.1 Complex Transformation

This TYSP is written with assumptions that are based on the preferred alternative for the Laboratory's scope of operations presented in the draft SPEIS. Complex Transformation will promote existing and new activities, eliminate redundancies, and reduce facility footprint. A reduced footprint will result in efficiency improvements, lower operating costs, increased safety and security, and risk reduction.

Reducing total building footprint by approximately 20% and establishing MaRIE as a science magnet are site-specific goals. Goals related to future missions and activities as a result of Complex Transformation include:

• upgrading existing facilities and appropriate investments will provide the capability for producing up to 80 pits per year (50/80 Alternative). This alternative assumes that the CMRR facility will be completed and modifications to existing facilities at TA-55 may be required to accommodate additional workers.

- reducing tritium activities and removing material from the Weapons Engineering Tritium Facility (WETF) by 2010 for consolidation of R&D at the Savannah River Site (SRS)
- ceasing open-air hydrodynamic testing in 2009 and downsizing hydrodynamic testing facilities
- closing major environmental testing facilities by 2010 for consolidation at Sandia National Laboratory (SNL)
- consolidating weapons activities engineering component work to SNL
- transferring or excessing redundant facilities supported by the Weapons Activity Account
- remaining a host site for supercomputing platforms



The Laboratory's future pit production capabilities, outlined in the draft SPEIS, will require upgrades to existing facilities at TA-55 as well as completion of new facilities such as the CMRR.

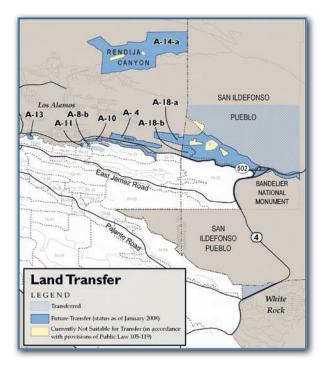
2.2 Site Boundaries

Boundary Changes Not Related to Complex Transformation

Over the next 36 months, DOE will convey to the Incorporated County of Los Alamos, New Mexico, eight parcels of land which total 1,568 acres. These land conveyances, not related to Complex Transformation strategies, are conveyed under the direction of Public Law 105-119 Section 632 to help the County become economically self-sufficient.

Transferring the following seven parcels, located along the northern edge of the Laboratory, will result in changes to the site boundaries:

- A-4, the Airport
- A-8-b, DP Road-1 South
- A-10, DP Canyon
- A-11, DP Road-4 West
- A-13, LASO East
- A-18-a, TA-74 South
- A-18-b, TA-74 South



The eighth parcel is A-14-a, Rendija Canyon. DOE administers this Federal land, which totals 883 acres. The parcel is north of Los Alamos, discontinuous with the Laboratory.

Boundary Changes Related to Complex Transformation

There are no plans for land to be transferred as a result of the planned Complex Transformation in the next ten years. However, boundaries will change due to previously planned land transfers under Public Law 105-119, detailed earlier.

While the Weapons Program is planning significant consolidation, evaluations will be made to transfer facilities to other non-DP missions.

Mission Changes, Facility Impacts, and Compliance with the National Historic Preservation Act

In compliance with the National Historic Preservation Act (NHPA) of 1966, Laboratory buildings and structures built between 1942 and 1963, or designated in the 1999 SWEIS as key facilities, must be reviewed for historical significance. The most significant examples are to be evaluated for preservation and adaptive reuse potential.

In consultation with the New Mexico State Historic Preservation Officer (SHPO), Laboratory buildings and structures are evaluated for inclusion on the National Register of Historic Places (Register). Eligibility for the Register does not mean that a building or structure will be preserved. If determined eligible for the Register, decontamination and demolition (D&D) can be completed when measures are developed to resolve any adverse effects to the property.

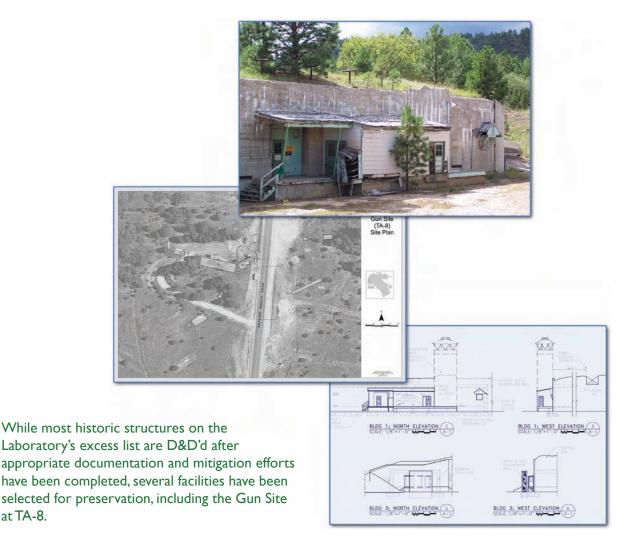
Typical measures focus on architectural and historical documentation and include the following:

• compilation of updated as-built drawings

2.2 Site Boundaries

- production of archival-quality black and white photographs
- documentation of the property's history and the significance of its role at the Laboratory, often supplemented with historic photographs and oral interviews of former site workers

Most of the Laboratory's historic properties are not candidates for preservation and will ultimately be demolished when they no longer support the Laboratory's mission. The demolition of historic properties is carried out after NHPA compliance activities are conducted.



at TA-8.

2.3 Facility Funding

LANS has imposed fiscal restraints and policies aimed at improving efficiencies in all areas of Laboratory operations.

Despite declining Future-Years Nuclear Security Program (FYNSP) budgets, increases in current funding levels are required to consolidate operations, improve facility conditions and space utilization, ensure continued compliance with the Consent Order, and enhance scientific capabilities. It is assumed that the Facilities and Infrastructure Recapitalization Program's (FIRP) preliminary site planning target for the Laboratory will be approximately \$32M in FY09, increase by 15% in FY10 and then flatten through FY13. It is also assumed that the operations of facilities in the Readiness in Technical Base and Facilities (RTBF) program's preliminary site planning target for the Laboratory will begin at approximately \$298M in FY09 and increase by 5% in FY10, 9% in FY11, 7% in FY12 and 2.5% in FY13. Projected inflation rates are assumed to be 2.6% for FY08, 2.5% for FY09, 2.3% for FY10, and 2.2% for FY11.

Under the proposed Complex Transformation, it is assumed that Transformation Disposition (TD) funding will be available for footprint reduction beginning in FY09. Funding from individual projects and the transfer of process-contaminated buildings is expected for the progression of D&D. The Laboratory intends to increase its available resources for facility management by implementing its footprint reduction plans and finding additional opportunities for improving maintenance practices and reducing expenses. Laboratory management will continue to pursue opportunities and solutions for additional operational improvements to insure that the goals of Complex Transformation can be achieved at the Laboratory, and for the Complex as a whole.

Chapter 3.5 describes ongoing Laboratory efforts to responsibly manage institutional funds with Laboratory cost recovery mechanisms for non-NNSA facilities and equipment. Chapter 4.1 describes the future D&D funding and plans to reduce maintenance expenditures.

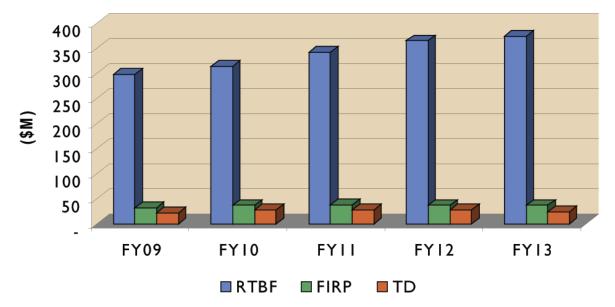


Figure 2-1. FYNSP preliminary site planning targets for RTBF/Operations of Facilities, FIRP, and TD.

2.4 Security and Safeguards

All planned physical security enhancements are premised on the 2005 DBT Policy Implementation of the DOE tactical doctrine and on compliance with departmental security regulations. New and upgraded protective force training facilities needed to comply with the DBT and the tactical doctrine are addressed in the Laboratory's 2005 Design Basis Threat Policy Implementation Plan. The plan will be initiated in 2010 in accordance with Defense Nuclear Security (DNS), NA-70, and budget guidance. The 2008 Graded Security Protection Planning (08 GSP) policy recently superseded the 05 DBT and is expected to drive infrastructure upgrades similar to those proposed under the 05 DBT implementation plan.

The site's current security envelope provides a high level of protection to existing Laboratory assets. With completion of the Nuclear Materials Safeguards and Security Upgrades Project (NMSSUP) Phase II and the 2005 Design Basis Threat Policy Implementation, the envelope will satisfy the majority of security needs associated with proposed changes in mission assignment under Complex Transformation.

Fully addressing the anticipated security needs for Complex Transformation is dependent on future expansion of the protected area at TA-55. This expansion would extend the protection envelope, but would not require different security controls. Therefore, no significant change in the site's overall protection level is anticipated.



Security enhancements such as the Security Perimeter Project completed in FY07, provide the site with a high level of protection for existing Laboratory assets.

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Chapter 3. Mission Needs and Program Descriptions

3.1 Future NNSA Missions, Programs, and Workload

3.1.1 Weapons Programs

Role and Mission

The Laboratory is committed to meeting its core mission—nuclear weapons stockpile stewardship. This commitment includes support for required stockpile life extensions, pit manufacturing and certification, a technically sound basis for certification science, and the experimental campaigns necessary to meet stewardship requirements. Future missions and facilities will reflect the implementation of NNSA Complex Transformation.

The Laboratory continues to work with NNSA to develop stockpile stewardship into the mature, sustainable, and agile program necessary to support the current stockpile and respond to any future nuclear requirement. It is through this comprehensive capability that the Laboratory has established itself as a fully capable element of the nation's responsive defense infrastructure. Goals for this program include ensuring a sustainable weapon certification capability, providing limited but flexible manufacturing capability in support of NNSA needs, establishing and demonstrating the capability to extend the life or modify existing weapons, and if requested, exploring new concepts.

The core programmatic responsibility of the Weapons Program is to create, integrate, and maintain a sustainable nuclear weapons mission. Chief responsibilities include setting priorities for the \$1.1B nuclear weapons program budget, providing cost-benefit analysis and risk management, tracking and ensuring execution of weapons activity plans with consistency across the institution, and ensuring long-term support of division capabilities that are the foundation of the nuclear weapons program. In executing these roles, the Weapons Program balances the stockpile and predictive science programs, allocates required resources, and ensures technical quality of programs and deliverables. It also provides a one-voice interface with customers such as the DOE, the NNSA, and the Department of Defense (DoD).

The Laboratory's contribution to national security has evolved to encompass maintaining the U.S. nuclear deterrent, advanced conventional weapons research, and technical solutions that reduce threats from the proliferation of weapons of mass destruction (WMD) and terrorism to ensure homeland security. In support of its missions, the Laboratory maintains, sustains, and pursues broad, multi-disciplinary programs in basic science. The key elements of the Laboratory's national security mission today include the following:

- ensure the safety, security, and reliability of the U.S. nuclear deterrent
- reduce global threats
- solve other emerging national security challenges

The Laboratory's mission and corresponding goals and priorities must respond to and anticipate national security needs in a dramatically changing world. The

programmatic and business strategies to carry out that mission are derived directly from the vision that Los Alamos National Laboratory will be the national security science laboratory of choice.

The next sections discuss how current and/ or future changes to program missions from Complex Transformation will impact the Laboratory's F&I activities and requirements during the 10-year timeframe of this plan. While the Laboratory will support Complex Transformation for the long term, the nature of that support will be contingent upon key decisions about Complex Transformation affecting the overall Nuclear Weapons Complex (NWC).

Complex Transformation

The 2001 Nuclear Posture Review (NPR) directed a change in the structure of the nuclear deterrent to adjust to changes in the nature of the threat. The NPR called for the following:

- changing the size, composition and character of the nuclear stockpile in a way to reflect that the Cold War is over
- achieving a credible deterrent with the lowest possible number of nuclear warheads consistent with our national security needs
- transforming the NNSA complex into a responsive infrastructure that supports the specific stockpile requirements and maintains the essential U.S. nuclear capabilities needed for an uncertain future

In response to the NPR, NNSA developed a planning scenario that establishes its vision for the future NWC. The scenario consists of four over-arching long-term strategies. In partnership with DoD:

- transform the nuclear stockpile
- transform to a modernized, cost-effective NWC
- create a fully integrated and interdependent NWC

• drive the science and technology base essential for long-term national security

NNSA has been evaluating the capabilities within the Complex to align limited current and projected resources against priority program needs. One alternative for Complex Transformation identifies the Laboratory as the future Center of Excellence for Nuclear Design and Engineering and the Center of Excellence for Plutonium. The Laboratory currently:

- conducts research, design, and development of nuclear weapons
- designs and tests advanced technology concepts
- provides safety, security, and reliability assessments and certification of stockpile weapons
- maintains production capabilities for limited quantities of plutonium components for delivery to the stockpile
- manufactures nuclear weapon detonators for the stockpile
- conducts tritium R&D
- conducts hydrodynamic testing
- conducts HE R&D
- conducts environmental testing
- maintains Category I/II quantities of SNM

The Laboratorys mission under Complex Transformation will include:

- plutonium pit production R&D
- detonator production and contained HE R&D
- materials research with MaRIE as a potential science magnet (see Section 3.1.2)
- becoming a supercomputing platform host site (see Section 3.4.1)

Redundant capabilities that would be eliminated or reduced at the Laboratory include tritium operations and major environmental testing. The Laboratory will also provide capabilities in the science and technology base to support the Nation's nuclear deterrent (see Sections 3.1.2 and 3.2.1).

Capabilities and Facilities Supporting Future Missions

Over the next 10–20 years, the Laboratory will exercise its unique facility, equipment, and personnel resources to provide the required capabilities (as proposed in the Complex Transformation) to ensure that nuclear weapons are safe, secure, and reliable. These capabilities will predict performance and support design and production at the Laboratory and within the NWC for the warhead refurbishment programs, limited life component production and surveillance, and pit manufacturing. The next section describes the Laboratory's current and future capabilities and the MC facilities that support them. Also included are descriptions of the F&I projects required to meet these capability requirements. The following descriptions are written consistent with alternatives described in the draft SPEIS; however, future missions and the configuration of the Laboratory is dependent on the final ROD.

Center of Excellence for Nuclear Design and Engineering

The Laboratory performs basic research, design, system engineering, development testing, reliability assessment, and certification of nuclear performance. In 1995, the President concluded that the continued vitality of all three nuclear weapons laboratories was essential to the nation's ability to fulfill the requirements of stockpile stewardship in the absence of underground nuclear testing. Under Complex Transformation, the Laboratory will maintain responsibility for the nuclear design and engineering of its nuclear physics packages. The capability to support this Complex Transformation initiative is currently demonstrated at the Laboratory through Directed Stockpile Work (DSW), the Science Campaign, the Engineering Campaign, the Inertial Confinement Fusion Ignition and

High Yield (ICF) Campaign, the Advanced Simulation and Computing (ASC) Campaign, and the Readiness Campaign.

Directed Stockpile Work

The goal of DSW is to ensure that the nuclear warheads in the U.S. nuclear weapons stockpile are safe, secure, and reliable. This goal is achieved by:

- developing solutions to extend weapon life
- identifying and correcting potential technical issues
- refurbishing warheads
- conducting evaluations to certify warhead reliability and to detect potential issues
- conducting scheduled maintenance
- dismantling warheads retired from the stockpile

MC facilities supporting DSW include the following:

Dual Axis Radiographic Hydrodynamic Test Facility Operations: The Dual Axis Radiographic Hydrodynamic Test Facility (DARHT) provides the major hydrodynamic testing capability described in the draft SPEIS. DARHT is used to perform integrated, non-nuclear experiments designed to measure the many complex and dynamic aspects of



DARHT, the world's first machine capable of taking x-ray mini-movies of a mock nuclear implosion, will perform the first truly dual axis hydrodynamic test in the summer of 2008.

implosion systems, shock physics, and high velocity impacts. In early 2008, the Laboratory received authorization from NNSA to begin operating Axis 2. By May 2008, NNSA announced that DARHT was fully operational. Under Complex Transformation, DARHT is expected to provide contained hydrotesting capability for the Complex until the end of its design life in approximately 2025.

Nondestructive and Environmental Testing **Facilities Operations:** These facilities provide the capability for component and subsystem environmental testing, including vibration, shock, temperature evaluation, and radiography in both destructive and nondestructive modes. Under Complex Transformation, major environmental testing capability will be consolidated at SNL/New Mexico because many major environmental test facilities are costly to maintain or have potentially significant environmental impacts. This will require TA-11 to close; however, a subset (less the outdoor drop tower) of the shock and vibration capability will be relocated from TA-11 to the adjacent TA-16.

High Explosive Radiography: HE

radiography capability at the Laboratory will remain for the proposed Complex Transformation. The TA-8 radiography capability characterizes HE components. The facility supports the detonator fabrication program, hydrodynamic testing at DARHT,



The TA-8 radiography capability supports the characterization of HE components.

and sub-critical testing at the Nevada Test Site (NTS). The TA-8 radiography facility, 55 years old and in failing condition, will be refurbished in the near future.

High Explosives Detonation Facilities:

The need for HE detonation facilities at the Laboratory will remain under the proposed Complex Transformation. The HE detonation facilities provide the capability to design, develop, manufacture, and test detonator systems. One consolidation activity under consideration is a Shock and Detonation Physics Facility which would relocate researchers from failing office and lab space at TA-40 to a new building at TA-22. This would improve synergy by co-locating HE, shock wave physics, and HE systems researchers.

Los Alamos Neutron Science Center

Facilities: The Los Alamos Neutron Science Center (LANSCE) MC facilities consist of a high intensity 0.8 Megawatt (MW) proton linear accelerator; the Weapons Neutron Research (WNR) facility, where high-energy un-moderated neutrons and protons are used for weapons-related basic and applied research; and the Lujan Center, which employs moderated spallation neutrons for condensed matter-science, engineering, and nuclear science research.

The existing LANSCE systems, especially those associated with the accelerator, are increasingly unreliable, expensive to operate and maintain, and reaching the end of their design life. The proposed science magnet and signature facility, MaRIE (see Section 3.1.2), will provide a vital increase in Laboratory capabilities for materials research at LANSCE. Key infrastructure projects for LANSCE include the following:

• LANSCE Refurbishment: LANSCE's reliability has been under increasing stress over the past few years. Major components have become obsolete, occasionally fail, and are operating years beyond expected service lives. Replacement part fabrication could cause a one-year shutdown. Without

• • • • • • • • • • • 3.1 Future NNSA Missions, Programs, and Workload



The existing LANSCE systems are reaching the end of their design life and, if unaddressed, will be unable to meet both the requirements of its stakeholders and the milestones for the stockpile stewardship and science programs.

reinvestment now, the facility will continue to decline and will be unable to meet both the requirements of its stakeholders and milestones for the stockpile stewardship and science programs. LANSCE-R is a compilation of F&I subprojects that will focus on renovating and modernizing the existing linear accelerator and related systems. The LANSCE-R project is designed to sustain reliable facility operations past 2020 for defense research and applications with a priority on dependable beam delivery.

- *1L Target Replacement:* The 1L target provides spallation neutrons to the Lujan center in support of stockpile stewardship and basic energy research. The existing target, which is nearing the end of its lifecycle, is plagued by mechanical issues. Temporary repairs have allowed for continued operation, but a permanent replacement is required.
- *F&I Upgrades:* To fully support LANSCE-R and future operations, key F&I systems, such as electrical, chilled water, and heating, ventilation and air-conditioning (HVAC) systems need to be refurbished.

Weapons Engineering Tritium Facility: WETF provides the space to perform research, development and engineering of gas transfer systems. The facility will play a key role in the development of new gas transfer systems and will continue to support the surveillance of the gas delivery systems in the legacy stockpile. The facility also provides space to store, in environmental conditions, gas transfers systems to study the aging of these systems in the legacy stockpile. The facility is in fair condition, and no related projects are currently required. An NNSA decision on consolidating tritium functions at another NNSA site will impact this capability at the Laboratory.

Science Campaign

The goal of the Science Campaign is to develop improved capabilities to assess the safety, reliability, and performance of the nuclear physics package of weapons without further underground testing; enhance readiness to conduct underground nuclear testing as directed by the President; and develop essential scientific capabilities and infrastructure. This includes providing capabilities to support annual assessment and certification of the Life Extension Program, and to improve response times for resolving significant findings and certifying warhead replacement components that meet the goals of responsive infrastructure. The

Science Campaign is principally responsible for the development of Quantification of Margins and Uncertainties (QMU), which is the methodology that applies scientific capabilities to stockpile certification issues and to communicate certification findings in a common framework.

MC Science Campaign facilities are used to develop improved capabilities to assess the safety, reliability, and performance of the nuclear physics package of weapons without further underground testing. MC facilities supporting the Science Campaigns include the following:

High Explosives R&D Laboratories: The Laboratory's HE capability, which ensures the stability and dependability of HE in nuclear weapons, is essential to maintaining the safety and reliability of the nuclear weapons stockpile. HE R&D supports the improved predictive capability for performance, safety, and aging.

Materials Science Laboratory: The Materials Science Laboratory (MSL) supports four types of experimentation: materials processing, mechanical behavior in extreme environments, advanced materials development and materials characterization. The MSL is in excellent condition and no related projects are currently required or planned.



The MSL, constructed in 1993, supports materials processing, mechanical behavior in extreme environments, advanced materials development and materials characterization.

Engineering Campaign

The goal of the Engineering Campaign is to provide validated engineering sciences and engineering modeling and simulation tools for design, qualification, and certification; improved surety technologies; radiation hardening design and modeling capabilities; microsystems and microtechnologies; component and material lifetime assessments; and predictive aging models and surveillance diagnostics. The Campaign provides the NWC with modern tools and capabilities in engineering sciences to ensure the safety, security, reliability and performance of the current and future nuclear weapons stockpile and a sustained engineering basis for stockpile certification and assessments throughout the lifecycle of each weapon.

Inertial Confinement Fusion Ignition and High Yield Campaign

The goal of the Inertial Confinement Fusion Ignition and High Yield (ICF) Campaign is to develop laboratory capabilities to create and measure extreme conditions of temperature, pressure, and radiation, including thermonuclear burn conditions, approaching those in a nuclear explosion, and conduct weapons-related research in these environments. The ICF Campaign supports the Stockpile Stewardship Program (SSP) by developing experimental capabilities and executing experiments to examine phenomena at physical conditions approaching those in a nuclear weapon.

Inertial Confinement Fusion Ignition and High Yield Facility: The Trident facility is used for experiments requiring highenergy laser light pulses, primarily in inertial confinement fusion, high-energy density physics and basic research to certify the stockpile. The Trident Laser Enhancement project, completed in FY07, increased Trident's short pulse capabilities for radiography of hydrodynamic targets used in the high-energy density physics program. No additional related projects are currently planned, and no changes are anticipated under Complex Transformation.

Advanced Simulation and Computing Campaign

The goal of the ASC Campaign is to provide leading edge, high-end simulation capabilities to meet weapons assessment and certification requirements, including weapon codes, weapons science, platforms, and computer facilities. The ASC Campaign enables Stockpile Stewardship by delivering validated weapons simulation tools with more accurate physical models and better numerical approximations by:

- integrating the ASC tools into a QMU certification and assessment methodology
- developing the ability to quantify confidence bounds on the uncertainty of results
- providing the necessary computing capability to users

The ASC tools simulate device performance to ensure systems in the stockpile meet all performance and surety requirements, as well as stockpile-to-target sequence and the entire weapons lifecycle.

Nicholas C. Metropolis Center for Modeling and Simulation houses the Roadrunner supercomputer. For a complete discussion of capabilities and F&I projects at the Metropolis Center, see Section 3.4.

Supercomputing Platform Host

The Laboratory and LLNL have been designated as supercomputing platform host sites as part of consolidation efforts to reduce host sites for supercomputing platforms on weapons account from three to two by 2012.

Readiness Campaign

The goal of the Readiness Campaign is to develop and deliver design-to-manufacturing capabilities to meet the evolving and urgent needs of the stockpile. The Readiness Campaign serves its customer base with technology that contributes to faster implementation of new requirements, reduction in cycle times, less waste, leaner manufacturing (fewer components or processing steps), and an enabled workforce.

Center of Excellence for Plutonium

The future stockpile is projected to be smaller and less diverse, leading to changes in the associated production requirements which are currently under evaluation. The Laboratory is responsible for key nuclear components within the majority of active weapons systems. Most notably, TA-55 provides the only fully functioning plutonium facility used for R&D and the only pit manufacturing capability within the NWC.

The Laboratory, through existing capabilities and planned nuclear facility consolidation and construction activities, has established a stable weapons F&I to meet near-term manufacturing needs. The Laboratory is poised to provide additional capacity for expanded pit production missions over the long term. The primary weapons program at the Laboratory today that uses this capability is the Pit Manufacturing and Certification Campaign (PMC).

Pit Manufacturing and Certification Campaign

The goal of the PMC is to restore the capability and limited capacity to manufacture pits of all types required for the nuclear weapons stockpile. Within the PMC, three subprograms make unique contributions.

- 1. The Pit Manufacturing subprogram objective is to manufacture limited quantities of pits that meet all quality requirements for entry into the stockpile and to develop a limited pit manufacturing capability at existing Laboratory facilities.
- 2. The Pit Certification subprogram objective was to confirm the nuclear performance of a W88 warhead with a Laboratory-manufactured pit by the end of FY07 without nuclear testing and to establish a basis for certification processes for future replacement pits.

3. The Pit Manufacturing Capability subprogram objective is to establish the capability to manufacture replacement pits, other than the W88, by developing and demonstrating processes applicable to either existing Laboratory facilities or a long-term pit manufacturing facility.

MC facilities for the PMC support restoration of the capability and capacity to manufacture pits of all types required for the nuclear weapons stockpile.

TA-55 hosts activities in support of pit manufacturing, surveillance, and certification. TA-55 capabilities include plutonium casting, fabrication, machining, and metallurgy laboratories; plutonium recovery; metal preparation; and destructive analysis and nondestructive analysis (NDA). An SNM storage vault is also located at TA-55. The F&I at TA-55 are reaching the end of their useful lives.

The following projects in the TA-55 area will enable continued operation to meet programmatic requirements and are detailed in the F&I Cost Projection spreadsheets, Attachment A, and are listed in Attachment B:

- *TA-55 Reinvestment* is composed of three phased Line-Item projects that will revitalize aging and obsolete electrical, mechanical, safety, facility controls, and other selected systems. TA-55 Reinvestment Project (TRP) I and II are currently in the FYNSP and are reflected in Attachment A-1. TRP III scope is currently being re-evaluated and its timing is beyond the current FYNSP. More details on TRP III will be provided in future TYSP's.
- *TA-55 Radiography* will house highenergy and medium-energy X-ray systems to examine sealed nuclear components. This facility is critical for the PMC Campaign as well as surveillance programs. This project has received Critical Decision 0 approval but is currently not in the FYNSP. However, an

interim capability has been established at TA-55 in FY08 that will be used until programmatic direction is received on the long term solution for this capability.

• *NMSSUP Phase II* will upgrade and replace the existing physical security system at TA-55 to address the new protection strategy requirements and deteriorating physical security infrastructure.

Most of the existing facilities critical to plutonium manufacturing, and R&D are aging and beyond their design life and are in need of replacement. Two projects that support the need for an enduring waste treatment capability are:

- *Radioactive Liquid Waste Treatment Facility (RLWTF) Upgrade* will construct a facility to improve the RLW treatment capability at TA-50. The facility will provide increased reliability and process capability to meet projected regulatory requirements for discharge.
- *Transuranic (TRU) Waste Facility* will provide a replacement facility to process and ship newly-generated TRU waste to the Waste Isolation Pilot Plant (WIPP). The Consent Order currently requires that the Laboratory's existing TRU waste processing capability located at TA-54 be closed in 2012 and remediated by 2015.



The RLWTF upgrade will enhance reliability and process capability to meet projected regulatory requirements for discharge.

Both of these projects are identified within FYNSP. However, it is recognized that the duration required to get these facilities constructed and approved may be longer than originally anticipated. Studies are underway to determine if investments are needed in the existing facilities to maintain operations in a safe and compliant manner until the new facilities become operational.

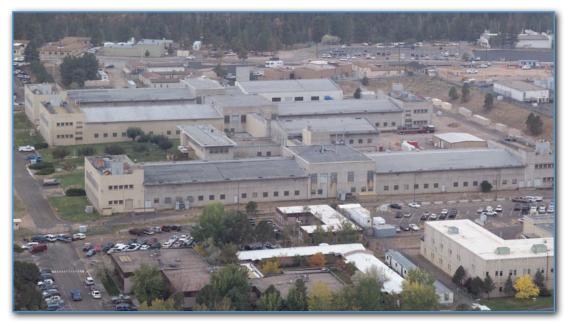
Chemistry and Metallurgy Research

Facility: The existing CMR facility serves as the primary facility for a broad spectrum of actinide, metallurgical, and other material testing systems of radiological components for Security Category III material levels. The CMR building houses significant nuclear material capabilities in support of programs at TA-55, including analytical chemistry, metallography, and R&D for science-based stockpile stewardship and surveillance programs.

The CMR facility currently operates on a "run-to-replacement" philosophy due to funding constraints and in anticipation of CMRR project completion. The CMR will maintain normal operations and sustain

capabilities needed for ongoing missions until the CMRR Facility becomes operational. This will require an update to the current Authorization Basis (AB) which will expire in 2010. A new Documented Safety Analysis (DSA) is expected to be approved by NNSA prior to the December 2010 expiration. Significant investments involving upgrades to the CMR facility's cooling and ventilation systems are underway to keep the CMR operational and compliant. The Laboratory has also initiated a major risk reduction effort in wings 2, 3 and 4 that involves relocating process activities and wing closures to reduce the operating hazards and will lead to a continuation of an operating environment that can be sustained until the new CMRR is completed.

The CMRR will provide new facilities at TA-55 to house existing CMR capabilities and consolidate Security Category I/II laboratory work in a single area to minimize the transfer of nuclear material within the complex. The CMRR facilities consist of three buildings—a laboratory/office building, a utility building (RLUOB), and a Security Category I/II,



The existing CMR, which houses significant nuclear materials capabilities, will require continued investments in the facility's maintenance to sustain capabilities needed for ongoing missions until the CMRR is certified operational.



The completion of the CMRR project, currently under construction, will contribute to the Laboratory's nuclear facility consolidation efforts.

Hazard Category II laboratory building. Construction of the laboratory/office and utility building has begun with an anticipated completion date of 2010.

Beryllium Technology Facility Operations:

The Beryllium Technology Facility (BTF) provides the only technical capability within DOE for non-nuclear component fabrication and beryllium R&D. Operations at the BTF include alloy development, foundry operations, inspections, and nondestructive testing, joining, machining, metallography, mechanical testing, and powder operations. The BTF is in good condition, and no related projects are currently required or planned.

Sigma: The Sigma facility supports a large, multi-disciplinary technology base in materials fabrication science. This facility is used mainly for materials synthesis and processing, characterization, fabrication, joining, and coating of metallic and ceramic items. Under Complex Transformation, capabilities provided by the Sigma facility will be required to support increased manufacturing. The Sigma facility is a candidate for replacement or significant revitalization due to its age and poor condition, and options for a replacement facility are currently being studied.

With the exception of the CMR, which must bridge the gap until the CMRR becomes operational, each of these facilities will be



Capabilities provided by the Sigma facility will be required to support increased manufacturing under Complex Transformation.

necessary to support the Laboratory as the proposed Center of Excellence for Plutonium.

Major Hydrodynamic Testing

Hydrodynamic testing consists of HE experiments to assess the performance and safety of nuclear weapons. Hydrotesting, coupled with modeling and simulation using high performance computers, is used to certify the safety, reliability, and performance of the nuclear physics package of nuclear weapons without nuclear testing. DARHT, described previously in DSW, is used to perform integrated, non-nuclear experiments designed to measure the many complex and dynamic aspects of implosion systems, shock physics, and high velocity impacts.

Science and Technology Base to Support the Nation's Nuclear Deterrent

The Laboratory provides unique science, technology, and engineering capabilities in support of the SSP missions.

- Los Alamos Neutron Science Center Facilities (see Directed Stockpile Work)
- Materials Science (see Science Campaign)

Weapons Facilities and Infrastructure Investments

All of the aforementioned evolving programmatic needs are being evaluated to develop planning scenarios and options to DOE, NNSA, and the Laboratory. Through the evaluation process, NNSA and the Laboratory can optimize current investments and maintain flexibility to reduce risk and respond to dynamic program needs. See Chapter 1 – Executive State, for a description of the Laboratory goals and methods for achieving a weapons infrastructure vision by making cost-effective investments in the Laboratory's F&I.

The Laboratory must deliver and maintain safe and secure facilities in order to meet near-term deliverables. It must also perform and deliver the requisite levels of science and technology capabilities so that the safety and reliability of the nuclear weapons stockpile is maintained and the balance of the physical infrastructure and intellectual underpinnings are in place to support the goals and mission of NNSA.

The weapons infrastructure is closely linked to the Safeguards and Security Program and Construction (~\$170M), as well as Infrastructure Support (~\$190M) for non-weapons facilities. This linkage is vital to achieve a sustainable Laboratory in the future.

The future state of the weapons infrastructure is maintained and upgraded through the RTBF and FIRP programs. Through investments made by these programs over the last several years, the Laboratory is making progress towards transforming the Laboratory into a sustainable site.

Readiness in Technical Base and Facilities

The responsibility of RTBF is to ensure that the right configuration of F&I are in place to manufacture and certify the 21st century nuclear weapons stockpile. The RTBF program funds construction, operations, and maintenance of Laboratory infrastructure, assuring that the scientific, technical, and manufacturing activities of the SSP are operated in a safe, secure, and compliant manner. The majority of RTBF directly funds facilities to a state of "mission capable," ready to perform programmatic tasks in support of DSW and the Campaigns. The scope and annual budget available for the Laboratory's RTBF activities include the following:

- operations of facilities ~\$300M
- Material Recycle and Recovery (MR&R), Program Readiness, and other special projects ~\$25M; MR&R is targeted at reducing SNM holdings while Program Readiness supports operational criticality safety. Construction funds (projected at \$75-\$200M) support major projects, including the CMRR and RLWTF Upgrade (see Waste Management)

Strategic Investments/Footprint Reduction

Continuing initiatives within the RTBF program at the Laboratory include those for SI/FR. Due to the age and condition of Laboratory infrastructure and current resource constraints, the Laboratory must invest its funding wisely into enduring F&I and eliminate those F&I not required for the long-term. This dedicated effort was initiated in FY05.

In FY07, NNSA HQ initiated Institutional Site Support funding aimed at supporting the same type of projects to help offset future Laboratory funding shortfalls. Projects supported with the SI/FR and Institutional Site Support funding are included in Attachment A-3.

The Laboratory continues to improve facility, project, and program management. Ongoing efforts continue to improve baselines that more accurately depict how individual work elements are accomplished. This enhancement of earned value management tools is aimed at improving efficiencies in both real property maintenance and other elements within RTBF (see Section 5.0).

Facility and Infrastructure Recapitalization Program

FIRP invests in existing infrastructure to curb the effects of facility aging by funding projects that reduce deferred maintenance (DM). FIRP investments in recapitalization

and utility Line-Item construction make a significant contribution towards reducing the Laboratory's DM backlog. In addition, investments in facility disposition reduce risk and the associated surveillance and maintenance (S&M) costs. The scope and annual budget available for FIRP is approximately \$35M. This is substantially less than previous FYNSP budgets but is more consistent with actual FIRP allocations.

Current FYNSP projections show that actual RTBF and FIRP annual buying power will continue to be diminished, which will create a condition that is contradictory with NNSA Headquarters (HQ) mandates to increase funding of maintenance activities and aggressively reduce DM. As a result, some weapons-related missions may be at risk unless programmatic expectations are reduced and aggressive facility management actions are taken.

Waste Management

Waste management is a critical support function for the Laboratory missions and implementation of the Plutonium Center of Excellence. The overall strategy maintains reliable program support with compliant, cost-effective operations.

- implementing full cost recovery for waste processing to increase efficiency and enabling increased capital and operating investment in waste management infrastructure
- minimizing waste generation to reduce the environmental impacts and to control legacy waste work-off
- relocating and consolidating TA-54 waste facilities so the material disposal area of Area G and material disposal portion of Area L can be closed under the Consent Order

Nuclear Facility Consolidation

Nuclear facility consolidation has been in place for several years and is critical to increase program efficiency, improve security, and reduce footprint and operating costs. This initiative, when fully implemented, will be a major element in establishing the Plutonium Center of Excellence. The following consolidation efforts are in progress.

- De-inventory Category I/II SNM from TA-18 and relocate the material. De-inventory has been completed and the Laboratory is progressing with the Criticality Experiment Facilities Project to move this capability to the Device Assembly Facility at NTS.
- Accept CAT I/II quantities of SNM from LLNL by the end of 2012
- Relocate CMR analytical chemistry and materials characterization (AC/MC) from TA-3 to TA-55. The CMRR Project is the near-term centerpiece of the Laboratory's nuclear consolidation effort. Currently, RLUOB, the first phase of CMRR, is under construction. Design of the nuclear facility and equipment is in progress.
- Relocate plutonium (Pu) radiography from TA-8 to TA-55. This project promotes efficiency in both security and programmatic operations and is currently in the conceptual design phase but currently on hold. HE radiography operations will continue at TA-8-23 in support of hydrotests.
- Upgrade/maintain critical facilities at TA-55 and TA-50 to support current and future missions. This includes the TRP that upgrades the existing infrastructure at TA-55; RLWTF Upgrades Project that replaces the current RLWTF at TA-50; and a new TRU facility to improve the handling, characterization and packing of solid nuclear waste for shipping to disposal facilities offsite.
- Implementation of full cost recovery models that support consolidation and modernization plans for the plutonium infrastructure. Cost recovery will distribute appropriate infrastructure costs to benefiting programs to offset facility operations cost growth and

enable infrastructure investment. These investments will address current deficiencies and ensure the sustainability of the Laboratory's plutonium infrastructure and associated mission execution. For additional discussion on cost recovery, see Section 3.5.

- Continue Integrated Nuclear Planning (INP) efforts to integrate the management interfaces and lead decision-making for nuclear programs, projects, and facility operations. Integration areas include the following: mission diversification; construction program expansion; workforce and critical personnel resources; infrastructure consolidation and revitalization; Consent Order implementation and transition to enduring waste management missions; plutonium program customer base and requirements; stockpile transformation resolution; and out-year program funding.
- Nuclear facility consolidation on the Pajarito Corridor in TA-50 and TA-55 will allow consolidation of national security assets and associated physical security systems such as vault type rooms and area access controls. However, consolidation of special nuclear materials into new facilities on the corridor such as the CMRR facility will result in expansion of the PIDAS, which is being upgraded under NMSSUP Phase II. See Sections 2.4 and 3.1.5 for a detailed description of security initiatives.

Non-Nuclear Facility Consolidation

Non-nuclear facility consolidation is also critical to increase program efficiency and reduce footprint and operating costs. This effort has been under way for several years for both Weapons Physics and Weapons Engineering. The end result of these consolidation efforts will be one that is consistent with Complex Transformation to establish the Center of Excellence for Nuclear Design and Engineering. Key activities will include:

- consolidating HE firing sites, maintaining the detonator production capability, and conducting contained HE R&D
- removing bulk quantities of tritium to a level consistent with the draft SPEIS by 2012 and right-size tritium facilities for future R&D efforts
- eliminating the environmental testing capability from TA-11

3.1.2 Science, Technology, and Engineering

In addition to work performed directly by the weapons programs organizations, future NNSA mission success relies in part on Science, Technology, and Engineering organizations, which execute a significant portion of the nuclear weapons mission and oversee many of the associated facilities. Several of these MC facilities support materials research, modeling and simulation, and other mission activities.

This section addresses the most significant Science, Technology, and Engineering facility issues for future NNSA missions and programs.

Los Alamos Neutron Science Center

A multiprogram user facility, LANSCE provides critical support to NNSA/DP and other DOE programs. NNSA supports facility operations and beam delivery to all experimental areas through RTBF, and operates the proton radiography capability and the WNR capability for high-energy neutron nuclear measurements. The Office of Science (SC) provides funds (\$10.5M in FY08) to operate the Lujan Center for Neutron Scattering, and the Office of Nuclear Energy (NE) provides funds (\$7.5M in FY08) to operate the Isotope Production Facility that utilizes a low-energy portion of the LANSCE proton beam. A Memorandum of Understanding (MOU) defines the stewardship and governance relationships among these sponsors and the Laboratory.

Proton radiography is a key capability providing unique data that contributes to the understanding and prediction of the physics and performance of nuclear weapons. The Lujan Center for Neutron Scattering is operated as an SC user facility (see Sections 3.1.1, 3.2.1, and 3.3). It also supports NA-10 missions, which use a significant portion of its instrumentation. For example, neutron scattering at the Lujan Center characterizes components to enable responsive manufacturing. LANSCE also provides unique nuclear data for programmatic uncertainty reduction. These data needs are identified in ongoing planning for the NNSA mission.

Research that utilizes LANSCE is an important magnet to attract and develop physical science personnel until this role is superseded by MaRIE, a future signature facility that in part builds on today's LANSCE. However, LANSCE cannot be sustained in the interim without significant refurbishment, without which the DOE mission delivery will suffer significantly.

The LANSCE-R project, approved to upgrade key accelerator systems, supports long-term facility viability (see Attachment A-1).

Signature Facility

As noted in NNSA's description of the Complex Transformation goals in the draft SPEIS, MaRIE is the Laboratory's concept for a future facility for achieving and maintaining leadership in materials-centric national security science. MaRIE's focus is to achieve solutions for transformational materials performance with unique capabilities in creating extreme radiation fluxes, developing unprecedented probes of matter, and incubating materials discovery.

MaRIE's capabilities address NNSA's mission needs and its predictive capability framework by supporting the means to achieve a modern, predictive certification strategy for our future stockpile. MaRIE provides the experimental tools to bridge the micron gap in coupling atomistic interactions to integrated component behavior. This is central to process-aware materials performance and certification.

MaRIE also provides unique capabilities for radiation damage science and materials qualification in extreme environments. To achieve this vision, the current concept for MaRIE includes a Fission and Fusion Materials Facility and Multi-Probe Diagnostic Hall centered at LANSCE and M4 (Making, Measuring, Modeling Materials), a materials synthesis, characterization, and integration facility.

Other Facilities and Capabilities

In the future, other facilities and capabilities will continue to provide direct support to the NNSA mission. The Laboratory will operate and enable high-performance computing systems, software, and visualization; develop computational science for weapons programs and other applications; and provide critical support to the successful use of the new Roadrunner advanced-architecture platform. For more information, see Section 3.4.1.

An array of materials science and engineering facilities and capabilities will continue to support hydrodynamic testing at the DARHT, stockpile life extension, and other stockpile stewardship needs.

Target fabrication, simulation, and laser facilities (Trident, TA-35) will continue to contribute to the National Ignition Campaign (NIC). Chemistry and geosciences capabilities will continue to support Weapons and Threat Reduction missions with capabilities for measurement, analysis, and forensics.

Actinide science capabilities (CMR, TA-48, TA-55) at the Laboratory remain an important resource enabling NNSA mission delivery. A range of experimental and theoretical capabilities will continue to be necessary to make critical contributions to quantification of margins and uncertainties (QMU) and to science-based prediction of complex systems for nuclear weapon stewardship and threat reduction.

Radiological facilities also support NNSA missions outside the Weapons Program, providing experimental support for nonproliferation and safeguards programs as well as emergency operations.

Strategic Infrastructure Planning

The Laboratory is working with all technical elements to facilitate internal, ongoing efforts to help chart the scientific course of Laboratory capabilities needed to support the future national security missions.

Planning activities include technical development of the science and engineering "Grand Challenges," identified in 2006 by Laboratory management in the Los Alamos Science Business Plan. Planning also includes consideration of a broad mission-driven, long-term vision for Laboratory technical infrastructure that is consistent with NNSA and Complex Transformation planning as well as with ongoing and anticipated future national security needs within the scope of the Laboratory's mission.

Strategic planning activities point toward a future Laboratory site that places much more of its capabilities in secure enclaves within the TA-3 security perimeter area and within the Pajarito Corridor. Examples include revitalization and consolidation of the radiological facilities described earlier, a potential evolution characterized as the Line-Item Radiological Sciences Institute (RSI) proposed in the FY08 TYSP.

LANSCE and several other facilities would continue to operate in existing areas. MaRIE would build upon and extend existing capabilities to become a future magnet science facility.

3.1.3 Threat Reduction

The Laboratory supports the national threat reduction mission by developing and applying mission-driven science and technology to reduce the threat from WMD, proliferation, and terrorism and to solve national problems in homeland defense, intelligence, and infrastructure. The programs the Laboratory executes for NNSA and other sponsors include:

- preventing, detecting, assessing, and responding to threats of proliferation and/ or use of WMD by nations or subnational groups
- providing technical innovation and leadership for U.S. arms control and nonproliferation initiatives
- providing analyses and advanced technologies to protect the nation's critical infrastructure

The Laboratory's work includes programs to counter nuclear, biological, and chemical terrorism. Other programs encourage cooperative threat reduction, promote national and international nuclear safeguards and security, contribute to monitoring and analyzing threat, and provide related research. This work helps dissuade and deter possible threats, particularly threats from WMD.

Funding from NNSA

In FY07 Threat Reduction received new funding from NNSA totaling \$206M; \$41M for Defense Programs (DP) and \$165M for non-DP. Some NA-26 (Fissile Materials Disposition) and NA-40 (Emergency Operations) work is transitioning to NA-10 (DP). With the national focus on issues of nonproliferation, intelligence, defense, and overall homeland security, the Laboratory is likely to see programmatic growth in the future. However, in line with the expected relatively flat NNSA budgets in out-years, the NNSA portion of this growth will be targeted to specific areas of expertise at the Laboratory and is not expected to show significant overall growth in the near term.

Areas of Growth for National Security Sponsors

Related areas where significant growth can be expected involve the Laboratory's capabilities to provide end-to-end solutions for national security sponsors.



The Airborne Spectral Photometric Environmental Collection Technology (ASPECT) plane, operated by the EPA and supported by the Laboratory, deploys chemical and radiological detection equipment in an aircraftsystem platform to emergency first responders.

The first area concerns the development of improved intelligence and surveillance. This involves reconnaissance technologies and systems applied to a broader range of critical national security needs for customers within NNSA as well as for the DoD and the Intelligence Community (IC). The second area, for the same customer set, calls for expanding information analysis products and tools to provide actionable intelligence designed to address identified threats from the plethora of data. These two areas will require investments in staffing and the concomitant classified computing infrastructure. They will also require increased light laboratory and Sensitive **Compartmentalized Information Facility** (SCIF) space.

The third area of growth supports the development of NA-45, the Office of National Technical Nuclear Forensics (NTNF). The intersection of nuclear intelligence and materials characterization and analysis is a growth area for the Laboratory.

Facilities for Threat Reduction Programs

Major facilities supporting Threat Reduction include the Nonproliferation and International Security Complex (NISC) and many older structures at multiple sites throughout the Laboratory. These facilities



Although the NISC is a notable exception, many of the structures that support Threat Reduction are old and deteriorating.

include the tunnel vault at TA-41; light laboratory and office space at TA-3, -16, -33, -35, -39, -49, and -53; and additional office space in TA-52 and -66.

In addition, Threat Reduction activities involve personnel in supporting organizations located throughout the Laboratory. TA-55 is particularly important to Threat Reduction customers due to its ability to handle Security Category I nuclear materials and to provide a real-world test bed for facility monitoring technologies.

Continued success in the threat reduction mission will require investments in new facilities and refurbishment of existing facilities. In some cases, Work for Others (WFO) customers are anticipated to fund refurbishment of existing facilities through General Plant Projects (GPP). The ability of NNSA's nonproliferation programs to fund infrastructure investments will be a significant challenge in the coming years.

Workload and Future Impacts

The workload and impacts of the NNSA threat reduction programs are affected by the relocation of Security Category I/II SNM and associated program work from TA-18 to the NTS or to other Laboratory locations. The Laboratory has also moved the remaining Category III/IV SNM and associated programmatic work from TA-18 to other locations at the Laboratory. The loss of TA-18 for Category III/IV SNM work increases the need for modern facilities at the Laboratory in which to work with Category III/IV SNM for safeguards and other mission areas. In addition, some nonproliferation programs at NTS that use Category I/II SNM, particularly the safeguards training program, cannot currently be conducted at NTS because the AB at NTS does not allow handling of these materials. The Laboratory is in the process of exploring future nuclear facility requirements for threat reduction missions.

Upgrade and Renovation of Facilities

Although early in the process, some projects involve upgrading the real property assets associated with threat reduction activities at the Laboratory. Current facilities are anticipated to be renovated to provide additional classroom and hands-on instruction capabilities to meet the growing demands of NNSA (NA-42) and WFO sponsors for training first responders to nuclear emergencies.

Existing SCIF space at the Laboratory is very constrained. The new requirements to house personnel in a SCIF will likely result in significant potential for growth in programs needing SCIF space.

3.1.4 Environmental Programs

Sponsorship of environmental protection and waste management responsibilities at the Laboratory are divided between NNSA and EM.

NNSA Responsibilities

One of the primary NNSA responsibilities is to clean and remediate excess processcontaminated facilities and sites in preparation for EM to D&D the facilities. NNSA activities include:

- relocating NNSA capabilities that obstruct access to contaminated media
- de-inventorying the facilities

- Resource Conservation Recovery Act (RCRA) closure of permitted facilities
- NNSA is responsible for D&D of non-process-contaminated facilities

Another major NNSA responsibility is to provide long-term stewardship of remediated sites, which:

- occurs after EM remediates the sites to New Mexico Environment Department (NMED) cleanup requirements under the Consent Order (signed March 1, 2005)
- involves sites with remaining residual contamination
- includes site-wide environmental surveillance and monitoring (ESM)

NNSA also maintains waste processing and disposition facilities necessary to support EM and NNSA's missions at the Laboratory.

For a summary of overall responsibilities, see Table 3-1.

EM Responsibilities

EM is responsible for the following:

- disposition of legacy (pre-1999) TRU waste
- D&D of process-contaminated facilities
- remediation of contaminated media, primarily soils and groundwater

Preparing Facilities for the Office of Environmental Management

In many cases, environmental remediation requires that NNSA de-inventory and deactivate sites and remove NNSA buildings to enable access to the contaminated subsurface. The NNSA landlord is responsible for de-inventorying and deactivating affected facilities, including disposition of about 3,300 drums of post-FY98 TRU waste stored at Area G. Deactivation includes removal of all equipment from facilities, regulatory closure of RCRA-permitted areas within the facilities, and removal or stabilization of utilities.

FY09 TYSP

Table 3-1. Summary of Likely Future NNSA Environmental Liabilities

Project	Authority	Implementation Status	Funding (\$M)	Timeframe	Funding Status	Impact to Current Facilities	Construction
	New Mexico E	New Mexico Environment Department (NMED) Consent Order and EPA FFCA	t (NMED) Co	onsent Order an	d epa ffca		
Dispose of FY99-FY11 NNSA TRU Waste	Necessary to implement legally enforceable order	RTBF Line Item construction project	24.0	FY07-FY12	Additional funds requested from RTBF	None	AIN
D&D at TA-54 (non-process-contaminated) facility and infrastructure removal	Necessary to implement legally enforceable order	In planning	30.1	FY08-FY13	To be requested of NNSA/DOE	Facilities at TA-54 would be removed	AIN
RCRA Closure at TA-54	Necessary to implement legally enforceable order	In planning	6.8	FY08-FY13	To be requested of NNSA/DOE	None	AIN
Relocation of LLW compactor and radioactive waste characterization and verification activities from MDA-G to another location at TA-54	Necessary to implement legally enforceable order	In planning	10.5	FY08-FY10	To be requested of NNSA/DOE	None	AIN
Relocation of hazardous waste characterization and verification activities from MDA-L to another location at TA-54	Necessary to implement legally enforceable order	In planning	0.18	FY08-FY10	To be requested of NNSA/DOE	None	AIN
D&D at TA-21 (non-process- contaminated)	Necessary to implement legally enforceable order	In planning	6.0	FY07-FY10	To be requested of NNSA/DOE	Facilities at TA-21 would be removed	A/A

FY09 TYSP

Table 3-1. Summary of Likely Future NNSA Environmental Liabilities (continued)

Project	Authority	Implementation Status	Funding (\$M)	Timeframe	Funding Status	Impact to Current Facilities	Construction
	Post-Conse	Post-Consent Order RCRA Operating Permit and post-FFCA NPDES Permit	ng Permit and I	oost-FFCA NPDE	S Permit		
Long-Term Environmental Stewardship (including groundwater monitoring)	Necessary to implement legally enforceable order	In planning	106.1	FY16-FY70	To be requested of NNSA/DOE	None	Establishes exclusion areas or requires clean-up before construction
Expansion of LLW disposal operations into Zone 4	Operational requirement	In planning	Current funding is 0.18 Total project need is 1.8	FY07-FY10	Current funding will allow Zone 4 site planning but no disposal unit design or construction.	None	A/A
RLWTF Upgrade	Operational requirement	Line item construction project, currently in CD-1 preliminary design	87.0	FY06-FY12	Identified as line item construction project in Attachment A.	None	A/A
TRU Waste Facility Project	Operational requirement	Approval to begin conceptual design Q2 FY06	80.6	FY06-FY13	ldentified as line item (RTBF) project	None	A/A

The NNSA landlord is also responsible for D&D of excess non-process-contaminated facilities that interfere with contaminated site remediation. The specific NNSA program responsible for funding these activities is still to be determined. The Facilities Disposition Plan (see Attachment E-1) lists all facilities requiring D&D and RCRA closure to support the remediation mandated by the Consent Order.

Long-Term Stewardship

After EM-funded remediation of legacycontaminated sites and completion of the Consent Order, the NNSA LTS Program will conduct surveillance of contaminated media left in place. Environmental surveillance includes maintenance of final remedies and monitoring to verify their continued effectiveness.

Required environmental sampling of residual contaminants will be incorporated into the ongoing sampling under DOE Order 231.1 of Laboratory operations and will be part of the LTS program.

In accordance with DOE Order 430.1B, LTS includes physical and institutional controls and other mechanisms needed to ensure protection of people and the environment where DOE, whether EM or NNSA, has completed disposition or cleanup. Activities associated with long-term stewardship are: land use controls, monitoring maintenance, and information management.

NNSA controls access to and use of the Laboratory by implementing institutional and physical controls, minimizing the potential for human exposure to contamination. When NNSA transfers property to another entity, appropriate deed and use restrictions will be incorporated into the transfer to ensure that appropriate institutional controls remain in place.

Many contaminated sites will be remediated to industrial use standards. Industrial use is the appropriate future land use for most of the Laboratory as it continues its mission operations. The remediation program was developed, and in 2006, it published Summary of Watersheds Potentially Impacted by the Los Alamos National Laboratory (LA-UR-06-5387). This is a summary document of the current and projected future land use of remediated waste sites by watershed.

Environmental Surveillance and Monitoring

Under DOE Order 231.1, Environmental, Safety, and Health Reporting, the Laboratory prepares an annual Environmental Surveillance Report (ESR) summarizing the results of environmental monitoring of air, surface water, groundwater, sediments, soils, biota, and foodstuffs. FY08 funding for ESM, not including surface water monitoring, is approximately \$2.7M.

NNSA Future Waste Processing and Disposition

NNSA is responsible for funding all waste facilities at the Laboratory according to a 1998 agreement transferring this mission from EM to NNSA. Laboratory waste streams are processed and dispositioned by facilities designed to address each stream. Most Laboratory waste facilities will be relocated, replaced, or upgraded during the next 10 years.

Transuranic Waste Facilities Through 2011

The TRU Waste Characterization, Reduction, and Repackaging Facility (WCRRF), the Radioassay and Nondestructive Testing (RANT) Facility, and the TRU waste shipping facility, have recently completed RTBFfunded upgrades and are capable of Hazard Category II Nuclear Facility operations. This is essential because no other facilities at the Laboratory can process the 325 drums of above-ground, high-activity [greater than 56 plutonium equivalent curies (PE-Ci)] TRU waste for WIPP. After the above-ground drums are successfully processed, the Laboratory will request operating authority to



Drums of post-FY98 TRU waste await disposition at Area G.

process the 721 below-ground, high-activity drums in Trenches A–D at Area G at these facilities.

Area G

TA-54, Area G, is a Hazard Category II Nuclear Facility containing 12 sprungstructure domes that store TRU waste awaiting shipment to WIPP. The fabric exterior of these domes is near or beyond its design life and may need to be replaced. Additional waste is stored below ground above Pit 29, in Pit 9, in Trenches A–D, and in numbered shafts. TRU waste characterization and repackaging and container venting are also conducted in Area G.

Chemistry and Metallurgy Research Wing 9 Hot Cells

CMR Wing 9 hot cells represent a unique capability for remote handling activities. The Laboratory is proposing to modify the space in the CMR Wing 9 hot cells so that the 33 shafts of remote-handled TRU waste now stored below ground at Area G can be processed for disposal at this facility. These shafts contain one-gallon containers of TRU waste with surface doses as high as 1000 rem per hour of contact. One of these shafts contains the Los Alamos Molten Plutonium Reactor Experiment (LAMPRE), which is encased in concrete.

The proposed scope of work will be to receive, process, characterize, package,

and load the waste into a WIPP shipping container. The waste will be processed during FY11–FY14. Costs will be funded by the EM TRU Waste Disposition Program (WDP).

Transuranic Waste Facilities After 2011

Between FY07 and FY12, the Environmental Management TRU Waste Disposition Facility will process both legacy and newly-generated (post-1998) TRU waste for WIPP. After 2012, the Waste Disposition Facility will no longer accept TRU waste from ongoing operations at TA-54.

After 2012, a new TRU waste disposition capability at the TRU Waste Facility will have been completed or TRU waste will be stored pending TRU Waste Facility startup. This facility will re-establish TRU waste processing capability at TA-52, near TA-55 and TA-50 waste-generating operations. This facility is designed to process the 600-700 drums of TRU waste expected annually from NNSA and other mission operations. The facility will also be capable of storing, size-reducing, and repackaging oversized TRU waste. The facility has completed the conceptual phase and is preparing for its Critical Decision (CD)-1. The Laboratory must apply for and obtain a hazardous waste permit for waste storage and treatment activities at the facility before construction can begin.



TA-54, as seen from the air, contains numerous sprung-structure domes storing TRU waste awaiting shipment to WIPP.

Low-Level Waste Facilities

Low-level waste (LLW) is now disposed in pits and shafts at TA-54, Area G. After the Material Disposal Area (MDA)-G region of Area G is closed, future LLW will be disposed in Zone-4 of Area G. The LLW compactor and radioactive waste characterization and verification facilities currently located at Area G will be relocated to Zone 4. The Laboratory is also evaluating the option of disposing of LLW off-site, perhaps at the NTS.

Hazardous and Mixed Low-Level Waste Facilities

Hazardous and mixed LLW are shipped from TA-54 primarily to disposal companies. The waste is consolidated and packaged at TA-54. This capability will be moved from its present location, which must be closed under the Consent Order, to Area L.

Upgrade to Radioactive Liquid Waste Treatment Facility

The RLWTF Upgrade project will improve RLW treatment capability at TA-50 by increasing reliability and process efficiency to meet projected regulatory requirements for discharging treated effluent. Many process and facility systems require replacement. This includes electrical and mechanical systems as well as HVAC systems.

Design alternatives include eliminating clarification processes and increasing use of filtration and reverse osmosis. Another improvement will include on-site evaporation capability. Effluent discharge standards are becoming more restrictive and the upgrades will take this into account. By using modular process treatment equipment and piping configurations, the project will be flexible and adaptable to future changes in regulatory requirements.

Not included in this RLWTF upgrade is the refurbishment of the RLW collection system (RLWCS). The proposed project, estimated at approximately \$19M, initiates the design and repairs of the collection system vaults and was not funded in FY07.

To remain serviceable as administrative and lab space, the existing RLWTF requires upgrades to the electrical and ventilation system. After transferring treatment operations to the new facility in FY12, the existing treatment process equipment will need to be decontaminated and eventually demolished. Estimates have not been generated for either of these final two tasks relating to the long-term disposition of the current TA-50 treatment facility.



Packaged drums of TRU waste are lowered into a shipping container for transportation to WIPP.

3.1.5 Safeguards and Security

The Laboratory is designated the Center of Excellence for Plutonium under Complex Transformation. Consolidation of plutonium operations at the Laboratory is expected to increase the protected area footprint at TA-55.

This growth is not expected to increase protective force staffing requirements due to efficiencies possible through co-location of the nuclear facilities inside a single Perimeter Intrusion Detection, Assessment, and Delay System (PIDADS) boundary employing sophisticated technologies.

The proposed consolidation of tritium operations, hydrodynamic testing, and major environmental testing is expected to reduce the site's limited security area (LSA) footprint. This anticipated reduction is offset by increases in SCIF space needed to support expected increases in national security work such as development of improved intelligence and surveillance capabilities. Expanding the SCIF space footprint impacts the Security Program in two areas—security systems and protective force response.

Security needs for increased national security work in the areas of chemical and biological nonproliferation are expected to be met with current security infrastructure and personnel resources.

3.2 Future Non-NNSA Missions, Programs, and Workload

3.2.1 Science, Technology, and Engineering

Experimental, theoretical, and computational capabilities at the Laboratory will continue to be essential to support NNSA weapons programs needs, and enable the Laboratory to support other national security needs. This includes threat reduction and energy security initiatives as well as other challenges of national importance where the Laboratory (solely or with partners) contributes significant value toward solutions.

As described in the NNSA Strategic Planning Guidance For FY 2010–FY 2014, April 2008, the Laboratory must foster a broader array of national security efforts that "ensure continuity and stability" to support the core nuclear-deterrent mission and 21st century national security challenges

The Laboratory anticipates growth and development in many of these non-DP mission areas that will continue to provide synergy with and help strengthen its capabilities for multiple national security missions. For example, it is foreseeable that energy security and climate/environmental issues associated with energy demand will grow in emphasis as national security issues for the U.S. and for DOE in particular.

Existing and Future Facilities

The Laboratory operates many science and engineering facilities vital to national security as well as to science missions. One example is LANSCE, the Laboratory's top experimental science facility priority, as described in Section 3.1.2. LANSCE supports NNSA as an MC facility, SC as a national user facility, and the Office of Nuclear Energy (NE) with medical isotope production along with nuclear energy-related research.

In addition, the Laboratory manages the components of the National Science

Foundation (NSF)-sponsored National High Magnetic Field Laboratory (NHMFL) and the SC-sponsored Center for Integrated Nanotechnologies (CINT), the Superconductivity Technology Center (STC), and the Stable Isotope Resource.

LANSCE, NHMFL, and CINT are major national scientific user facilities, supporting over 1,000 visits annually from qualified members of the national and international science and engineering community. These facilities have broad impacts across the Laboratory's missions and are central to its materials strategy.

LANSCE will remain an important facility for non-NNSA missions as well as for the nuclear weapons program, with the funding for accelerator operations supported through RTBF. In addition to the DP activities at LANSCE, the facility supports two notable technical facilities — the Lujan Center for Neutron Scattering, principally supported by SC, and the Isotope Production Facility supported by NE. With a decision to move forward with the LANSCE-R project, the Laboratory anticipates additional evolution of SC and NE activities at LANSCE.

SC has asked the Laboratory to offer an updated strategic plan for the Lujan Center, including new and enhanced instrumentation within the Center to complement future operation of the Spallation Neutron Source (SNS) at Oak Ridge National Laboratory (ORNL). This planning has been developed in coordination with the SNS and others. It includes consideration of the Laboratory's national security needs in addition to the needs of the external user community. A strategic plan is being finalized for submission.

In a separate development, future expansion of NE activities is anticipated through the implementation of a Materials Test Station (MTS) that uses the high-power LANSCE beam to help test potential advanced fuels and materials. DOE has determined the mission need for a Fast Neutron Test Capability to perform such work with the MTS as one of the identified approaches.

As discussed relative to NNSA mission needs in Section 3.1.2, the Laboratory is pursuing the signature facility concept MaRIE for achieving and maintaining leadership in materials-centric national security science. MaRIE's focus is on achieving solutions for transformational materials performance with an emphasis on matter-radiation interactions in extremes. Those solutions, enabled by MaRIE, will provide unique capabilities to address many national and global security challenges in addition to specific NNSA mission needs. MaRIE will be an international user facility and add to the suite of national user facilities provided through the Lujan Center, NHMFL, and CINT.

The mission need for the capabilities MaRIE would provide has been articulated in longrange planning by the materials research community, specifically DOE's SC Fusion Energy Science Advisory Committee (FESAC) and Basic Energy Sciences Advisory Committee (BESAC), in a series of scientific community reports and studies. Details of the MaRIE concept are being further developed with potential users.

Science Complex

Over the years, the Laboratory has described plans for a Science Complex to provide new mission-related basic and applied science facilities and to facilitate removal of aging and deteriorating space. The amount of aging facility space, much of which will be eliminated as the Science Complex becomes operational, exceeds the amount of new space planned for the Science Complex. The need for the Science Complex remains and increases in urgency as facilities supporting mission-related work continue to age. The Laboratory is continuing to explore alternative financing methods to support science facilities in addition to traditional funding mechanisms, such as Congressional Line-Item funding and GPP funding. For the purpose of this TYSP, specifically as it relates to the attachments, the Science Complex is assumed to be a third party lease.

The Science Complex, as currently envisaged, will consist of two buildings, one for classified work and one for unclassified work, totaling up to 450,000 gsf. The complex will house up to 1,600 scientific staff members from across the Laboratory, supporting both NNSA and non-NNSA national security missions as noted in Section 3.1.2. This new multidisciplinary, cost effective state-ofthe-art infrastructure will seek LEED Gold certification. The Laboratory is preparing a detailed operating lease proposal package for NNSA review in FY09.

Energy Programs

Because energy security, carbon emission reduction, and climate modeling will remain significant national and DOE priorities, energy programs are anticipated to be of ongoing importance. The Laboratory will continue to play a leading role in nuclear energy through R&D in such areas as modeling and simulation, fuels and materials research, nuclear data, repository science and issues of waste from R&D, nonproliferation and safeguards, and the proposed MTS at LANSCE.

Until replacement facilities can be developed, Wing 9 of CMR will need to remain in operation to support NE as well as environmental, NNSA, and other activities. Laboratory facilities will also continue to contribute to other aspects of energy security programs, including:

- modeling of energy infrastructure
- alternative energy sources
- fuel cell research, innovation, and development
- research and analysis for carbon storage and sequestration
- technologies for fossil fuels and energy efficiency

The Laboratory was recently selected to lead the DOE's Center of Excellence for Chemical

Hydrogen Storage that investigates chemical storage solutions for hydrogen-fueled vehicles.

Cooperative agreements with energy supply and technology industries also contribute to U.S. energy security. The Laboratory will remain a center for research in the origins and applications of high-temperature superconductors, which may ultimately enable significant reduction in transmissionrelated energy losses.

Biological Science

The Laboratory provides significant contributions to biological science, and detecting and countering biological threats, through capabilities and strengths that include modeling of disease management, infection and immune response, surveillance of disease spread, and theoretical science guiding development of new vaccines and therapeutics, as well as experimental components in genome-scale measurements and analyses, and protein science and engineering.



Stylized rendering of a cross-section of the AIDS virus.

Basic and applied biological science research will remain a significant element of Laboratory programs, both for DOE and through WFO. It will also enable threat reduction applications. Examples of the Laboratory's contributions to genomics research include work on Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS), influenza, and computational biology. The Laboratory also contributes to other initiatives with fundamental research that may help limit or mitigate threats from natural pathogens and bioterrorism, such as anthrax. The fundamental understanding of biological science that is developed at the Laboratory will also be applied to addressing other challenges associated with energy and the environment.

Radiological and Actinide Science

As described in Section 3.1.2, the Laboratory has a continuing need for facilities that support radiological and actinide science for multiple missions. It is recognized that these facilities require revitalization to ensure efficient, sustainable support of those missions.

In its long-term strategic planning, the Laboratory envisions the consolidation and renewal of radiological facilities as a "campus" within the Pajarito Corridor where several similar (but aging) facilities are now located. This evolution was characterized as the Line-Item Radiological Sciences Institute as a Proposed Line-Item Project in the FY08 TYSP. However, the evolution of these facilities may instead result from multiple independent developments over an extended timeframe, guided in part by this strategic direction.

These efforts would modernize the Laboratory's radiochemistry, nuclear nonproliferation and safeguards, and nuclear materials science capabilities while providing for consolidation of our current radiological footprint. The radiological capabilities that would be retained and modernized are needed to support ongoing radiological and nuclear science R&D which in turn support core national security weapons and threat reduction missions. These missions include international and domestic safeguards, remote unattended monitoring, Second Line of Defense, off-site source recovery, export control, National Technical Nuclear Forensics, and nuclear emergency response.

The foundation of these critical missions is based on the Laboratory's ongoing expertise as a nuclear weapons design laboratory and as a major center for actinide science. The Laboratory's expertise in these mission areas provides a synergistic opportunity for programmatic work for other government agencies, such as the Department of Homeland Security (DHS), the International Atomic Energy Agency (IAEA), and the IC.

3.2.2 Threat Reduction

The Laboratory's Threat Reduction Program manages several non-NNSA DOE programs. The FY07 budget includes \$14M from NE for the Pu-238 heat source program supporting the National Aeronautics and Space Administration (NASA) deep-space missions, \$5.7M from the Office of Intelligence (IN), and \$0.6M from the Office of Health and Safety (HS). These activities are projected to continue into the future.

3.2.3 Environmental Programs

The Laboratory's EM Program is responsible for remediation of contaminated media (primarily soils and groundwater), D&D of process-contaminated facilities, and disposition of legacy (pre-1999) TRU waste. The EM mission is divided into a funded program to address inactive sites and a future, unfunded program to address active sites when NNSA no longer requires them.

The waste disposition, D&D, and remediation workscope necessary to address the requirements of the NMED Consent Order for inactive contaminated sites is currently funded by EM as an integrated project with an Office of Engineering and Construction Management (OECM)-validated performance baseline. This project, scheduled for completion in 2015, will do the following:

- address 860 legacy-contaminated sites (solid waste management units (SWMU) or Areas of Concern (AOC)
- dispose of 8,400 cubic meters of legacy waste
- D&D 450,000 gsf of legacy, processcontaminated facilities
- remediate or establish compliant monitoring for the groundwater affected by past Laboratory contaminant releases

This integrated EM project has recently passed all the requirements for its CD-2/3 decision. The cost to complete this EM scope (2007–2015) is \$1.781B. See Table 3-2 for details about the NMED Consent Order and Environmental Protection Agency (EPA) FFCA requirements.

The D&D and remediation necessary to address the active sites is not currently funded by EM. Active sites are deferred under the Consent Order until they become inactive. As part of the Complex Transformation decision, the Laboratory is identifying active sites that will become inactive and preparing documentation to propose them for EM funding.

Remediation of Contaminated Sites and Groundwater

Remediation of contaminated media is mandated by the Consent Order, the FFCA, and DOE orders. The Laboratory is also subject to DOE/NNSA requirements for remediation of sites contaminated as a result of radioactive releases.

The Consent Order is a compliance agreement for remediation of Laboratory sites contaminated with legacy hazardous materials subject to RCRA. The Consent Order establishes a legally-enforceable set of requirements and a cleanup schedule for the EM-funded remediation of legacy contamination at the Laboratory.

Because most contaminated sites, SWMUs or AOC, have both radioactive and hazardous

FY09 TYSP

Table 3-2. Requirements of the NMED Consent Order and EPA FFCA

Requirement/ Project	Authority	Implementation Status	Project Completion (\$M)	Project Timeframe	Funding Status	Impact to Current Facilities	Impact to New Construction
		New Mexico Environment Department (NMED) Consent Order and EPA FFCA	ent Department (N	IMED) Consent	Order and EPA FFC	A	
Environmental Restoration (including ground water monitoring)	Legally enforceable order	Under way	1,051	FY08-FY15	\$1,546M budgeted EM \$234M overtarget requested EM	Requires access for investigation and remedy implementation	Establishes exclusion areas or requires clean- up before construction
Dispose of legacy TRU waste	Necessary to implement legally enforceable order	Under way	516	FY08-FY13		Legacy TRU waste disposition is on critical path for closure/ remediation of TA-54 Area G Facility	No impact to new construction
D&D at TA-54 and TA-21 (process-contaminated)	Necessary to implement legally enforceable order	In planning	214	FY08-FY14		Facilities at TA-54 and TA-21 would be removed	New TRU Waste Facility in TA-52 is required because of closure/remediation of TA-54 Area G Facility
Implementation of the FFCA/AO (for surface water monitoring)	Legally enforceable agreement under Clean Water Act	Under way	15	FY05-FY15	General and Administrative (G&A) \$15M	Current facilities with potentially contaminated areas must control storm water across those areas	New construction must control storm water from disturbed areas and design storm water runoff to avoid potentially contaminated areas

constituents, the Consent Order schedule most often determines the remediation baseline schedule. A separate FFCA between the Los Alamos Site Office (LASO), LANS, and the EPA addresses contamination transported from contaminated sites by storm events.

Remediation, as prescribed in the Consent Order, requires investigation of each SWMU or AOC to determine whether hazardous constituents have been released to the environment. If constituents have been released, possible remedial alternatives will be evaluated and implemented at NMED's direction.

Investigation Phase

The initial phase of activities covered by the Consent Order is investigation to determine whether contaminants have been released to the environment. The major investigation activities include:

- investigating canyons within six major watersheds at and around the Laboratory
- investigating mesa-top SWMUs and AOC



Crews complete drilling of four bore holes between waste pits at MDA-C (TA-50) as part of requirements under the Consent Order with the State of New Mexico.

- completing the ongoing investigations and cleanups begun under the Hazardous and Solid Waste Amendments (HSWA) Module VIII section of the Laboratory's RCRA permit
- investigating 28 watershed aggregate areas, including all the SWMUs and AOC contained within them
- implementing a comprehensive site-wide groundwater monitoring program

Corrective Measures

Based on the results of investigations, NMED may require corrective measures at a site. Some Corrective Measures Evaluations (CME) were initiated under Module VIII of the Laboratory's RCRA permit.

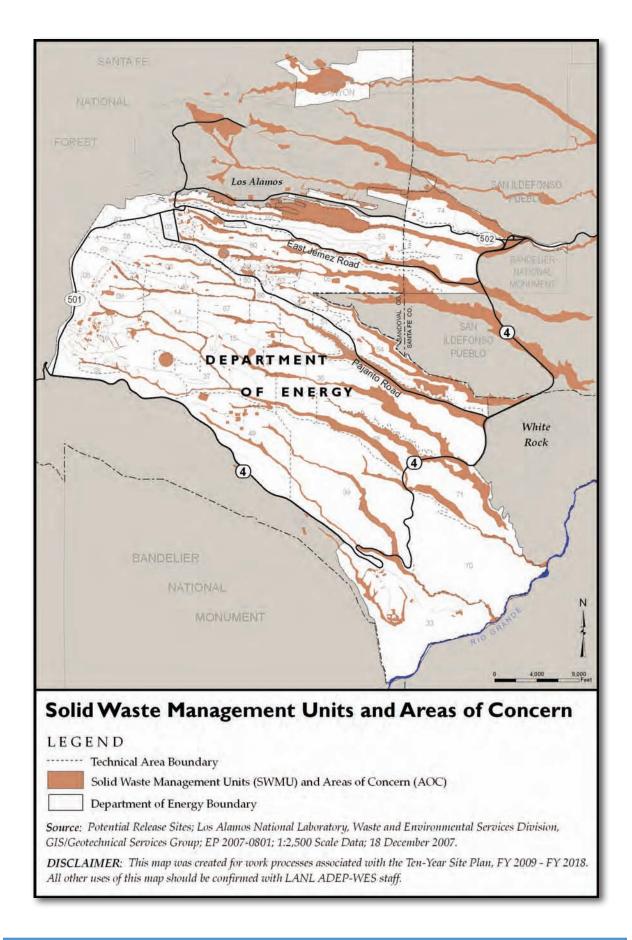
The NMED will determine whether other sites require CME based on site-specific investigation results. The CME phase includes identifying and evaluating feasible corrective measures at a SWMU or at AOC and then recommending a preferred alternative. This is accomplished through a compliance-driven technical analysis and reporting process with the NMED.

Based on the results of CMEs, the Laboratory will recommend a corrective measure for a site and, after consideration of public comments, NMED will select the final corrective measure. The selected corrective measure and its associated schedule will then become an enforceable part of the Consent Order. After a corrective measure is selected, the Laboratory will be responsible for implementing the measure as part of a Corrective Measures Implementation (CMI) process.

The map illustrates the SWMUs and AOCs indicating the scope of legacy and ongoing contamination issues impacting land use.

Groundwater Monitoring Wells

As part of the investigation and corrective action phases, the Consent Order requires installation of an extensive network of groundwater monitoring wells. As identified





The installation of groundwater monitoring wells is included under the investigation and corrective action phases of the Consent Order.

in the Consent Order, DOE Order 450.1, and the Environmental Protection Program, regulatory requirements include:

- preparing an interim site-wide groundwater monitoring plan
- creating procedures for sampling and analysis
- installing additional groundwater monitoring wells
- monitoring and sampling all Laboratory canyons
- developing specific compliance deliverable schedules

D&D of Process-Contaminated Facilities

The EM D&D Program will remove approximately 450,000 gsf of processcontaminated facilities at TA-21 and at TA-54, Area G. This program is divided into defense and non-defense D&D. The only non-defense D&D project is the Tritium Systems Test Assembly building at TA-21.

Disposition of Legacy (pre-1999) Transuranic Waste

The Laboratory has a legacy TRU waste inventory of 8,400 cubic meters. Depending on radioactivity assay results for each waste container, the inventory will be disposed at WIPP or disposed as LLW or mixed LLW. Approximately 35% of this waste is stored below ground in shafts or pits at Area G.

The TRU waste must be retrieved, characterized, and repackaged to meet WIPP waste acceptance criteria and then shipped to WIPP or another appropriate disposal location. These operations require use of the Area G waste storage and characterization facilities, the TA-50 WCRRF, the TA-54 RANT Facility, and the CMR Wing 9 hot cell facility. Wing 9 is required to characterize and repackage 33 shafts of remote-handled TRU waste.

Legacy Contamination and Remediation at Operational Sites

Many areas with legacy contamination cannot be remediated by 2015 because they and the facilities on them will continue operations. Information about these deferred sites is summarized in Table 3-3.

These areas include the Laboratory's active firing sites, the existing system of buried radioactive liquid waste collection lines, and many active sanitary waste lines which may have been contaminated during past operation. These sites will remain under NNSA operational control until they become inactive. Then they will be investigated and, if appropriate, remediated.

Approximately 16 firing sites and numerous drainlines are expected to remain in use beyond 2015. The responsibility for investigating and remediating these sites resides with EM. The remediation, estimated at \$64M for firing sites and \$80M for drainlines, is not yet funded.

Table	3-3.	Deferred	Remediation	Sites
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ТА	Description	PRS IDs
TA-06	Firing sites	06-0003(a)
	Building	C-06-0019
TA-07	Firing sites	07-0001(c),07-0001(d)
TA-11	Burn site	11-0002
	Air gun impact area	II-0003(b)
	Material disposal area (MDA S)	11-0009
	Buildings	11-0012(c), 11-0012(d), C-11-0001
	Firing sites	-000 (a), -000 (b), -0004(a), -0004(b), -0004(c), -0004(d), -0004(e), -0004(f)
TA-14	Firing sites	14-0001(f), 14-0002(a), 14-0002(b), 14-0002(e)
TA-15	Firing sites	15-0003, 15-0004(a), 15-0004(g), 15-0006(a), 15-0006(b), 15-0006(c), 15-0006(d), 15-0008(f)
TA-36	Firing sites	36-0004(a), 36-0004(b), 36-0004(d), 36-0004(e)
TA-39	Firing sites	39-0004(a), 39-0004(b), 39-0004(e)
TA-40	Firing sites	40-0006(a), 40-0006(b), 40-0006(c)
TA-49	Soil contamination	49-0008(a), 49-0008(b), 49-0008(c)

3.3 Other NNSA, Other DOE, and Work for Others

While the Laboratory is an NNSA site, non-NNSA programs are increasingly becoming important aspects of the Laboratory's national security mission. Such programs also provide financial support for facility operations through taxes on labor. In several cases, this directly benefits capabilities used by NNSA, representing a diversification of scope and funding. The Laboratory remains among a very few laboratories that can rapidly bring together the great breadth of fundamental science, technology, and engineering to create tangible solutions for national security needs.

The growth of non-NNSA mission programs is a crucial element of the Laboratory's strategy to sustain the science base for all of its national security missions. Their growth is consistent with the ongoing nuclear weapons program and the goals of Complex Transformation.

Mission and Core Capabilities

In addition to its core statutory mission of ensuring the safety, security, and reliability of the U.S. nuclear deterrent, the Laboratory's mission also includes reducing global threats and solving emerging national security challenges. The core capabilities the Laboratory must sustain for its mission include:

- nuclear weapons science and technology
- theory, modeling, and high-performance computing
- advanced material science
- complex experimentation and measurement
- actinide science
- physics, nuclear science, plasmas, and beams
- bioscience and biotechnology
- earth and environmental systems

These core capabilities are applied to national security missions such as stockpile stewardship, energy security, and threat reduction. While providing unique value to national security priorities, work outside NA-10 accounts is both complementary to the NA-10 mission and, in many cases, is important to ensure sustained excellence in technical areas vital for current and future execution of the mission. Programs in the past were integrated as necessary to meet the deliverables associated with each mission. The expectation is to sustain this integration in the future.

Scope of Other Programs and Projects

Non-weapons NNSA, DOE, and WFO activities are a significant component of the Laboratory's activities. Of the FY07 \$2.1B budget, funds for NNSA programs other than DPs (for example, nonproliferation programs) are approximately \$165M. New funds for DOE programs are approximately \$269M, with the majority of these DOE funds for science and energy programs (\$125M) and for environmental activities (\$136M).

Work for other agencies and sponsors includes work for the IC, the DoD, the National Institutes of Health (NIH), the Department of Health and Human Services (HHS), the NSF, the Nuclear Regulatory Commission (NRC), and industry. This work involves \$305M in new funds across more than 1,000 projects of varying size. The work ranges from unclassified to highly classified and from theoretical to practical work with nuclear materials.

Facilities that are largely devoted to these sponsors include the Lujan Center at LANSCE and CINT (both are SC user facilities), the NHMFL (an NSF user facility), and the NISC. However, the scope of activities requires use of a wide variety of other Laboratory facilities and office structures.

Unique and Valuable Contributions to Other National Security Missions

Solely and in concert with partners, the Laboratory makes specific contributions

to other non-weapons programs when they are unique and align with the core competencies needed for the weapons missions. Some examples are summarized below and in Section 3.2.1. The evolution and growing complexity of the nation's science and security challenges call for additional multidisciplinary solutions. The capabilities of the Laboratory and the other NNSA national security laboratories offer important contributions to these national priorities. Sharing diverse resources, knowledge, and capabilities ultimately leads to greater strength and better outcomes for weapons programs and non-weapons programs alike.

The following are brief summaries and examples of areas in which the Laboratory contributes to non-weapons national security missions in threat reduction (global security), energy security, and through fundamental science. In addition key Laboratory



Facilities such as the Lujan Center at LANSCE (shown above), CINT (shown below), NHMFL, and NISC are largely devoted to work for other agencies and sponsors including the IC, DoD, NIH, HHS, NSF, NRC, and industry.



institutional efforts to develop and leverage science capabilities that support its national security missions are noted.

Threat Reduction

Threat reduction work for NNSA and other sponsors [Department of State (DoS), DoD, DHS, IC, NASA and others] includes programs to counter nuclear, biological, and chemical terrorism as well as programs to encourage cooperative threat reduction. It also includes activities to promote national and international nuclear safeguards and security, efforts toward threat monitoring and analysis, and related research. This work contributes to dissuading and deterring possible threats, particularly threats from WMD. See Sections 3.1.3 and 3.2.2 for additional discussion.

Energy Security

Energy security is a significant national security issue. Meeting the global demand for energy from diverse sources without adverse climate or economic impact is a critical challenge directly affecting the U. S. and its interests.

DOE civilian nuclear programs include support for advanced nuclear fuel cycle programs. The Laboratory's support includes new fuel synthesis, irradiation, characterization, separations, safeguards and measurement of nuclear data. These programs also include science associated with nuclear waste forms and repositories as well as production of medical isotopes for DOE customers.

Fossil energy programs include application of broad scientific, measurement, and modeling capabilities to address carbon dioxide (CO2) capture and storage as well as unconventional fuel production and environment impact. Alternative energy and infrastructure programs include R&D in fuel cells and hydrogen storage, superconductivity for increased energy efficiency and reliability, and the modeling and simulation of infrastructure for energy security.

Fundamental Science Contributions to National Security

Through the DOE-SC, the Laboratory conducts long-term, national securityinspired fundamental science. These efforts enable remarkable discoveries and tools that transform our understanding of energy and matter while advancing the national, economic, and energy security of the U.S. Although SC research at the Laboratory is frequently proposal-driven, it includes ongoing roles in neutron scattering research, nanoscience and technology, and genomics as well as work with the Joint Genome Institute (JGI). Multidisciplinary research, such as Laboratory-generated ocean and sea ice models is a key component of national and international efforts to model global climate. WFO includes modeling HIV/AIDS and influenza. It also includes atomic-scale simulations of the ribosome and simulation of potential influenza pandemics.

Institutional Science Capability Activities

Examples of the Laboratory's institutional science capability activities are the Laboratory-Directed Research and Development (LDRD) program, the National Security Education Center (NSEC), and technology transfer (TT) activities. The NSEC is a consortium of Laboratory institutes that focuses on developing and enhancing the educational bases for national security. It is designed to foster academic cooperation, scholarship, and technical workforce development through joint scientific collaboration by recruiting the next generation of scientists and engineers while revitalizing and retaining the Laboratory's current world-class technical staff. It includes partnerships with the University of California campuses at San Diego, Davis, Santa Barbara, and Santa Cruz; Carnegie Mellon University; and the New Mexico Consortium (University of New Mexico, New Mexico State University, and New Mexico Tech).

TT helps move technologies from the Laboratory to the marketplace to benefit society and the U.S. economy. These activities include licensing the Laboratory's technologies to industry and startup companies and managing Laboratoryindustry research partnerships through a variety of mechanisms that help accomplish the Laboratory's programmatic goals while benefiting the nation's industrial and academic sectors.

3.4 Facilities and Infrastructure Impacts in Support of Information Technology

3.4.1 Secure Information Technology

Without nuclear testing, numerical simulations have become the only way to integrate the many complex processes that occur in a thermonuclear weapon. Large-scale calculations are now the primary tools for estimating the nuclear yield and evaluating the safety of the aging weapons in the stockpile.

Aging effects introduce small defects that undermine the symmetries physicists and engineers invoked when they designed new weapons. The continued certification of the safety and reliability of the aging stockpile depends on the ability to perform highly complex, three-dimensional computer simulations.

Nicholas C. Metropolis Center

Enormous enhancements in both computational speed and memory are needed. The Laboratory estimates that assessing the safety and performance of the stockpile will require computational power 100,000 times greater than that required to design new weapons.

The Nicholas C. Metropolis Center for Modeling and Simulation was completed in 2002 with this goal in mind. The information infrastructure associated with the Metropolis Center includes high-speed networks, workstations, visualization centers, interactive data analysis tools, and collaborative laboratories. With its roots in the Accelerated Strategic Computing Initiative (ASCI), the Metropolis Center allows the Laboratory to support SSP to fulfill its prime stewardship mission—ensuring the safety, reliability, and performance of the nation's nuclear weapons stockpile without nuclear testing.

The Metropolis Center was originally outfitted with the utilities required to operate

the first supercomputer installed in the facility—the Q machine. Several electrical/ mechanical upgrades have been accomplished within the facility to support more recent supercomputers such as Lightning and Roadrunner. Several additional upgrades are being planned to accommodate future supercomputer requirements.

A second electrical/mechanical upgrade for the Metropolis Center will be installed in preparation for the Roadrunner Phase II delivery. This upgrade will provide an additional 2.4 MW of power and the associated cooling needed for Roadrunner.



The Roadrunner project, which provides nextgeneration Linux clusters for the Advanced Simulation and Computing (ASC) Campaign, was developed in partnership between the Laboratory and IBM. Phase I was completed in 2006; Phase II is scheduled for delivery in Q4 of FY08.

Future supercomputers could require additional power and cooling. The Zia supercomputer proposed for acquisition in FY10 could provide multiple petaflops of capability and may require up to 8 MW of electrical power. Trinity (an FY12 supercomputer proposal) could require 12 MW. All of these power estimates are within the original design parameters of the Metropolis facility.

Future supercomputers could require additional power and cooling for the facility.

The Zia supercomputer, under discussion for possible acquisition in FY10, could provide multiple petaflops of capability and may require up to 8 MW of electrical power. A follow-on supercomputer projected for FY12 or later could require 12 MW. These power estimates fit nicely within the original design concept of the facility. As originally anticipated, the Metropolis Center could accommodate loads of up to 30 MW.

3.4.2 Unclassified Information Technology

The fundamental challenges facing science and national security in upcoming decades revolve around data. From satellite-based sensors to medical imaging devices, the automated collection of terascale data is becoming standard and the generation of petascale simulation data is close at hand.

Incremental improvements on today's techniques will not be sufficient to process, model, or analyze these data sets. In applications from video-tracking to biothreat detection, the size and complexity of the data make offline storage untenable. Real-time and automated processing is the only acceptable approach, with data collection adaptively coupled to automated information extraction.

In addition to challenges associated with massive data sets, many national security missions require significant unclassified as well as classified simulation resources. For example, the Laboratory's contributions to nuclear energy R&D through modeling and simulation (see Section 3.2.1) will require significant computing resources.

Unclassified Computing Resources

Current unclassified supercomputer resources are located within the Laboratory Data Communications Center (LDCC). These resources include a small version of Roadrunner and a Linux cluster called Coyote. Infrastructure improvements are being planned to keep power and cooling capabilities commensurate with new unclassified supercomputer requirements. Infrastructure improvements include the installation of a rotary uninterruptible power supply (RUPS), a new 900-ton chiller, and a pair of chilled water towers as well as heat exchangers and pumps required to "water cool" the new, high-density computer racks in Roadrunner and future systems.



Infrastructure improvements to the LDCC include the installation of a rotary uninterruptible power supply (RUPS).

A study is under way to determine the future viability of the LDCC with regard to the Laboratory's unclassified computing requirements. Power, cooling, and space are limited and the cost of significant upgrades in the LDCC compared to the construction of a new facility must be evaluated.

Potential Information Technology Aspects of MaRIE

The Laboratory's proposed signature facility MaRIE, described in Section 3.1.2, will host thousands of scientists and serve many of our nation's energy and environmental needs. The scientists will use a large array of experimental techniques to probe matter and radiation at various spatial and temporal scales. MaRIE's mission requires integration of these techniques on a magnitude that no single facility has attempted, creating some unprecedented information science and technology challenges.

With new interfaces and new software environments, MaRIE can radically transform

science and computer applications in the laboratory from a necessary to a cooperative asset. By addressing the information technology issues as part of an overall research system environment, MaRIE's implementation can enable new, unforeseen collaborations previously hampered by fragmented databases and incompatible software.

The Laboratory has the talent required to create such an environment within MaRIE. Laboratory experts have been working on problems in stream computing, visualization, and high-dimensional data indexing. Many of these experts have also developed contacts within industry who can enable appropriate partnerships in the future.

Using its extensive experience in simulation and high-performance computing through the ASC, the Laboratory can lead scientific information management as well as key elements of matter-radiation experimental science into the 21st century with MaRIE. Current MaRIE planning includes information science and technology needs to address these challenges.

3.5 Plutonium Infrastructure Cost Recovery

While the Laboratory is an NNSA site, non-NNSA programs are important aspects of the Laboratory's national security mission set. These programs also provide financial support for facility operations, in several cases with direct benefit to sustaining capabilities used by NNSA.

Cost recovery is the funding contribution of the resident or user programs to support infrastructure and activities. The Laboratory has developed cost recovery models and associated management processes to ensure fair, equitable, transparent, simple, flexible and sustainable execution and drive desired behaviors. Cost recovery is being implemented as a corporate position with inclusion of all stakeholders and complies with all accounting regulations. Management and administration systems provide both the necessary oversight and reporting, maintain both the models and the cost recovery program management plan under change control, and define the steps necessary to establish additional cost recovery models.

For Plutonium Infrastructure, the Laboratory began implementing a cost recovery model in FY07. Appropriate support for long term viability of the Laboratorys plutonium facilities (TA-55 and CMR) and waste processing activities requires incremental funding from users, both Defense Programs (DP) and non-DP. Through FY07, the infrastructure/facility operations and investments are funded primarily through RTBF with some support from specific DP campaigns and non-DP programs. Waste processing was funded primarily by RTBF in FY06 with very minimal support from Pits and Plutonium 238 in FY07. In order to continue the safe and secure operations and ensure sustainability into the future, a cost recovery model was implemented to formalize and distribute the costs appropriately.

The cost recovery model for operations at TA-55 and CMR will distribute facility operations costs to programs occupying space within the facility. The model was developed by determining facility support costs appropriate for distribution to programs and then prorating the costs based on the amount of floor space occupied by the program. The cost recovery model for waste processing will distribute processing costs to waste generators. The scope of cost recovery includes recovery of 1) cost for waste processing at the waste generator site, which is included in the facility space model costs and 2) cost for waste processing at Waste Management facilities (TA-50/TA-54), which is in the waste cost recovery. The cost recovery is applicable to all hazardous and radioactive liquid and solid wastes but not sanitary solid and liquid wastes.

FY08 was a transition year with partial cost recovery from programs, while full cost recovery is anticipated for FY09 and subsequent years. Cost distributions will be periodically reviewed based on realtime program tenants and waste generation volumes.

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Chapter 4. Real Property Asset Management

4.1 Site Footprint Management/ Excess Facilities Disposition

The current focus for site footprint management is to perform a "right-sizing" of the Laboratory to ensure a sustainable site. At the Laboratory this means a significant reduction in real property square footage, along with the associated infrastructure. The primary internal driver for this effort is the business case that indicates that the size of the Laboratory needs to be reduced by approximately two million square feet. Said another way, this scale of facility reduction is necessary to align available operations and maintenance funding with the Laboratory footprint. Coincident with the internal business driver for footprint reduction is Complex Transformation, which seeks to evolve the Complex into a smaller and more efficient collection of sites with reduced redundancy and an overall smaller footprint. Both Complex Transformation and the Laboratory's footprint reduction efforts strive towards an overlapping goal, namely to ensure that resources are maximally utilized to maintain the most important facilities necessary to support DOE missions.

Complex Transformation baseline for the site footprint gsf is based on the end of FY05 FIMS gsf. Reduction in the footprint produces the following results:

- 17.9% reduction in Weapons Activities Account facilities
- 13.7% reduction in all Laboratory facilities

Chapter 1, Executive Summary, includes a gsf Summary Table (Table 1-1) and chart

(Figure 1-1) depicting the reduction over the Complex Transformation timeframe described in this TYSP.

If CMR disposition and the new nuclear facility at CMRR are included in this calculation, both of which are integral parts of Complex Transformation, then this yields the following reductions in site footprint (note: the current projection for the new nuclear facility and the disposition of CMR is beyond 2018):

- 21.1% reduction in Weapons Activities Account facilities
- 17.8% reduction in all Laboratory facilities

Transformational changes include an achievement of 50% reduction in the nuclear operations footprint. A nuclear facility consolidation program began in the operations directorate in FY00. Many of the aging facilities at the time did not meet the current design codes and had overlapping or changes in mission. A significant cost premium is associated with a nuclear facility that includes the 10 CFR 830 Safety Basis development, maintenance and implementation; compliance and Price-Anderson costs/risks; nuclear space differential; and the security cost differential. Three solutions that reduce the nuclear footprint, provide more efficient operations, and meet current building codes are:

- construction of modern nuclear facilities to accept consolidated nuclear missions and provide flexibility for further consolidation or mission growth
- disposition of older facilities at the end of mission life

• removal from the nuclear list based on mission changes

In FY00, there was 1.8 M gsf of nuclear facility space at the Laboratory. By implementing the solutions listed, it is estimated that a 36% reduction in nuclear facilities will be achieved by FY18, and a 67% reduction will be the final achievement with the inclusion of CMR D&D.

While the ultimate consequence of footprint reduction is a more cost effective site, there are other consequences that pose challenges over the next ten years. Two obvious consequences are: a large increase in the number of facilities in shutdown awaiting D&D that require surveillance and maintenance; and a significant increase in D&D activities across the site. Both of these consequences require organizational and funding shifts from past precedence.

As stated previously, the quantity of excess facilities has been and will continue to increase at the Laboratory for many years. Many of these facilities are substantial in scale and were constructed in the 1950s for a Cold War mission and are no longer able to support modern mission requirements. With the evolution of building codes; Environment, Safety, and Health (ES&H) requirements; and security standards, adaptive re-use of many of these facilities is not economically feasible. Although the Laboratory continues to seek adaptive re-use options for facilities pending excess, D&D is often the most cost-effective solution in the long-term.

In addition to supporting the business case and Complex Transformation, aggressively pursuing D&D achieves the following:

- removing risk to the public, workers, and the environment
- minimizing expenditures associated with S&M
- minimizing potential spread of contamination, fire, and/or degradation of aging or excessed structures.
- minimizing costs associated with postponing D&D

• creating opportunities for developing future facilities

Sitewide Footprint Management

This TYSP addresses multiple complementary initiatives and directives that have emerged in recent years with similar fundamental objectives—reduce the footprint and associated costs for F&I. While these initiatives and directives are complementary, their goals and measure of success vary. Table 4-1, Initiatives and Directives for Footprint Reduction, is offered as an overview.

Attachment E presents the facilities disposition plan and new construction added since FY02. Notably, D&D of certain facilities cannot begin until replacement facilities are occupied. Footprint tracking summaries are included in this attachment illustrating the Laboratory's NNSA footprint and the total Laboratory footprint through FY18.

In the Executive Summary, Table 1-1 summarizes the footprint by owned and leased square footage. These are categorized by the footprint associated with the Weapons Activity Account, other NNSA owned (NA-20), other DOE owned, and non-DOE owned. This table tracks the changes planned for Complex Transformation from the end of FY05 until the end of FY18.

Footprint Reduction and Historic Buildings

Footprint reduction is an institutional goal with ramifications for the Laboratory's historic buildings. Laboratory space that is transferred to excess and demolished receives footprint reduction credit. While not all historic buildings are categorized as excess properties, many fall into this category and are slated for eventual D&D. Historic buildings removed from operation as part of square foot reduction efforts, but not yet identified for D&D, may also be adversely affected. For a full description of Laboratory policies related to historic buildings, see Section 2.2, Mission Changes, Facility

Initiatives and Directives	Goals and Measures of Success
Congressional One-For-One Mandate	The FY02 mandate that footprint added by construction must be offset by eliminating an equal amount of excess space.
	Actual completion of D&D is required. Square footage is "banked" from across the institution regardless of program.
FIRP Disposition Program	FIRP has achieved its goal of removing over 3 million gsf across the NNSA Complex since FY02. By the end of FY08, the program will have funded D&D of 415,000 gsf at the Laboratory. The disposition program ends in FY08.
Laboratory Footprint Reduction Initiative (FRI)	Beginning in FY07, the Laboratory established the goal of removing 2 million gsf of obsolete facilities from operations and/or performing D&D.The majority of the facilities shut down under FRI are transitioned to an interim "cold and dark" state.
	New in FY08
Complex Transformation	Reduce footprint of (owned and leased) buildings and structures supporting weapons missions by more than 9 million gsf by the end of FY18 across the NNSA Complex; tracking begins in 2006. Space may be transferred to other programs.
Transformation Disposition Program	TD begins in FY09 with the goal to D&D 5 million gsf by the end of FY17 across the NNSA Complex. The Laboratory anticipates that average D&D funding will exceed \$25M per year from FY09–FY17.
NNSA 1-Up and 1.5-Eliminated Policy for Weapons Activities Account	Beginning in FY2008, D&D footprint increased in any way triggers the new policy offset of 1-up and 1.5-eliminated. The policy does not apply to non-weapons activities account facilities.

Table 4-1. Initiatives and Directives for Footprint Reduction

Impacts, and Compliance with the National Historic Preservation Act.

Previous Funding Initiatives

In FY99, DP-10 provided \$2M in funding through RTBF for facility disposition. This funding was split between S&M of excess facilities and D&D of 27 small structures. With the same level of funding in FY00, a few more structures were removed, including two contaminated bag houses in the core of TA-3. After the Cerro Grande Fire in May 2000, the Laboratory requested and received approximately \$20M to remove debris from damaged and destroyed buildings and to remove excess buildings in flood or fire risk areas.

Funding from Facilities and Infrastructure Recapitalization Program

The start of FIRP funding for disposition coincided with the FY02 Congressional Mandate that footprint added by construction of new facilities must be offset by eliminating an equal amount of excess space. The national goal established at that time for FIRP was the elimination of three million gsf across the NNSA Complex. The program has achieved its goal and consequently FY08 is the last of the seven years of FIRP-funded D&D.

As shown in Figure 4-1, the year before the FY02 Congressional mandate, the Laboratory demolished 46,779 gsf. Through the first

six years of the mandate (FY02–FY07), the Laboratory "banked" 540,629 gsf of removed footprint. Of that total, approximately 380,000 gsf of D&D was funded by FIRP.

When complete, FIRP will have enabled the removal of over 100 buildings with approximately 415,000 gsf throughout the Laboratory. The highest profile disposition project funded by FIRP is the Nuclear Materials Storage Facility (PF-41), approximately 36,000 gsf, which was completed in FY08. In total, FIRP will have accomplished D&D of about 68% of all gsf removed at the Laboratory during the sevenyear program.

Funding for the Future

The progression of D&D activities in the last decade is significant. The Laboratory has established a level of success and expectations for further removal of excess structures and is working to apply any possible funding source to remove buildings with no further use.

Planned funding sources include the following:

- Transformation Disposition (TD)
- individual project funding
- transfer of process-contaminated buildings from DP to EM

TD is the most aggressive proposed funding source for removing obsolete facilities at the Laboratory. This funding will begin in FY09 and is currently planned through FY17. Laboratory disposition planning is highly dependent on this funding stream to ensure that facilities shutdown in the coming years do not indefinitely remain in a state of surveillance and maintenance.

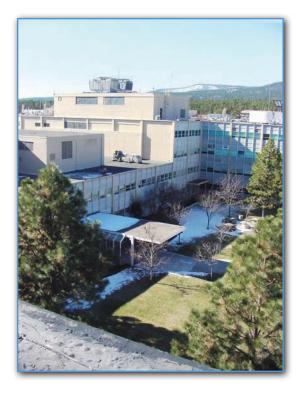
One example of individual project funding involves the structures being demolished by NMSSUP Phase II, resulting in removal of 6,270 gsf at TA-55. Another example is the planned Administration Building (03-0043) demolition of 315,737 gsf, estimated for completion in FY11. During the early 1990s, some buildings were transferred from DP to EM for demolition. When the Consent Order was signed in March 2005 with the State of New Mexico, EM recognized that contaminated and non-contaminated facilities at TA-21 and TA-54 inhibit or prevent subsurface investigations and environmental clean-up beneath these facilities. All facilities required to be removed by the Consent Order at TA-21 and TA-54 are listed on Attachment E-1. A major portion of these structures are planned for removal by EM.

Two Million Gross Square Feet Footprint Reduction Initiative

As is well known, the Laboratory's original intent was to close down a significant number of facilities, approximately 2 million gsf, by FY09. The purpose for this effort was for the many reasons already stated and still continues to be a high priority, but due to programmatic needs and funding priorities the time frame over which this goal will be achieved is of a greater duration. The Laboratory continues to pursue the reduction of 2 million gsf, as outlined in this TYSP. To date, since the start of this initiative, the number of facilities in the closure process, closed or fully dispositioned is approaching 1 million square feet.

The Laboratory's footprint reduction initiative will result in the shutdown of many poorcondition, under-utilized facilities with limited value for future Laboratory activities and missions. As stated previously, the intent of the effort is to free up funding for operations, maintenance and recapitalization of high-valued F&I and will position the Laboratory as a lean provider of services to support DOE missions.

The majority of facilities shut down under the footprint reduction effort have been or will be transitioned to an interim "cold and dark" state (minimizing heat and power requirements). These facilities will be evacuated and will no longer be used to support site activities. This interim state



includes elimination of all but emergency lighting and fire suppression capabilities in the facility and immobilization of resident contamination. In this stabilized shutdown condition, extensive maintenance on other than emergency systems is no longer required, negating the need for a majority of the continued investments in planned maintenance.

The following are the initial benefits of footprint reduction:

- more optimal use of investments to reduce DM
- improving the net condition of active F&I
- minimizing the current shortfall between required and planned maintenance

Investments in DM for shutdown facilities, other than those needed to reach and maintain the stabilized shutdown condition, can be avoided. Because the investments are made to place the facilities in a long-term stable condition, the remaining DM on the facilities need not be performed even though the facilities have not been demolished.



Historic buildings, such as SM-43 and facilities at TA-21, may be adversely affected by footprint reduction if proper mitigation activities are not undertaken. Adverse effects include removal of historic equipment and associated records, loss of contact with former site workers for oral accounts, and loss of electricity that is necessary for post-closure photographic documentation efforts.

The condition of active F&I at the Laboratory will be substantially improved if site facilities are prioritized so that facilities in the poorest condition, with the lowest use and least value to ongoing missions, are preferentially excessed. The resulting effective Facility Condition Index (FCI) for Mission Dependent (MD) and Non-Mission Dependent (NMD) facilities would then be improved to less than 10% even if the replacement plant value (RPV) for shutdown facilities is removed from the calculation.

Accompanied by modest FIRP investment (less than \$30M) in MC facilities, an effective FCI less than 5% for these facilities is attained. This is true even with the assumption that the current CMR facility will be removed from the RPV base after FY18.

The effective value of maintenance investments at the Laboratory will be significantly improved. Removing all maintenance requirements, except for S&M of emergency lighting, fire suppression systems, and other systems to maintain a stable condition, will result in a considerable reduction of the current maintenance

shortfall between estimated annual required maintenance (RM) and planned maintenance at the site.

The potential impact of footprint reduction, shown on Attachments E (Footprint

Management) and F (Projected Deferred Maintenance Reduction) is significant. Further plans for transition of facilities to the stabilized shutdown condition are currently under development.

4.2 Future Space Needs

The importance of removing obsolete structures across the institution is equaled only by the need for strategic investments in new and revitalized facilities to support the mission requirements of the future.

This TYSP provides the perspective associated with the FYNSP. It includes potential F&I impacts from the Complex Transformation, which are listed in Attachment B. A majority of the construction and disposition investments reflect strategies described in previous TYSPs.

This TYSP quantifies new investment affecting future space in several Attachments:

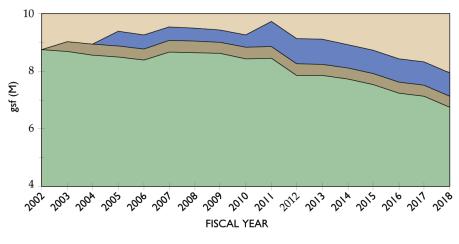
- Attachment A, the Facilities and Infrastructure Cost Projection Spreadsheets, provides the overview of construction projects with regard to funding profiles and the proposed gsf of the facility
- the new construction, listed in Attachment E-2, addresses the same projects included in Attachment A, but with a focus on the timing of beneficial occupancy in order to quantify the magnitude of space being added in each year

• the footprint tracking summary, Attachment E-4, uses the information from Attachments E-2 and E-1 (Facilities Disposition Plan) to project the overall increase or decrease of space across the institution

The disposition of the CMR complex (571,458 gsf) is not included in the footprint tracking summary because the specific disposition year is anticipated to be beyond FY18. However, by factoring in the CMR disposition and the new CMRR-NF, the Laboratory projects a 21.1% reduction of owned space from FY08 to beyond FY18. As the overall site is reduced, the Laboratory anticipates stabilization in the percentage of facility types such as office, laboratory, warehouse, etc.

Under the Complex Transformation, the space requirements for the establishment of the MaRIE facilities have not been determined. This complex may consist of a Fission and Fusion Materials Facility, a Multi-Probe Diagnostic Hall, and a Making, Measuring, Modeling, Materials facility.

Planned construction for the PMC program includes 576,800 gsf. These include the CMRR, the RLWTF Upgrade, the TA-55 Radiography Facility, the TRU Waste Facility,



■ Beginning Site Footprint ■ Cumulative Grandfathered Footprint Added ■ Leased Space

Figure 4-1. Site-wide footprint tracking summary (multi-program). Source: Attachment E4-b.

and the NMSSUP Phase II. Under DSW, LANSCE-R is scheduled for completion in FY14 and will need 20,000 gsf, and an HX warehouse with 6,000 gsf will be constructed. The SCI program includes an Explosive Gas Gun Facility at TA-40 (4300 gsf). Other future space needs include a computing and communications operations building (8000 gsf), and a wellness center replacement (10,000 gsf).

4.3 Deferred Maintenance Reduction and Facility Condition

The Laboratory has made progress toward meeting the NNSA FCI goals for MC and MDNC. Attachment F-2 reports FCI for the Laboratory's MC facilities at 4.3% at the start of FY08, projecting it to remain below the NNSA goal of 5% even after factoring DM additions anticipated in 2008. Achieving the MDNC FCI goal at the Laboratory will be a challenge, with DM growth being prompted by recent data changes (e.g., updated facility inspections, corrected DM for shutdown facilities, and revised utility DM) and revised maintenance requirements as the site's Conduct of Maintenance (CoM) program matures. Total year-end FY08 DM reported in FIMS increased by almost 91% to \$875M. This DM growth, predominately for Non-Mission Dependent facilities, will be further discussed in the FY10 TYSP.

The following are specific challenges faced in achieving NNSA's near and longer-term goals for facility condition:

- A recent LASO assessment of the Laboratory's DM and RPV methodology indicated that the DM and RPV may be understated - to the extent this is verified, it could either raise or lower calculated FCIs
- Updated Condition Assessment Surveys (CAS) scheduled in FY08 may result in net increased DM
- Laboratory corrective maintenance backlogs analyzed in FY08 that may result in additional DM
- Inaccuracies in previous utility DM and RPV estimates, which, when corrected, will increase both DM and FCI for "Other Structures and Facilities" assets
- Planned maintenance (PM) funding levels remain below the NNSA (2-4% of RPV) facility and infrastructure guidelines

- Implementation of the Laboratory's new CoM tools and bottom-up estimating processes significantly exceed previous RM estimates - the larger budget gaps between RM and PM predict an increase of DM growth in the future (see 4.4)
- FIRP funding and associated DM work-off plans projected at lower levels than were anticipated in prior TYSPs
- Utilization of the non-enduring CMR facility extends beyond the time period predicted in prior TYSPs. CMR is scheduled for disposition 3 to 5 years after the CMRR facility becomes operational

Overall, the Laboratory does not believe that DM growth resulting from these challenges will jeopardize the FCI goal for MC facilities. However, achieving the FCI goal for MDNC facilities will be challenging even with continued efforts to reduce footprint and improve maintenance productivity and stewardship levels at the Laboratory.

A detailed F&I funding gap analysis will be performed in FY09 utilizing updated facility inspection data, updated DM/RPV data and revised Required Maintenance value.

Utilities

LANS recognizes that the utility systems require additional attention to ensure reliable service and to assure energy and fuel sources are available to the meet the demands of the Laboratory. Maintenance and operations of these systems to industry standards are vital for creating a safe environment, reducing risk, and supporting mission success. In early FY08, Utility and Infrastructure Facilities Operations was elevated to a division within the Associate Directorate of Infrastructure and Site Services (ADISS).

The utility systems are comprised of electric transmission and distribution, power plant, steam distribution, water, sanitary sewer, and natural gas. The Utility and Infrastructure Facility Operations are also responsible for the roads, grounds, and open space. The majority of underground

utilities at the Laboratory was installed in the 1950s and 1960s and is operating well beyond their design life. Prone to failure, continued operation of these systems without refurbishment or replacement may cause service disruptions, create safety hazards, and impede the Laboratory's ability to develop new and enhanced programs and missions.

A long range strategy is under development that includes:

- Functional Management Assessment (completed in FY07)
- Energy Management Plan (completed and issued 12/07)
- assessment of the asset inventory, RPV, and DM (in progress FY08)
- condition assessments with industry standard technology (in progress FY08)



Many utility systems at the Laboratory are operating well beyond their design life.Without refurbishment or replacement, continued operation may result in service disruptions, safety hazards, and the inability to develop new programs and missions at the Laboratory.

• system modeling and configuration data management (in progress FY08)

Over the past five years, the Laboratory has developed a robust inventory of utility system components using a geographic information system (GIS). The inventory includes the following utility systems:

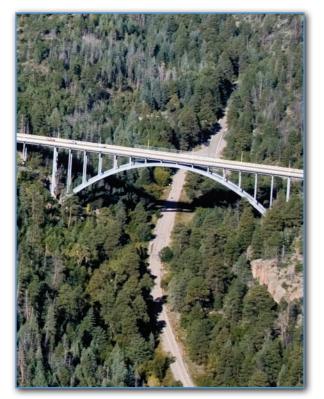
- natural gas
- electrical power distribution and transmission
- water distribution
- wastewater collection

The Laboratory is defining a methodology and implementing a process that uses the data collected with GIS tools to establish an accurate and defendable asset inventory, RPV, RM, DM, and actual costs for the utility systems. This methodology, once established, will integrate this inventory into the FIMS database. FIMS usage codes and unit costs will be utilized to establish a revised utility RPV. Management is also reviewing existing asset condition information from past inspections to determine any required revisions to the Condition Assessment Information System (CAIS) database.

Significant utility and infrastructure issues that require future projects to correct are being identified. These issues include:

- power grid infrastructure reliability and capacity
- central cogeneration plant reliability and capacity
- potable water line corrosion
- backflow prevention system compliance
- Omega Bridge deterioration and seismic compliance
- Pajarito Road deterioration and capacity
- TA-3 Steam System corrosion

As the pre-conceptual planning process proceeds, these needs will be coordinated with the Weapons Program to identify a sponsor for future Line-Item funding requests.



The Omega Bridge, constructed in 1951, is in need of significant maintenance within the next ten years due to deterioration of the concrete decking and seismic compliance concerns.

4.4 Maintenance

Budget Gap and Cost Models

As described in the FY08 TYSP, LANS implemented significant improvements in F&I management structures and practices at the Laboratory. This has resulted in better performance and reduced risks relative to facility maintenance and conditions.

Although this TYSP reports recent improvements in facility conditions (see Section 4.3) the Laboratory does not yet meet NNSA FCI goals in all facility categories. It is expected that documented facility conditions will worsen in 2008 as fresh data from facility inspections and other analyses culminate in increased DM reporting at the Laboratory. Also noted in Section 4.3 are anticipated reductions in planned FIRP DM buy downs. Implementation of the Laboratory's Conduct of Maintenance (CoM) program is producing more comprehensive (and increasing) annual maintenance budget requests. Greater attention has been given to all Laboratory facilities, including previously overlooked systems. This has resulted in additional maintenance requirements and an increase in overall budget demands despite improved productivity and reduction of facility footprint.

In past TYSPs, the Laboratory benchmarked its RM calculations with DoD facility sustainment cost models. These models predicted estimates of sustainment requirements based on facility type's usage, and mission priorities. Changes in operations, usage, and maintenance processes during FY07 were determined to be so significant that the model's estimates of RM became inaccurate. The Laboratory has adopted a new method for calculating RM that accounts for these changes. The bottom-up method requires each facility maintenance manager to estimate the required maintenance for corrective, preventive and predictive/ surveillance maintenance. The estimate for corrective maintenance is an average of

the historical maintenance cost for the last several years. The preventive and predictive/ surveillance maintenance cost estimates are based on the cost of the PM and predictive maintenance program activities planned and scheduled in the computerized maintenance management system.

This TYSP calculates future RM funding requirements (see Attachment F-2) based on implementation of the Laboratory's new CoM tools and "bottom-up" estimates from site maintenance managers, adjusted to account for 500,235 gsf of facilities vacated during FY07 and lower overhead rates for craft labor (achieved through business model changes and other productivity enhancements). Attachment F-2 reports an RM value of \$143 M, nearly 50% over the FY07 RM estimate. This revised RM increases the corresponding budget gap with PM, and future DM growth, are likely to be more significant than in past TYSPs.

The FY08 planned maintenance budget of approximately \$99M represents approximately 1.6% of the Laboratory's buildings RPV of \$6B (i.e., below NNSA's guidance of 2%, and well below RM estimates produced by the current "bottom-up" Laboratory model). The effect of the non-enduring CMR facility has a significant influence on this calculation due to its large RPV and an aggressive strategy to minimize maintenance investments consistent with reduced utilization and end-of-life. However, even if CMR were removed from the sitewide calculation, FY08 maintenance funding is still below the NNSA guidance level.

The Laboratory's historical focus has primarily been on the sustainment of MC facilities. Maintenance has provided the necessary support to the Laboratory's core mission, nuclear weapons stockpile stewardship, facilities. The RTBF and FIRP projects have had the same MC facility focus in facility sustainment and reducing DM. The projected footprint reduction effort will reduce the number of NMD facilities and

• • • • • • • • • • 4.0 Real Property Asset Management

eliminate the associated DM. As indicated in Attachment F-2, the MDNC facilities, including utility facilities, will not receive sufficient funding nor benefit from footprint reduction to achieve the FCI goal. In FY09, the Laboratory will evaluate a new site-wide integrated prioritization method to ensure the proper balance of sustainment funding is achieved.

Tradeoffs to Reduce Maintenance Costs

Given the fiscal realities of declining budgets, maintenance investment decisions require consideration of potentially significant tradeoffs at the site level. FYNSP constraints are expected to result in generally flat maintenance budgets until CMRR becomes operational. Therefore, as previously stated, to reduce the maintenance budget gap, the Laboratory must reduce the overall site footprint, enabling the maintenance budget to support remaining facilities and systems at sustainable levels. A detailed F&I funding gap analysis will be performed in FY09 utilizing updated facility inspection data, updated DM/RPV data and revised RM.

The Laboratory is refining site maintenance business practices to reduce overhead and improve safety and productivity. LANS started transforming the 60-year-old maintenance subcontracting model in FY07 by in-sourcing several functions. As a result, overhead costs dropped and efficiency increased. Further refinement of the site service model is planned in FY08 and FY09.

4.5 Security/Security Infrastructure

The Security Program continues to work with Laboratory organizations responsible for maintenance of the real property that perform and provide physical security functions. This coordination ensures security infrastructure is appropriately maintained.

Lifecycle planning for security infrastructure replacement and identification of modernization opportunities is under way. However, full and effective implementation of a lifecycle management process for security infrastructure is dependent on adequate funding for maintenance, replacement, and modernization. This is a significant challenge because program funding targets do not include dedicated appropriations for security infrastructure needs, such as the FIRP or the RTBF Program created to restore the vitality of the NWC.

Recent security infrastructure management efforts have focused on improving site access controls, upgrading protective force posts within TA-55, and consolidating security areas. These real property-related physical security enhancements along with previously implemented protective force equipment and training upgrades have brought the Laboratory into full compliance with the 2003 DBT implementation. Additional improvements are needed for compliance with the 2005 DBT implementation.

Access and Facility Improvements

Vehicle access portals have been constructed on West Jemez Road and Pajarito Road, and a truck inspection station has been established on East Jemez Road to improve site access controls.

The site continues to pursue replacement of mechanical keys and cores with an electronic system that provides a detailed and auditable record of use. The programmable cyber keys expire unless reauthorized periodically, providing enhanced protection against



A variety of investments are being made in the area of security and DBT implementation.

improper use of lost or stolen keys and reducing replacement costs.

Facility improvements within TA-55 provide increased protection for protective force personnel. Training for the protective force is also being enhanced by implementing a simulator training facility. Minor building modifications are currently in progress at an existing physics laboratory to accommodate the training simulator. This facility's location is temporary, pending completion of the proposed Consolidated Protective Force Training and Infrastructure Facilities project.

Security Asset Consolidation Program

Authorized and completed in FY07, the prototype SVTR project enabled the closure of five standalone classified media libraries and demonstrated innovative classified media document processes that significantly reduce the exposure of classified matter to security risks. This institutionally-funded project modified existing space in the CCF to create a prototype security facility for collecting, storing, and distributing classified media and documents.

The SVTR incorporates several innovative features, including:

 access-controlled, transparent interior dividing walls, allowing security personnel to observe all work activities while compartmentalizing personnel work tasks and operations

- a high-security transaction window, providing a controlled exchange of classified matter and restricting non-security personnel access to security assets
- compartmentalized media storage units and computer server racks secured with electronic locks and programmable cyber keys
- both classified (RedNet) and unclassified (YellowNet) diskless workstations, eliminating all media use by security professionals within the SVTR
- multimedia/obsolete media upload center for transferring classified removable electronic media (CREM) and accountable classified removable electronic media (ACREM) to centralized servers

Security officials representing the Office of the Chief Security Officer (CSO) and Associate Directorate of Safeguards and Security (ADSS) have begun planning the construction of the second generation facilities. These facilities are an expansion of the SVTR concept across the site, providing a central "Service Center" at TA-03, supported by a remote computer machine room, along with two "Media Libraries;" one at TA-55 and one at TA-22. All locations will consolidate classified matter, providing for the transfer of data on classified media and standalone classified computers to centralized classified servers accessed by diskless keyboard video mouse systems. The facilities will be



Proposed exterior modifications to Building TA-3-0510, the Service Center for classified matter handling.

strategically located to serve the direct needs of classified media handling. They will feature functional aspects to expand and reinforce the concepts introduced in the SVTR prototype. The introduction of classified conferencing provides additional functionality.

The second generation facilities are intended to provide a three-part approach to classified materials and computing. The three elements will include:

- 1. A centrally located Service Center, providing a broad range of classified material handling that would range from; mail services to electronic consolidation to tele-conferencing. These services will be available within the TA-03 Limited area. The Service Center will be supported by a remote Machine Room containing computer servers to support the Service Center operations. The Service Center will be located in building 03-0510 and the space will be renovated to accommodate the new use. The Machine Room function will be housed at the LDDC building in space that will be dedicated to the Security Asset Consolidation Program (SeaC-Pro).
- 2. Strategically located "Media Centers" will enhance the function of the Service Center. Locating Media Centers in areas that generate high levels of classified material will greatly increase logistical efficiencies. Two Media Centers are currently being developed; one at TA-55, building 0029 and one at TA-22, building 0120. These two locations will allow for expedient access for classified media handling services similar to the Service Centers, and to classified conferencing.
- 3. Back-up capabilities are critical to the effectiveness of SeaC-Pro. and the third element includes for a remote back-up location. A remote back-up operation, located at TA-22-0120, will provide data back-up capabilities in support of the Service Center's remote Machine Room and be co-located with a Media Library.

Design Basis Threat Implementation

The Laboratory will fully comply with the 2005 DBT policy by FY12 under the approved implementation plan, which reflects the DNS transparent and collaborative physical security risk management approach to achieve savings in long-term security costs. The DNS approach uses independent peer reviews to:

- develop site-specific attack scenarios
- assess current site capabilities to defend against those scenarios
- identify cost-effective security upgrades

Extreme or speculative scenarios are acknowledged and assessed but do not automatically drive security upgrades as they have in the past.

Many improvements will be accomplished under the NMSSUP Phase II project. The project will provide an exterior security system design for the CMRR facility, an essential element of Complex Transformation. It will also provide entry control system upgrades at the TA-55 material access area replacing the legacy security system, and provide compatibility with Argus security system installations made under NMSSUP Phase I. Site-wide end-of-life replacement for the Argus system is anticipated within the next 10 years. This need will be evaluated to determine any impacts to real property. A replacement project plan based on these impacts will be developed. It is expected that this project will be proposed as a Line-Item.

New and upgraded protective force training facilities are needed to comply with the 2005 DBT implementation and the DOE tactical doctrine. The Laboratory's 2005 DBT implementation plan contains a consolidated training facility with indoor and outdoor ranges, a tactical response training range, a shoot house, classrooms, and a physical fitness facility. The 08 GSP Policy recently superseded the 05 DBT and is expected to drive infrastructure upgrades similar to those proposed under the 05 DBT implementation plan.

Unfunded Infrastructure Proposals

Critical unfunded infrastructure needs include the following:

- construction of permanent facilities for the vehicle inspection station if analysis warrants a continuing mission need for the station
- elimination of multiple transportable structures that have significantly exceeded their anticipated service life
- upgrades to the entry control system at TA-55 and related minor facility modifications

The vehicle inspection station was initially established using a combination of temporary structures and vehicles. This arrangement was expected to be replaced when a new distribution center and inspection facility was built. The Laboratory pursued funding for construction of a distribution center for several years but was not successful. The relocation of the distribution center was not driven by documented security requirements. Consequently, the Security Program has determined that construction of permanent facilities is necessary to continue to effectively and efficiently perform vehicle inspection functions at the current location.

Replacement of aging transportable structures with new office space will provide improved working conditions for Security Program personnel and reduce facility maintenance and operations costs.

These infrastructure proposals are expected to be budgeted as operating expense-funded projects and accommodated within current budget targets through cost savings and reinvestment efforts.

Chapter 5. Overview of Site Project Prioritization and Cost Profile

This section describes the Laboratory's prioritization process for F&I projects reported in the cost projection spreadsheets (Attachment A). Challenges associated with key projects and their support of NNSA program missions, goals, and requirements are highlighted.

The FY2009-2018 Ten-Year Site Plan Guidance requires sites to list and prioritize all F&I projects in the following categories:

- Line-Item
- RTBF/Operations of Facilities
- FIRP
- Other F&I Programs
- Security Infrastructure

Infrastructure Review Board

The Laboratory's comprehensive approach to F&I project prioritization incorporates two elements:

- an Infrastructure Review Board (IRB) is charged with providing institutional perspective, consistency, and continuity of purpose for infrastructure planning and decision-making; the IRB is chaired by the Deputy Laboratory Director and consists of several of the PADs and ADs and other key senior managers.
- integrated prioritization processes that address relative value of projects to safety, security, site missions, and the long-term sustainability of site capabilities

The IRB will guide the integration of infrastructure planning and utilization to ensure that projects are mission-driven and that they maximize efficient use of available resources. It also serves as a central forum to establish infrastructure priorities, drive infrastructure budget allocations, and support site-wide strategies to optimize Laboratory resources.

The IRB will ensure that Laboratory assets are operated, inspected, maintained, recapitalized, and dispositioned according to DOE Orders and Directives. It empowers the entities planning and implementing infrastructure initiatives (infrastructure safety, facility stewardship, footprint reduction, and integrated institutional planning) to facilitate rapid and positive transformation of Laboratory infrastructure and infrastructure services.

Integrated prioritization processes address the need for a consistent, technically defendable basis to evaluate competing projects and investments. Although the precise methodology employed differs for different types of project funding, each process generally:

- values safety, environmental, and security management
- establishes the value of proposed assets in terms of mission and life-cycle
- optimizes the value of investments within existing resources

The Laboratory is constantly refining its integrated prioritization processes to ensure value-based selections of proposed physical infrastructure projects. Quantitative prioritization methods are also employed at the Laboratory and are described in detail in the description of RTBF later in this section.

Line-Item Projects

Attachment A-1 lists approved Line-Item projects and associated funding profiles. The funding profiles are consistent with Appendix 1 FYNSP funding profiles for FIRP and RTBF/Operations of Facilities (and targets for Nuclear Nonproliferation, Emergency Operations, and Defense Nuclear Security), as applicable, and the FY 2009-2013 President's Budget.

Line-Item profiles for FY14-FY18 reflect the Construction Project Data Sheets reported in the FY 2009-2013 President's Budget. The FY 2009 Congressional Budget Request is consulted for out-years funding profiles.

Readiness in Technical Base and Facilities and Operations of Facilities Projects

RTBF projects are evaluated with a systematic and auditable application of multi-attribute preference theory. This quantitative methodology ranks projects according to risk, safety and security improvements, return on investment, mission risk, program efficiencies and the potential for footprint reduction.

Multi-attribute preference theory provides a logical, consistent basis for evaluating projects with complex and multiple characteristics. The practical application of multi-attribute preference theory relies on three steps:

- Laboratory objectives are identified, weighted and grouped into categories
- categories are scored and the contribution of each category is measured
- results for each project are aggregated to yield a single score

Projects are prioritized based on their relative scores. The process is highly interactive and participants are actively engaged at every step. Although the process yields a prioritized list, it produces other useful results such as the contribution and sensitivity of each category. This process can also be used to evaluate non-Line Item projects. In FY07, NNSA initiated Institutional Site Support funding for projects that offset future Laboratory funding shortfalls. Projects supported with the RTBF SI/FR, and Institutional Site Support funding are listed in Attachment A-3.

Facility and Infrastructure Recapitalization Program

Projects listed in Attachments A-4a and A-4b are funded by FIRP, prioritized with the Facility and Infrastructure Recapitalization Ranking System (FIRRS) and are consistent with the Congressional List. Attachments A-4a and A-4b include projects that reduce DM captured in the FY03 baseline for MC facilities. Each project is rated on relative contributions to health and safety, safeguards and security, environmental and waste management, and mission.

Consistent with the FIRRS guidance, the Laboratory prioritizes projects within and across categories to yield a total score. For projects with the same score, health and safety is given the highest weight and mission the lowest. In the case of projects with identical scores within categories, ranking is based on secondary categories.

Physical Security Infrastructure

Attachments A-6a and A-6b list funded and proposed physical security infrastructure projects falling into three categories: security system upgrades; protective force training facilities; and infrastructure necessary to house personnel performing security functions.

Security system upgrades replace, upgrade or modernize property assets associated with security systems. Protective force training projects provide classroom, physical fitness and weapons training facilities. Infrastructure projects necessary to house personnel performing security functions consolidate core operations in permanent facilities or replace facilities in poor condition to improve working conditions, save energy, and reduce M&O costs. The Security Infrastructure Rating Matrix in the TYSP guidance uses a balanced set of performance expectations. Security infrastructure projects are prioritized with the following criteria:

- protect worker and public health and safety
- protect SNM
- protect classified matter
- protect government property and facilities
- comply with federal laws and departmental regulations
- enable programmatic mission
- enable business capabilities and program development

The program's prioritization process expands on the Security Infrastructure Rating Matrix, the required methodology for prioritizing unfunded security infrastructure projects. Both approaches score projects such that higher scores represent high priority needs, and scores may be aggregated when projects impact multiple criteria. Likewise, both processes recognize that scores are a tool to support the overall prioritization process, which includes consideration of stakeholder values, program issues and strategic objectives.

FY09 TYSP • • • • • • • • •

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Chapter 6. Changes from Prior Year TYSP

This section provides traceability between the FY08 TYSP and the FY09 TYSP and includes summary explanations of key changes in Attachments A through F. Most changes in this TYSP reflect the evolving priorities of the Laboratory and the NWC described in the draft SPEIS.

Attachments A – Facilities and Infrastructure Cost Projection Spreadsheets

Adjustments in selected Line-Items occur consistent with the Consolidated Appropriations Act (2008 P. L. 110–116), the FY09–18 TYSP Guidance Appendix 1 Site Funding Targets, and the FY09–13 President's Budget/FYNSP.

Attachment A-3 – RTBF/Operations of Facilities

Attachment A-3 represents baseline funding necessary to ensure safe, secure, reliable facility operations on a daily basis.

The RTBF/Operations of Facilities has eliminated 1 GPP project and added 9. The Security Assets Consolidation Program has added 4 projects that include 1 MD and 3 NMD machine rooms, a main service center, and a classified matter center. Strategic Investments include 3 MD and 2 MC projects. Footprint Reduction projects have 1 GPP added that is a warehouse for DARHT.

Other projects that have been added or eliminated are expense funded. These include 1 eliminated project (MD) and 7 added in Strategic Investments funding (2 MC, 4 MD); 9 eliminated (2 MC, 5 NMD, 2 MD) under Footprint Reduction; and 7 added under Institutional Site Support (4 MC, 2 NMD, 1 MD).

Attachment A-4 – Facilities and Infrastructure Recapitalization Program

Attachment A-4a identifies projects addressing the Legacy Deferred Maintenance Baseline identified in FY03.

Of the projects funded by FIRP, 39 projects were added and 93 were completed. The new projects include resolution of DM issues at the CMR facility, the LANSCE site, the Radioactive Liquid Waste Collection System, and nearly all other major sites at the Laboratory. Many FIRP projects have been completed or eliminated.

Attachment A-5 – Other Facilities and Infrastructure Cost Projection Projects

Attachment A-5 lists projects associated with other NNSA-funded F&I non-Line-Item projects not reported in Attachments A-3 or A-4, as well as those for non-NNSA programs and activities. New projects include:

- a septic replacement at TA-33
- the NISC SCIF project
- the HRL Condensate Recovery project
- a sewer upgrade at TA-50

Attachment A-6a – Security Infrastructure-Funded

Attachment A-6a provides a corporate roll-up of funded and ongoing Security Infrastructure projects. NMSSUP II, an MC project, will extend into FY09 and FY10. Associated projects for the Security Asset Consolidation Program have been added.

Attachment A-6b – Security Infrastructure-Unfunded

A-6b lists planned unfunded projects for FY09 and FY10. Unfunded MC projects include the 2008 Graded Security Protection Planning Implementation and the Vehicle Inspection Post Upgrade. MD unfunded projects include the Replacement Security Integration Services Building and the Consolidated Safeguards and Security Management Building.

Attachment B – NNSA Potential Facilities & Infrastructure Impacts of Future Nuclear Weapons Complex Planning

This new attachment identifies potential facilities and infrastructure impacts of ongoing and future transformation of the Laboratory and the NWC.

Attachment B indicates whether a building will be demolished, shutdown, placed for sale, transferred, leased, renovated, or constructed as a result of Complex Transformation. The Laboratory's affected mission areas include Plutonium Manufacturing and R&D, Major Environmental Test Facilities, Nuclear Design and Engineering, Tritium R&D, and HE R&D.

Attachment C – DOE New Buildings and Major Renovation Projects Seeking or Registered for LEED Certification

The new Attachment C describes LEED information as required by the DOE's HPSBWG and Secretary Bodman's TEAM Initiative. All NNSA and non-NNSA facilities built or renovated since FY03 that have been designed for LEED certification are listed. These projects have been funded by DP-10, Nuclear Nonproliferation, RTBF, DNS, and the Office of Defense Science. The CMRR-RLUOB project is expected to qualify for silver certifications.

Attachment D – Establishment of Security Baseline

The purpose of this new attachment is to establish the site's security baseline. For each

of the facility and system types listed, the total number of security areas, the protection level, and the size is described. This baseline will be used to track future changes resulting from transformation or consolidation.

Attachments E-I and E-Ia – Facilities Disposition Plan

Attachments E-1 and E-1a capture all excess facilities and those that will become excess in the FY09–18 period. Facility disposition is funded by FIRP, RTBF, EM, EM Request, Safeguards and Security, and Institutional. TD funding is scheduled to start in FY09, when FIRP funded D&D will run through FY17. The TD program is established in partnership with RTBF to ensure disposition of the excess F&I in the NWC. Many facilities with funding listed as TBD in the FY08 TYSP are categorized under TD funding.

Facilities identified for disposition from FIRP and TD funding from FY08–17 include ~1.4M gsf; EM has identified ~455k gsf of facilities on the disposition list; RTBF has added ~45K gsf; and ~323K gsf is identified for disposition by the institution or other programs. Total disposition identified on Attachment E-1 is ~2.25M gsf.

The disposition of many of the TA-21 and TA-54 buildings has been moved to out-years. The disposition of the Administration Building has been moved from FY10 to FY11.

As shown in Attachment E-1a, a few facilities above FYNSP (where funding is TBD) have been labeled with TD as a funding source but do not have a projected D&D year. The CMR Complex (RTBF) also does not have a projected year for disposition. Structures at TA-39 are listed on Attachment E-1 for transfer to NA-20.

Attachment E-2 – New Construction Footprint Added

Attachment E-2 captures the gsf of FYNSP approved and completed construction at the site, along with the year of beneficial occupancy, for Line-Item, GPP, IGPP and other approved projects from FY06–18.

New Construction Footprint added for CMRR-RLUOB, the Computing and Communications Operations facility, and the Wellness Center Replacement has been moved from FY09 to FY10, and the CMRR-Nuclear Facility was shifted from FY14 to TBD. The Explosive Gas Gun Facility is added to FY10, and the HX Warehouse project was added to FY09.

The TA-69 Emergency Operations Center Office facility has been eliminated from the list. The TA-55 TRU Waste Facility confirmed gsf is approximately 28,700. The LANSCE-R Line-Item has been added to the FY14 New Construction Footprint.

In several cases estimated gsf reported in prior year TYSPs has been corrected when buildings are completed and the gsf is confirmed and reported in FIMS.

Attachment F – Deferred Maintenance Baseline and Projected Deferred Maintenance Reduction

Attachment F reports the NNSA maintenance requirements baseline to assess actual and planned progress toward reducing DM. Principle changes include redistributing FIRP projects; changing the calculation methodology for the FY08 RPV; reducing FY08 RM based on efficiencies; moving CMRR-Nuclear Facility occupancy to TBD; and reducing the CMR RM in FY10 and FY16 as facility use is reduced. A bottom-up evaluation was used in the risk-based model to determine RM and an escalation was used in calculating planned maintenance. The bottom-up method requires each facility maintenance manager to estimate the RM for the three types of maintenance activities: corrective maintenance, PM, and predictive/ surveillance maintenance. The estimate for corrective maintenance is an average of the historical maintenance cost for the last several years. The PM and predictive/surveillance maintenance cost estimates are based on the cost of the PM/predictive maintenance activities planned and scheduled in the computerized maintenance management system.

FY09 TYSP • • • • • • • • •

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Attachments



Attachment A.

Facilities and Infrastructure Cost Projection Spreadsheets

Attachment A, the F&I Cost Projection Spreadsheets, provide prioritized descriptions of current and projected NNSA and non-NNSA funded F&I projects and activities. Data in Attachment A is adjusted for FY07 appropriations, FYNSP funding profiles, and the President's FY09-FY13 Budget. Attachment A reflects the fact that FIRP D&D funding will end in FY09 and FIRP Construction funding in FY13.

Attachment A-I: Approved Line-Item Construction Projects

Approved Line-Item construction projects represent substantial NNSA investments in Laboratory assets to ensure current and future mission readiness.

The approved Line-Item construction projects provide the following benefits to NNSA and the Laboratory over the next 10 to 15 years:

- provide better worker and public safety and protection of the environment
- improve security to protect vital assets against increased threats
- support NNSA Complex Transformation objectives
- improve technical capabilities to satisfy new programs and perform work safely and efficiently
- revitalize and replace old, unreliable infrastructure, to reduce operational and programmatic costs
- contribute to the laboratory's nuclear facility consolidation goals and reduce the DM backlog

Each project is coordinated and developed with NNSA, the INP and ICPP processes to ensure that the scope, estimated costs and schedules are integrated with NNSA programmatic drivers and deliverables. The Laboratory works closely with NNSA organizational elements and their corresponding programs, including RTBF, Safeguards and Security (S&S), and FIRP.

Project goals and objectives emphasize safety, security, capability improvements and the efficient use of operating and programmatic funds. The aging (and in many instances unreliable) F&I systems demand a significant proportion of Laboratory resources. This situation diverts funds and attention from programmatic activities, a core Laboratory mission. These facility and infrastructure investments, when complete, will result in a more balanced resource allocation and management focus.

Attachment A-3: Readiness in Technical Base and Facilities/Operations of Facilities Projects

Attachment A-3 describes F&I projects associated with Operations of Facilities funding within RTBF to ensure safe, secure, reliable facility operations on a daily basis.

Attachment A-4: Facilities and Infrastructure Recapitalization Projects

Attachment A-4a describes projects that target DM reduction. Since FIRP specifically targets DM reduction, projects that do not substantially reduce the site's FY03 DM baseline are not accepted for funding. Projects are prioritized using the FIRRS Matrix, with each project rated for health and safety, environmental and waste management, safeguards and security, and mission and investment.

Attachment A-5: Other Facilities and Infrastructure Cost Projection Spreadsheets

Attachment A-5 describes F&I projects associated with other NNSA funded F&I non-Line-Item projects not reported in Attachments A-3 or A-4, as well as those for non-NNSA programs and activities. It provides information on DM buydown and projects funded from other sources. The Institutional General Plant Project (IGPP) planning in Attachment A-5 reflects that GPP limits have not increased from the \$5M maximum established in FY97. The inability to complete certain projects within GPP limits has resulted in the deletion of some proposals presented in previous TYSPs.

Attachment A-6: Security Infrastructure Projects

Attachment A-6 includes projects listed in A-1 through A-5 and provides a corporate roll-up of ongoing security infrastructure projects. It also serves as a crosswalk of security infrastructure projects funded and executed in FY08 and planned for FY09-FY10.

Planned but unfunded projects are ranked to ensure that management attention and potential resource allocation are focused on the highest priorities. To provide rough order financial constraints, the unfunded submissions are for FY09 and FY10 only.

Attachment A

Attachment A-I FY09-2018 Ten-Year Site Plan	Facilities and Infrastructure Cost Projection Spreadsheet	Line Item Projects for NNSA - LANL Site	(4000-)
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Attachment A

Attachment A-1 FY09-2018 Ten-Year Site Plan Facilities and Infrastructure Cost Projection Spreadsheet Line Item Projects for NNSA - LANL Site (\$006)

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Priority (1)	Project Name (2)	Number (3)	Identifier(s) (3a)	Dependency (4)	Program (4a)	Reduction (5)	Eliminated (6)	Type (7)	Total P. (8) F ₁	Finding (9)	FY 2007 FY (10) (1	FYNSP F (11) FYN	FY 2009 FY 2010 FYNSP (12) FYNSP (13)	FY 2010 YNSP (13)	FYNSP (14)	FYNSP (15)	FY 2013 (16)	FY 2014 (17)	FY 2014 FY 2015 FY 2016 (17) (18) (19)	FY 2016 FY 2017 (19) (20)	17 FY 2018 (21)
B. Faciliti	B. Facilities and Infrastructure Recapitalization Program (FIRP) Line Items	alization Program	n (FIRP) Line Iten		(and																
								OPC	1,500	1,375	125	•	•	•	1	1		1	•	•	
	Dorrow Caild Tafacolan drive		_				1	PE&D	1	1	•				1	1		1		•	•
1	Fower Grid infrastructure Unorado	05-D-602	LA-LI-05-01	DIMN	NA	1	Ļ	П	18,336	18,336	•		1	1	•			1			
	oberano							Total (TPC)	19,836	19,711	125	1	1	1	I	1		1	'	1	
								OPC	12,500	2,500	5,000	5,000	•	•				1	•	•	
		196101	_				-	PE&D	1	1	'		•	1	1			1	1		-
2	PF-41 Demolition	WBS	TBD	UMD	NA	705	(35, 849)	п	•			•	•	•	1			1	•	•	
		#1.07.02.03.01						Total (TPC)	12,500	2,500	5,000	5,000						1			
C. Safegu	C. Safeguards & Security (S&S) Line Items	ems						Juc.	4.400	4 040	460										
			_				_	Dr.D	4,4.70	080/8	100			'							
	Consider Dosimotos Daviont	0E D 017	Clar	UMU	NIA		C71 C	TEXU		- 10 01				'							
-	security remnerer riolect	/10-71-00	IBU	DIMINI	NA.		701/7		19,542	740'61	'	•	•	'	'			'	•	•	•
_								Total (TPC)	24,332	23,882	450	1	1	1	1	1	1	1	'	1	1
								OPC	25,245	15,625	1,191	2,386	1,785	1,866	658	1,734		1	1	•	1
	Nuclear Materials Safeguards	020-01-00	_				1	PE&D	43,094	43,094					1	1		1		•	1
2	and Security Upgrades	097-01-90	TBD	MC	PMC	TBD	22,000	п	171,661	•	•	49,496	46,000	49,000	27,165			1	1	•	1
	Project (NMSSUP) Phase II	1.0/1-41-60						Total (TPC)	240,000	58,719	1,191	51,882	47,785	50,866	27,823	1,734		1		1	
D. Other	D. Other Defense Programs Line Items (for example, Campaigns/Directed Stockpile Work (DSW))	(for example, Ca	mpaigns/Directe	d Stockpile Worl	x (DSW))																
			_					OPC	1		•	•	•	•	1	1		1	•	•	
	No "Other Defense Programs"		_				1	PE&D					•	•		1			•	•	
	Line Items		_					П	1	1		•	•	1	1			1		•	
								Total (TPC)	1	1	,	1	'	'	1	1	'	1	'		
					Total Costs fo	r All NNSA We	Total Costs for All NNSA Weapons Account Line Items	Line Items	2,391,842	474,900 1	123,174 2	217,335	229,842	322,234	338,623	321,834	309,500	52,200	2,200	- 1	- 1
E. Nuclea	E. Nuclear Nonproliferation (NN) Line Items	Items																			
								OPC	1	1	•	•	•		1			1	•	•	
	Mis. "Missilaan		_				1	PE&D	1	1					1	1		1		•	•
	No INUCIERI Nommolifaration"I ina Itame		_					П	-	1					1			-			-
	troubiours and purchase							Total	'												
								(TFC)		'	'	•	1	'	'	1	1	•	•	•	•
						Total Costs for	Total Costs for All NNSA Site Line Items	Line Items	2,391,842	474,900 1	123,174 2	217,335	229,842	322,234	338,623	321,834	309,500	52,200	2,200	1	
F. Non-N	F. Non-NNSA Line Items							DBC												-	
			_					PE&D													
	No "Non-NNSA" Line Items		_				-	П	1	1					1			1	•		
								Total (TPC)	1		,			1	1	1	'	1	'		
					T	Total Costs for N	for Non-NNSA Line Items (OS)	Items (OS)	'			'	'		'			1			
							Tota	Total Cito Conto	010100	47.4.000	C 171 CC1	017 33E	010 010	100000	667 866	AC0 100	200 500	60.000	00000		
							1010	DIEC COSES	710,170,77			CCC'/17	750'677	407/776	000/000	170/170			Z,200		-

Attachment A

Attachment A-3 FY09-2018 Ten-Year Site Plan NNSA - LANL Facilities and Infrastructure Cost Projection Spreadsheet RTBF/Operations of Facilities for LANL Site (\$000\$)

Weise Weise <t< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>(\$000\$)</th><th>s)</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>									(\$000\$)	s)												
Matrix Period Matrix Matrix<																						
Maine with with with the product of the maine of t			Project	Mission	Mission Dep		Danner Joo	Funding	Pri	or Years'	E					(2012						
	Priority	Project Name	Number	Dependency	Program	Reduction	Eliminated	Type											Y 2015	FY 2016	FY 2017	FY 2018
Notational year with ye	(1)	(2)	(3)		(4a)	(5)	(9)	(2)	(8)	(6)				(13)	-	-	16)	(17)	(18)	(19)	(20)	(21)
128 129 <td>ecurity /</td> <td>Assets Consolidation Program (Super Va</td> <td>ault Type Room</td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td>	ecurity /	Assets Consolidation Program (Super Va	ault Type Room		1										1				-			
Heat The image Num	ц	*Machine Room TA-22-120	TBD	QW	NA	TBD	•	GPP	1,500	1	•	1,500	1	1	•	1	1	•	1	1	1	1
The field of the second	F	*Machine Room TA-3-1498	TBD	NMD	NA	TBD	1	GPP	4,000	•	•	4,000	•	1	•	1	1		1	1	1	1
dist Tot Not Poc Tot And For And For And For For <td>н</td> <td>*Main Service Center TA-3-510</td> <td>TBD</td> <td>NMD</td> <td>NA</td> <td>TBD</td> <td></td> <td>GPP</td> <td>4,800</td> <td>1</td> <td>•</td> <td>4,800</td> <td>1</td> <td>1</td> <td>•</td> <td>1</td> <td></td> <td>1</td> <td></td> <td>1</td> <td>1</td> <td>1</td>	н	*Main Service Center TA-3-510	TBD	NMD	NA	TBD		GPP	4,800	1	•	4,800	1	1	•	1		1		1	1	1
Indiration for A39-PNM LNN-indirate MC PMC P	н	*Media Center TA-55-028	TBD	DMD	PMC	TBD	1	GPP	3,000	1	•	3,000	•	•	•		•	•	•	•	•	
Index (X-3) - PM XXX - Gala WC PMC - CP 4.96 5.91 1.94 -	trategic	Investments																				
runtlikention NA MC PMC PMC <th< td=""><td>о ц</td><td>PF-4 Switchgear Installation (TA-55) - FY06 SI</td><td></td><td>MC</td><td>PMC</td><td>1</td><td>1</td><td>GPP</td><td>4,596</td><td>550</td><td>2,812</td><td>1,234</td><td>- 1</td><td>•</td><td>-</td><td>•</td><td></td><td>1</td><td>1</td><td>1</td><td>1</td><td></td></th<>	о ц	PF-4 Switchgear Installation (TA-55) - FY06 SI		MC	PMC	1	1	GPP	4,596	550	2,812	1,234	- 1	•	-	•		1	1	1	1	
with Mindender Table Mode	ц	*PF-4 Vault Efficiency and Risk Reduction	NA	MC	PMC	1		н	1,808		1,808											
	н	*Room 60 Refurbishment - Maintenance Activities	TBD	MD	PMC	3,071	1	ш	6,570	1	3,170	2,400	1,000		1	1						1
	F	TA-3 ESA Shops Be Decontamination	TBD	MD	DSW	•	•	Е	1,655	•	521	1,134	•		•	1		•				1
alment BD MD SG \cdot	F	*DE Gun Relocation	TBD	MD	SCI	TBD	(4,828)	GPP	4,328	1	300	528	3,500	-	•	•	•	1				
The field controls in the control of the con	н	*TA-9-21 Lab Refurbishment	TBD	MD	DS	•	1	GPP		1		605	1	1	1	1	1	1		1	1	1
w facility Cartols TBD W c DSW TBD M C DSW TBD M C DSM TBD M C T C C	F	*LANSCE 1L Target	TBD	MC	DSW		1	GPE		-	1	4,075	4,300		1	1			1		1	
twitter Proceed particulation TBD MC TBD MC TBD MC TBD MC TBD MC TBD MC TC	Н	*BTF VTR Reactivation, Facility Controls Upgrades	TBD	MC	DSW	'	'	н	'	1	1	2,178		1	1	ı	,	,	1	1	1	1
with big	H	*RLWTF Process Ops Revitalization	TBD	MD	PMC	TBD		н	,		,	1,531	2,290	•	,	1	•	•	•	•	•	1
i i <td>ц</td> <td>*TA-54 Area G Security Upgrades</td> <td>TBD</td> <td>MD</td> <td>PMC</td> <td>1</td> <td>1</td> <td>Е</td> <td>•</td> <td>1</td> <td>1</td> <td>510</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>'</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td>	ц	*TA-54 Area G Security Upgrades	TBD	MD	PMC	1	1	Е	•	1	1	510	1	1	1	1	'	1	1	1	1	1
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	F	*RANT Modifications	TBD	MD	PMC	1	1	н	1	1		204		-			-					
intersection NA MC PMC NC PMC	ц	*WCRR Upgrades	TBD	MD	PMC	1	1	GPP	1	1	1	66	1	1	1	1	1	1		1	1	1
arts founge IBD MC BSW TBD TPD GPP	н	*TA-55 Crit Safety	NA	MC	PMC	1	1	Е	•	1	1	2,100	•	•	1	1	•	•	1	•	•	1
estimating for is competed for each some eter for and some et	ц	*Non-HE Classified Parts Storage Relocation	TBD	MC	MSD	TBD	1	GPP	'	,	1	1,721	1	I	,	,	'	'	1	1	1	I
S ⁽⁶⁾ Various TBD TBD TBD CPP I6I,400 - </td <td>1</td> <td>Outyear Strategic Investments (Funding for Strategic Investments is competed for each</td> <td></td> <td>TBD</td> <td>TBD</td> <td>TBD</td> <td>TBD</td> <td>E/GPP</td> <td>111,950</td> <td>1</td> <td>1</td> <td>6,040</td> <td>9,270</td> <td>9,550</td> <td>9,830</td> <td></td> <td>10,430</td> <td>10,750</td> <td>11,070</td> <td>11,400</td> <td>11,740</td> <td>11,740</td>	1	Outyear Strategic Investments (Funding for Strategic Investments is competed for each		TBD	TBD	TBD	TBD	E/GPP	111,950	1	1	6,040	9,270	9,550	9,830		10,430	10,750	11,070	11,400	11,740	11,740
Same Various IBO IB	4	year)		1000				000	4 / 4 400									000 10	000 000	00,00	000 00	000 00
tota and Wing Closure TBD WC FMC E 393 3937 3937 5937 3937 - - - - - - - - - - - - - - - - - - - 3937 3937 3937 3937 - <	2 ootprint	Post FIRP Investments	Various	IBD	18D	18D	'	GPP	161,400	'	'	'	'	'	'	'	'	31,200	31,800	32,400	33,000	33,000
Removal of MFT-344, 395, and 399 TBD NMD NA 120 (5,99) E 104 -<	ш	CMR Hazard Reduction and Wing Closure - FY05	TBD	MC	PMC	1	1	ш	3, 937	3,937	1	1	1	1	,	1	,	,	,	1	1	1
Removal of MTF-4f2 and 405 TBD NMD NA 31 (2,300) E 66 - 65 - 6 1 6 1	н	Removal of MPF-394, 395, and 399	TBD	NMD	NA	120	(5,095)	н	104	1	104			•	•		•	•	•	•	•	
*Decommision and Demolition of Building NA NA/D NA 3,140 (13,487) E 1,267 -	н	Removal of MPF-402 and 405	TBD	NMD	NA	31	(2,907)	ш	65		65	•	•	•	•	•	•	•		•	•	
Desire Desire Desire E 1,784 - 1,784 - 1,784 - 1,784 - <	н	*Decommision and Demolition of Building 40 at Technical Area 15	NA	NMD	NA	3,140	(13,487)	ш	1,267	,	1,267	I	1	I	1	1	'	1	1	I	I	I
Construct DARHT Warehouse TBD MC DSW TBD (4,000) GPP 1,700 - 1,200	н	De-inventory of Area L MLLW + MDA L Closure	TBD	NMD	NA	,	,	Е	1,784	ı	1,784		ı	,	1	ı		I		1	1	I
	F	*Construct DARHT Warehouse	TBD	MC	DSW	TBD	(4,000)	GPP	1,700	-	1,200	500		-	•	•	-					ł

Attachment A

Attachment A-4(a) FY09-2018 Ten-Year Site Plan NNSA - LANL Facilities and Infrastructure Cost Projection Spreadsheet Facilities and Infrastructure Recapitalization Program (FIRP) for LANL Site

						(+)											
		-	Deferred		Mission	FY03 Baseline Deferred	GSF Added	-		- - 1			00000	C HOR / AL		211/ 2/11	Ì
Project Name Score (2) (2a)	FIRRS Score (2a)	Project Number (3)	Maint. Identifier (3a)	Mission Dependency (4)	Dependency Program (4a)	Maintenance Reduction (5)	or Eliminated (6)	Funding Type (7)	Total (8)	Prior Years Funding (9)	FY 2007 (10)	FY 2008 FYNSP (11)	FY 2009 FYNSP (12)	FY 2010 FYNSP (13)	FY 2011 FYNSP (14)	FY 2012 FYNSP (15)	FY 2013 (16)
TA-16-193 Reconfiguration	60 LA	LANL-R-05-01	LANL-R-05-01	MD	DSW	3,923	1	GPP	992	666	(2)		1				
Lujan Center Ventilation and Cooling Uperade	60 LA	LANL-R-05-06	LANL-R-05-06	MD	DSW	006	I	GPP	1,128	393	735				1		
TA-50 Waste Treatment Plant Deficiencies - 1A (Room 60	65 LA	LANL-R-05-11	LANL-DM-07G30-02A	MD	PMC	6,868		GPP/E	3,899	3,658	241						
Modifications) *TA-53-3 Hot Water System	55 LA	LA-R-06-03	LANL-DM-05D30-02	MC	DSW	1,573		ш	2,567	251	2,316		1				
*TA-53-3Sector B Chilled Water System	55 LA		LANL-DM-05D30-04	MC	DSW	175	1	ш	1,568	359	1,209		1	1	1	1	
TA-53-3 Sector B 208-480V	55 LA	55 LA-R-06-05	LANL-DM-05D50-02	MC	DSW	871	1	Е	2,171	289	1,882		1				
FY07 RAMP Support	60 LA	LANL-R-07-01	LANL-R-06-05	MC/MD/NMD	NA			Е	1,436		1,436		-	-	1	1	
IA-55 Roof Systems Deficiencies ME)	55 LA	LANL-R-07-03	LANL-DM-06B30-02	MD	PMC	689	1	GPP/E	1,614	1	1,614	-	-	-			
TA-09, -15, -16, -35, -39, -53 and -69 Roof Systems Deficiencies (ME)	55 LA	LANL-R-07-04	LANL-DM-06B30-03	DMN/DM	NA	864		GPP/E	858		858						
Roof Systems Deficiencies (ME)	55 LA	LANL-R-07-05	LANL-DM-06B30-03	MD/NMD	NA	1,294	1	GPP/E	2,568	1	2,568		I		1		
TA-15, -16 and -55 Plumbing and Fire Protection Systems Deficiencies (MF)	50 LA	LANL-R-07-06	10-06D90-WD-7NV7	MD/NMD	DSW	484	1	GPP/E	1,206	1	1,206	1	1	I	I	1	1
Interior/Exterior Building Systems and Grounds Deficiencies	50 LA	LANL-R-07-07	LANL-DM-06D30-01; LANL-DM-09D50-02; LANL-DM-09X90-05; 1 ANI -DM-08X90-07	MC/MD/NMD	NA	1,126		н	2,514	1	2,514		1	1	1	1	
*Lab Wide Building Systems and Ground Deficiencies	45 LA	LANL-R-07-08	LANL-DM-06X90-01; LANL-DM-06X90-01;	MC/MD/NMD	NA	212	1	ш	1,039		1,039						
FY07 Planning for FY08 NA Recapitalization Projects		LANL-P-07-01	LANL-P-07-01	MC/MD/NMD	NA		1	GPP/E	4,291		4,291						
FY08 RAMP Support	60 LA	LANL-R-08-01	LANL-R-06-05	MC/MD/NMD	NA	1,498	-	Е	2,598	1	-	2,598	-	-	1	1	
Building 55-0004 Electrical Switch Upgrade	55 TBD		LANL-DM-05D50-04	MC	PMC	815	1	GPP/E	1,886	1		1,886	1			,	
*TA03-0029 Refurbish Supply Air, Wings 5, 7	50 LA	50 LANL-R-08-03	LANL-DM-07D50-01; LANL-DM-07D90-01	MC	PMC	1,232		GPP	2,644			2,644			1		
*TA03-0029 Replace Heating Ventilation Air Conditioning Exhaust Fans Wings 5,7	50 LA	LANL-R-08-04	LANL-DM-07D50-01; LANL-DM-07D90-01	MC	PMC	1,732		Е	3,724		-	3,724					
TA-53 Correct Roof Deficiencies	50 LA	LANL-R-08-05	LANL-DM-08B30-01	MC/NMD	NA	4,627	I	GPP/E	4,761		1	4,761	1		1		
*TA 55-4 Roof Refurbishment South	55 LA	LANL-R-08-6	LANL-DM-05B30-01	MC	PMC	2,246	T	н	3,000	-	-	3,000	-	-	1	1	
Electrical Infrastructure Safety Upgrade (TA-15-0183)	50 LA	LANL-R-08-07	LANL-R-06-01	MD	MSD	196	I	GPP	2,033		1	2,033					
Electrical Infrastructure Safety Upgrade TA-9-21	50 LA	LANL-R-08-08	LANL-R-XX-01	MD	SCI	T	I	GPP/E	3,440		-	1,540	1,900	-	1	I	
FY08 Planning for FY09 Recapitalization Projects	NA LA	LA-P-08-01	NA	MC/MD/NMD	NA	I	1	GPP/E	2,800		·	2,800	1			1	
FY09 Planning for FY10 Recanitalization Projects	NA TBD		NA	MC/MD/NMD	NA		1	GPP/E	5,200	1	-		5,200				
FY09 RAMP Support	60 TBD	0	LANL-R-06-05	MC/MD/NMD	NA	TBD		Е	1,200				1,200				
'TA-55-4 Roof Refurbishment North	55 LA	LANL-R-08-6	LANL-DM-05B30-01	MC	PMC	2,246		ш	3,000		1		3,000		1		
*RLW Collection Vault Repairs A-B	55 TBD	0	LANL-R-06-14	UMD	PMC		1	ш	TBD				TBD			'	
TA-53-3 Sector C Chilled Water Wetern	55 TBD		LANL-DM-05D30-04	MC	DSW	1,339	1	Е	1,568	1			359	1,209			

Los Alamos National Laboratory

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Attachment A-4(a) FY09-2018 Ten-Year Site Plan NNSA - LANL Facilities and Infrastructure Cost Projection Spreadsheet Facilities and Infrastructure Recapitalization Program (FIRP) for LANL Site

Attachment A

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(14) | ' | | 1

 | 1,209 | 1,882 | 1,209
 | 1,882 | |

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 | 1 | | 3,800 | 1 | 4,000 |
| FY 2010
FYNSP
(13) | 1,882 | 1,209 | 1,882

 | 1 | | '
 | | |

 | 1 | '
 | 1 |

 | 1 | ' | 1 | 2,100 | 2,100
 | 1 | | 1 | | 2,800 | 5,600
 | 1,300 | TBD | 3,800 | 1,500 | 3,900 |
| FY 2009
FYNSP
(12) | 289 | 359 | 289

 | 359 | 289 | 359
 | 289 | 359 | 289

 | 359 | 289
 | 359 | 359

 | 2,115 | 1,000 | 400 | 2,100 | 2,200
 | 1,650 | 906 | 2,000 | 1,675 | 2,100 |
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| FY 2008
FYNSP
(11) | ' | | '

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| Total
(8) | 2,171 | 1,568 | 2,171

 | 1,568 | 2,171 | 1,568
 | 2,171 | 1,568 | 2,171

 | 1,568 | 2,171
 | 1,568 | 1,568

 | 2,630 | 1,515 | 400 | 2,900 | 4,300
 | 1,650 | 006 | 2,000 | 1,675 | 4,900 | 5,600
 | 1,300 | TBD | 2,600 | 1,500 | 15,300 |
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 | ANL-R-06-10 | 0-06X90-MQ-JNV | 0-06X60-MQ-JNA |)-060L0-M0-1NA | 0-06X20-MG-JNA
 | ANL-DM-08D30-(| ANL-DM-06D30-0 | ANL-R-XX-04 | 301-DM-06D50-0 | ANL-DM-05CMR | A
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lectrical System Revitalization | TA-53-3 Sector D Chilled Wa
vstem | Building 53-0003 Sector D 208
80V Electrical System
evitalization

 | TA-53-3 Sector E Chilled Wat | Building 53-0003 Sector E 208
lectrical System Revitalization | I A-53-3 Sector F Chilled Wat.
vstem
 | I A-53-3 Sector F 208-480V
lectrical System Revitalization | I A-53-3 Sector G Chilled Wat
ystem | I A-53-3 Sector G 208-480V
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ystem | IA-53-3 Sector H 208-480V
lectrical System Revitalization
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ystem | BTA-53-3 Sector S Chilled W avstem

 | lectrical Infrastructure Safety
pgrade (TA-53-2) | A-16, 22, 36, 39 and 53
onstruction Deficiencies | Site Wide Exterior Constructi
•eficiencies | Y08 Mechanical Systems DM
eductions (ME) | Y08 Architectural and Structu
M Reductions (Mission Esser
 | Y08 HVAC DM Reductions
Mission Essential) | A-53 and -55 HVAC Systems
•eficiencies (ME) - A | Radiography Facility Upgrad
[A-8-23] | A-16, -53 and -55 Electrical
vstems Deficiencies | MR Mechanical Systems
Veficiencies | Y10 Planning for FY11
ecanitalization Proiects
 | Y10 FIRP Funded D&D | RLW Collection Vault Repair: | Y08 Electrical System DM
eductions (Mission Essential) | A-08, -35, -54 and -55 Fire
rotection Systems Deficiencie
v/E) | TA-15 and -21 Electrical Systems
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Los Alamos National Laboratory

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Attachment A

Attachment A-4(a) FY090-2018 Ten-Year Site Plan NNSA - LANL Facilities and Infrastructure Cost Projection Spreadsheet Facilities and Infrastructure Rece<u>sticalization</u> Program (FIRP) for LANL Site

						(\$000s)	(\$000\$)											
				Freedor		Minim	FY03 Baseline	CCE A Adod										
FIRRS Priority (1)	Project Name (2)	FIRRS Score (2a)	Project Number (3)	Deterred Maint. Identifier (3a)	Mission Dependency (4)	Mission Dependency Program (4a)	Deterred Maintenance Reduction (5)	GSF Added or Eliminated (6)	Funding Type (7)	Total (8)	Prior Years' Funding (9)	FY 2007 (10)	FY 2008 FYNSP (11)	FY 2009 FYNSP (12)	FY 2010 FYNSP (13)	FY 2011 FYNSP (14)	FY 2012 FYNSP (15)	FY 2013 (16)
44	Site Wide Interior Construction Deficiencies		TBD	LANL-DM-09X90-05	MC/MD/NMD	NA	1,010	1		2,500	1			1	2,500	1		1
45	TA-03, -16, -36, -37, -40, -53, -54 and - 55 Roof Systems Deficiencies (ME)	45	TBD	LANL-DM-09B30-04	MC/MD/NMD	NA	782		GPP/E	2,000	'			1	2,000	'	'	
46	Construction Deficiencies (ME)	45	TBD	LANL-DM-09C30-01	MC/MD/NMD	NA	6,951		GPP/E	14,400	•	1		1	3,300	3,500	3,700	3,900
47	FY11 Planning for FY12 Recanitalization Projects	NA	TBD	NA	MC/MD/NMD	NA				5,428	1	I	1	1	1	5,428	1	I
48	FY11 RAMP Support	9	TBD	LANL-R-06-05	MC/MD/NMD	NA	TBD	1	н	1,400	1	1		1	'	1,400	'	'
49	*RLW Collection Vault Repairs E-F		L .	LANL-R-06-14	NMD	PMC			E	TBD	•			1	1	TBD	1	1
50	Bldg 09-0045 Electrical System Deficiencies	55	TBD	LANL-DM-05D50-01	MD	SCI		1	GPP/E	1,800	1	I	1	1	1	1,800	1	,
51	TA-03, -08, -09, -11, -15 and -16 Plumbing and Fire Protection Systems Deficiencies (ME)	55	TBD	LANL-DM-08D90-01	MC/MD/NMD	NA	1,399		GPP/E	3,500						3,500	1	
52	Electrical System Deficiencies (Mission Essential)	55	TBD	LANL-DM-08D50-01	MC	PMC	9,582		GPP/E	14,400	1					4,800	4,800	4,800
53	FY12 Planning for FY13 Recapitalization Projects	NA	TBD	NA	MC/MD/NMD	NA	1	1	GPP/E	5,728	1	1	1	1	1	1	5,728	1
54	FY12 RAMP Support	60	TBD	LANL-R-06-05	MC/MD/NMD	NA			GPP/E	1,600		1			1	1	1,600	1
55	*RLW Collection Vault Repairs G-H	55	TBD	LANL-R-06-14	NMD	PMC		1	ш	TBD	1	I	1	1	1	1	TBD	I
56	Bldg 55-0004 Electrical Distribution System Deficiencies	55	TBD	LANL-DM-05D50-04	MC	PMC	815		GPP/E	1,900	1			1		1	1,900	1
	TA-03, -08, -09, -11, -15 and -16																	
57	Plumbing and Fire Protection Systems Deficiencies (ME)	55	TBD	LANL-DM-09D90-01	MC/MD/NMD	NA	854	'	GPP/E	2,100	1	T	1	1	1	1	2,100	I
58	Bldg 53-0002 HVAC System Deficiencies	55	TBD	LANL-DM-05D30-09	NMD	DSW	2,108	1	GPP/E	5,300	1	-			1	1	2,700	2,600
59	TA-53 and -55 Mechanical Systems Deficiencies (ME) - B	45	TBD	LANL-DM-06D90-05B	MC/MD/NMD	NA	66	'	GPP/E	200	'	I	'	1	1	1	200	ı
60	JNETF (TA-16-302)	45	TBD	LA-R-XX-03	MD	DSW	728	5	GPP/E	2,200	•				1		2,200	1
61	TA-9-38,40,42,46 Stm to Hot Water Htg. Conversion	40	TBD	LANL-R-06-11	MC/MD	SCI	72	1	GPP	341	341	I	I	I	I	I	I	I.
62	TA-55 Heating and Cooling Systems Deficiencies (ME)	55	TBD	LANL-DM-09D30-05	NMD	PMC	2,363	1	GPP/E	5,900	1	1	1	1			3,000	2,900
63	FY13 RAMP Support	60	TBD	LANL-R-06-05	MC/MD/NMD	NA	1	1	GPP/E	1,592	-	1		1	1	1	1	1,592
64	*RLW Collection Vault Repairs J-K	55	55 TBD	LANL-R-06-14	DMD	PMC	I	1	Е	TBD	1	I	1	I	1	1	- T	TBD
65	Classified Parts Storage	55	TBD	LANL-R-XX-06	MD	DSW	722		GPP/E	1,800								1,800
99	biag 53-0005 Electrical Lignung Systems Deficiencies (ME)	55	TBD	LANL-DM-06D50-01	MC	DSW	642	1	GPP/E	1,600	1	T	1	ľ	1	1	1	1,600
67	TA-55 Electrical Systems Deficiencies	55	TBD	LANL-DM-06D50-03	MC/MD	PMC	721		GPP/E	1,800	1							1,800
68	Shock and Detonation Physics Facility	50	TBD	LANL-R-04-04	MD	DSW	413	1		1,000	i.	1	1	1	1	1		1,000
69	TA-16 and -55 Electrical Systems Deficiencies (Mission Essential)	50	TBD	LANL-DM-09D50-05	MD	PMC/DSW	2,353		GPP/E	4,800	1					'		4,800
70	Internal Construction Deficiencies (Mission Essential	45	TBD	LANL-DM-09X90-06	MC/MD/NMD	NA	579	1	GPP/E	1,000	1	1	1	1	1	1	1	1,000
71	FY08 Construction and Specialty Systems Deficiencies (ME)	40	TBD	LANL-DM-08C30-03	MC	PMC	7,233	I	GPP/E	4,500	I	1	1	I	I	T	I	4,500
									TOTAL (FIRP)	237,666	7,320	21,902	24,986	32,046	37,082	38,110	38,110	38,110

Attachment A

Attachment A-4(b) FY09-2018 Ten-Year Site Plan NNSA - LANL Facilities and Infrastructure Cost Projection Spreadsheet Other Facilities and Infrastructure Recapitalization Program (FIRP) Projects for LANL Site

						(\$000s)	• •									
FIRRS		FIRRS	Project	Deferred Maintenance	Mission	Mission Dependency	FY04 Identified Deferred Maintenance	GSF Added or	Funding							
Priority (1)	Project Name (2)	Score (2a)	Number (3)	Identifier(s) (3a)	Dependency (4)	Program (4a)	Reduction (5)	Eliminated (6)	Type (7)	Total (8)	FY 2008 I (11)	FY 2009 1 (12)	FY 2010 (13)	FY 2011 (14)	FY 2012 (15)	FY 2013 (16)
12	Electrical Infrastructure Safety Upgrade (TA-53-2)	50	TBD	LANL-R-06-10	NMD	NA	1,974	1	GPP	2,115	1	1	1	I	I	1
28	*RLW Collection TA-48 to TA-50	55	TBD	LANL-R-06-14	NMD	PMC	TBD	I	н	4,300	1	1	1	1	I	I
45	Bldg 09-0045 Electrical System Deficiencies	55	TBD	LANL-DM-05D50-01	MD	SCI	901		GPP/E	1,800	1,800	1	1	1	1	1
46	Bldg 55-0004 Electrical Distribution System Deficiencies	55	TBD	LANL-DM-05D50-04	MC	PMC	815	I	GPP/E	1,600	1,600	I	1	1	I	ı
49	TA-16, -53 and -55 Electrical Systems Deficiencies	55	TBD	LANL-DM-06D50-03	NMD	NA	8,198	I	GPP/E	1,200	1	1,200	1	1	1	I
53	TA-11 and -53 Construction and Specialty Systems Deficiencies (ME)	45	TBD	LANL-DM-06X90-02	MC/MD/NMD	PMC/DSW	177		GPP/E	350	1	350	1	'	1	'
64	Bldg 53-0002 HVAC System Deficiencies	55	TBD	LANL-DM-05D30-09	NMD	DSW	1,893	1	GPP/E	3,800	ı	1	1,600	2,200	I	ı
65	TA-53 and -55 Mechanical Systems Deficiencies (ME) - B	45	TBD	LANL-DM-06D90-05B	MC/MD/NMD	NA	2,331	1	GPP/E	4,600	1	1	4,600	ı	1	I
99	TA-55 Electrical Systems Deficiencies	55	TBD	LANL-DM-06D50-03	MC/MD	PMC	7,443	1	GPP/E	12,400	'	'	4,000	4,200	4,200	'
67	Bldg 53-0002 Electrical System Deficiencies	55	TBD	LANL-DM-05D50-03	NMD	DSW	1,382	1	GPP/E	2,600			2,600	-		1
68	Roof System Deficiencies (ME)	55	TBD	LANL-DM-06B30-06	MC/MD	DSW/ENG	695		GPP/E	1,400		1	1,400	1	1	'
69	Bldg 16-0260 HVAC Systems Deficiencies (ME)	45	TBD	LANL-DM-06D30-01	MC	DSW	567	1	GPP/E	1,100	,	1	ı	1,100	ı	ı
20	TA-16 Air Handling and Ductwork Systems Deficiencies (ME)	45	TBD	LANL-DM-06D30-04	MC	DSW	1,116		GPP/E	2,200	1		1	2,200	1	
75	*BLDG 03-0066 HV AC Sy stem Deficiencies	45	TBD	LANL-DNM-08DD30-01MC		PMC	4,925	1	GPP/E	6,600	1	1	4,800	4,800	'	1
29	Bldg 53-0003 Electrical Lighting Systems Deficiencies (ME)	55	TBD	LANL-DM-06D50-01	MC	DSW	560	1	GPP/E	1,300	1	1	'	1,300	1	1
80	Construction and Specialty Systems Deficiencies (ME)	45	TBD	LANL-DM-06X90-02	MC/MD/NMD	NA	393	-	GPP/E	800	1	1	'	1	800	1
83	Life Extension Project (TA-9-21)	55	TBD	LANL-R-XX-05	MD	SCI	4,002		GPP/E	4,800	1	1	1	4,800	1	1
16	Electrical Infrastructure Safety Upgrade (TA-35-2)*	50	TBD	LANL-R-06-07	NMD	NA	1,236	1	GPP	6,600	1	1	1	1	3,300	3,300
92	Electrical Infrastructure Safety Upgrade (TA-46-1)	50	TBD	LANL-R-06-09	NMD	NA	332	I	GPP	2,970	,	I	1	1	2,970	ı
66	Electrical System Deficiencies (Mission Essential)	55	TBD	LANL-DM-08D50-01	MC	PMC	2,372	1	GPP/E	4,700	1	1	1	'	4,700	'
100	Mechanical Systems Deficiencies (ME)	55	TBD	LANL-DM-09D30-01	MC/MD/NMD	NA	741		GPP/E	1,500	1	1	1	1	1,500	'
103	TA-50 HVAC Systems Deficiencies (Mission Essential)	55	TBD	LANL-DM-09D30-06	MD	PMC	3,355	1	GPP/E	4,800	1	1	1	1	I	4,800
106	Electrical Infrastructure Safety Upgrade (TA-39-2)	50	TBD	LANL-R-09-02	NMD	NA	63	1	GPP	1,000	I	I	1	I	1	1,000
114	TA-16 and -55 Electrical Systems Deficiencies (Mission Essential)	50	TBD	LANL-DM-09D50-05	MD	PMC/DSW	3,543	1	GPP/E	4,800	1	1	'	'	'	4,800
115	Internal Construction Deficiencies (Mission Essential	45	TBD	LANL-DM-09X90-06	MC/MD/NMD NA	NA	3,419	1	GPP/E	4,800	'	'	'	1	'	4,800
									TOTAL Other FIRP	87,135	3,400	1,550	19,000	20,600	17,470	18,700

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Attachment A-5 FY09-2018 Ten-Year Site Plan	Other Facilities and Infrastructure Cost Projection Spreadsheet	For NNSA - LANL Site	(\$000s)
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		FΥ	2018 (21)											-				1
		FΥ	2017 (20)					1										'
		FΥ	2016 (19)									'		'				'
		FΥ	2015 (18)	1		1		1	1			1	1	1		1		I
		FY	2014 (17)			1		1	1		1	1	1	1		I.		I
		FΥ	2013 (16)	1		1	1	,	1		1		1	1	,	1		1
	FY	2012	FYNSP (15)	1				'	1				1	1		1		1
	FY	2011		1		1		1	T			1	1	1	1	I		I
	FY	2010				1		,	1		1		400	1	1	3,400	3,900	1
	FY	2009	•	1,500		600		TBD	1		1		3,000	1,500	1,500	1,500	1,000	200
	FY	2008		1		100	450	TBD	1	180	60	135		1		1		1
		FY		1		1	I		40	1,487	3,769	2,291	1	I	,		1	I.
	Prior	Years	Funding (9)	1		1	1		260	175	480		1	1	1	1		1
Site				1,500	-	700	450	1,150	600	1,842	4,309	2,426	3,400	1,500	1,500	4,900	4,900	200
(\$000s) (\$000s)		60	Total (8)															
For NNSA - LANL Site (\$000s)		Funding	Type (7)	TOTAL at Reduction		GPP	GPP	TOTAL ogram - TBD	GPP	GPP	GPP	GPP	GPP	GPP	GPP	GPP	GPP	GPP
<u>В</u>	GSF	Added or	Eliminated (6)	Program - Thre		1		nis category); Pr								8,000		
	Deferred	Maintenance	Reduction (5)	TOTAL GPPs (facilities & infrastructure reported under this category); Program - Threat Reduction		1	1	TOTAL GPPs (facilities & infrastructure reported under this category); Program - TBD	1		I		I	I	1	1	1	I
	Mission	Dependency	Program (4a)	tructure reported u	Program: TBD)	ΥN	ΥN	ities & infrastructu	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		Mission	Dependency (4)	facilities & infras	n Spreadsheet (W	ΥN	GPPs (facil	NA	NA	ΝA	NA	NA	NA	NA	ΥN	NA	NA
		Project	Number (3)		cture Cost Projectio	LANL-08-	LANL-08-		LANL-05-450	LANL-06-451	1 LANL-06-452	LANL-07-101986	LANL-07-428	LANL-07-453	LANL-09-	LANL-08-429	LANL-08-454	LANL-08-436
			Project Name (2)		NNSA Facilities and Infrastructure Cost Projection Spreadsheet (Program: 1	NISC SCIF (Design only)	HRL Condensate Recovery	GPPs (facilities &) CPPs (facilities &)	TA-48-1 Duct Washdown Pollution Prevention System	TA-3 Utility Corridor	Pajarito Corridor Road and Parking Project	Super VTR	Upgrade Diamond Drive/Eniwetok Drive Intersection	Road Alignment and Intersection at TA-54	*TA-33 Septic Replacement Project	Construct Computing and Communications Operations Building	Otowi Building Heating Ventilation Air Conditioning Systems Upgrades	Building 16-0171 Water Tank Refurbishment
			Priority (1)		NNSA Fac	Ŧ	Ŧ		F	Ł	μ	Ŀ						

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Attachment A-5	FY09-2018 Ten-Year Site Plan Other Facilities and Infrastructure Cost Projection Spreadsheet	For NNSA - LANL Site	(COODe)
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										, - .	_								
	FY 2018	(21)	'			'				10,000	10,000								- 1
	FY 2017	(20)		1	-					10,000	10,000		-			-	1	I	1
	FY 2016	(19)		I	1	1	1	1		10,000	10,000		1			1	1	I	1
	FY 2015	(18)		1		'	,		,	10,000	10,000		1			TBD	1	1	TBD
	FY 2014	(17)		1	-	I	1	1	1	10,000	10,000		-			TBD	1	TBD	TBD
	FY 2013	(16)	1	1	1	1	1	1		10,000	10,000		1			TBD	TBD	TBD	TBD
	FY 2012 FYNSP	(15)		I	-	2,000	3,400	3,400		1	8,800		-			TBD	TBD	TBD	TBD
	FY 2011 FYNSP	(14)		3,400	2,000	1,000	1,500	1,500		1	9,400		13,000	13,000		TBD	TBD	TBD	TBD
	FY 2010 FYNSP	(13)	1	1,500	1	1	1	1	,	1	9,200		15,000	15,000		TBD	Dan	TBD	TBD
	-	(12)	500	1	1	1	1	1	1	1	9,700		4,000	4,000		TBD	TBD	TBD	TBD
	2	(11)		1	-	1		1		1	375		-	1		TBD	TBD	TBD	TBD
	FY 2007	(10)		,		'	1	1		1	7,587		175	175		1	1	i	1
	Prior Years Funding	(6)		I		1	'			1	1,215			i.	lities)	1	1	1	
ANL Site		(8)	500	4,900	2,000	3,000	4,900	4,900			46,277		32,175	32,175	ninated Faci	1,051,000	516,000	214,000	1,781,000
For NNSA - LANL Site (\$000s)	Funding Type	(2)	GPP	GPP	GPP	GPP	GPP	GPP	GPP	GPP	TOTAL is category)		Е	TOTAL is category)	cess Contar	TBD	TBD	TBD	TOTAL s category)
For	or ted	(9)	,	10,000	I	1	TBD	TBD		1	eported under thi		315,737	eported under thi	agement for Pro	TBD	I	TBD	eported under thi
	Deferred Maintenance Reduction	(5)	I	I	ı	I	1		1		TOTAL NNSA Institutional GPPs (facilities & infrastructure reported under this category	stitutional)	32,398	TOTAL Non-NNSA Institutional (facilities & infrastructure reported under this calegory	vironmental Man	TBD	I	TBD	TOTAL Environmental Manazement (facilities & infrastructure reported under this category
	Mission Dependency Program	(1 a)	NA	NA	NA	NA	TBD	TBD	NA	NA	onal GPPs (faciliti	neet (Program: In	NA	stitutional (facilitic	neet (Program: En	ΑN	NA	NA	unagement (facilitie
	Mission Dependency	(4)	NA	NA	NA	NA	TBD	TBD	NA	NA	NNSA Instituti	jection Spreadsl	NA	Non-NNSA In	jection Spreadsl	NA	NA	NA	invironmental Me
	Project Number	(3)	LANL-08-440	LANL-08-434	LANL-08-438	LANL-09-455	LANL-TBD	LANL-TBD	LANL-TBD-444	LANL-TBD-		tructure Cost Proj	LANL-06-DD-13		tructure Cost Proj	LANL-EM	LANL-EM	LANL-EM	LL.
	Project Name	(2)	*Technical Area 50 Sewer Upgrade	Construct Wellness Center Replacement	Electrical Upgrade for Institutional Computing	Pajarito/Pecos Tunnel	*Low Level Counting Assays at Technical Area 48	Quantum Institute	Road Safety Upgrades LANL-TBD-444	TBD		Non-NNSA Facilities and Infrastructure Cost Projection Spreadsheet (Program: Institutional)	SM-43 Decommision and Demolition ⁽²⁸⁾		Non-NNSA Facilities and Infrastructure Cost Projection Spreadsheet (Program: Environmental Management for Process Contaminated Facilities)	Environmental Restoration (including ground water monitoring)	Dispose of legacy TRU Waste	Decontamination and Demolition at TA-54 and TA-21 (process contaminated)	
	Priority	(1)										Non-NNS	1		Non-NNS.	1	7	ń	

Attachment A

Attachment A-5 FY09-2018 Ten-Year Site Plan Other Facilities and Infrastructure Cost Projection Spreadsheet For NNSA - LANL Site

r	_							
	FY 2018 (21)				'			
	FY 2017 (20)		-	1		ı	-	
	FY 2016 (19)		1		1	ı		
	FY 2015 (18)	1	1		1	T		
	FY 2014 (17)	1	1	1	1	ı		
	FY 2013 (16)	1	TBD	TBD	I	I	1	TBD
	FY 2012 FYNSP (15)	TBD	TBD	TBD	1	I.	-	TBD
	FY 2011 FYNSP (14)	TBD	TBD	TBD	1	1		TBD
	FY 2010 FYNSP (13)	TBD	TBD	TBD	TBD	TBD	TBD	TBD
	FY 2009 FYNSP (12)	TBD	TBD	TBD	TBD	TBD	TBD	TBD
	FY 2008 FYNSP (11)	TBD	TBD	TBD	TBD	TBD	TBD	TBD
	FY 2007 (10)	- TBD	1	1	1	I.	- TBD	TBD
	Prior Years Funding (9)		1			ı		
NL Site	Total (8)	24,000	30,076	6,821	10,500	180	6,008	77,585
For NNSA - LANL Site (\$000s)	Funding Type (7)	TBD	TBD	TBD	TBD	TBD	TBD	TOTAL s category)
For	GSF Added or 1 Eliminated (6)		TBD	TBD	CIBIT	TBD	TBD	eported under this
	Deferred Maintenance Reduction (5)	-	TBD	TBD	TBD	TBD	TBD	د infrastructure r
	Mission Dependency Program (4a)	WN Parantar or :	NA	NA	NA	NA	NA	TOTAL To be requested of NNSA/DOE (facilities & infrastructure reported under this calegory)
	Mission Dependency (4)	VN N	NA	NA	NA	ΥN	CIMN	oe requested of NN
	Project Number (3)	LANL-NNSA	LANL-NNSA	LANL-NNSA	LANL-NNSA	LANL-NNSA	LANL-NNSA	Toł
	Project Name (2)	1 Dispose of FY99-FY11 LANL-NNSA NA NA NA NA TBD - 24,00	D&D at TA-54 (Non- process-contaminated) LANL-NNSA facility and infrastructure removal	Resource Conservation Recovery LANL-NNSA Act Closure at TA-54	Relocation of LLW compactor and radioactive waste characterization and verification activities from MDA-G to another location at TA- 54	Relocation of hazardous waste characterization and verification activities from MDA-L to another location at TA- 54	D&D at TA-21 (non- process contaminated)	
	Priority (1)	1	р	m	-44	ιŋ	9	

Attachment A

Attachment A-6(a) - FY 2009 -- FY 2010 FY09-2018 Ten-Year Site Plan NNSA - LANL Facilities and Infrastructure Cost Projection Spreadsheet Currently Funded Security Infrastructure Projects for LANL Site (\$000s)

							Planned	Planned Funding Source	ource	
Priority Project Name Site Specific D (1) (2) (3) (3)		D	Mission Dependency (4)	Mission Dependency Program (4a)	Estimated Total Project Cost (8)	Line Item A-1,2	RTBF A-3	FIRP A-4	Other A-5	DBT Related? Y or N
List FY 08 Projects										
NMSSUP II LANL 05-D-070.1	LANL 05-D-070.1		MC	PMC	240,000	Х				Υ
List FY 09 Projects										
*NMSSUP II LANL 05-D-070.1	LANL 05-D-070.1		MC	PMC	240,000	×				Υ
*Machine Room TA-22-120 TBD	TBD		MD	NA	1,500		Х			Ν
*Machine Room TA-3-1498 TBD	TBD		NMD	NA	4,000		Х			N
*Main Service Center TA-3-510 TBD	TBD		NMD	NA	4,800		×			Z
*Media Center TA-55-028 TBD	TBD		NMD	PMC	3,000		×			N
List FY10 Projects										
*NMSSUP II LANL 05-D-070.1	LANL 05-D-070.1		MC	PMC	240,000	Х				Υ
	•									

Attachment A

Attachment A-6(b) - FY09 and FY10 Unfunded FY09-2018 Ten-Year Site Plan NNSA - LANL Facilities and Infrastructure Cost Projection Spreadsheet Security Infrastructure Projects for LANL Site

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	Prioritization		Site Specific	Mission	Mission Dependency		Proposed for	DBT
Priority (1)	Score (2a)	Project Name (2)	Project Number (3)	Dependency (4)	Program (4a)	Total (8)	either FY09 or FY10 funding	Related? Y or N
		*2008 Graded Security Protection						;
1	73	Planning (08 GSP) Implementation	NA	MC	PMC	45,000	FY10	Y
2	63	*Vehicle Inspection Post Upgrade	NA	MC	DNS	1,000	FY09	Ν
З	40	*Replacement Security Integration Services Building	NA	MD	DNS	4,860	F Y09	Z
4	40	*Consolidated Safeguards and Security Management Building	NA	MD	DNS	4,860	FY10	Z
					TOTAL	55.720		

Attachment A Notes TYSP FY2009 - 2018

NNSA Facilities and Infrastructure Cost Projection Spreadsheets LANL Site

Note #	Subject	Description
General	General Attachment Notes	
(1)	Priority	Each of the funding types is prioritized in sequential order (from 1 to xyz) for site facilities and infrastructure projects/activities. For funded projects – an "F" is shown in the priority column.
(2)	Project Name	Changes from prior year plan are indicated with an asterisk "*" in front of the applicable Project Name
(3)	Project Number / Project Identification Number	Assigned either by Headquarters for active projects or by the Laboratory for planned projects.
(3a)	Deferred Maintenance Identifier	Unique identifier linked to the Legacy Deferred Maintenance Baseline that will be tracked through the life of the FIRP program.
(4)	Mission Dependency	Defined as Mission Critical (MC); Mission Dependent, Not Critical (MD); or Not Mission Dependent (NMD).
(4 a)	Mission Dependency Program	If there is no clear predominant program activity then the Not Applicable (NA) designation is utilitized.
(5)	Deferred Maintenance Reduction	Deferred maintenance reduction from the FY03 Deferred Maintenance Baseline (\$000) due directly or indirectly from completion of the project.
(9)	Gross Square Footage	Total gross square footage constructed or eliminated as a result of the project or activity.
(7)	Funding Type	The type of funding associated with each activity / project, as applicable using the following abbreviations: LI: Capital Funded Line Item Project ALT: Alternative Financing OPC: Other Project Costs Project Engineering & Design E E: Expense GPP: General Plant Project IGPP: Institutional General Plant Project
(8)	Total	Total Project Cost (TPC) sums the OPC, PE&D, and LI cost by fiscal year. Some project costs are yet to be determined (TBD).
(6)	Prior Years Funding	The actual prior years funding associated with the project (sum of the prior years funded through FY 2002 actual) for each funding type is listed.
(10)	FY 2007	The FY 2007 obligation authority / funding associated with the project.

Attachment A Notes TYSP FY2009 - 2018

NNSA Facilities and Infrastructure Cost Projection Spreadsheets

		NNSA Facilities and Intrastructure Cost Projection Spreadsheets LANL Site
Note #	Subject	Description
(11)	FY 2008	These data is consistent with the Consolidated Appropriations Act, 2008 P. L. 110-161
(12)-(16)	FY 2009 – FY 2013	These data are consistent with the Appendix 1 LANL funding target of the FY 2009 - 2018 TYSP guidance and the FY 2009-2013 President's Budget / FYNSP.
(17)–(21)	(17)–(21) FY 2014 – FY 2018	Provides a requirements based case that is constrained by the inflation rate based upon deflators listed in table 1.3 of the historical tables of the FY 2008 budget of the US government (Appendix 1 of TYSP guidance). Outyears beyond the FYNSP through 2018 reflect an inflation-based case using the Appendix 1 of the FY09-18 TYSP guidance.
Attachm	Attachment A-1 Specific Notes	
(22)	NSSB	The gross square footage for this project includes the NSSB and LASO Buildings less the Administration Building disposition.
(23)	CMRR	This project includes three phases: Phase A: Radiological Laboratory/Utility/Office Building Phase B: Special Facilities Equipment Phase C: Nuclear Facility
(24)	TRU Waste Facility Project	
(25)	To Be Determined (TBD) totals to be	To Be Determined (TBD) totals to be included with the RTBF total and total site costs when available.
Table A	Table A-2 Specific Notes	
None		
Attachm	Attachment A-3 Specific Notes	
(26)	Post FIRP Investments	LANL recognizes that at the conclusion of FIRP, additional investment in real property will be needed. Post FIRP investments are expected to be similar to the investments made by the recapitalization portion of FIRP.
(27)	Outyear Footprint Reduction (Funding for Strategic Investments is competed for each year)	The initial implementation of SI/FR requires the Associate Directorates within LANL to compete for these funds on a yearly basis. As this program element matures, the process will require competition that looks a year ahead so that planning is done one year with execution to occur the following year. It is expected that as decisions on Complex Transformation are made and Directorates complete consolidation plans, better outyear definition will be provided.

Attachment A Notes TYSP FY2009 - 2018

NNSA Facilities and Infrastructure Cost Projection Spreadsheets

LANL Site

Note #	Subject	Description
Attachm	Attachment A-4 Specific Notes	
(1)	FIRRS Priority	Prioritizes each FIRP project in sequential order. Includes all current and future projects and those prior year projects not yet completed. An "F" indicates that the project is funded.
(2a)	FIRRS Score (A-4a and A-4b only)	Score entered from the Facility and Infrastructure Recapitalization Rating Score matrix as presented in the FIRP PEP.
The purp	ose of A-4b is to allow each site to pr	The purpose of A-4b is to allow each site to propose/forecast additional high-priority NNSA FIRP projects with deferred maintenance deficiences identified in FY2004 for
headquai	neadquarters consideration.	
Attachm	Attachment A-5 Specific Notes	
Initiation	of institutional projects noted are con	Initiation of institutional projects noted are contingent on funding availability as determined through the Laboratory's indirect budget prioritization process.
(28)	SM-43 (Administration Building) D&D	Institutionally funded Other Project Costs component of the Nuclear Security Sciences Building Line Item Project
Attachm	Attachment A-6 Specific Notes	
	Security Infrastructure Prioritization Score (A-6b only)	Score entered from the Security Infrastructure Rating Matrix presented in the FY09-18 TYSP guidance, Appendix 3.
(29)	Attachment A-6b	The Future-Years Nuclear Security Program budget targets currently include funds for projects associated with 2005 Defense Basis Threat Policy Implementation beginning in FY 2010.
All futur	e year cost profiles are preliminary dı	All future year cost profiles are preliminary due to mission and budget uncertainty,

FY09 TYSP • • • • • • • • •

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Attachment B.

Potential Facilities & Infrastructure Impacts of Future Nuclear Weapons Complex Planning

Attachment B identifies potential F&I impacts of Complex Transformation at the Laboratory. It provides a single perspective on the magnitude of investment and footprint associated with transformation driven construction and disposition for the affected mission areas proposed in the draft SPEIS.

Attachment B includes planned construction projects previously described in Attachment A and planned disposition projects described in Attachment E. Facilities noted for transfer to other programs are only listed in Attachment B and E1a.

The Laboratory's proposed designation as the NWC's "Center of Excellence for Plutonium" has a significant influence on Attachment B due to ongoing construction investment in TA-50, TA-55 and the disposition of the existing CMR complex.

Attachment B was developed with the following assumptions:

- proposed construction is dependent on an ROD for the draft SPEIS
- facilities that are placed in excess prior to FY08 are not impacted by Complex Transformation
- facilities without mission dependency and listed in E-1 are not included in Attachment B
- the "start/needed date" for facilities proposed for demolition is the estimated fiscal year the facility will be placed in excess
- ongoing construction projects that support Complex Transformation are included

FY09 TYSP • • • • • • • • •

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FY09-2018 Ten-Year Site Plan NNSA Potential Facilities and Infrastructure Impacts of Future Nuclear Weapons Complex Planning for Los Alamos National Laboratory Site (\$000) Attachment B



Itential tential page: Project or 5 (s) n Pending Facility Facility n Pending 14-0006 n 14-0005 n 14-00034 n 15-0185 n 15-0185 n 15-0186 n 15-0186 n 15-0186 n 15-0186 n 15-0186 n 15-0186 n 15-0199 n 15-0199 n 15-0199 n 15-0198 n 15-0199 n 15-0199 n 36-0003 n 36-0003 n 36-0013 n 36-0013 n <th></th>										
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DSW Discontinue Operations Demolition 14-0040 DSW Discontinue Operations Demolition 15-0027 DAA Discontinue Operations Demolition 15-0027 DAA Discontinue Operations Demolition 15-0027 DAA Discontinue Operations Demolition 15-0044 DAA Discontinue Operations Demolition 15-0044 DA Discontinue Operations Demolition 15-0044 DA Discontinue Operations Demolition 15-0044 NA Discontinue Operations Demolition 15-0045 NA Discontinue Operations Demolition 15-0045 NA Discontinue Operations Demolition 15-0045 NA Discontinue Operations Demolition 15-0047 DSW Discontinue Operations Demolition 15-0036 NA Discontinue Operations Demolition 15-0030 DSW Discontinue Operations Demolition 15-0030 DSW Discontinue Op	Demolition		TROL BLDG	342	- ۲	Yes	FY10	FY11	TBD	
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SCI Discontinue Operations Demolition 36-0019 DSW Discontinue Operations Demolition 36-0045 DSW Discontinue Operations Demolition 36-0047 DSW Discontinue Operations Demolition 36-0047 DSN Discontinue Operations Demolition 36-0045 SCI Discontinue Operations Demolition 36-0053 SCI Discontinue Operations Demolition 36-0053 SCI Discontinue Operations Demolition 36-0055 SCI Discontinue Operations Demolition 36-0055 SCI Discontinue Operations Demolition 36-0056 SCI Discontinue Operations Demolition 36-0056 SCI Discontinue Operations Demolition 36-0056 SCI Discontinue Operations Demolition 36-0107 SCI Discontinue Operations Demolition 36-0107 SCI Discontinue Operations Demolition 36-0107	Demolition		INSTRUMENT CHAMBER	110	- Y	Yes	FY15	FY16	TBD	
DSW Discontinue Operations Demolition 36-0046 DSW Discontinue Operations Demolition 36-0047 NA Discontinue Operations Demolition 36-0047 SCI Discontinue Operations Demolition 36-0047 SCI Discontinue Operations Demolition 36-0053 SCI Discontinue Operations Demolition 36-0055 SCI Discontinue Operations Demolition 36-0055 SCI Discontinue Operations Demolition 36-0055 SCI Discontinue Operations Demolition 36-0086 SCI Discontinue Operations Demolition 36-0086 SCI Discontinue Operations Demolition 36-0107 SCI Discontinue Operations Demolition 36-0107 SCI Discontinue Operations Demolition 36-0107	Demolition		INSTRUMENT CHAMBER	110	- Y		FY10	FY16	TBD	
DSW Discontinue Operations Demolition 36-0047 NA Discontinue Operations Demolition 36-0033 SCI Discontinue Operations Demolition 36-0055 SCI Discontinue Operations Demolition 36-0055 SCI Discontinue Operations Demolition 36-0055 SCI Discontinue Operations Demolition 36-0086 SCI Discontinue Operations Demolition 36-0086 SCI Discontinue Operations Demolition 36-0107 SCI Discontinue Operations Demolition 36-0107 SCI Discontinue Operations Demolition 36-0107	Demolition		AGE BLDG.	952	-			FY15	TBD	
NA Discontinue Operations Demolition 36-0053 SCI Discontinue Operations Demolition 36-0055 SCI Discontinue Operations Demolition 36-0055 SCI Discontinue Operations Demolition 36-0055 SCI Discontinue Operations Demolition 36-0056 SCI Discontinue Operations Demolition 36-0107 SCI Discontinue Operations Demolition 36-0107 SCI Discontinue Operations Demolition 36-0107	Demolition		AGE BLDG.	362	-			FY15	TBD	
SCI Discontinue Operations Demolition 36-0055 SCI Discontinue Operations Demolition 36-0085 SCI Discontinue Operations Demolition 36-0086 SCI Discontinue Operations Demolition 36-0107	Demolition		RAGE BLDG.	297	-	NA F		FY15	TBD	
SCI Discontinue Operations Demolition 36-0082 SCI Discontinue Operations Demolition 36-0086 SCI Discontinue Operations Demolition 36-0107 SCI Discontinue Operations Demolition 36-0107 SCI Discontinue Operations Demolition 36-0107	Demolition		TROL BLDG	732	- 7		_	FY16	TBD	
SCI Discontinue Operations Demolition 36-0086 SCI Discontinue Operations Demolition 36-0107 SCI Discontinue Operations Demolition 36-0107 SCI Discontinue Operations Demolition 36-0107	Demolition		LER	665	'	NA	FY09	FY10	TBD	
SCI Discontinue Operations Demolition 36-0107 SCI Discontinue Operations Demolition 36-0120 SCI Discontinue Operations Demolition 36-0120 SCI Discontinue Operations Tomortion 36-0120	Demolition		E INTENSE X-KAY	3,012	- Y	Yes	FY15	FY16	TBD	
SCI Discontinue Operations Demolition 36-0120	Demolition		TROL BUNKER	1,055	- Y		FY09	FY16	TBD	
POI Discontinue Descritore Transfor 20 0000	Demolition		SHRAPNEL PROTECTION	78	-		FY15	FY16	TBD	
	Transfer		OFFICE BLDG	13,238	-		FY10	FY10	TBD	
High Explosives R&D SCI Discontinue Operations Transfer 39-0003 MAGAZINE	Transfer		AZINE	400	-	NA	FY10	FY10	TBD	

Los Alamos National Laboratory

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Attachment B

Attachment B FY09-2018 Ten-Year Site Plan NNSA Potential Facilities and Infrastructure Impacts of Future Nuclear Weapons Complex Planning for Los Alamos National Laboratory Site (\$000)

Mission	Mission	Site	Potential Facility	Project or Eacility	Deviant or	CSF	CSF	Within	Start/ Needed	Estimated	Total	
Area	Program	Impact ¹	Impact ²	Number	Facility Name	Eliminated	Added	FYNSP? ³	Date	Date	Funding	Notes
(1)		(3) (3)	(4)	(5)	(9)	(2)	(8)	(6)	(10)	(10)	(12)	(12)
High Explosives R&D	SCI	Discontinue Operations	Transfer	39-0004	TRIM BLDG	839	-	NA	FY10	FY10	TBD	
High Explosives R&D	SCI	Discontinue Operations	Transfer	39-0005	READY MAGAZINE	144	-	NA	FY10	FY10	TBD	
High Explosives R&D	SCI	Discontinue Operations	Transfer	39-0006	FIRING CHAMBER #1	561	1	NA	FY10	FY10	TBD	
High Explosives R&D	SCI	Discontinue Operations	Transfer	39-0009	Z HOSE HOUSE C108694	40	1	NA	FY10	FY10	TBD	
High Explosives R&D	SCI	Discontinue Operations	Transfer	39-0010	Z HOSE HOUSE C108695	40	1	Yes	FY10	FY10	TBD	
High Explosives R&D	SCI	Discontinue Operations	Transfer	39-0056	GUN BLDG	276	-	NA	FY10	FY10	TBD	
High Explosives R&D	SCI	Discontinue Operations	Transfer	39-0057	FIRING CHAMBER	578	1	NA	FY10	FY10	TBD	
High Explosives R&D	SCI	Discontinue Operations	Transfer	39-0062	LABORATORY	1,536	-	NA	FY10	FY10	TBD	
High Explosives R&D	SCI	Discontinue Operations	Transfer	39-0063	EQUIPMENT SHELTER	262	1	NA	FY10	FY10	TBD	
High Explosives R&D	SCI	Discontinue Operations	Transfer	39-0064	EQUIPMENT SHELTER	262		NA	FY10	FY10	TBD	
High Explosives R&D	sci	Discontinue Operations	Transfer	39-0067	CAPACITOR BANK ENCLOSURE	280	-	NA	FY10	FY10	TBD	
High Explosives R&D	SCI	Discontinue Operations	Transfer	39-0068	STORAGE BLDG	252		NA	FY10	FY10	TBD	
High Explosives R&D	sci	Discontinue Operations	Transfer	39-0069	GUN BLDG	2,613	1	NA	FY10	FY10	TBD	
High Explosives R&D	SCI	Discontinue Operations	Transfer	39-0077	MAGAZINE	205	1	NA	FY10	FY10	TBD	
High Explosives R&D	SCI	Discontinue Operations	Transfer	39-0088	FIRING CHAMBER	1,317	1	NA	FY10	FY10	TBD	
High Explosives R&D	SCI	Discontinue Operations	Transfer	39-0089	GAS GUN SUPPORT BLDG	1,800	1	NA	FY10	FY10	TBD	
High Explosives R&D	SCI	Discontinue Operations	Transfer	39-0095	BUNKER	1,100	-	NA	FY10	FY10	TBD	
High Explosives R&D	SCI	Discontinue Operations	Transfer	39-0096	ACCESS TUNNEL	340		NA	FY10	FY10	TBD	
High Explosives R&D	SCI	Discontinue Operations	Transfer	39-0097	BUNKER	2.072		NA	FY10	FY10	TBD	
High Explosives R&D	sci	Discontinue Operations	Transfer	39-0098	APPLIED PHYSICS BLDG	6,605	1	NA	FY10	FY10	TBD	
High Explosives R&D	SCI	Discontinue Operations	Transfer	39-0111	PULSED POWER BLDG	1,215	'	NA	FY10	FY10	TBD	
High Explosives R&D	sci	Discontinue Operations	Transfer	39-0138	FIRING SITE SUPPORT BLDG	96	'	NA	FY10	FY10	TBD	
High Explosives R&D	sci	Discontinue Operations	Transfer	39-0175	BUNKER	864	1	NA	FY10	FY10	TBD	
High Explosives R&D	SCI	Discontinue Operations	Transfer	39-0176	ACCESS TUNNEL	614	'	NA	FY10	FY10	TBD	
High Explosives R&D	sci	Discontinue Operations	Transfer	39-0177	BUNKER	129	'	NA	FY10	FY10	TBD	
High Explosives R&D	SCI	Discontinue Operations	Transfer	39-0183	GUARD STATION #468	108	'	NA	FY10	FY10	TBD	
High Explosives R&D	SCI	Discontinue Operations	Transfer	39-0207	MORGAN SHED	37		NA	FY10	FY10	TBD	
High Explosives R&D	sci	Discontinue Operations	Demolition	40-0012	HE CHEMISTRY RESEARCH BLDG	1,342	1	Yes	FY15	FY16	TBD	
High Explosives R&D	sci	Discontinue Operations	Demolition	40-0090	TRANSPORTABLE	1,587	1	Yes	FY15	FY16	TBD	
Tritium R&D	DSW	Donor	Demolition	16-0205	TRITIUM PROCESSING FACILITY	9,186		No	FY16	FY17	TBD	
Tritium R&D	DSW	Donor	Demolition	16-0450	PROCESS BLDG	14,460	1	No	FY16	FY17	TBD	
Major Environmental Test Facilities	DSW	Discontinue Operations	Disposition Pending	11-0001	STORAGE BLDG	618	1	Yes	FY09	FY11	TBD S	See E1a, historical
Major Environmental Test Facilities	DSW	Discontinue Operations	Disposition Pending	11-0002	CONTROL BLDG	831	1	Yes	FY09	FY11	TBD S	See E1a, historical
Major Environmental Test Facilities	DSW	Discontinue Operations	Disposition Pending	11-0003	CONTROL BUILDING	529	1	Yes	FY09	FY11		See E1a, historical
Major Environmental Test Facilities	DSW	Discontinue Operations	Demolition	11-0030	VIBRATION TEST BLDG	2,001	1	Yes	FY11	FY11	TBD	
Major Environmental Test Facilities	DSW	Discontinue Operations	Demolition	11-0004	CONTROL BUILDING	706	-	Yes	FY09	FY11	TBD	
Major Environmental Test Facilities	DSW	Discontinue Operations	Demolition	11-0024	SHOP/ASSEMBLY BLDG	3,685	1	Yes	FY09	FY11	TBD	
Major Environmental Test Facilities	MSD	Discontinue Operations	Demolition	11-0033	CONTROL BLDG/EQUIPMENT SHELTER	66		Yes	FY09	FY11	TBD	
Maior Environmental Test Facilities	DSW	Discontinue Operations	Demolition	11-0036	HE MAGAZINE	82	1	Yes	FΥ09	FY11	TBD S	TBD See E1a, historical

 Attachment B •

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	NNS	A Potential Facilities and	d Infrastructure Impa	icts of Future N	NNSA Potential Facilities and Infrastructure Impacts of Future Nuclear Weapons Complex Planning for Los Alamos National Laboratory Site (\$000)	anning for Los	Alamos	National La	boratory	ite (\$000)		
			Potontial						C++/	Tot for the L	Tatal	
Mission	Dependency	Site	Facility	Tacility	Project or	GSF	GSF	Within	Needed	Completetion	Estimated	
Area (1)	Program (2)	Impact ¹ (3)	Impact ² (4)	Number (5)	Facility Name (6)	Eliminated (7)	Added (8)	FYNSP? ³ (9)	Date (10)	Date (10)	Funding (12)	Notes (12)
Plutonium Manufacturing and R&D	PMC	Discontinue Operations	Demolition	03-0029	CMR LABORATORY	566,849	i i	Yes	TBD	TBD	TBD	(mar)
Plutonium Manufacturing and R&D	PMC	Discontinue Operations	Demolition	03-0503	GUARD STATION	349	1	Yes	TBD	TBD	TBD	
Plutonium Manufacturing and R&D	PMC	Discontinue Operations	Demolition	03-0564	EQUIPMENT SHELTER	80		Yes	TBD	TBD	TBD	
Plutonium Manufacturing and R&D	PMC	Discontinue Operations	Demolition	03-0586	MECHANICAL BLDG	336	1	Yes	TBD	TBD	TBD	CMR Complex D&D to be
Plutonium Manufacturing and R&D	PMC	Discontinue Operations	Demolition	03-0154	HOT WASTE PUMP HOUSE	400	I	Yes	TBD	TBD	TBD	completed approximately 3 to 5 years after completion of the
Plutonium Manufacturing and R&D	PMC	Discontinue Operations	Demolition	03-1610	GUARD STATION	288	1	Yes	TBD	TBD	TBD	CMRR Project 04-D-125
Plutonium Manufacturing and R&D	PMC	Discontinue Operations	Demolition	03-1614	GUARD STATION	64	1	Yes	TBD	TBD	TBD	
Plutonium Manufacturing and R&D	PMC	Discontinue Operations	Demolition	03-1615	GUARD STATION	64	-	Yes	TBD	TBD	TBD	
Plutonium Manufacturing and R&D	PMC	Discontinue Operations	Demolition	03-2206	STORAGE BUILDING	3,028	-	Yes	TBD	TBD	TBD	
Plutonium Manufacturing and R&D	PMC	Discontinue Operations	Demolition	50-0001	LIQUID DISPOSAL PLANT	7,000	1	No	TBD	TBD	TBD	
Plutonium Manufacturing and R&D	PMC	Discontinue Operations	Demolition	55-0009	GUARD STATION #402	1,160	'	Yes	FY10	FY10	TBD	
Plutonium Manufacturing and R&D Plutonium Manufacturing and R&D	PMC	Discontinue Operations	Demolition	55-0043	GENERATOR BLDG	103	' '	Yes Yes	FY11 FV11	FY11 FV11	TBD	
Plutonium Manufacturing and R&D	PMC	Discontinue Operations	Demolition	55-0264	PLUTONIUM ACCESS	4.262		Yes	FY09	FY09	TBD	
	0				CENTER	10-11		***			224	
Plutonium Manufacturing and R&D	PMC	Receiver	New Construction	04-D-125	CHEMISTRY AND METALLURGY RESEARCH REPLACEMENT - RADIOLOGICAL ABORATORY/UTILITY/ OFFICE BUILDING		220,000	Yes	FY04	FY10	1,371,756	
Plutonium Manufacturing and R&D	PMC	Receiver	New Construction	04-D-125	CHEMISTRY AND METALLURGY RESEARCH REPLACEMENT - NUCLEAR FACILITY	1	287,000	Yes	FY04	TBD		
Plutonium Manufacturing and R&D	PMC	Receiver	New Construction	07-D-220	RADIOACTIVE LIQUID WASTE TREATMENT FACILITY		16,000	Yes	FY07	FY11	92,302	
Plutonium Manufacturing and R&D	PMC	Receiver	Renovation	08-D-804	TA-55 INFRASTRUCTURE REINVESTMENT PHASE I	,	1	Yes	FY06	FY10	21,477	
Plutonium Manufacturing and R&D	PMC	Receiver	Renovation	10-D-XXX	TA-55 INFRASTRUCTURE REINVESTMENT PHASE II		1	Yes	FY07	FY15	141,140	
Plutonium Manufacturing and R&D	PMC	Receiver	New Construction	06-D-140.1	TA-55 RADIOGRAPHY FACILITY		5,000	Yes	FY06	TBD	TBD	
Plutonium Manufacturing and R&D	PMC	Receiver	New Construction	07-D-140.2	TRU WASTE FACILITY		28,700	Yes	FY07	TBD	TBD	
Plutonium Manufacturing and R&D	NA	Discontinue Operations	Demolition	101961 WBS #1.07.02.03.01 55-0041	PF-41 DEMOLITION	35,849	1	Yes	FY07	FY08	12,500	
Plutonium Manufacturing and R&D	PMC	Receiver	New Construction	05-D-0170.1 08-D-260	NUCLEAR MATERIALS SAFEGUARDS AND SECURITY UPGRADES		22,000	Yes	FY05	FY12	240,000	
¹ Site Impacts include: (1) Donor; (2) Receiver; (3) Ongoing Operations; (4) Discontinue Operations	eiver; (3) Ongoing	; Operations; (4) Discontinue	• Operations									
² Potential Facility Impacts include: (1) Demolition; (2) Shutdown; (3) Sale; (4) Transfer; (5) Lease (new or Terminiation); (6) Renovation; (7) New Construction	bemolition; (2) Shut	tdown; (3) Sale; (4) Transfer;	(5) Lease (new or Term	iniation); (6) Renc	vation; (7) New Construction							
² Existing or planned project identified in TYSP Attachment A or E (within Site FYNSP constraints)	n TYSP Attachmeni	tt A or E (within Site FYNSP	constraints)									

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Attachment C.

New Buildings and Major Renovation Projects Seeking or Registered for LEED Certification

The new Attachment C spreadsheet is required by the DOE's HPSBWG and Secretary Bodman's TEAM initiatives and reports current Laboratory practices and progress in adhering to LEED criteria in planning, design and construction. The Laboratory is, and will continue to incorporate LEED design criteria into all line item construction and renovation projects.

In December 2002, the Laboratory instituted the *LANL Sustainable Design Guidelines* into its formal planning process. These guidelines identify and mandate planning, architectural, and engineering practices that promote a sustainable environment and concepts that are integral to the LEED design criteria. The guidelines must be implemented in all elements of a project, and cover site selection, landscaping, building design, engineering systems, construction, and building operations. It also prescribes a consistent format to integrate and apply sustainable elements into the Laboratory's planning process.

The Laboratory has been pursuing high performance buildings and LEED building

certifications for many years. Recently completed major construction projects and all new major projects have LEED standards incorporated into all elements of planning and design.

Two notable and recently completed projects, the National Security Sciences Building (NSSB) and the CINT building, were planned and constructed with LEED Silver criteria. The CMRR-RLUOB, currently under construction, is planned to be eligible for LEED Silver Certification. The CMRR-Nuclear Facility, still in the planning phase, is also scheduled for LEED Certification.

The Laboratory has not recently initiated any large scale building renovation projects. Laboratory goals for footprint reduction have placed an emphasis on removing older buildings and structures from the facility inventory. Although several adaptive reuse studies have been conducted on selected Cold War buildings, no funding or programs have successfully been directed towards these projects. They still remain viable renovation projects and are retained for master planning purposes.

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Attachment C

Attachment C FY09-2018 Ten-Year Site Plan

DOE New Buildings and Major Renovation Projects Seeking or Registered for Leadership in Energy and Environmental Design (LEED) Certification

constructs two related buildings. In Construction. This project Construction Complete Construction Complete Construction Complete Construction Complete In Planning In Design In Design Notes (15) Equivalent Certification Level Met and Unregistered Unregistered Unregistered Unregistered In Progress LEED or Date (14)NA NA NA Planned LEED or Certification Level Met and Equivalent Certified Certified Certified Date (13) Silver Silver Silver Gold Gold Occupancy Estimated Data 2015 2012 (12) 2002 2003 2006 2006 2010 TBD Registration Equivalent USGBC or Date (11) NA ΝA ΝA ΝA ΝA ΝA ΝA ΝA 45,645 285,000 18,00055,850 78,309 1,228,803 76,963 Construction Building Cost* (2000) (10)450,000 296,522 34,945 287,000 28,700 169,576 368,900 220,000 Gross Sq. Ft. 6 LANL Site Critical Decision Complete Complete Concept Complete Complete Level 9-0-9-0-9-0-(8) Rating System LEED or Equivalent LEED-NC LEED-NC LEED-NC LEED-NC LEED-NC LEED-NC LEED-NC LEED-NC 6 **Critical Decision 4 and Higher** CENTER FOR INTERGRATED NANO TEC (CINT) **FIMS Property Description** STRATEGIC COMPUTER COMPLEX NATIONAL SECURITY SCIENCES BLDG (NSSB) (9) ΝA NA ΝA ΝA NISC Decision 4 and Higher FIMS Property ID Critical Laboratory and Office) (2) NA ΝA (Utility) NA 55-040003-1400 03-1420 55-0440 03-2327 03-2322 Equivalent Project ID USGBC or (4) NA NA ΝA NA NA ΝA NA NA trategic Computer (NISC) National Security Sciences Bldg (NSSB) Center for Integrated Nano Tech (CINT) TRU Waste Facility aboratory/Utility/ und International Science Complex onproliferation **Project Title** Office Building Chemistry and ecurity Center **Nuclear Facility** hemistry and Replacement -Seplacement -Radiological Metallurgy 3 Metallurgy Research Research omplex Project aboratory os Alamos os Alamos os Alamos os Alamos Jos Alamos os Alamos os Alamos aboratory os Alamos aboratory aboratory Laboratory aboratory aboratory Site (2) aboratory National National National National National Vational National National Vonproliferatic Program (1) Office of Science Defense Program rogram Program efense rogram rogram rogram efense Nuclear Defense Defense Defense Defense

Los Alamos National Laboratory

*All future year cost data are preliminary due to mission and budget uncertainty

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Attachment D.

Establishment of Security Baseline

Attachment D establishes the Laboratory's security baseline at the start of FY08 categorized by facility and system type. The spreadsheet contains a comprehensive description of the total number and size of security areas in the following categories:

- exclusion area
- limited area

- material access area
- PIDAS
- protected area
- security area
- vault-type room
- vital area

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Attachment D FY09-2018 Ten-Year Site Plan Establishment of Security Baseline for LANL Site

	-1	Area (3)	Acres (4)	Linear Feet (5)
PIDAS Protected Area		NA	3	4,085
Other Protected Area	1	654,022	15	NA
Limited Areas	88	549,092,883	12,605	NA
Exclusion Areas	30	225,838	2	NA
Material Access Area (MAA)	1	152,089	3	NA
Vital Areas	I	I	1	NA
Functionally Specialized Security Areas	16	41,919	1	NA
Vault Type Rooms (VTR)	120	338,145	NA	NA

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Attachment E.

Facilities Disposition and New Construction

The Laboratory's investment in consolidation, modernization and the elimination of obsolete facilities is funded by several DOE programs. Funding programs are selected by matching the characteristics of a project to the corresponding objectives of the funding source. Funding programs are called out in Attachment E and provide an overview of the cumulative effect of investment on Laboratory efforts to consolidate.

Attachment E-I: Excess Facilities Footprint Elimination Plan

Attachment E-1 describes NNSA, DOE, and non-DOE facilities placed in excess or that will be placed in excess during the 10-year planning horizon of the FY09 TYSP. Recent Disposition funding programs included FIRP, RTBF, EM Programs, and project-specific sources.

Attachment E-1 identifies the year and funding source for all facilities scheduled for disposition. Attachments E and B present the impact details of a future Laboratory footprint resulting from Complex Transformation and consolidation.

Attachment E-Ia: Facilities Disposition Plan Above FYNSP

New this year, Attachment E-1a describes projects that are outside the FYNSP

constraints and/or out-year funding targets. In addition, this attachment lists transfers to other programs and historic structures scheduled for disposition.

Attachment E-2: New Construction Footprint Added

DOE's implementation policy requires the Laboratory to offset space added by new construction by removing an equivalent amount of existing space. E-2 captures the gsf of all FYNSP approved and completed construction at the site, along with the year of beneficial occupancy, for Line-Item, GPP, IGPP, and other approved projects from FY 2006–2018.

Attachment E-4: Footprint Tracking Summaries

This attachment illustrates Laboratory compliance with DOE directives to offset the footprint of new construction projects by the transfer, sale, or demolition of excess buildings and facilities of equal size. E-4a describes NNSA facilities and E-4b describes all facilities site-wide. The E-4a River Graph illustrates the change in the NNSA Laboratory gsf over time. The E-4b River Graph illustrates changes to site-wide Laboratory gsf.

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Attachment E-1 FY09-2018 Ten-Year Site Plan Facilities Disposition Plan (Within FYNSP/Outyear Planning Targets) LANL Site

Funding	Facility Identification		Mission Dependency		Priority	Gross Square Footage	Excess	Estimated	sition	Yearly S&M Costs	Contaminated	
Source (1)	Number (FIMS) (2)	Facility Name (3)	Program (4)	Priority Score (5)	Rank (6)	(gsf) (7)	Year (8)	Disposition Year (9)	(\$000s) (10)	(\$000s) (12)	(Yes or No) (13)	Notes (14)
FY02 Archived Total						68,161						
FY03 Archived Total						136,416						
FY04 Archived Total						109,586						
FY05 Archived Total						115,896						
FY06 Archived Total						78,628						
	15-0140	Storage Building	NA	NA	NA	1,210	NA	Complete - FIRP	NA	NA	NA	Removed: 1/24/2007
		*Storage Building	NA	NA	NA	86	NA	Complete - FIRP	NA	NA	NA	Removed: 1/23/2007
						1,296		4				
	15-0040	Office And Lab	NA	NA	NA	13,487	NA	Complete - RTBF	NA	36	NA	Removed: 1/23/2007
	15-0476	Trailer	NA	NA	NA	675	NA	Complete - RTBF	NA	2	NA	Removed: 3/13/2007
	53-0394	Transportable	NA	NA	NA	1,692	NA	Complete - RTBF	NA	5	NA	Removed: 9/01/2007
/	53-0395	Transportable	NA	NA	NA	1,711	NA	Complete - RTBF	NA	5	NA	Removed: 9/01/2007
-1	53-0399	Transportable	NA	NA	NA	1,692	NA	Complete - RTBF	NA	ιΩ	NA	Removed: 9/01/2007
-,	53-0402	Transportable	NA	NA	NA	1,455	NA	Complete - RTBF	NA	4	NA	Removed: 9/01/2007
	53-0405	Transportable	NA	NA	NA	1,452	NA	Complete - RTBF	NA	4	NA	Removed: 9/01/2007
						22,164						
	35-0268	Transportable	NA	NA	NA	1,703	NA	Complete - Inst.	NA	NA	NA	Removed: 8/18/07
- 1	35-02.69	Transportable	NA	NA	NA	1,699	NA	Complete - Inst.	NA	NA	NA	Removed: 8/18/07
- 1	35-0270	Transportable	NA	NA	NA	1,688	NA	Complete - Inst.	NA	NA	NA	Removed: 8/18/07
INST.	54-0288	Trailer	NA	NA	NA	673	NA	Complete - Inst.	NA	NA	NA	Removed: 9/28/07
						5,763						
	21-0353	*Trailer	NA	NA NA	AN .	300	NA	Complete - Other	NA	NA .	TBD	Removed: 4/23/07
	39-0101	*Trailer	NA	NA	NA	300	NA	Complete - Other	NA	NA	NA	Salvaged: 3/14/2007
- , 14	53-U382 EE 0120	"Metal Detector Shed	NA	NA	NA	105	NA	Complete - Other	NA	NA	NA	Salvaged: 10/1/2006
.,	55-01.39 55-01.44	1 rauer Trailer	NA	NA	NA	670	NA	Complete - Other Complete - Other	NA	7 6	NA	Removed: 5/8/07 Removed: 5/8/07
	55-0145	Trailer	PMC	NA	NA	677	NA	Complete - Other	NA	0	NA	Removed: 5/8/07
*		A ANDAA	CHITY		170.7	2.719		compress come	1007	4	YMY	
FY07 Archived Total						31,942						
or 2002 -	2007					540,629						
2008 Facility Disnosition												
	16-0243	*Transnortahle	DSW	ΝA	AN	3.241	2008	Complete			Ŋ	
	16.0745	*Transnortable	DSW	NA	NA	1.691	2008	Complete	NA	NA	No	Removed Sentember 12, 2008
	16-0246	*Transportable	DSW	NA	NA	1,051	2008	Complete		64	No	
	55-0041	Nuclear Materials Storage Facility	PMC	NA	NA	35,849	2007	Complete	12,500	108	No	Removed June 26, 2008
	55-0352	*Trailer	PMC	NA	NA	670	2008	Complete	NA	NA	No	Removed June 26, 2008
						43,139						
				-								
.,	21-1001	Records Center	ΝA	Not applicable; this group of	his group of	15,423	2007	Complete		46	No	Structures listed were part of the RTBF supported LAND TRANSFER to los Alamos
	21-1002	Z Warehouse 120 6Th C101157	NA	structures was included as one package and is on land transferred to Los Alamos County.	ncluded as 1 is on land 3s Alamos	15,881	2007	Complete	¥ Z	48	No	County as part of the Department's Land Transfer Agreement. Structures have been vacated as a result of NSSB construction and the move of records to that new facility.
	21-1003	Backflow Preventor C113740	NA			113	2008	Complete		0	No	These structures were transferred on May 9, 2008.
			Ī									

Attachment E-1 FY09-2018 Ten-Year Site Plan Facilities Disposition Plan (Within FYNSP/Outyear Planning Targets) LANL Site

	-	-		-								
	Facility		Mission			Gross Square		1		Yearly Сомесьно		
Funding Source	Number (FIMS)	Facility Name	Dependency Program	Priority Score	Priority Rank	rootage (gsf)	Year	Estimated Disposition Year	1EC to Disposition (\$000s)		(Yes or No)	Notes
(1)	(2)	(3)	(4)	(2)	(9)	(2)	(8)	(6)	(10)	(12)	(13)	(14)
RTBF	37-0001	Storage Bldg	NA	NA	NA	188	2007	Complete		1	No	
RTBF	37-0002	Magazine	NA	NA	NA	192	2007	Complete		1	No	
RTBF	37-0003	Magazine	NA	NA	NA	416	2007	Complete	NIA	1	No	Domestical Lines 19, 2000
RTBF	37-0016	Magazine	NA	NA	NA	800	2007	Complete		2	No	Nettoyed Julie 10, 2000
RTBF	37-0017	Magazine	NA	NA	NA	800	2007	Complete		2	No	
RTBF	37-0027	Storage Building	DSW	NA	NA	800	2007	Complete		2	No	
2008 RTBF Total						34,613						
INSTITUTIONAL	35-0248	*Trailer	NA	NA	NA	602	2008	Complete	NA	NA	TBD	9000 00
INSTITUTIONAL	35-0251	*Trailer	NA	NA	NA	209	2008	Complete	NA	NA	TBD	Nelloved September 20, 2000
2008 Institutional Total						1,418						
2008 Total						79,170						
2009 Facility Disposition 2009 Transformation Disposition Planning	sition Planning								4.000			
E.	16-0430	HE Pressing Building	DSW			19,168	2007	2009	h-		Yes	Compliance complete. Final D&D pending.
Ê	16-0435	Rest House	DSW	34	18	4,439	2007	2009	4,713	86	Yes	Historical Significance: Not eligible
EL	16-0437	Rest House	DSW		1	4,323	2007	2009		1	Yes	Historical Significance: Not eligible
DI	18-0005	*Metal Bldg	NA	32	18	123	1995	2009	12	0	TBD	
TD	18-0028	*Warehouse	NA	36	21	4,782	2007	2009	490	15	Yes	
TD	18-0030	*Main Bldg	NA	36	21	23,367	2008	2009	2,825	72	TBD	
TD	18-0031	*Utility Bldg	NA	30	1	2,093	2009	2009	253	6	TBD	
TD	18-0032	*Critical Assembly Bldg	NA	36	21	3,267	2009	2009	699	10	Yes	
TD	18-0037	*Guard Station	NA	36	21	189	2007	2009	19	1	Yes	
TD	18-0116	*Critical Assembly Bldg	NA	36	21	5,783	2009	2009	1,185	18	Yes	
TD	18-0119	*Storage Bldg	NA	36	21	1,242	2009	2009	255	4	Yes	
TD	18-0122	*Storage Bldg	NA	36	21	1,372	2009	2009	281		Yes	
TD	18-0127	*Pulsed Accelerator Bldg	NA	38	36	9,537	2008	2009	1,368	29	Yes	
TD	18-0128	*Assembly Cover Bldg	NA	30	1	120	2009	2009	12	0	TBD	
£	18-0129	*Reactor Sub-Assembly Building	NA	36	21	6,570	2007	2009	1,346	20	Yes	
£	18-0138	*Warehouse	NA	36	21	1,344	2008	2009	275	4	Yes	
£	18-0141	*Ultra-Sonic Cleaning Bldg	NA	36	21	963	2007	2009	66	ŝ	TBD	Elizibility assessment report and technical
Ē	18-0147	*Office Bldg	NA	36	21	1,298	2007	2009	157	4	TBD	area wide MOA in progress.
DI	18-0168	*Sheba Critical Bldg	NA	8	19	400	2009	2009	123	-1	Yes	
TD	18-0184	*Trailer	NA	30	1	248	2009	2009	25	1	TBD	
TD	18-0187	*Guard Tower	NA	30	1	36	2009	2009	4	0	TBD	
TD	18-0188	*Guard Tower	NA	30	1	36	2008	2009	4	0	TBD	
TD	18-0189	*Secure Enhance Assessment Building	NA	30	1	912	2008	2009	63	ę	TBD	
TD	18-0190	*Guard Station	NA	30	1	523	2008	2009	54	2	TBD	
£.	18-0227	*Accelerator Development Laboratory	NA	30	1	2,838	2007	2009	291	6	TBD	
£	18-0256	*Butler Bldg	NA	36	21	206	2007	2009	93	3	Yes	
DI DI	18-0257	*Trailer	NA	30	1	1,440	2009	2009	148	4	TBD	
£L	18-0258	*Trailer	NA	30	1	1,440	2008	2009	148	4	TBD	
TD	18-0270	*Guard Station	NA	30	1	42	2008	2009	4	0	TBD	
TD	18-0297	*Storage Bldg	NA	30	1	874	2008	2009	90	3	TBD	

Attachment E-1 FY09-2018 Ten-Year Site Plan Facilities Disposition Plan (Within FYNSP/Outyear Planning Targets) LANL Site

Notes (14)	/EY)	- 0	Historical Significance: Eligible. Compliance	documentation completed.		The land will be transferred to Los Alamos County as part of the Department's Land Transfer agreement.	Historical Significance: Eligible. Compliance									Structures will be transferred as operating	facilities to Los Alamos County.		NMSSUP II Line Item Project					D&D Planning Complete Historical Significance: Eligible, documentation reading	accuración permite		The PTH EKMEX Complex was last used in	Z004 to contact from test operations. Dismosition of the Dharmay commlay nlannad	as a group within a single project.	Historical significance: Eligible, compliance	documentation pending.	-												
Contaminated (Yes or No) (13)	NI-	No	No	Yes	No	No	Yes		TBD	TBD	TBD	TBD	TBD	1BD	18D	No	ON1		TBD					Yes	Yes	Yes	Yes	Yes	TBD	TBD	TBD	TBD	Yes	TBD	TBD	TBD	TBD		TBD	TBD	TBD	TBD	TBD	TBD
Yearly S&M Costs (\$000s) (12)	(74)	28	1	2	18	122	18		NA	NA	NA	NA	NA	AN	NA	NIA	ČN.		13					177	34	40	7	1	С	9	2	3	10	2	2	5	11	2	c)	2	3	2	2	2
TEC to Disposition (\$000s) (10)	101	1.317	65	72	845	5,706	1,961		NA	NA	NA	NA	NA	NA 	NA	< IV	C N		Funded			000 0	3,000	9,434	3,477	2,742	505	98	195	438	152	188	690	155	145	92	213	73	91	35	53	65	55	55
Estimated Disposition Year (9)	0000	2009	2009	2009	2009	2009	2009		2009	2009	2009	2009	2009	2009	6007	2009	2009		2009					2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2009	2009	2009	2009	2009	2009	2010	2010	2010
Excess Year (8)	100	2007	2009	1999	2008	2008	2007		2008	2008	2008	2008	2008	2008	8007	2009	2009		2009					1999	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009	2008	2008	2008	2008	2008	2008	2007	2008	2008
Gross Square Footage (gsf) (7)	0.052	9.184	455	500	5,891	39,778	5,748	164,188	360	293	294	1,432	699	1,420	940	2,892	2,816	11,016	4,262	4,262	179,466			56,259	10,841	12,698	2,338	452	905	2,027	702	870	3,194	720	672	1,456	3,389	500	1,452	550	840	584	520	520
Priority Priority Score Rank (5) (6)	00	30	30 1	30 1	30 1	36 21	36 21		36 21				24 46		32 23	These structures are on land	Alamos County.		NA - NMSSUP II funded					36 48					36 48					30 2	34 40	32 26	36 48	36 48	32 26	34 40		30 2		34 40
Mission Dependency Program (4)	NTA	NA	NA	NA	NA	NA	NA		DSW	DSW	DSW	DSW	DSW	DSW	DSW	NA The	NA Alar		PMC N					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	DSW	DSW	DSW	DSW	DSW	DSW	DSW	NA	NA	NA	NA
Facility Name (3)	70)	Z IIIStument Bug CL09224 *Maint: Work Shon & Crafts Bldø	*Calcium Bldg	*Storage Trailer	*Steam Plant	Department Of Energy - Los Alamos Site Office Building	Steam Generating Plant Bldg		*Rover Trailer	*Secure Bldg	*Secure Building	*Trailer	*Trailer	*Doublewide Trailer	"I railer	*Z Airprt Term Fac C116028	*Z Storage Bldg C101150		*Plutonium Access Center					*Ion Beam Facility	*Phermex Chamber / Amp	*Phermex Power Control Bldg	*Detection Chamber	*Phermex Power Supply Bldg	*Phermex Tunnel	*Phermex Tunnel	*Phermex Tunnel	*Phermex Tunnel	*Phermex Multidiag Operations	*Trailer	*Trailer	*Transportable	*Transportable	He Fixture Assembly Facility	*Transportable	*Trailer	*Trailer	*Z Fire Dept Train Fac C117387	*Trailer	*Trailer
Facility Identification Number (FIMS) (2)							43-0041		16-0367				16-0660	16-0661	10-140/	73-0001	73-0002		55-0264				osition Planning	03-0016	15-0184	15-0185	15-0186	15-0189			15-0200	15-0201		15-0447	15-0468	16-0242	16-0244	16-0251	16-0897	16-0898		16-0421		35-0226
Funding Source (1)	(r)		GL	DI	DI	DI	TD	2009 TD Total	TD	RTBF	RTBF	RTBF	RTBF	RTBF	KIBF	RTBF	RTBF	2009 RTBF Total	*S&S	2009 S&S Total	2009 Total	2010 Facility Disposition	2010 I ransformation Disposition Flamming	DI	TD	TD	TD	TD	TD	TD	TD	TD	TD	TD	TD	TD	TD	TD	TD	TD	TD	TD	TD	TD

Attachment E-1 FY09-2018 Ten-Year Site Plan Facilities Disposition Plan (Within FYNSP/Outyear Planning Targets) LANL Site

Funding Source	Facility		Mission		Priority	Gross Square	Excess	1	:	Yearly S&M Costs		
Source	Identification				A READ FOR	Fontage		Fehmated	TEC to Disnosition S&M Costs		Contaminated	
(4)	Number (FIMS)	Facility Name	Program	Priority Score	Rank	(gsf)	Year	Disposition Year	(\$000s)	(\$000s)	(Yes or No)	Notes
(T)	7E 01770	(3)	(4) NI A	(6)	(9)		(8) 2000	(6)	(01)	(71)	(13) TBD	(14)
	35-0250	Transnortahle	NA	8 8	26	1 440	2009	2010	151	4 LC	18D	
D	35-0256	*Transportable	NA	32	26	1.440	2009	2010	151	5	TBD	
Œ	35-0337	*Trailer	NA	30	2	624	2009	2010	65	2	TBD	
TD	35-0382	*Trailer	NA	32	26	732	2009	2010	44	2	TBD	
TD	36-0082	*Trailer	SCI	36	48	665	2009	2010	70	2	Yes	
TD	46-0119	*Modular Office Bldg	NA	30	2	1,443	2009	2010	151	5	TBD	
TD	48-0046	*Transportable	NA	34	40	1,695	2009	2010	178	5	TBD	
TD	48-0047	*Transportable	NA	34	40	1,695	2009	2010	178	5	TBD	
TD	52-0035	*Transportable	NA	30	2	3,360	2007	2010	352	11	TBD	
TD	52-0036	*Transportable	NA	30	2	3,332	2007	2010	349	10	TBD	
TD	52-0105	*Guard Station #417	NA	30	2	27	2007	2010	3	0	TBD	
TD	52-0123	*Guard Station	NA	30	2	150	2007	2010	16	0	TBD	
TD	53-0406	*Transportable	NA	30	2	1,450	2009	2010	152	5	TBD	
TD	53-0407	Transportable	NA	32	26	1,450	2009	2010	152	5	TBD	
TD	53-0456	*Trailer	NA	36	48	300	2009	2010	31	1	TBD	
TD	53-0502	*Trailer	NA	34	40	332	2009	2010	35	1	TBD	
TD	53-0514	*Trailer	NA	30	2	720	2009	2010	75	2	TBD	
DI	53-0525	*Trailer	NA	32	26	550	2009	2010	58	2	TBD	
TD	53-0535	*Trailer	NA	0E	2	320	2009	2010	94	1	TBD	
TD	53-0773	*Iso Rad Trailer	NA	36	48	320	2009	2010	101	1	TBD	
TD	53-1199	*Trailer	DSW	32	26	500	2009	2010	52	2	TBD	
TD	54-0062	*Cover Drum Storage Pads	NA		NA		2008	2010	1		Yes	Structure with 3852 gsf not in FIMS.
CL.	54-0117	*Trailer	NA	30	2	720	2008	2010	75	2	TBD	company a caroby.
E.	54-0185	*Trailer	NA	32	26	617	2008	2010	65	5	TBD	
TD	54-0210	*Trailer	NA	32	26	600	2008	2010	63	2	TBD	
TD	54-0211	*Trailer	NA	32	26	624	2008	2010	92	2	TBD	
DT.	54-0221	*Trailer	NA	30	2	592	2008	2010	62	2	TBD	
TD	54-0464	*Modified Transportainer	PMC	30	2	640	2008	2010	29	2	TBD	
TD	54-1051	*Modified Modular Shed	NA	0E	2	360	2008	2010	88	1	TBD	
1D	54-1052	*Modified Modular Shed	NA	30	2	360	2008	2010	38	1	TBD	
TD	55-0107	*Trailer	PMC	90E	2	720	2008	2010	43	2	TBD	
DT	60-0045	*High Frequency Radio	NA	26	1	2,158	2007	2010	129	9	TBD	
TD	60-0211	*Trailer	NA	30	2	156	2007	2010	16	0	TBD	
TD	60-0212	*Trailer	NA	30	2	191	2007	2010	20	1	TBD	
D T	63-0001	*Maintenance Offices	NA	32	26	2,769	2009	2010	290	6	TBD	
TD	63-0002	*Trailer	NA	32	26	454	2009	2010	48	1	TBD	
DI	63-0003	*Craft Shop	NA	32	26	4,240	2009	2010	649	13	TBD	
CL.	63-0004	*Trailer	NA	36	48	1,460	2009	2010	153	5	TBD	
		*Trailer	NA	36	48	452	2009	2010	47	1	TBD	
TD		*Trailer	NA	30	2	513	2009	2010	54	2	TBD	
TD	63-0093	*Trailer	NA	36	48	664	2009	2010	70	2	TBD	
TD	64-0027	*Trailer	NA	30	2	535	2007	2010	56	2	TBD	
ID	69-0002	*Doublewide Trailer	DSW	30	2	1,680	2007	2010	176	5	TBD	
DI	69-0005	*Trailer Po 7509E	DSW	30	2	715	2007	2010	75	2	TBD	
2010 TD Total						146,366						
EM	21-0155	Tritium Systems Test Assembly	NA	NA: EM funded D&D for	D&D for	16,349	2003	2010	Included in the EM	51	Yes	
EM	21-0213	Lab Supply Warehouse	NA	these process contaminated TA-21 structures.	ntaminated	1,728	2003	2010	Funding for this set of structures at	10	Yes	Historical Significance: Eligible. Compliance documentation completed.
EM	21-0220	Cooling Tower	NA			•	2003	2010	TA-21		Yes	
2010 EM Total						18,077						

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Attachment E-1 FY09-2018 Ten-Year Site Plan Facilities Disposition Plan (Within FYNSP/Outyear Planning Targets) LANL Site

	Notes (14)		Historical Significance: Eligible. Compliance	hereu.																											Π					Need National Register of Historic Places Evaluation			[†] Historic Places	' in progress,
			Historical Significance: Eli documentation comulated																												Funded by NMSSUP II					Need National Regi Evaluation			National Register of Historic Places	evaluation currently in progress.
	Contaminated (Yes or No) (13)	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		No					TBD	TBD	TBD	TBD	Yes
Yearly	S&M Costs (\$000s) (12)	4	4	67		υ	2	4	2	59	1	48	10	2	13	23	1		0,	-	2	1	ς,	2	1			1	1		NA					55	0	1	2	2
	TEC to Disposition (\$000s) (10)	Included in the EM	Funding request for	Project											Included in the EM	Funding Request for	the TA-54 Closure	Project													Funded				3,000	2,171	5	21	100	64
	Estimated Disposition Year (9)	2010	2010	2010		2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010		2010					2011	2011	2011	2011	2011
	Excess Year (8)	2007	2007	2007		2010	2009	2009	2009	2009	2009	2009	2009	2010	2010	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009	2010	2010	2010	2010		2010					2009	2009	2009	2009	900c
Gross Square	Footage (gsf) (7)	1,302	1,302	21,379	23,983	1,617	651	1,136	680	18,610	192	15,181	3,306	510	4,160	7,350	240	360	120	355	734	458	996	702	160	199	199	199	360	58,674	1,160	1,160	248,260			17,174	36	187	638	869
	Priority Rank (6)	z requested	DCess	ructures.					1			1			z requested	ocess	A-54									1	1				P II funded					14	14	14	3	70
	Priority Score (5)	NA: EM funding requested	for this set of process	contaminated structures.											NA: EM funding requested	for this set of process	contaminated TA-54	structures.													NA - NMSSUP II funded					36	36	36	30	CV
Mission	Dependency Program (4)		DSW	NA		PMC	PMC	PMC	PMC	PMC	PMC	PMC	PMC	PMC					PMC	PMC	PMC	PMC	PMC	NA	PMC	NA	AN	NA	PMC		PMC					NA	NA	DSW	DSW	DCIAL
	Facility Name (3)	Equipment Building	Equipment Building	*Office Building		Lab Support Fac Area G	Contaminated Drum Storage	Waste Mgmt Control Facility	Equipment Shelter Bldg	Tension Support Dome (Pad 6)	Modified Morgan Shed	Tension Support Dome	*Tension Support Dome	Trailer	Tension Support Dome	Tension Support Dome	Utility Bldg	Modular Bldg	Hvac Equipment Bldg	Trailer	Control Bldg	Trailer	Trailer	Modular Bldg	Modified Transportainer	Mixed Waste Storage Shed	Mixed Waste Storage Shed	*Mixed Waste Storage Shed	*Trailer		Guard Station #402					*Office Bldg	*Guard Tower- Station #334	*Guard Station	*Storage/Salvage Bldg	AAAACU Doccouch Lab
Facility	Identification Number (FIMS) (2)		21-0167	21-0210 *	Total	54-0002	54-0008 0	54-0011	54-0020	54-0153	54-0156	54-0215															54-1020		54-1058 *	Total	55-0009			ud	sposition Planning	03-0028	03-1814 *	08-0020 *	08-0026 *	
	Funding Source (1)	EM RQST	EM RQST	EM RQST	2010 TA-21 EM Request Total	EM RQST	EM RQST	EM RQST	EM RQST	EM RQST	EM RQST	EM RQST	EM RQST	EM RQST	EM RQST	EM RQST	EM RQST	EM RQST	EM RUST	EM RQSI	EM ROST	EMRQST	EMRQST	EMRQST	EM RQST	EM ROST	EM ROST	EMROST	EM RQST	2010 TA-54 EM Request Total	*S&S	2010 S&S Total	2010 Total	2011 Facility Disposition	2011 Transformation Disposition Planning	TD	DI	TD	TD	TD

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34	DSW
	DSW
30	DSW
8 8	DSW
28	NA
36	DSW
38	DSW
36	DSW
36	DSW
38	DSW
34	NA
8 8	DSW
34	NA
34	NA
36	DSW
34	NA
36	DSW
38	DSW
26	SCI
40	DSW
34	DSW
40	DSW
38	DSW
30	DSW
40	DSW
30	DSW
36	DSW
36	DSW
34	NA
	NA
	NA
	NA
	NA
NA: EM funding requested	NA
for this set of process	NIA
contaminated structures.	NA
T	AN
_	MSD
	DSW
	NA

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Notes (14)	(11)				Historical significance: Eligible. Compliance	documentation pending.										Historical Significance: Eligible, Compliance documentation complete.		Funded by NMSSUP II	•				Historical Simificance: Flicible Compliance	documentation complete	Historical Significance: Eligible, Compliance documentation pending	Needs National Register of Historic Places evaluation.	Needs National Register of Historic Places	evaluation. Needs National Register of Historic Places	evaluation.							Historical significance: Eligible. Compliance Documentation Pending		Historical significance: Eligible. Compliance	Documentation Pending		
Contaminated (Yes or No) (13)	(cr)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes		No		TBD	TBD					No	TBD	TBD	No	1BD	TBD	TBD	TBD	TBD	TBD	TBD	Yes	Yes	Yes	Yes	Voc	No	No
Yearly S&M Costs (\$000s) (12)	171)	14	12	7	14	16	15	1	1	3		45	19	70		1,015		NA						1	1	0	1	16	1	27	5	16	0	1	1	1	1	1	~	0 0	2
TEC to Disposition (\$000s) (10)	(01)			Included in the EM	Funding request for	the TA-21 Closure	Project					Included in the EM	Funding Request for the TA-54 Closure	Project		34,472		Funded					3,000	28	33	6	32	644	62	1,123	224	665	14	43	99	66	99	99	801	111	131
Estimated Disposition Y ear (9)	1100	2011	2011	2010	2010	2010			2011	2011		2011	2011	2011		2011		2011	2011					2012	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012
Excess Year (8)	2009	2009	1995	1998	1998	1998	1998	1998	2009	2007		2010	2010	2007		2008		2011	2011					1992	2009	2009	1993	2009	2009	2008	2009	2009	2009	2009	2009	2009	2009	2009	2009	1994	1994
Gross Square Footage (gsf) (7)		4,227	3,578	2,072	4,275	4,843	4,773	320		900	141,424	13,951	5,829	21,718	41,498	315,737	315,737	163	685	848	606,042			173	208	40	202	4.747	454	8,269	1,647	4,899	101	314	416	416	416	:	416	490	582
Priority Rank (6)	(0)				cequestea	ocess	ructures.					requested	ocess A-54			al e NSSB		I funded	1					4	20	23	4	11	11	2	23	20	27	23	27	27	27	27	22	4	4
Priority Score (5)	(6)			NTA - 17 4 6 - 41 -	NA: EM IUNAING requested	tor this set of pro	contaminated structures.					NA: EM funding requested	for this set of process contaminated TA-54	structures.		NA - Institutional component of the NSSB		NA - NMSSUP II funded						26	30	32	26	28	28	24	32	30	34	32	34	34	34	34	27	8	26
Mission Dependency Program (4)	(H) N A	NA	NA	NA	NA	NA	NA	NA	NA	DSW		PMC	PMC	PMC		NA		PMC	PMC					OFO	OFO	OFO	OFO	NIS	NA	NA	NA	NA	NA	NA	DSW	DSW	DSW	DSW	DSW	NGU	NA
Facility Name (3)	*7 Control Bide C112747	*Rad Liq Wste Dispo	*Warehouse	*Corridor Structure	*Corridor Structure	*Corridor Structure	*Corridor Structure	*Materials Receiving Building	*Water Tank	Mechanical Equipment		*Tension Support Dome (Pad 5)	*Tension Support Dome (Pad 5)	*Tension Support Dome (Pad 1)		*Administration Building		Assessment Bldg	Generator Bldg					*Storage Bldg	Storage Bldg	*Hose House	*Test Cell	*Laboratory Bldg	*Control Tunnel	*Document Center	*High Voltage Development	*Experimental Support	*Guard Station #410	*Garage	*Magazine	*Magazine	*Magazine		*Magazine *Magazine	*Firino Chamber #2	*Firing Chamber #3
Facility Identification Number (FIMS) (2)						21-0314		21-0328	21-0342	21-0370	otal	54-0048	54-0224	54-0226		03-0043		55-0043	55-0047				osition Planning	33-0026	33-0089	33-0091	33-0129	35-0034	35-0035	35-0046					37-0004	37-0006	37-0008		37-0009		
Funding Source (1)	EM ROST	EM ROST	EM ROST	EM RQST	EMRQST	EMRQST	EMRQST	EMRQST	EM RQST	EM RQST	2011 TA-21 EM Request Total	EM RQST	EM RQST	EM RQST	2011 TA-54 EM Request Total	INSTI.	2011 INSTI Total	*S&S	*S&S	2011 S&S Total	2011 Total	2012 Facility Disposition	2012 Transformation Disposition Planning	£L	D L	TD	TD	0L	TD	TD	TD	OI	TD	TD	DI	TD	TD	DI	TD		DI DI

Los Alamos National Laboratory

Attachment E-1 FY09-2018 Ten-Year Site Plan Facilities Disposition Plan (Within FYNSP/Outyear Planning Targets) LANL Site

Attachment E-1 FY09-2018 Ten-Year Site Plan Facilities Disposition Plan (Within FYNSP/Outyear Planning Targets) LANL Site

					-	LANL Site						
Funding Source	Facility Identification Number (FIMS)	Facility Name	Mission Dependency Program	Priority Score	Priority Rank	Gross Square Footage (gsf)	Excess Year	Estimated Disposition Year	TEC to Disposition (\$000s)	Yearly S&M Costs (\$000s)	Contaminated (Yes or No)	Notes 14.1
EM ROST		n Support D	DMC	NA: EM funding requested for this set of process	g requested ocess	14 439	2012	2013	Included in the EM Funding Request for	48	(cr) say	(4.8.4)
		(Pad 6)		contaminated TA-54 structures.	A-54	con la v			the TA-54 Closure Project	2	1	
2013 EM RQST Total						14,439						
2013 Total						131,752						
2014 Facility Disposition 2014 Transformation Disposition Planning	ition Planning								000°E			
TD		*Sample Management Facility	NA	32	5	14,333	2013	2014	982	49	TBD	
TD	43-0001	*Health Research Lab	SC	30	2	103,369	2013	2014	23,603	354	TBD	Needs National Register of Historic Places
TD	43-0010	*Z Sewage Lift Station C114346	SC	36	15	148	2013	2014	10	1	TBD	v varaatoor.
TD		*Warehouse	S	30	2	1,440	2013	2014	194	5	TBD	
E E	43-0020	*Transportable	Sc	38	15	3,347	2013	2014	229	11	C SEL	
		- trailer *Trailer	r X	32	n n	1.227	2013	2014	14 84	4	18D	
TD	43-0045	*Trailer Po G2449	SC	32	ŝ	981	2013	2014	67	3	TBD	
TD	46-0074	*Test Facility	NA	32	5	120	2013	2014	80	0	TBD	Needs National Register of Historic Places
TD	46-0076	*Laser Laboratory	NA	30	2	4,808	2013	2014	648	16	TBD	C VALANALULI
TD		*Modular Solar House	NA	34	14	1,120	2013	2014	44	4	TBD	
0		*Trailer	NA	24	1	1,440	2008	2014	66	ιΩ (TBD	
01 LL	46-0181	*Tranennetable P#6704C	NA	8 8	0 10	1680	2013	2014	49	2 9	UBL TBD	
CLL		*Transportation	NA	30) LC	1.711	2013	2014	117	o 4	LIEL LIEL	
E E		*Trailer	NA	8	15	360	2013	2014	25		TBD	
TD		*Transportable	NA	36	15	5,064	2013	2014	347	17	TBD	
TD	48-0033	*Transportable	NA	36	15	288	2013	2014	20	1	TBD	
TD	48-0057	*Transportable	NA	36	15	1,686	2013	2014	115	9	TBD	
£1		*Trailer Po Q2673	NA	%	15	727	2013	2014	50	5	TBD	
OT CT	49-0101	*Metal Shed	NA	32	5 Q	180	2013	2014	12		CIBI CIBI	
CII.	49-0122	*"Irauer	NA	ŝ	3	248	2013	5014	1/	-	IBD	Naade National Baaistar of Historic Places
TD	49-0135	*Nts Office	NA	32	ŝ	135	2008	2014	6	0	TBD	ivedusivational vegister of rustoric races evaluation.
2014 TD Total						145,340						
EMRQST	54-0033	*Tru-Waste Drum Prep	PMC	NA: EM funding requested	g requested	7,854	2013	2014	Included in the EM	27	Yes	Needs National Register of Historic Places evaluation
EMRQST	54-0049	*Tension Support Dome (Pad 3)	PMC	for this set of process contaminated TA-54	ocess A-54	25,041	2013	2014	Funding Request for the TA-54 Closure	86	Yes	
EMRQST	54-0375	*Tension Support Dome	PMC	structures.		30,221	2013	2014	Project	104	Yes	
2014 EM RQST Total						63,116						
2014 Total 2015 Facility Disposition						208,456						
2015 Transformation Disposition Planning	ution Planning								3,000			Needs National Revister of Historic Places
DI	03-0030	*General Warehouse	NA	34	18	114,643	2014	2015	15,756	401	TBD	evaluation.
Œ	03-0065	*Source Storage Bldg	NA	40	48	1,144	2014	2015	157	4	Yes	Needs National Register of Historic Places evaluation.
Ð	03-0130	*Calibration Bldg	NA	36	36	2,463	2014	2015	339	6	Yes	Needs National Register of Historic Places evaluation.
£	03-0170	*Liquid & Comp Gas Fac	NA	34	18	9,405	2014	2015	1,293	33	TBD	Needs National Register of Historic Places
Ē	03-0322	*Supply Bldg	NA	30	1	1,200	2014	2015	165	4	TBD	ev auatrott.
TD		*Modular Office Bldg	NA	36	36	1,441	2014	2015	101	5	TBD	
EL I		*Office Facility	NA	32	4	15,169	2014	2015	1,060	23	TBD	
	03-0461	*Transportable	NA	3 %	18	3.181	2014 2014	2015	222	0 11	TBD	
		×										

Attachment E-1 FY09-2018 Ten-Year Site Plan Facilities Disposition Plan (Within FYNSP/Outyear Planning Targets) LANL Site

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	Notes (14)	(44)																		Needs National Register of Historic Places	evanuation. Needs National Register of Historic Places	evaluation.																												
Contaminated	(Yes or No) (13)	TBD		TBD			UBT UBT									1BD		TBD	1BD	TBD	UBL		Ugi LBT	IBD	TBD	TBD	1BD	1BU TBD	IBD	TBD	TBD	U8I UBL	TBD	TBD	TBD		Yes	Yes	Yes	Yes	Vac	5				U81	TBD	TBD	UBD UBL	IBD
Yearly S&M Costs	(\$000s) (12)	11	11	12	12	5	C1 L2	0 0	4 63	2	3	3	0	с, с	C7 C	7 2	1	11	1	9	-		1	. 11	6	6	9	¢ (9	9	9	7	- LC	2	2		69	72	69	75	46	0#			7	0 10	12	17	13	11
sition	(\$000s) (10)		221	237	237	43	44	54 50	50	141	53	50	50	50	47	47	21	222	21	67	25	;	17	449	334	118	119	0	125	118	119	42	101	45	47			Included in the EM	runding kequest for the TA-54 Closure	Project					3,000	206	236	334	251	227
Estimated	Disposition Year	2015	2015	2015	2015	2015	2015	2012	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015		2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015		2015	2015	2015	2015	2015	CT/17			2016	2016	2016	2016	2016	2016
Excess	Year (8)	2014	2014	2014	2014	2014	2014	\$107 \$107	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014		2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014		2014	2014	2014	2014	2014	¥107			2016	2015	2015	2015	2015	2015
Gross Square Footage	(gsf) (7)	3,190	3.166	3,391	3,395	617	624 1 344	11/2/11	720	2,016	758	720	720	720	672	672	300	3,176	300	952	362	100	1 9/9/	3,267	2,433	1,690	1,701	1,690	1,790	1,690	1,707	600	1.440	650	672	204,501	19,679	20,498	19,695	21.363	13.784	94.519	299,020		1 705	2,894	3,313	4,690	3,525	3,187
Priority	Rank (6)	4	4	18	4	36	18	18	4	18	18	18	36	18	10	18	4	18	18	42	36	:	42	1	4	18	4	4 CF	4	4	4	36	44	42	42			requested	cess \-54						ç	12	39	39	39	39
	Priority Score		32	34	32	36	34	34	32	34	34	34	36	34	34	34	32	34	34	38	36	1	30	30	32	34	32	32	32	32	32	36	32	38	38			NA: EM funding requested	for this set of process contaminated TA-54	structures.	-1-				6	32	34	34	34	34
Mission Dependency	Program	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	DSW	MSU		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		PMC	PMC	PMC	PMC	DVIC	LINC			NIA	NA	NA	NA	NA	NA
	Facility Name	Transportable	Transportable	*Transportable	*Transportable	*Trailer	*Irailer #Trailor	*Trailor	*Trailer	Trailer	*Trailer	*Railer	*Trailer Po 6585H	*Trailer	*I railer Po W 2491 *T===1==	rrailer	Trailer	Transportable	"I ransportable #Trailer	*Storage Bldg	"Storage Bldg	0.0	'Storage bldg *Environmental Rech Lah	Science Lab Bldg	Library & Maint Bldg	*Transportable	Transportable	L ransportable Provor Trailor	Transportable Lp K9190	*Transportable Lp K9190	Transportable K9190	*Van Irailer *Troilor	Trailer *Doublewide Trailer	*Trailer Po 6001R	Trailer Po 6001R		Tension Support Dome (Pad 9)	Tension Support Dome (Pad 9)	Tension Support Dome	(rad 9) Tension Support Dome	(Pad 9) Decon/Volume Reduction Sv (Pad 1)	Decord volume reduction by (rad 1)			7 Chanse Chanses C11 2001	Z Struc Storage C113991 Modular Office Bldø	Modular Office Bldg	Transportable	Transportable Transmontable	Transportable
Facility Identification	Number (FIMS) (7)	03-0462 **					03-0546 03-1516 1								03-1736		03-1789 *		03-2018	36-0046 *	36-0047		30-0033			-	51-0026					16001					54-0232	54-0229	54-0230	54-0231									03-0463	
Funding	Source (1)	TD	OL.																	D	E				TD											2015 TD Total	EM RQST	EM RQST	EM ROST	EM ROST		ROST Total	2015 Total	2016 Facility Disposition	2016 Transformation Disposition Planning				QI QI	

Attachment E-1 FY09-2018 Ten-Year Site Plan Facilities Disposition Plan (Within FYNSP/Outyear Planning Targets) LANL Site

Ameson Dependency Program (a) (b) (c) (c) (c) (c) (a) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c
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Attachment E-1 FY09-2018 Ten-Year Site Plan Facilities Disposition Plan (Within FYNSP/Outyear Planning Targets) LANL Site

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Billy Name (Mode) Definition (Mode) Definition (Mode) Definition (Mode) Panel (Mode) Panel (Mode) <		Facility		Mission			Gross Square				Yearly		
Other band(1) N(t)	Funding Source	Identification Number (FIMS)	Facility Name	Dependency Program		Priority Rank	Footage (gsf)	Excess Year	Estimated Disposition Year		S&M Costs (\$000s)	Contaminated (Yes or No)	Notes
Construction NA P <	(1)	(2)	(3)	(4)		(9)	(2)	(8)	(6)	(10)	(12)	(13)	(14)
Transmerticity NM		60-004	Z Office Trailer C117441	NA	32	12	1,890	2015	2016	135	2	TBD	
Transference No. N		60-0006	Trailer Po L1702 7 Trailor D556556	NA	32	12	129	2015	2016	48	2 5	TBD	
Tokan theorem Nu R 1 Nu R 1 Nu 1 <th1< th=""> 1 1</th1<>		600009	Z Trailer P55657	AN	32	12	720	2015	2016	51	0 0	TBD	
Interest Of the Mig. NM NM NM NM NM NM NM Interest Of the Mig. NM N N N NM		60-0020	Z Bldg Trlr Office E21318	NA	32	12	360	2015	2016	26	1	TBD	
Instructure Number Nu	D Total						103,915						
Interestication Number Number <t< td=""><td>otal</td><td></td><td></td><td></td><td></td><td></td><td>103,915</td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	otal						103,915						
Invested folle (kigk, invested folle (kigk, vertice) NA	raculty Disposition	ition Planning								3.000			
Grappent holding NA 20 1 1259 2010 2017 17.50 46 100 Monose No NA <	and era monuminatem	03-0123	Theoretical Office Bldg	NA	30	1	34,278	2016	2017	4,897	125	TBD	
Watchase NA <		03-0132	Computer Building	NA	30	1	122,938	2016	2017	17,563	447	TBD	Need National Register of Historic Places
Once mide NA		0142	Wienchenter	MA	75	ED	009 66	2016	210C	123 1	110	CIRL	Evaluation Need National Register of Historic Places
		7710-00	warehouse	INA	о с	nc	34,079	91.02	/107	4,0/1	119	100	Evaluation
		03-0200	Office Bldg	NA	30		37,509	2016	2017	5,359	136	TBD	
Trenspendie DSW 22 8 14,46 20.6 20.7 2.461 53 100 Trenspendie NA 23 8 14,46 20.7 7.6 4 4 100 Trenspendie NA 23 8 100 20.7 7.6 4 4 100 Trenspendie NA 23 8 100 20.7 7.6 4 4 100 Trenspendie NA 23 8 100 20.7 20.7 7.6 4 4 100 Trenspendie NA 28 8 106 20.7 20.7 7.6 4 100 Trenspendie NA 28 8 106 20.7 20.7 7.6 7 4 100 Trenspendie NA 28 14.6 20.6 20.7 20.7 20.6 7 4 100 Trenspendie NA 28 14.6 20.6 <td></td> <td>16-0205</td> <td>Unce Didg *Tritium Processing Facility</td> <td>DSW</td> <td>36</td> <td>50</td> <td>9,186</td> <td>2016</td> <td>2017</td> <td>303</td> <td>33</td> <td>Yes</td> <td></td>		16-0205	Unce Didg *Tritium Processing Facility	DSW	36	50	9,186	2016	2017	303	33	Yes	
Transportish NA 22 8 100 2017 2017 201 6 100 Transportish NA 22 8 1018 2017 701 4 100 Transportish NA 28 8 1018 2017 701 4 100 Transportish NA 28 8 1018 2017 701 4 100 Transportish NA 28 8 1008 2017 701 6 100 Transportish NA 28 8 1008 2017 701 701 6 100 Transportish NA 28 8 1.443 2016 2017 701 7		16-0450	*Process Building	DSW	32	8	14,460	2016	2017	2,451	53	TBD	Historical significance: Eligible. Compliance
Inseptentie NN 22 8 1,00 2017 71 4 Inseptentie NA 23 8 1,00 2016 2017 71 4 Inseptentie NA 23 8 1,00 2016 2017 713 4 Inseptentie NA 23 8 1,00 2016 2017 713 4 Inseptentie NA 33 8 1,00 2016 2017 703 4 Inseptentie NA 33 8 1,40 2016 2017 703 5 Inseptentie NA 32 8 1,44 2016 2017 703 <td></td> <td>53-0044</td> <td>Transnortahle</td> <td>NA</td> <td>32</td> <td>×</td> <td>896</td> <td>2016</td> <td>2017</td> <td>20</td> <td>4</td> <td>TBD</td> <td>documentation pending.</td>		53-0044	Transnortahle	NA	32	×	896	2016	2017	20	4	TBD	documentation pending.
Transpondule NM 32 8 9,02 30.0 30.7 70 4 Transpondule NM 32 8 1,03 30.7 70 4 Transpondule NM 32 8 1,03 30.7 70 4 Transpondule NM 32 8 1,03 30.7 703 4 Transpondule NM 32 8 1,49 30.6 30.7 703 4 Transpondule NM 32 8 1,49 30.6 30.7 703 4 Transpondule NM 32 8 1,49 30.6 30.7 703 5 Transpondule NM 32 8 1,49 30.6 30.7 703 5 Transpondule NM 32 9 1,49 30.6 30.7 70.9 10 37 Transpondule NM 32 1,49 30.6 30.7 70.7 <td></td> <td>53-0045</td> <td>Transportable</td> <td>NA</td> <td>32</td> <td>8</td> <td>1,018</td> <td>2016</td> <td>2017</td> <td>74</td> <td>4</td> <td>TBD</td> <td></td>		53-0045	Transportable	NA	32	8	1,018	2016	2017	74	4	TBD	
		53-0046	Transportable	NA	32	8	1,132	2016	2017	20	4	TBD	
		53-0047	Transportable	NA	32	8	696	2016	2017	70	4	TBD	
Transpondation NN 22 8 1.665 2017 1.021 6 Transpondation NA 22 8 1.665 2017 1013 5 Transpondation NA 22 8 1.665 2017 1013 5 Transpondation NA 22 8 1.465 2016 2017 1013 5 Transpondation NA 22 8 1.485 2016 2017 1013 5 Transpondation NA 22 8 1.485 2016 2017 1013 5 Transpondation NA 22 8 1.41 2016 2017 2013 201 2015 201 2015 201 2015 201 2015 201 2015 201 2015 201 2015 201 2015 201 2015 201 2015 201 2015 2015 201 2015 2015 2015 2015 <		53-0367	Tratter Transmischla	NA	\$ F	0 6 «	1 605	2016	2017	54 102	у У	TBU	
Transportable NA 32 6 105 217 103 6 Transportable NA 32 6 147 2017 1015 5 Transportable NA 32 8 1.45 2017 1015 5 Transportable NA 32 8 1.46 2017 1015 5 Transportable NA 32 8 1.46 2016 2017 1015 5 Transportable NA 32 8 1.46 2016 2017 1015 5 Transportable NA 32 8 1.47 2016 2017 2015 2015 2017 2015 201		53-0397	Transportable	AN	32	° «	1.699	2016	2017	123	9	TBD	
Inseparable NA 34 40 1422 2016 2017 1015 5 Inseparable NA 22 8 1449 2016 2017 1015 5 Tansportable NA 22 8 1449 2016 2017 1015 5 Tansportable NA 22 8 1449 2016 2017 1015 5 Tansportable NA 22 8 1449 2016 2017 1015 5 Tansportable NA 22 8 1449 2016 2017 2015 2017 2015 2015 2017 2015 2015 2017 2015 2015 2017 2015 2017 2015 2015 2017 2015 2015 2015 2015 2017 2015 2015 2015 2015 2015 2015 2015 2015 2015 2015 2015 2015 2015 2015 2015 20		53-0398	Tranportable	NA	32	8	1,695	2016	2017	123	9	TBD	
		53-0400	Transportable	NA	34	40	1,452	2016	2017	105	5	TBD	
		53-0401	Transportable	NA	32	8	1,452	2016	2017	105	ις I	TBD	
		53-0403 53-0404	Transportable	NA	32	x x	1,449	2016 2016	2017	105	n n	CIBIT	
		53-0408	Transportable	NA	32	8	1,451	2016	2017	105	0	TBD	
Remote Handling Control Center DSW 30 1 312 2016 2017 35 1 Tradier PM 32 3 31 2016 2017 35 3 Detector Bulkling DSW 32 1 520 2016 2017 56 2 Detector Bulkling DSW 32 8 1,457 2016 2017 56 3 Detector Bulkling DSW 32 8 3,47 2016 2017 56 3 Detector Bulkling NA 32 8 1,457 2016 2017 56 3 Tanspectable NA 32 8 1,457 2016 2017 706 5 Tanspectable NA 32 8 1,457 2016 2017 706 5 Tanspectable NA 32 8 1,457 2016 2017 706 5 Tanspectable NA 32		53-0409	Transportable	NA	32	8	3,186	2016	2017	231	12	TBD	
		53-0505	Remote Handling Control Center	DSW	30	1	312	2016	2017	38	1	TBD	
Z traiter F903 NA 32 8 3.01 3.01 3.01 3.01 4.4 2 Z traiter F903 NA 32 8 3.01 3.01 3.01 4.4 2 Z traiter F903 NA 32 8 3.44 2016 3017 4.6 2 Z traiter F903 NA 32 8 1.457 2016 3017 4.6 2 Z traiter F903 NA 32 8 1.457 2016 3017 106 5 Transportable NA 32 8 1.457 2016 2017 106 5 Transportable NA 32 8 1.457 2016 2017 106 5 Transportable NA 32 8 1.657 2016 2017 123 6 Transportable NA 32 8 1.695 2016 2017 123 6 Transportable NA 32 </td <td></td> <td>53-0527</td> <td>Trailer</td> <td>NA</td> <td>32</td> <td>8</td> <td>720</td> <td>2016</td> <td>2017</td> <td>52</td> <td>e, i</td> <td>TBD</td> <td></td>		53-0527	Trailer	NA	32	8	720	2016	2017	52	e, i	TBD	
		53-0541 E2_0E4.4	Detector Building	DSW	06	1 0	523	2016	2017	63	14	CIBI	
		53-0573	Z I raiter F3503 Defector Building	DSW	32	0 -	233	2016	2102	28	1 1	TBD	
		53-0675	Z Trailer P3903	NA	32	8	106	2016	2017	65	3	TBD	
$ \begin{array}{l l l l l l l l l l l l l l l l l l l $		53-0882	Transportable	NA	32	8	3,414	2016	2017	248	12	TBD	
Transportable NA 32 8 1.451 2016 2017 106 5 Transportable NA 34 40 1.451 2016 2017 106 5 Orcendinoal Health Lab NA 38 52 55901 2016 2017 7.700 196 Orcendinoal Health Lab NA 32 8 1657 2016 2017 7.700 196 Orcendinoal Health Lab NA 32 8 1667 2017 7.700 196 Transportable NA 32 8 1672 2016 2017 123 6 Transportable NA 32 8 1692 2016 2017 123 6 Transportable NA 34 40 1691 2016 2017 123 6 Transportable NA 32 8 1792 2016 2017 123 6 Transportable NA 34		53-0885	Transportable	NA	32	8	1,457	2016	2017	106	5	TBD	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		53-0886	Transportable	NA	32	× ;	1,454	2016	2017	106	LD T	TBD	
		59-0001	Irauer Occumational Health Lab	NA	55 SE	40	53901	2016	2017	7 700	196	1BD Yes	
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		59-0119	Trailer Po F2111	NA	¥ 8	40	715	2016	2017	52	e e	1BD	

Los Alamos National Laboratory

Attachment E-1 FY09-2018 Ten-Year Site Plan Facilitise Disposition Plan (Within FYNSP/Outyaar Planning Targets) LANL Site

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Indentification are Indentification Number (FINS) Facily Name (30) Dependency (30) Friority (30) Friority (30		Facility		Mission			Gross Square				Yearly		
Inductor (FMS) Facility Name Program Friority Score Rank (gs) Year Disposition Year (600) (300) <th>Funding</th> <th>Identification</th> <th></th> <th>Dependency</th> <th></th> <th>Priority</th> <th>Footage</th> <th>Excess</th> <th></th> <th>TEC to Disposition</th> <th>S&M Costs</th> <th>~</th> <th></th>	Funding	Identification		Dependency		Priority	Footage	Excess		TEC to Disposition	S&M Costs	~	
	Source	Number (FIMS)	Facility Name	Program	Priority Score	Rank	(gsf)	Year		(\$000s)	(S000s)	(Yes or No)	Notes
39-0123 Traiter Pols200 NA 34 40 660 2016 2017 69 2 63-013 Modular Office Bdg NA 32 8 1.504 2016 2017 69 2 63-013 Modular Office Bdg NA 32 8 1.504 2016 2017 118 2 63-014 Modular Office Bdg NA 34 40 1.637 2016 2017 118 5 63-014 Modular Office Bdg NA 34 40 1.637 2016 2017 118 6 7000 Monub Modular Office Bdg NA 36.144 2016 2017 118 6 7300 Monub Modular Office Bdg NA 36.144 1.637 2016 2017 118 6 7300 Monub Modular Office Bdg NA 36.144 1.637 2016 2017 118 6 7300 Monub Modular Office Bdg NA 36.144 1.637	(1)	(2)	(3)	(4)	(5)	(9)	(2)	(8)	(6)	(10)	(12)	(13)	(14)
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	Grand Total FY2008 throug	th FY2018					2,281,159						

Attachment E

Attachment E-1a FY09-2018 Ten-Year Site Plan Facilities Disposition Plan (Above FYNSP/Funding is "TBD") LANL Site

Unit In <br< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th>lite</th><th></th><th></th><th></th><th></th></br<>							lite				
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(1) (1) <td>*RTBF</td> <td>03-1610</td> <td>GUARD STA #333</td> <td>PMC</td> <td>288</td> <td>TBD</td> <td>completion of the</td> <td></td> <td>NA</td> <td>TBD</td> <td>•</td>	*RTBF	03-1610	GUARD STA #333	PMC	288	TBD	completion of the		NA	TBD	•
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International structure International	*RTBF	03-1615	GUARD STATION	PMC	64	TBD			NA	TBD	
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Global Cycogenies Bidg Filter Filter <t< td=""><td>Chemistry and</td><td>Metallurov Researc</td><td>h Comnley (TBD) Total</td><td></td><td>571 458</td><td></td><td></td><td></td><td></td><td></td><td>Total not included in E-4</td></t<>	Chemistry and	Metallurov Researc	h Comnley (TBD) Total		571 458						Total not included in E-4
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39-0056 CUN BLDC DSW 276 NA 39-0057 THRING CHAMBER DSW 276 NA 39-0057 THRING CHAMBER DSW 758 NA 39-0053 TABICATORA OFO 758 NA 39-0054 TADICATHER DSW 262 NA 39-0054 TADUTIVETHELTER DSW 262 NA 39-0054 TADUTIVETHELTER DSW 262 NA 39-0056 CADACTIOR BANK ENCLOSURE DSW 223 NA 39-0069 CUN BLDC DSW 2261 NA 39-0069 CUN BLDC DSW 2261 NA 39-0069 CUN BLDC DSW 2261 NA 39-0069 CUN BLDC DSW 237 NA 39-0069 CUN BLDC DSW 2361 NA 39-0069 CUN BLDC DSW 230 NA 39-0069 CUN BLDC DSW 330 NA	*TBD	39-0010	*Z HOSE HOUSE C108695	DSW	40	NA					
39-0057 FHRING CHAMBER DSW 578 NA 39-0052 FHRING SHEUTER DSW 578 NA 39-0064 FEQUIPMENT SHEUTER DSW 252 NA 39-0064 FEQUIPMENT SHEUTER DSW 262 NA 39-0065 CAPACTIOR BANK ENCLOSURE DSW 262 NA 39-0066 STORAGE BLDG DSW 263 NA 39-0067 CAPACTIOR BANK ENCLOSURE DSW 263 NA 39-0068 STORAGE BLDG DSW 263 NA 39-0067 VALORAGE BLDG DSW 263 NA 39-0067 STORAGE BLDG DSW 263 NA 39-0067 PUN BLDG DSW 203 NA 39-0069 FIRING CHAMBER DSW 203 NA 39-0095 BUNKER DSW DSW 300 NA 39-0095 BUNKER DSW DSW 300 NA 39-0095 BUNKER D	*TBD	39-0056	*GUN BLDG	DSW	276	NA					
39-00c2 1-ABORATORY OFO 1,536 NA 39-00c5 FQUIPMENT SHELTER DSW 2c2 NA 39-00c5 FQUIPMENT SHELTER DSW 2c2 NA 39-00c7 FQUIPMENT SHELTER DSW 2c2 NA 39-00c7 FQUIPMENT SHELTER DSW 2c3 NA 39-00c7 FQUIPMENT SHELTER DSW 2c3 NA 39-00c7 VARACIFIBLIC DSW 2c8 NA 39-00c8 STORAGE BLDG DSW 2c3 NA 39-00c9 SCIN BLDG DSW 2c61 NA 39-00c8 FIBING CHAMBER DSW 2c13 NA 39-00c8 FIBING CHAMBER DSW 1.317 NA 39-00c8 FIBING CHAMBER DSW <t< td=""><td>*TBD</td><td>39-0057</td><td>*FIRING CHAMBER</td><td>DSW</td><td>578</td><td>NA</td><td></td><td></td><td></td><td></td><td></td></t<>	*TBD	39-0057	*FIRING CHAMBER	DSW	578	NA					
39-0063 *EQUIPMENT SHELTER DSW 262 NA 39-0064 *EQUIPMENT SHELTER DSW 222 NA 39-0064 *EQUIPMENT SHELTER DSW 220 NA 39-0065 *STORAGE BLDG DSW 230 NA 39-0066 *STORAGE BLDG DSW 232 NA 39-0069 *GUN BLDG DSW 232 NA 39-0069 *GUN BLDG DSW 26/13 NA 39-0089 *GNN BLDG DSW 217 NA 39-0089 *GNN BLDG DSW 137 NA 39-0089 *GAS GUN SUPPORT BLDG DSW 137 NA 39-0089 *GAS GUN SUPPORT BLDG DSW 1370 NA 39-0085 *BUNKER DSW 1370 NA 39-0086 *BUNKER DSW 1370 NA 39-0086 *BUNKER DSW 1370 NA 39-0095 *BUNKER DSW 1300 NA	*TBD	39-0062	*LABORATORY	OFO	1,536	NA					
39-0064 FEQUIPAEINT SHELTER DSW 222 NA 39-0067 CAPACTTOR BANK ENCLOSURE DSW 228 NA 39-0068 YSTORAGE BLDG DSW 229 NA 39-0069 CUN BLDG DSW 22613 NA 39-0069 VALOAZTINE DSW 22613 NA 39-0069 CUN BLDG DSW 2051 NA 39-0069 CUN BLDG DSW 2051 NA 39-0069 FIRING CHARDER DSW 2051 NA 39-0095 FIRING CHARDER DSW 1,317 NA 39-0095 FIRING CHARDER DSW 1,300 NA 39-0095 FIRING CHARDER DSW 1,300 NA 39-0095 FIRINGER DSW 3-00 NA 39-0096 FIRINGER DSW DSW 3-00 NA 39-0097 FIRINGER DSW DSW 3-00 NA 39-0098 FIRINER DSW	*TBD	39-0063	*EQUIPMENT SHELTER	DSW	262	NA		EV10	Two of a store	440 - onthone - Oth	tor Endored A row close
39-0067 *CAPACITOR BANK ENCLOSURE DSW 280 39-0068 *STORAGE BLDG DSW 232 39-0069 *CUN BLDG DSW 233 39-0075 *MCACATINE DSW 245 39-0077 *MCARAINE DSW 245 39-0078 *FIRING CHAMBER DSW 245 39-0078 *FIRING CHAMBER DSW 1,317 39-0076 *CUN SUPPORT BLDG DSW 1,317 39-0095 *BUNKER DSW 1,300 39-0096 *BUNKER DSW 1,000 39-0096 *BUNKER DSW 2,072 39-0098 *APPLIED PHYSICS BLDG OFO 6,605	*TBD	39-0064	*EQUIPMENT SHELTER	DSW	262	NA		0777.7	1 Internet		int recent upperiors
39-0068 *STORAGE BLDG DSW 252 39-0069 *STORAGE BLDG DSW 2613 39-0057 *MAGAZINE DSW 2613 39-0057 *RAGAZINE DSW 2613 39-0059 *FRNG CHAMBER DSW 1,317 39-0056 *GUN SUPPORT BLDG DSW 1,300 39-0056 *UNKER DSW 1,300 39-0056 *UNKER DSW 1,000 39-0056 *BUNKER DSW 2,002 39-0096 *BUNKER DSW 2,002 39-0098 *APLIED PHYSICS BLDG OFO 6,605	*TBD	39-0067	*CAPACITOR BANK ENCLOSURE	DSW	280	NA					
39-0069 *CUN BLDG DSW 26/3 39-0077 *MACAZINE DSW 26/3 39-0087 *FRINCCIAMBER DSW 207 39-0089 *FRINCCIAMBER DSW 137 39-0089 *GAS GUN SUPPORT BLDG DSW 1,800 39-0096 *BUNKER DSW 1,800 39-0096 *BUNKER DSW 1,800 39-0096 *BUKER DSW 2,940 39-0096 *APLLED PHYSICS BLDG DSW 2,940 39-0098 *APLLED PHYSICS BLDG OFO 6,605	*TBD	39-0068	*STORAGE BLDG	DSW	252	NA					
39-007 *MAGAZINE DSW 205 39-007 *ERNC CHAMBER 205 39-0098 FERNC CHAMBER DSW 1,317 39-0095 *CAS CUN SUPPORT BLDG DSW 1,310 39-0095 *BUNKER DSW 1,300 39-0096 *ACCEST TUNEL DSW 1,100 39-0095 *UNKER DSW 1,100 39-0095 *ACCEST TUNEL DSW 2,005 39-0095 *ACCEST TUNEL DSW 2,075 39-0095 *ACCEST TUNEL DSW 2,070 39-0095 *ACCEST TUNEL DSW 2,070 39-0095 *ACCEST TUNEL DSW 2,070	*TBD	39-0069	*GUN BLDG	DSW	2,613	NA					
39-008 *FIRING CHAMBER DSW 1,317 39-0095 *EAIS GUN SUPPORT BLDG DSW 1,300 39-0095 *GAS GUN SUPPORT BLDG DSW 1,400 39-0096 *ACCESS TUNNEL DSW 3,00 39-0097 *BUNKER DSW 2,072 39-0098 *APPLED PHYSICS BLDG OFO 6,605	*TBD	39-0077	*MAGAZINE	DSW	205	NA					
39-0089 *CAS GUN SUPPORT BLDG DSW 1,800 39-0095 *BUNKER DSW 1,100 39-0096 *BUNKER DSW 3,00 39-0096 *BUNKER DSW 2,072 39-0098 *BUNKER DSW 2,072 39-0098 *APPLED PHYSICS BLDG OFO 6,605	*TBD	39-0088	*FIRING CHAMBER	DSW	1,317	NA					
39-005 *BUNKER DSW 1,100 39-0096 *ACCESTUNNEL DSW 3,00 39-0095 *BUNKER DSW 3,00 39-0096 *APTLED PHYSICS BLDG OFO 6,605	*TBD	39-0089	*GAS GUN SUPPORT BLDG	DSW	1,800	NA					
39-0096 *ACCESS TUNNEL DSW 340 39-0097 *BUNKER DSW 2,072 39-0098 *APPLIED PHYSICS BLDG OFO 6,605	*TBD	39-0095	*BUNKER	DSW	1,100	NA					
39-0097 *BUNKER DSW 2.072 39-0098 *APPLIED PHYSICS BLDG OFO 6,605	*TBD	39-0096	*ACCESS TUNNEL	DSW	340	NA					
39-0098 *APPLIED PHYSICS BLDG 0FO 6,605	*TBD	39-0097	*BUNKER	DSW	2,072	NA					
	*TBD	39-0098	*APPLIED PHYSICS BLDG	OFO	6,605	NA					

Attachment E-1a FY09-2018 Ten-Year Site Plan Facilities Disposition Plan (Above FYNSP/Funding is "TBD") LANL Site

					ļ					
	Eacility		Mission	Groce Source			TEC to	Yearly S&M		
Ю	Identification		Dependency	Footage		Planned	Disposition	Costs	Contaminated	
Program Office	Number (FIMS) (2)	Facility Name	Program (4)	(gsf) (7)	Excess Year (8)	Disposition Year (9)	(\$000s) (10)	(\$000s) (12)	(Yes or No) (13)	Notes (14)
*TBD	39-0111	*PULSED POWER BLDG	DSW	1,215	NA	101	1021	(==)	lart	faces
*TBD	39-0138	*FIRING SITE SUPPORT BLDG	DSW	96	NA					
*TBD	39-0175	*BUNKER	DSW	864	NA					
*TBD	39-0176	*ACCESS TUNNEL	SCI	614	NA		Ŀ	Y10 Transfer to	FY10 Transfer to work for others - Other Federal Agencies	ar Federal Agencies
*TBD	39-0177	*BUNKER	SCI	129	NA					
*TBD	39-0183	*GUARD STATION #468	NA	108	NA					
*TBD	39-0207	*MORGAN SHED	NA	37	NA					
Total Transferred Structures	d Structures			37,823						
			The fo	llowing structures	are historical ar	The following structures are historical and are not planned for demolition.	r demolition.			
N/A	06-0037	CONCRETE BOWL	NA	'	2110	Historical Structure	NA	1		Reinforced Concrete Bowl 200 feet diameter Historical - NOT TO BE DEMOLISHED; Potential Manhattan Project National Historic
N1/ A	06 0001	1 AB & CHOP BI DC	NIA	0 888	1007	Historical Churchine	NA	9		Landmark
N/A	08-0002	SHOP & STORAGE	NA	408	1992	Historical Structure	NA	9		Gun Site Historical - NOT TO BE DEMOLISHED:
- 4										DOE Manhattan Project Signature Facility, Potential
N/A	08-0003	LABORATORY BLDG	NA	647	1992	Historical Structure	NA	9		Manhattan Project National Historic Landmark.
N/A	11-0001	*STORAGE BLDG	DSW	618	2009	Historical Structure	NA	2	Yes	Marketter Busidet Buildings Discontinue and direct
N/A	11-0002	CONTROL BUILDING	DSW	831	2002	Historical Structure	NA	2	Yes	mannatan Liojett bunungs. Disposition penung
N/A	11-0003	*CONTROL BLDG	DSW	529	2009	Historical Structure	NA	2	Yes	resolution of inational Fark services survey, 2001
							:			HEXAGONAL SHAPED PIT, 8' SIDES BY 12' DEEP AND LINED INSIDE AND TOP WITH 3/4" STEEL
N/A	12-0004	HEXAGONAL FIRING PIT	NA	1	2110	Historical Structure	NA	ı		PLATE.
										Historical - NOT TO BE DEMOLISHED
N/A	14-0006	*BUNKER	DSW	699	2009	Historical Structure	NA	1	TBD	
N/A	16-0058	MAGAZINE	NA	299	1992	Historical Structure	NA	×		Historical - NOT TO BE DEMOLISHED
N/A	16-0410	ASSEMBLY BUILDING	DSW	10,187	2110	Historical Structure	NA	31		
N/A	16-0411	ASSEMBLY BUILDING	DSW	2,342	2110	Historical Structure	NA			Historical - NOT TO BE DEMOLISHED,
N/A N/A	16-0413 16-0414	KEST HOUSE HE FITTING STORAGE BLDG	DSW	1,247 8.488	2110	Historical Structure	NA	4 75		Potential DOE Cold War Signature Facility
N/A	16-0415	HE REST HOUSE	DSW	4,559	2110	Historical Structure	NA	14		
N/A	16-0516	PROCESS BLDG	DSW	999	2110	Historical Structure	NA	8	Yes	V-Site
N/A	16-0517	EQUIPMENT BUILDING	DSW	318	1999	Historical Structure	NA	8	Yes	Historical - NOT TO BE DEMOLISHED
N/A	16-1451	GUARD STATION	NA	187	1999	Historical Structure	NA	ю		Historical - NOT TO BE DEMOLISHED
										Slotin Accident Building
A 17 A	10 0001		~ 1 ~	1 061	0110	Ulistanias] Churchene	NI A	ç	Cat	Historical - NOT TO BE DEMOLISHED;
W/M	TOOD-OT	VINCENCE AND ALL AND AL	WN	TEN'T	0117	HISTORICAL SURVICE	- CN	0	IBU	r otentiai mannattan r roject mationai rustoric Landmark:
							_			historical documentation pending.
							,	0		Battleship Building/ Control Bunker
N/A	7000-21	METAL BLDG	NA	123	CKKI	Historical Structure	NA	D	IBU	Historical - NOL 10 BE DEMOLISHED; historical documentation neuding
N/A	18-0023	CRITICAL ASSEMBLY BLDG(CASA#1)	NA	2,681	2110	Historical Structure	NA	8	TBD	Historical - NOT TO BE DEMOLISHED; needs NRPH evaluation
										Hillside Vault
N/A	18-0026	VAULT	NA	287	2110	Historical Structure	NA	1	TBD	Historical - NOT TO BE DEMOLISHED; needs NRPH evaluation

Original Attachment E

Attachment E-I a FY09-2018 Ten-Year Site Plan Facilities Disposition Plan (Above FYNSP/Funding is "TBD") LANL Site

	Facility		Mission	Gross Square			TEC to	Yearly S&M		
HQ Program Office	Identification Number (FIMS) (2)	Facility Name (3)	Dependency Program (4)	Footage (gsf) (7)	Excess Year (8)	Planned Disposition Year (9)	Disposition (\$000s) (10)	Costs (\$000s) (12)	Contaminated (Yes or No) (13)	Notes (14)
N/A	18-0029	POND CABIN	NA	378	2110	Historical Structure	NA	-		Historical - NOT TO BE DEMOLISHED; On the New Mexico State Register of Historic Places
NA	18-0186	OTHER SERVICE BUILDINGS	NA	36	1995	Historical Structure	NA	0	TBD	
W/A	22-0001	LOADING BLDG	NA	7,895	1992	Historical Structure	NA	20	No	Fatman Assembly Building Historical - NOT TO BE DEMOLISHED; Denotial Manhattan Project National Historic Landmark
N/A	33-0027	GUARD STATION	OFO	186	2110	Historical Structure	NA	1		Historical - NOT TO BE DEMOLISHED Needs NRHP Evaluation.
N/A	33-0028	WATER TANK	NA	1	2110	Historical Structure	NA	1		Historical - NOT TO BE DEMOLISHED 50,000 GAL CAPACITY. FROM TOP OF POOTINGS: 61 'TO BOTTOM BOWL, 69' TO TOP OF BOWL CYL SECTION, 68' 6.34" TO TOP OF CYLINDER SECTION, 88' 8.12" DIAMETER.
N/A	41-0001	UNDERGROUND VAULT	NWIR	7,267	2110	Historical Structure	NA	22		Historical - NOT TO BE DEMOLISHED, Potential DOE Cold War Signature Facility
N/A	41-0002	GUARD HOUSE 318	NA	781	2110	Historical Structure	NA	2		Historical - NOT TO BE DEMOLISHED
N/A	41-0003	BLOWER HOUSE	NA	24	2110	Historical Structure	NA	0		Historical - NOT TO BE DEMOLISHED
N/A	2100-09	TEST FABRICATION	NA	18,213	2110	Historical Structure	NA	55		Rack Facility Historical - NOT TO BE DEMOLISHED, Potential DOE Cold War Signature Facility
N/A	60-0019	TEST FABRICATION C00117882	NA	17,318	1998	Historical Structure	NA	20		Rack Facility Historical - NOT TO BE DEMOLISHED Potential DOE Cold War Signature Facility
N/A	73-0015	WEATHER STATION	NA	592	2110	Historical Structure	NA	2		Front Gate Guard Tower Historical-NOT TO BE DEMOLISHED, Potential DOE Cold War Signature Facility
Historical Structures Total	ures Total			92,376						Total not included in E-4

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Attachment E-2 FY09-2018 Ten-Year Site Plan New Construction Footprint Added

LANL Site

			Mission			Year of	
			Dependency	Funding Type	Project Area	Beneficial	
Funding Source	Project Number	Facility Name	Program	(LI, GPP, IGPP)	(GSF)	Occupancy	Notes
(1)	(2)	(3)	(4)	(5)	(9)	(7)	(8)
		Previous New Construction	nstruction				
FY02 New Construction Total GSF	tction Total GSF				1		
FY03 New Construction Total GSF	tction Total GSF				1		
FY04 New Construction Total GSF	tction Total GSF				48,006		
FY05 New Construction Total GSF	tction Total GSF				8,617		
FY06 New Construction Total GSF	tction Total GSF				372,795		
		FY07 New Construction	struction				
S&S	LANL-05-017	Guard Station(03-2408)(Security Perimeter Project)	NA	п	1,080	FY07	1/5/2007
S&S	LANL-05-017	Guard Station(03-2409)(Security Perimeter Project)	NA	LI	48	FY07	1/5/2007
S&S	LANL-05-017	Guard Station(03-2410)(Security Perimeter Project)	NA	ΓI	48	FY07	1/5/2007
S&S	LANL-05-017	Guard Station(03-2411)(Security Perimeter Project)	ΝA	ΓI	48	FY07	1/5/2007
S&S	LANL-05-017	Guard Station(03-2412)(Security Perimeter Project)	NA	ΓΊ	48	FY07	1/5/2007
S&S	LANL-05-017	Guard Station(03-2413)(Security Perimeter Project)	ΝA	ΓI	48	FY07	1/5/2007
S&S	LANL-05-017	Guard Station(03-2414)(Security Perimeter Project)	ΝA	ΓI	48	FY07	1/5/2007
S&S	LANL-05-017	Guard Station(58-0049) (Security Perimeter Project)	ΝA	ΓI	1,080	FY07	1/5/2007
S&S	LANL-05-017	Guard Station(58-0050) (Security Perimeter Project)	ΝA	ΓI	48	FY07	1/5/2007
S&S	LANL-05-017	Guard Station(58-0051) (Security Perimeter Project)	ΝA	ΓI	48	FY07	1/5/2007
S&S	LANL-05-017	Guard Stataion(03-2482) (Security Perimeter Project)	NA	LI	48	FY07	1/5/2007
Other		Transportable (48-0242)	PMC	GPP	4,230	FY07	5/17/2007
Other		Combustion Gas Turbine Generator (CGTG)Instrumental Air Building (03-2425)	NA	н	412	FY07	8/9/2007
FY07 New Construction Total GSF	tction Total GSF				7,234		
Archived Sub-total for 2002 - 2007	1 for 2002 - 2007				436,652		
		FY08 New Construction	struction				
RTBF	LANL-03-D-102	*Los Alamos Site Office (03-1410)	NA	ΓΊ	24,818	FY08	Part of NSSB
S&S	LANL-08-D-701	*West Side Entry Control Center (TA-55)	NA	LI	1,500	FY08	NMSSUP II
CGRP	LANL-01-D703	*TA-50 Pump House Influenent Storage Facility	PMC	П	20,100	FY08	Waste Mitigation/
		(NGZN-NG)				_	Risk
FY08 New Construction Total GSF	iction Total GSF				46,418		

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Attachment E-2 FY09-2018 Ten-Year Site Plan New Construction Footprint Added LANL Site

			Mission Dependency	Funding Type	Project Area	Year of Beneficial	
Funding Source	Project Number	Facility Name	Program	(LI, GPP, IGPP)	(GSF)	Occupancy	Notes
(+)	(7)	FY09 New Construction	struction	(6)	(0)	(1)	(0)
S&S	LANL-08-D-701	*Utility Building (TA-55)	PMC	ΓI	2,000	FY09	II ANSSUP II
RTBF	LANL_08-	HX Warehouse	DSW	GPP	6,000	FY09	
FY09 New Construction Total GSF	tction Total GSF				8,000		
		FY10 New Construction	struction				
RTBF	LANL-04-D-125	*Chemistry and Metallurgy Research Replacement Project- Radiological Laboratory / Utility / Office Building	PMC	LI	220,000	FY10	
RTBF	LANL-07-P-0101	*Explosive Gas Gun Facility (TA-40)	SCI	GPP	4,300	FY10	
IGPP	LANL-08-429	*Computing and Communications Operations Building	NA	IGPP	8,000	FY10	
IGPP	LANL-08-434	*Construct Wellness Center Replacement	NA	IGPP	10,000	FY10	
S&S	LANL-08-D-701	*East Side Entry Control Center (TA-55)	PMC	LI	16,000	FY10	NMSSUP II
S&S	LANL-08-D-701	*Underground Access Tunnel (TA-55)	PMC	ΓI	2,100	FY10	II UNSSUP II
FY10 New Construction Total GSF	tction Total GSF				260,400		
		FY11 New Construction	struction				
*RTBF	LANL-07-D-220	*Radioactive Liquid Waste Treatment Facility Upgrade	PMC	LI	16,000	FY11	
FY11 New Construction Total GSF	tction Total GSF				16,000		
		FY12 New Construction	struction				
*RTBF	LANL-09-D-XXX	*Transuranic Waste Facility	PMC	LI	28,700	FY12	
FY12 New Construction Total GSF	tction Total GSF				28,700		
		FY13 New Construction	struction				
		NONE PLANNED AT THIS TIME			-		
FY13 New Construction Total GSF	tction Total GSF				1		
		FY14 New Construction	struction				
RTBF	LANL-07-001	*Los Alamos Neutron Science Center Refurbishment	DSW	LI	20,000	FY14	
FY14 New Construction Total GSF	tction Total GSF				20,000		
		FY15 New Construction	struction				
		NONE PLANNED AT THIS TIME			1		
FY15 New Construction Total GSF	tction Total GSF				1		
		FY16 New Construction NONED AT THE FRAME	struction				
FY16 New Construction Total GSF	ction Total GSF				, ,		

Los Alamos National Laboratory

Attachment E-2 FY09-2018 Ten-Year Site Plan New Construction Footprint Added LANL Site

		-	_				
			Mission			Year of	
			Dependency	Funding Type	Project Area	Beneficial	
Funding Source	Funding Source Project Number	Facility Name	Program	(LI, GPP, IGPP)	(GSF)	Occupancy	Notes
(1)	(2)	(3)	(4)	(5)	(9)	(2)	(8)
		FY17 New Construction	nstruction				
		NONE PLANNED AT THIS TIME			-		
FY17 New Construction Total GSF	tction Total GSF				•		
		FY18 New Construction	istruction				
		NONE PLANNED AT THIS TIME			I		
FY18 New Construction Total GSF	tction Total GSF				-		
GRAND TOTAL FY2008 - FY2018	FY2008 - FY2018				379,518		
		FYTBD New Construction	onstruction				
*RTBF	LANL-08-D-803	LANL-08-D-803 *TA-55 Radiography Facility	PMC	II	5,000	FYTBD	
*RTBF	LANL-04-D-125	Chemistry and Metallurgy Research Replacement Project - Nuclear Facility	PMC	ΓΊ	287,000	FYTBD	
FYTBD New Construction Total GSF	truction Total GSF				292,000		

Attachment E-4(a) FY09-2018 Ten-Year Site Plan FOOTPRINT TRACKING SUMMARY SPREADSHEET FY08 TYSP [September 2007 Update] LANL Site Footprint Tracking Summary - NNSA

		Excess	New						Site Total		
		Facilities	Construction	Site				Cumulative	Footprint		Weapons
	Beginning	Footprint	Footprint	Footprint	Footprint		"Grandfathered"	Grandfathered	(Multi-		Activity
	Site Footprint	Elimination	Added	Reduction by	"Banked"	Waiver/Transfer	Footprint Added	Footprint Added	Program)	Leased	Account
Fiscal Year	(gsf)	(gsf)	(gsf)	FΥ	(gsf)	(gsf)	(gsf)	(gsf)	(gsf)	Space	(gsf)
(1)	(2)	(3)	(4)	(5)	(9)	(2)	(8)	(8a)	(6)	(10)	(11)
FY 2002 Actual	8,731,335	(68,161)	1	8,663,174	-68,161	1	I	0	8,663,174	NA	NA
FY 2003 Actual	8,663,174	(136,416)	1	8,526,758	-204,577	1	348,054	348,054	8,874,812	NA	NA
FY 2004 Actual	8,526,758	(109,586)	48,006	8,465,178	-266,157	I	42,802	390,856	8,856,034	NA	NA
FY 2005 Actual	8,465,178	(115,896)	8,617	8,357,899	-373,436	1	I	390,856	8,748,755	501,116	NA
FY 2006 Actual	8,357,899	(78,628)	337,850	8,617,121	-114,214	1	I	390,856	9,007,977	489,842	1
FY 2007 Actual	8,617,121	(31,942)	7,234	8,592,413	-138,922	1	I	390,856	8,983,269	471,122	8,983,269
FY 2008	8,592,413	(79,170)	46,418	8,559,661	-171,674	1	I	390,856	8,950,517	455,954	8,950,517
FY 2009	8,559,661	(179,466)	8,000	8,388,195	-343,140	1	1	390,856	8,779,051	421,585	8,779,051
FY 2010	8,388,195	(230, 183)	260,400	8,418,412	-312,923	1	I	390,856	8,809,268	421,585	8,809,268
FY 2011	8,418,412	(606,042)	16,000	7,828,370	-902,965	1	I	390,856	8,219,226	871,585	8,219,226
FY 2012	7,828,370	(38,884)	28,700	7,818,186	-913,149	I	I	390,856	8,209,042	871,585	8,209,042
FY 2013	7,818,186	(131,752)	1	7,686,434	-1,044,901	1	I	390,856	8,077,290	871,585	8,077,290
FY 2014	7,686,434	(208,456)	20,000	7,497,978	-1,233,357	1	1	390,856	7,888,834	813,750	7,888,834
FY 2015	7,497,978	(299,020)	1	7,198,958	-1,532,377	1	I	390,856	7,589,814	805,965	7,589,814
FY 2016	7,198,958	(103,915)	1	7,095,043	-1,636,292	1	I	390,856	7,485,899	796,344	7,485,899
FY 2017	7,095,043	(386,194)	1	6,708,849	-2,022,486	1	1	390,856	7,099,705	796,344	7,099,705
FY 2018	6,708,849	I	I	6,708,849	-2,022,486	1	1	390,856	7,099,705	796,344	7,099,705

Attachment E-4(a) FY09-2018 Ten-Year Site Plan FOOTPRINT TRACKING SUMMARY GRAPH LANL Site Space Tracking Summary - NNSA

10.000 000			FY 2003 FY 2004 FY 2005 FY 2006	- 501,116 489,842 471,122 455,954 421,585 871,585 871,585 871,585 813,750 805,965 796,344 796,344 796,344		e 0 348,054 390,856 39	red la		Contraction Economics 8731335 8663174 8737788 8466178 8737860 8617131 8560461 8788195 8418412 783870 7818186 7686474 743078 7108.068 7006.013 6770840	
10	55	4 (.7	Leased Space	(10)	Cumulative	Grandfathered Footprint Added	(gsf) (8a)	Boginning Cito	(gsf) (2)

Attachment E-4 (b) FY09-2018 Ten-Year Site Plan FOOTPRINT SUMMARY SPREADSHEET LANL Footprint Tracking Summary - SITE WIDE (Multi-Program)

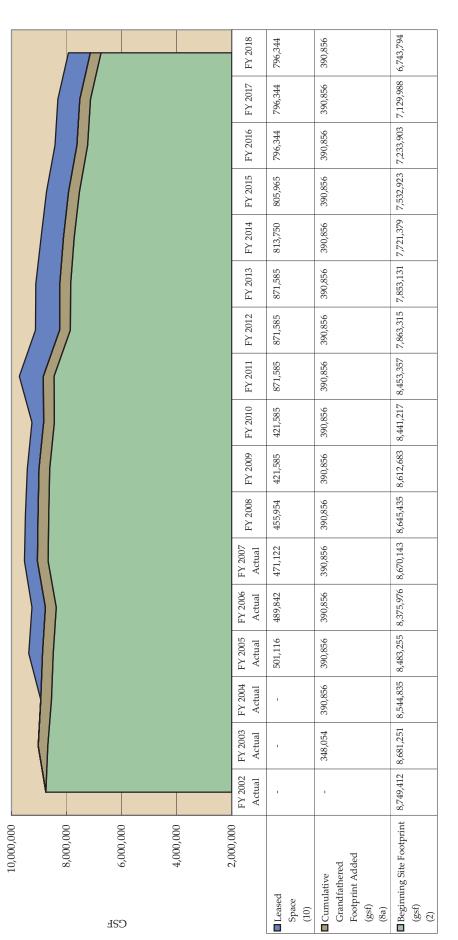
		Excess Facilities		Site				Cumulative		
	Beginning Site Footprint		New Construction Footprint Added	Fo Re	Footprint "Banked"	Waiver/Transfer	"Grandfathered" Footprint Added	Grandfathered Footprint Added	Site Total Footprint (Multi-Program)	Leased
Fiscal Year	(gsf)	(gsf)	(gsf)	by FY	(gsf)	(gsf)	(gsf)	(gsf)		Space
FY 2002 Actual	(z) 8,749,412	(68,161)		8,681,251	-68,161	-	- (0)	-	8,681,251	NA
FY 2003 Actual	8,681,251	(136,416)	1	8,544,835	-204,577	1	348,054	348,054	8,892,889	NA
FY 2004 Actual	8,544,835	(109,586)	48,006	8,483,255	-266,157	1	42,802	390,856	8,874,111	NA
FY 2005 Actual	8,483,255	(115,896)	8,617	8,375,976	-373,436	I	1	390,856	8,766,832	501,116
FY 2006 Actual	8,375,976	(78,628)	372,795	8,670,143	-79,269	1	1	390,856	9,060,999	489,842
FY 2007 Actual	8,670,143	(31,942)	7,234	8,645,435	-103,977	1	1	390,856	9,036,291	471,122
FY 2008	8,645,435	(79, 170)	46,418	8,612,683	-136,729	1	1	390,856	9,003,539	455,954
FY 2009	8,612,683	(179, 466)	8,000	8,441,217	-308,195	-	-	390,856	8,832,073	421,585
FY 2010	8,441,217	(248,260)	260,400	8,453,357	-296,055	1	1	390,856	8,844,213	421,585
FY 2011	8,453,357	(606,042)	16,000	7,863,315	-886,097	1	-	390,856	8,254,171	871,585
FY 2012	7,863,315	(38,884)	28,700	7,853,131	-896,281	-	-	390,856	8,243,987	871,585
FY 2013	7,853,131	(131,752)	I	7,721,379	-1,028,033	I	-	390,856	8,112,235	871,585
FY 2014	7,721,379	(208,456)	20,000	7,532,923	-1,216,489	1	-	390,856	7,923,779	813,750
FY 2015	7,532,923	(299,020)	T	7,233,903	-1,515,509	-	-	390,856	7,624,759	805,965
FY 2016	7,233,903	(103, 915)	I	7,129,988	-1,619,424	1	I	390,856	7,520,844	796,344
FY 2017	7,129,988	(386, 194)	-	6,743,794	-2,005,618	-	-	390,856	7,134,650	796,344
FY 2018	6,743,794	1	I	6,743,794	-2,005,618	I	1	390,856	7,134,650	796,344



Attachment E

Attachment E-4(b) FY09-2018 Ten-Year Site Plan FOOTPRINT TRACKING SUMMARY GRAPH





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Attachment E-I FY09-2018 Ten-Year Site Plan Facilities Disposition Plan Notes LANL Site

E-1 and E-1a	
(1) Funding Source	An Asterisk "*" placed in Funding Source indicates the facility is included in Attachment B.
(2) Facility Identification Number	Facility Information Management System Identification Number
(3) Facility Name	An Asterisk "*" placed with the Facility Name indicates a change from prior TYSP.
(4) Mission Dependency Program	Consistent with FIMS
(5) Priority Score	Facilities starting demolition in FY08 are indicated "In Progress". Transformation Disposition projects have a priority rating score using the Transformation Disposition Rating Matrix.
(6) Priorty Rank	Rank of priority by fiscal year and program.
(7) Gross Square Footage	Consistent with FIMS
(8) Excess year	Actual year the OECM determination was made that the facility is excess to DOE's needs.
(9) Estimated Disposition Year	The year the facility is expected to be dispositioned.
(10) TEC to Disposition	TEC values are parametric and are Rough Order Magnitude (Should not be used for formal baseline establishment).
(11) Yearly S&M Costs	Based on \$3.00 per square foot.
(12) Candidate for Transfer	Program or federal agency identified for transfer of facility.
(13) Contaminated Facility	Identification of contamintated facilities. These facilities have structural components and/or systems contaminated with hazardous chemicals and/or radioactive substances, including radionuclide. This definition excludes facilities that contain no residual hazardous substances other than those present in building materials and components, such as asbestos-containing material, lead based paint, or PCB-containing equipment. This definition excludes facilities in which bulk or containerized hazardous substances, including radionuclides, have been used or managed if no contaminants remain in or on structural components and/or systems.
E-2	
(3) Facility Name	An Asterisk "*" placed with the Facility Name indicates a change from prior TYSP.
GSF reported for future years is estimat E4a and E4Rb	GSF reported for future years is estimated. Therefore, gsf for prior fiscal years may be changed due to reporting of actual gsf. E4a and E4Bb
Differences from the Sitewide Footprint Summary Spreadsheet: 1. Addition of the Center for Integrated Nanotechnolgy (34,945 sq. 2. Elimination of the TSTA facility (18,077 sq. ft.) transferred by Off	Differences from the Sitewide Footprint Summary Spreadsheet: 1. Addition of the Center for Integrated Nanotechnolgy (34,945 sq. ft.) in 2006, funded by Office of Science 2. Elimination of the TSTA facility (18,077 sq. ft.) transferred by Office of Science with D&D, funded by EM in 2010.
NOTES: 1. CMR and related facilities will be dis 2. Leased space is not included in the S	NOTES: 1. CMR and related facilities will be dispositioned in a year yet to be determined (571,458 gsf), not included in Excess Facilities Footprint Elimination field. 2. Leased space is not included in the Site Total Footprint gsf column. Future leased space includes the proposed Science Complex.
Au Totals for vears prior to FY08 may have	All Totals for vears prior to FV08 may have been changed since the previous TYSP to reflect actual est instead of estimated esf.
TOTALS FOR JULY PUTTOR IN THIS TANK THE	e peci tilaliĝen altre like previoua 11.01. IV tuticu actual ĝaj alatudu di continucu ĝaj.

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Attachment F.

Legacy Deferred Maintenance Baseline and Projected Deferred Maintenance Reduction

Attachment F reports the NNSA maintenance requirements baseline for assessing actual and planned progress toward reducing DM. Attachment F-1 describes the FY03 legacy DM baseline and reflects DM reductions against this the baseline. Attachment F-2 illustrates the actual and projected trends (growth and reductions) for total DM and reports Laboratory progress in achieving NNSA's DM reduction goals.

FY09 TYSP • • • • • • • • •

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Attachment F

Attachment F-I FY09-2018 Ten-year Site Plan FIRP FY 2003 Legacy Deferred Maintenance Baseline and Projected Deferred Maintenance Reduction from Baseline NNSA - LANL Site (\$000\$)

Image: Mark SELINE (Actual) (Actual) </th <th>FY 2004 FY 2005 FY 2006 FY 2007 FY 2008 FY 2009 FY 2010 FY 2011 FY 2012</th> <th>2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018</th>	FY 2004 FY 2005 FY 2006 FY 2007 FY 2008 FY 2009 FY 2010 FY 2011 FY 2012	2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018
3 $564,243$ $429,430$ $359,144$ $301,146$ $279,395$ $268,833$ $256,930$ $243,498$ $205,418$ 11 2 $24,770$ $134,803$ $115,916$ $57,478$ $57,037$ $10,512$ $11,933$ $13,432$ $38,080$ 11 2 $24,770$ $134,803$ $115,916$ $57,478$ $57,037$ $10,512$ $11,943$ $11,464$ $11,464$ 2 $24,770$ $27,424$ $63,355$ $23,056$ $10,802$ $10,301$ $7,468$ $11,464$ $11,464$ 2 $24,770$ $27,424$ $63,355$ $23,056$ $10,802$ $10,901$ $10,930$ $10,369$	(Actual) (Actual)	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	359,144 301,146 279,395 268,883 256,930 243,498 205,418	194,861 177,088 172,468 169,056 165,798 156,698 156,698
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		
24,770 27,424 63,355 23,056 10,862 10,301 7,468 11,840 11,464 2 2,302 2,302 2,569 8,995 7,092 10,930 10,359 7 7 7,987 2,772 196 7 143 467 1 7,987 2,772 196 7 143 467 1 12,747 5,521 1,110 368 767 638	115,916 57,478 57,037 10,512 11,953 13,432 38,080	10,557 17,774 4,619 3,412 3,258 9,100 -
24,770 27,424 63,355 23,056 10,802 10,301 7,468 11,640 11,404 11,64 11,64 11,64 11,64 2,322 2,322 2,569 8,995 7,092 10,300 10,359 7,987 2,772 196 7 143 467 11,747 5,521 1,110 368 767 638		
2.322 2.569 8.995 7.092 10.930 10.359 7.987 2.772 196 7 143 467 10 10 5.521 1,110 368 767 638	63,355 23,056 10,862 10,301 7,468 11,840 11,464	9,590 17,110 - / / /
2,322 2,569 8,995 7,092 10,930 10,359 7,987 2,772 196 7 143 467 110 12,747 5,521 1,110 368 767 638		
7,987 2,772 196 7 143 467 1 1 1 368 767 638 1 1 5,521 1,110 368 767 638	2,569 8,995 7,092 10,930 10,359	7,537 15,620
7/987 2/772 196 7 143 467 12/74 5,521 1,110 368 767 638		
12,747 5,521 1,110 368 767 638	2,772 196 7 143 467	1,442 1,359 - / / /
12747 5,521 1,110 368 767 638 1 1 1 1 1 1		
	5,521 1,110 368 767 638	611 130 - / / /
FACILITIES & INFRASTRUCTURE 5,623,221 / / / / / /		

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Attachment F-2 FY09-2018 Ten-Year Site Plan NNSA Total Deferred Maintenance Reduction NNSA - LANL Site

				-	(\$000\$)	IL 316										
Category of Maintenance	FY 2003 (Baseline)	FY 2004 (Actual)	FY 2005 (Actual)	FY 2006 (Actual)	FY 2007 (Actual)	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
1. ANNUAL REQUIRED MAINTENANCE for F&I	107,124	109,313	111,620	102,814	105,284	143,670	151,371	147,372	150,077	153,490	156,579	159,399	161,789	158,770	159,885	163,181
2. ANNUAL PLANNED MAINTENANCE <u>IOTAL</u>	88,222	107,523	107,450	95,224	91,466	066,86	114,977	117,851	120,562	123,214	125,925	128,695	131,527	134,552	137,646	140,812
a. Direct	41,804	48,716	49,076	48,752	41,609	44,541	51,740	53,033	54,253	55,446	56,666	57,913	59,187	60,548	61,941	63,366
b. Indirect	46,418	108/86	58,3/3	46,472	49,857	54,449	63,237	64,818	605,309	6/,/08	667,69	70,782	72,340	74,003	/2//06	77/,447
3. DEFERRED MAINTENANCE (DM) TOTAL																
(Excludes Programmatic Real Property or Equipment)																
= Inflation Prior Year DM Total + DM New - Prior Year DM Reduction	564,243	546,979	455,113	465,773	457,868	466,416	462,466	461,539	414,619	416,183	395,937	405,715	412,688	421,398	408,911	422,790
i. Backlog Inflation Rate (%)		2.3%	2.6%	5.5%	5.7%	2.6%	2.5%	2.3%	2.2%	2.2%	2.2%	2.2%	2.3%	2.3%	2.3%	2.3%
ii. DM Inflation		12,978	14,221	25,093	26,609	11,905	11,660	10,637	10,154	9,122	9,156	8,711	9,331	9,492	9,692	9,405
iii. DM NEW	\setminus	36,276	8,487	12,326	10,151	8,880	7,279	5,904	5,903	6,055	6,131	6,141	6,052	4,844	4,448	4,474
A. DM, Mission-Critical F&I ONLY				136,731	139,943	138,299	136,376	128,280	118,397	114,610	94,989	98,835	102,876	105,776	108,134	111,012
B. DM, Mission-Dependent, Not Critical F&I ONLY		\setminus		71,575	63,971	65,087	66,839	68,835	63,804	63,953	57,122	59,824	62,383	64,551	66,075	69,137
C. DM, Not Mission-Dependent F&I ONLY				257,467	253,954	263,030	259,251	264,424	232,417	237,619	243,826	247,056	247,429	251,071	234,703	242,642
4. DEFERRED MAINTENANCE (DM) REDUCTION TOTAL	24,770	28,110	114,574	60,508	78,414	12,237	22,889	17,468	62,977	13,612	35,533	5,074	8,410	5,626	26,626	1
i. Reduction Total attributed to FIRP ONLY	24,770	28,110	40,691	23,172	19,372	11,955	10,274	15,062	18,560	12,273	34,585	$\left \right $			\setminus	
A. Reduction in DM for Mission-Critical F&I		\setminus		40,617	44,985	9,333	8,313	12,782	14,252	8,020	23,771	'			531	1
1. Reduction attributed to FIRP ONLY	\setminus	\setminus	$\left \right $	6,873	2,790	9,333	8,313	12,782	11,441	8,020	23,771					
					-	-	-	-	-	-						
B. Reduction in DM for Mission-Dependent, Not Critical F&I	\setminus	\setminus	\setminus	10,439	3,242	1,389	1,422	1,084	8,058	2,798	9,816	114	295	772	1,469	1
1. Reduction attributed to FIRP ONLY				10,402	2,723	1,389	1,422	670	5,863	2,712	9,816					
C. Reduction in DM for Not Mission-Dependent F&I	\setminus	\setminus	\setminus	9,452	30,187	1,515	13,154	3,603	40,667	2,794	1,945	4,959	8,115	4,854	24,627	1
1. Reduction attributed to FIRP ONLY				5,897	8,859	1,233	538	1,310	1,256	1,541	666					
									·				·			
 REPLACEMENT PLANT VALUE (RPV) for Facilities and Infrastructure (F&D) 																
= Inflation of PY RPV + Increase or Decrease due to other causes	5,623,221	5,742,511	5,775,207	6,376,986	6,673,911	7,635,262	7,926,204	8,059,023	7,996,338	8,177,651	8,348,718	8,498,705	8,649,402	8,821,172	8,874,523	9,078,637
A. RPV for Mission-Critical F&I ONLY	\setminus	\setminus	\setminus	3,051,571	3,289,260	3,832,214	3,928,019	4,018,364	4,096,401	4,202,554	4,295,011	4,415,090	4,516,637	4,620,519	4,685,172	4,792,931
B. RPV for Mission-Dependent, Not Critical F&I				442,276	448,262	522,186	707,711	718,266	722,127	736,083	752,277	762,324	766,199	780,569	789,207	807,359
C. RPV for Not Mission-Dependent F&I				2,883,138	2,936,389	3,280,862			3,177,809	3,239,013	3,301,430	3,321,291	3,366,566	3,420,083	3,400,144	3,478,347
D. RPV Increase from prior year attributed to inflation				560,452	478,765	173,522	190,882	182,303	177,299	175,919	179,908	183,672	195,470	198,936	202,887	204,114
E. RPV Increase / decrease attributed to causes other than inflation				200 11	(101 020)	000 101	100.061	1004.011	(190.020)	5 204	(1) 0/1/	(33 6 GE)	10777 141	1221 70	1140 5361	
(provide separate supporting riantative benind 1-2 extinuty) Booilitur foundition Indox (BCI)	EV 2002	EV 2004	EV 2005	EV 2006	EV 2007	EV 2008	EV 2000	EV 2010	EV 2011	EV 0010	EV 2012	EV 201.4	EV 201E	EV 2016	EV 2017	EV 2016
rachity condition much (r.c.)	(Baseline)	(Actual)	(Actual)	(Actual)	(Actual)	1.1 2000	1.1 2003	0107 1.1	1107 1.1	7107 1.1	6107 1.1	£107 1.1	6107 1.1	01071.1	11 201/	0107 1.1
FCITOTAL	10.0%	9.5%	7.9%	7.3%	6.9%	6.1%	5.8%	5.7%	5.2%	5.1%	4.7%	4.8%	4.8%	4.8%	4.6%	4.7%
FCI Mission Critical	\setminus	\setminus	\setminus	4.5%	4.3%	3.6%	3.5%	3.2%	2.9%	2.7%	2.2%	2.2%	2.3%	2.3%	2.3%	2.3%
FCI Mission Dependent, Not Critical				16.2%	14.3%	12.5%	9.4%	9.6%	8.8%	8.7%	7.6%	7.8%	8.1%	8.3%	8.4%	8.6%
FCI Not Mission Dependent				8.9%	8.6%	8.0%	7.9%	8.0%	7.3%	7.3%	7.4%	7.4%	7.3%	7.3%	6.9%	7.0%
Asset Condition Index (ACI)	FY 2003 (Baseline)	FY 2004 (Actual)	FY 2005 (Actual)	FY 2006 (Actual)	FY 2007 (Actual)	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
ACI TOTAL	90.0%	90.5%	92.1%	92.7%	93.1%	93.9%	94.2%	94.3%	94.8%	94.9%	95.3%	95.2%	95.2%	95.2%	95.4%	95.3%
ACI Mission Critical	\setminus	\setminus		95.5%	95.7%	96.4%	96.5%	96.8%	97.1%	97.3%	97.8%	97.8%	97.7%	97.7%	97.7%	97.7%
ACI Mission Dependent, Not Critical		\setminus	\setminus	83.8%	85.7%	87.5%	90.6%	90.4%	91.2%	91.3%	92.4%	92.2%	91.9%	91.7%	91.6%	91.4%
ACI Not Mission Dependent		\backslash		91.1%	91.4%	92.0%	92.1%	92.0%	92.7%	92.7%	92.6%	92.6%	92.7%	92.7%	93.1%	93.0%

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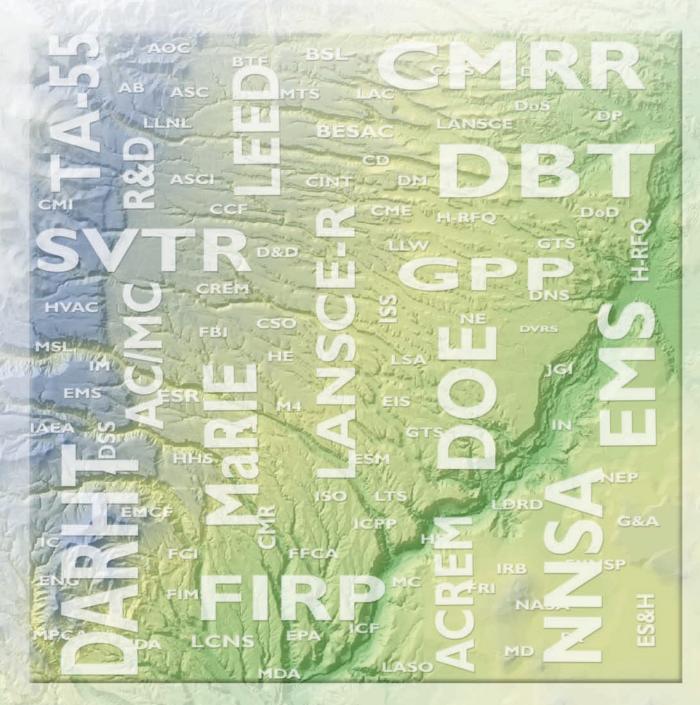
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٤	Attachment F Notes FY09-2018 Ten-Year Site Plan Draft 2 NNSA Total Deferred Maintenance and Projected Deferred Maintenance Reduction NNSA - LANL Site (\$000s)
Notes	
F-2 5.E RPV Increase / decrease attributed to causes other than inflation	The RPV for 2008 was adjusted based on the <i>FY07 Source Method for Replacement Plant Values (RPV) Calculation of FIMS Buildings and</i> <i>Trailers</i> dated 3/1/07. Specifically the site factor for laboratory type facilities was increased from 0.921 to the FIMS default value of 1.568. Additionally, five unique facilities and the OSFs were escalated by 3.9 % RPV changes for the remaining years (FY09 to FY18) were based on the removal and addition of facilities. Significant increases are due to adding CMRR-RLUOB in FY10 and CMRR-NF in FY16.
F-2 3. DM Total FY 2008	Total year-end FY08 DM reported in FIMS increased by almost 91% to \$875M. This increase, predominately for Non-Mission Dependent facilities, was due to updated facility inspections (6%), corrected DM for shutdown facilities (26%), and revised utility DM from previous inspections (67%).
All future year cost data are prelimina	All future year cost data are preliminary due to mission and budget uncertainty.

FY09 TYSP • • • • • • • • •

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Acronyms & References



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Acronyms

08 GSP	2008 Graded Security Protection Planning
2M FRI	Two Million Gross Square Feet Footprint Reduction Initiative
AB	Authorization Basis
AC/MC	analytical chemistry and materials characterization
ACREM	accountable classified removable electronic media
ADISS	Associate Directorate - Infrastructure and Site Services
ADSS	Associate Directorate - Security and Safeguards
AOC	Areas of Concern
ASC	Advanced Simulation and Computing Campaign
ASCI	Accelerated Strategic Computing Initiative
ASPECT	Airborne Spectral Photometric Collection Emergency Response Project
BESAC	Basic Energy Sciences Advisory Committee
BSL	Biological Safety Level
BTF	Beryllium Technology Facility
CAIS	Condition Assessment Information System
CAS	Condition Assessment Survey
CD	Critical Decision
CINT	Center for Integrated Nanotechnologies
CCF	Central Computing Facility
CME	Corrective Measures Evaluation
CMI	Corrective Measure Implementation
CMR	Chemistry and Metallurgy Research
CMRR	Chemistry and Metallurgy Research Replacement
CREM	classified removable electronic media
CSO	Office of the Chief Security Officer
D&D	decontamination and demolition
DARHT	Dual Axis Radiographic Hydrodynamic Test Facility
DSA	Documented Safety Analysis

FY09TYSP • • • • • • • • •

DBT	Design Basis Threat
DHS	Department of Homeland Security
DM	deferred maintenance
DNS	Defense Nuclear Security
DoD	Department of Defense
DOE	Department of Energy
DoS	Department of State
DP	Defense Program
DSW	Directed Stockpile Work
EIS	Environmental Impact Statement
EM	Office of Environmental Management
EMS	Environmental Management System
EPA	Environmental Protection Agency
ES&H	Environment, Safety, and Health
ESM	environmental surveillance and monitoring
ESR	Environmental Surveillance Report
F&I	facilities and infrastructure
FCI	Facility Condition Index
FESAC	Science Fusion Energy Science Advisory Committee
FFCA	Federal Facilities Compliance Agreement
FIMS	Facility Information Management System
FIRP	Facilities and Infrastructure Recapitalization Program
FIRRS	Facility and Infrastructure Recapitalization Ranking System
FY	fiscal year
FYNSP	Future-Years Nuclear Security Program
GIS	geographic information system
GPP	General Plant Projects
GSF	gross square feet
HPSBWG	Department of Energy High Performance Sustainable Buildings Working Group
HE	high explosive
HHS	Department of Health and Human Services
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome

• • • • • • • • • • Acronyms

HQ	Headquarters
HS	Office of Health and Safety
HSWA	Hazardous and Solid Waste Amendments
HVAC	heating, ventilation, and air-conditioning
IAEA	International Atomic Energy Agency
IC	Intelligence Community
ICPP	Integrated Construction Program Plan
IGPP	Institutional General Plant Project
IN	Office of Intelligence
INP	Integrated Nuclear Planning
IRB	Infrastructure Review Board
ISO	International Organization of Standardization
ISS	Infrastructure and Site Services
JGI	Joint Genome Institute
LAMPRE	Los Alamos Molten Plutonium Reactor Experiment
LANS	Los Alamos National Security, LLC
LANSCE	Los Alamos Neutron Science Center
LANSCE-R	Los Alamos Neutron Science Center Refurbishment
LASO	Los Alamos Site Office
LDCC	Laboratory Data Communications Center
LDRD	Laboratory-Directed Research and Development
LEED	Leadership in Energy Environmental Design
LLNL	Lawrence Livermore National Laboratory
LLW	low-level waste
LSA	limited security area
LTS	long-term stewardship
MaRIE	Matter-Radiation Interactions in Extremes
MC	Mission Critical
MD	Mission Dependent
MDA	Material Disposal Area
MOU	Memorandum of Understanding
MR&R	Material Recycle and Recovery

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MSL	Materials Science Laboratory
MTS	Materials Test Station
MW	Megawatt
NASA	National Aeronautics and Space Administration
NDA	nondestructive analysis
NE	Office of Nuclear Energy
NHMFL	National High Magnetic Field Laboratory
NHPA	National Historic Preservation Act
NIC	National Ignition Campaign
NIH	National Institutes of Health
NISC	Nonproliferation and International Security Complex
NMD	Non Mission Dependent
NMED	New Mexico Environment Department
NMSSUP	Nuclear Materials Safeguards and Security Upgrades Project
NNSA	National Nuclear Security Administration
NPR	Nuclear Posture Review
NRC	Nuclear Regulatory Commission
NSEC	National Security Education Center
NSF	National Science Foundation
NSSB	National Security Sciences Building
NTNF	Office of National Technical Nuclear Forensics
NTS	Nevada Test Site
NWC	Nuclear Weapons Complex
OECM	Office of Engineering and Construction Management
ORNL	Oak Ridge National Laboratory
PE-Ci	plutonium equivalent curies
PIDADS	Perimeter Intrusion Detection, Assessment and Delay System
PIDAS	Perimeter Intrusion Detection Alarm System
PM	Planned Maintenance
PMC	Pit Manufacturing and Certification Campaign
PPF	Plutonium Processing Facility
Pu	

Q	quarter
QMU	quantification of margins and uncertainties
R&D	research and development
RANT	Radioassay and Nondestructive Testing
RCRA	Resource Conservation Recovery Act
RISC	Risk-Informed Sustainment Cost
RLUOB	Radiological Laboratory Utilities and Office Building
RLWTF	Radioactive Liquid Waste Treatment Facility
RM	required maintenance
ROD	Record of Decision
RIK	replacement-in-kind
RPV	replacement plant value
RSI	Radiological Sciences Institute
RTBF	Readiness in Technical Base and Facilities
RUPS	rotary uninterruptible power supply
S&M	surveillance and maintenance
SC	Office of Science
SCIF	Sensitive Compartmentalized Information Facility
SHPO	State Historic Preservation Officer
SI/FR	Strategic Investments/Footprint Reduction
SNL	Sandia National Laboratories
SNM	special nuclear material
SNS	Spallation Neutron Source
SPEIS	Complex Transformation Supplemental Programmatic Environmental Impact Statement
SRS	Savannah River Site
SSP	Stockpile Stewardship Program
STC	Superconductivity Technology Center
SVTR	Super Vault-Type Room
SWEIS	Site-Wide Environmental Impact Statement
SWMU	Solid Waste Management Unit
ТА	Technical Area

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TBD	to be determined
TD	Transformation Disposition
TEAM	Transformational Energy Action Management
TRP	TA-55 Reinvestment Project
TRU	transuranic waste
TT	technology transfer
TYCSP	Ten-Year Comprehensive Site Plan
TYSP	Ten-Year Site Plan
U.S.	United States
WCRRF	Waste Characterization, Reduction, and Repackaging Facility
WETF	Weapons Engineering Tritium Facility
WFO	Work for Others
WIPP	Waste Isolation Pilot Plant
WMD	weapons of mass destruction
WNR	Weapons Neutron Research

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