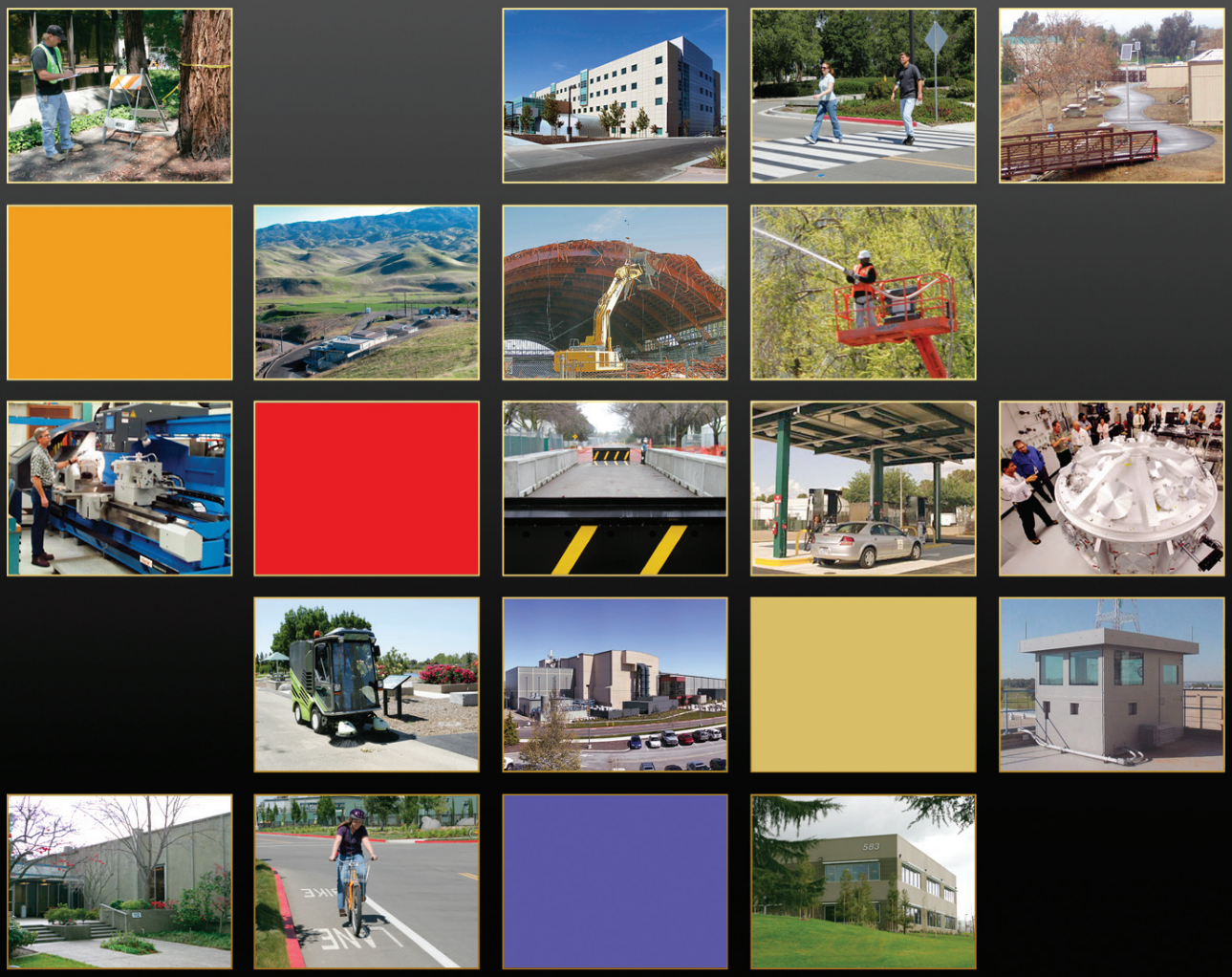
FY09 TEN YEAR SITE PLAN

AUGUST 2008



National Nuclear Security Administration

Lawrence Livermore National Laboratory

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LAWRENCE LIVERMORE NATIONAL LABORATORY

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Director's Statement

George H. Miller, Director

The transition to a new contractor to manage and operate the Lawrence Livermore National Laboratory (LLNL) was completed at the end of September 2007, but change at the Laboratory will continue. The new management team, Lawrence Livermore National Security, LLC (LLNS) has an exciting vision for the future of the Laboratory—providing national security in a global context. Our vision is shaped by and aligns with the National Nuclear Security Administration's (NNSA's) goal of transforming the nation's nuclear weapons complex to make it smaller, safer, more secure, and more cost-effective as we continue to meet the nation's vital security needs.

In NNSA's preferred alternative for Complex Transformation, LLNL serves as a Center of Excellence for nuclear design and engineering. Further, the plan identifies LLNL as a Center of Excellence for supercomputing, high-explosive research and development, and high-energy-density physics. This designation recognizes unique strengths and capabilities at LLNL, and it leverages the major investments NNSA has made in the Terascale Simulation Facility and Advanced Simulation and Computing supercomputers at Livermore, the High-Explosive Applications Facility, and the National Ignition Facility (NIF). These critical facilities will provide complex-wide support. NIF will also serve as a user facility where academic researchers will have opportunities to explore the frontiers of science.

LLNL has begun to take steps to reduce costs and better position the Laboratory for the future by consolidating into a smaller, more efficient operation, and by looking for ways to expedite change. We believe our actions and proposed plans on facilities and infrastructure, as reported in this *FY09 Ten year Site Plan* (TYSP), will take the Laboratory well into the next decade, in synergy with supporting the preferred alternative for Complex Transformation.

Complex Transformation not only builds on the special strengths at NNSA sites, it entails consolidation. We have already started shipping special nuclear materials from the Livermore site. Consolidation of Category I/II quantities of these materials to fewer sites in the complex will lower overall costs and enhance security. Similarly, long-term plans call for closure of the Contained Firing Facility when its use for hydrodynamic testing is no longer programmatically necessary and reduced NNSA support for Site 300. As these changes occur, Livermore scientists and engineers will carry out aspects of their important programmatic work at other sites. As this TYSP describes, we are aggressively addressing legacy space at the Livermore site using a highly cost-effective, best-in-class approach to decommissioning and demolition.

Regardless of specifics to improve the complex, one of the major goals set by the LLNS team is to improve the cost efficiency of work performed at the Laboratory while meeting high standards in safety, security, and environmental management and continuing Livermore's tradition of innovation and scientific excellence. Some of our best practices in facilities and infrastructure management are already being shared with others in the complex. As we continuously improve and increase cost efficiency in other areas, we will share lessons learned.

Centers of Excellence, consolidation, and greater cost efficiencies—our actions and plans demonstrate our commitment to a smaller, safer, more secure, and more cost-effective NNSA weapons complex. In the Livermore tradition, we will also continue to explore "game changing" ways to make improvements, such as the technology innovations that were part of our Reliable Replacement Warhead proposal. In addition, we will expand Work for Others at the Laboratory in a way that helps to support the critical skills and capabilities needed for our nuclear weapons and nuclear nonproliferation missions.

As our TYSP highlights, it is a time of change at LLNL. What remains fixed are our important national security responsibilities and the prospect of exciting scientific discoveries and technological advances to meet mission needs.

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List of Acronyms

A.L.A.R.M.S.	Advanced Livermore Alarm Recognition and Monitoring System
ACI	Asset Condition Index
ASC	Advanced Simulation and Computing
AUI	Asset Utilization Index
BKC	Biodefense Knowledge Center
CAIS	DOE Condition Assessment Information System
CAS	Condition Assessment Survey
CCTV	closed-circuit television
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CMMS	Computerized Maintenance Management System
D&D	decontamination and demolition
DBT	Design Basis Threat
DHS	U.S. Department of Homeland Security
DM	deferred maintenance
DoD	U.S. Department of Defense
DOE	U.S. Department of Energy
DP	Defense Program (NNSA)
DSW	Directed Stockpile Work
DTSC	State of California Department of Toxic Substance Control
DWTF	Decontamination and Waste Treatment Facility
EAC	East Avenue Corridor
EMS	Environmental Management System
EM	DOE Environmental Management
ESH&Q	Environment, Safety, Health, and Quality
ESPC	Energy Savings Performance Contract
ETCU	Engineering Technology Complex Upgrade
F&I	facilities and infrastructure
FAaRS	Facility Assessment and Ranking System
FACTRACS	Facility Tracking System
FCI	Facility Condition Index
FEMP	Federal Energy Management Program
FGB	Facility Governance Board
FIMS	Facility Information Management System
FIRP	Facility and Infrastructure Recapitalization Program

FITS	Facility Information Tracking System
FTE	full-time equivalent
FYNSP	Future-Years Nuclear Security Program
GPP	General Plant Project
gsf	gross square foot
HE	high explosive
HEAF	High Explosives Applications Facility
HQ	headquarters
HVAC	heating, ventilating, and air conditioning
ICPP	Integrated Construction Program Plan
IFC	Institutional Facility Charge
IFM	Institutional Facilities Management Organization
IFM	Institutional Facility Manager
IGPP	Institutional General Plant Project
IMAC	Interagency Modeling and Assessment Center
IROC	International Response Operations Center
ISMS	Integrated Safety Management System
JCI	Johnson Controls, Inc.
LANL	Los Alamos National Laboratory
LEED	Leadership in Energy and Environmental Design
LGS	load grid switch
LLNL	Lawrence Livermore National Laboratory
LLNS	Lawrence Livermore National Security, LLC
LTS	Long-Term Stewardship
M&O	maintenance and operations
MIP	Maintenance Implementation Plan
ML 1	maintenance level 1
ML 2	maintenance level 2
NARAC	National Atmospheric Release Advisory Center
NASA	National Aeronautics and Space Administration
NEPA	National Environmental Policy Act
NIF	National Ignition Facility
NIH	National Institutes of Health
NIRP	Nuclear Incident Response Program
NNSA	National Nuclear Security Administration

NTS	Nevada Test Site
PAB	Performance Assurance Board
PAD	Principal Associate Directorate and Principal Associate Director
PMMS	Preventive Maintenance Management System
PSO	Program Secretarial Office (DOE)
R&D	research and development
RAP	remote access panel
RCM	Reliability-Centered Maintenance
RCRA	Resource Conservation and Recovery Act
ROI	return on investment
RP&IE	real property and installed equipment
RPV	replacement plant value
RRW	Reliable Replacement Warhead
RTBF	Readiness in Technical Base and Facilities
RTI	Return to Institution
S&T	science and technology
SC	DOE Office of Science
SCIF	sensitive compartmentalized information facility
Site 200	LLNL Main Livermore Site
Site 300	LLNL High-Explosives Experimental Test Site
SNL	Sandia National Laboratories
SNL/CA	Sandia National Laboratory, California
SNM	special nuclear materials
SPEIS	Supplemental Programmatic Environmental Impact Statement
SSCs	systems, structures, and components
SSP	Stockpile Stewardship Program
SWEIS	Site-Wide Environmental Impact Statement
TFF	Target Fabrication Facility
TRIC	Tactical Response International Center
TSF	Terascale Simulation Facility
TYSP	Ten Year Site Plan
UC	University of California
WEST	Weapons Engineering and Science Technology facility
WFO	Work for Others
WMD	weapons of mass destruction

1.0 Executive Summary/Future State

The Lawrence Livermore National Laboratory (LLNL) is undergoing considerable change which is the central theme of this *Ten Year Site Plan* (TYSP) which covers the LLNL Main Livermore Site (Site 200) and High Explosives Experimental Test Site (Site 300). In October 2007, Lawrence Livermore National Security, LLC (LLNS) public–private partnership became the management and operating contractor for the Laboratory and brought with it a new organizational structure (see Figure 1-1). In January 2008, the National Nuclear Security Administration (NNSA) issued its draft plan for Complex Transformation which will transform the nation's nuclear weapons complex to make it smaller, safer, more secure, and more cost-effective. Both events have a profound effect on the future of the Laboratory, creating both opportunities and challenges—and most certainly, setting the stage for further change.

LLNS brings to Laboratory management an enormous experience base in science and technology, business and operations, and nuclear weapons complex-critical infrastructures capabilities. The new management team has a vision for LLNL: National Security in a Global Context. The strategy is to provide:

- Leadership in Nuclear Weapons Complex transformation.
- Strong mission delivery and aggressive Work for Others growth.
- Exceptional science and technology that anticipates, innovates, and delivers.
- Enhanced business and operational performance at lower cost.

We fully embrace Complex Transformation objectives and are seeking ways to accelerate the transformation process.

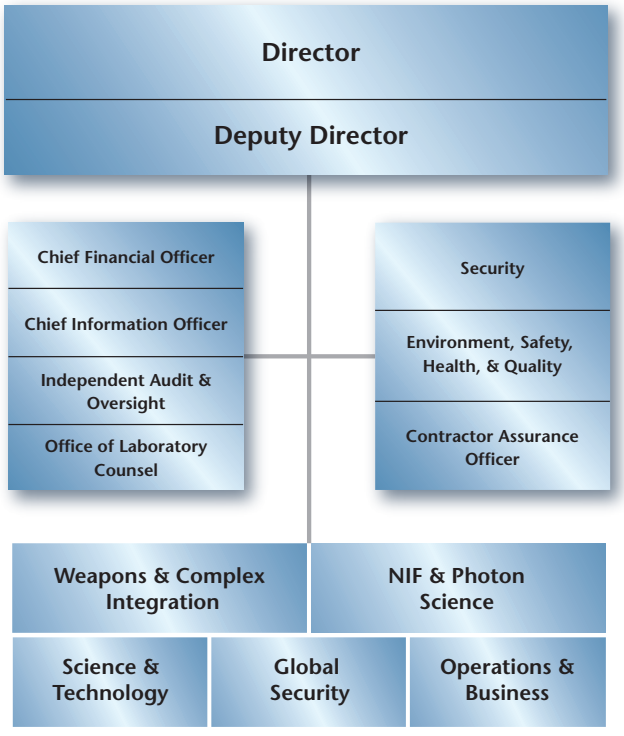

Figure 1-1. LLNL's organizational structure.

This TYSP addresses a wide range of facilities and infrastructure (F&I) activities at LLNL that strengthen the Laboratory's ability to support NNSA's Preferred Alternative for Complex Transformation. These include:

- *Centers of Excellence.* In the Preferred Alternative, LLNL will be a Center of Excellence for nuclear design and engineering. Several facilities at the site will serve as centers of excellence: the High Explosives Applications Facility (HEAF) for HE research and development (R&D) (for quantities <10 kg), the National Ignition Facility (NIF) for high-energy-density physics, and the Terascale Simulation Facility (TSF) as a supercomputing platform site (currently with BlueGene/L, the world's fastest computer).
- *Consolidation of Category I/II quantities of special nuclear materials.* The Laboratory has developed plans and schedules for the removal of Category I/II quantities of special nuclear materials (SNM) from the site by the end of 2012, sooner than the target date of 2014 considered last year. Only the minimum amount of materials would remain for R&D activities. The inventory reduction process has begun. Elimination of Category I/II quantities of SNM will affect the Design Basis Threat (DBT) appropriate for the Laboratory in the future.
- *Consolidation of experimental facilities.* Major hydrodynamic test facilities will be consolidated and work will cease at the Contained Firing Facility at Site 300 when programmatic alternatives are available in 2015. Defense Programs anticipates a 90% reduction in the acreage it will support at LLNL as Site 300 activities cease and the status of the site changes. Some testing activities necessary to sustain LLNL as NNSA's center-of-excellence in high explosive R&D need to be relocated at the Livermore site, leading to a Line Item request which has been submitted to the NNSA HQ Construction Working Group for an annex to HEAF.
- *Support of facilities and infrastructure at the Laboratory.* Consistent with the Preferred Alternative, NNSA anticipates a 30% reduction in support for buildings and infrastructure at the Laboratory. Near-term budget realities have necessitated a workforce restructuring at LLNL to reduce staff and consolidate space and functions. The result is up to 2M gross square feet (gsf) being targeted for closure. This TYSP highlights the issues and the plans under development to manage the large amount of legacy facilities and equipment, and their disposition, in an orderly, cost-efficient manner. Over the long run, growth in Work for Others will stabilize the workforce of the Laboratory, help sustain the base of critical skills needed for weapons activities, and serve as an additional source of F&I investments.
- *Complex-wide improvements.* The new management teams at Livermore and Los Alamos National Laboratories (LANL) are committed to joint or common practices to improve efficiencies. Best practices developed at the Laboratory will be shared. For example, in F&I areas such as Real Property Management and Decontamination and Demolition (D&D), LLNL is providing a model for best practices, which can be adopted uniformly across the complex. In addition, LLNL's efforts on the Reliable Replacement Warhead (RRW) have stimulated creative approaches, potentially applicable to RRWs or life-extention programs, for reducing costs and simplifying manufacturing processes and for improving stockpile surveillance. Their implementation would expedite Complex Transformation and help to address F&I issues at production facilities in the complex.

In summary, our TYSP reports on the excellent progress LLNL has made in the construction of major research facilities and on continuing efforts at reducing maintenance backlog, rehabilitation and modernization of building systems, and safe D&D of substandard space and legacy facilities. The Laboratory's current gross square footage is 7.2M, and the projected future gross square footage following the planning assumptions in this TYSP will be 6.8M (94%), with only 5.2M (72%) of today's gsf being operational. Making this reduction in a cost-effective and efficient manner poses a variety of investment and planning challenges, which also are discussed here. This submitted plan and ongoing planning activities fully support—and seek to expedite—Complex Transformation, pointing the way to further changes to LLNL's F&I.

Figure 1-2. Gross Square Footage Summary

	Site GSF Baseline (gsf) - *Based on FIMS Snap-shot taken at end of FY2005*	Net Change in GSF from FY06 through FY07 - *Based on FIMS Snap-shot at end of FY2007*	Cumulative Changes from Start FY2008 to End FY2018		Projected Footprint at end of FY2018 (gsf)	Change from Start of FY2006 to End of FY2018 (gsf)
			Cumulative Additions (Construction, New Leases, Transfers) (gsf)	Cumulative Reductions (Disposition, Sale, Transfer, Lease Termination) (gsf)		
OWNED GROSS SQUARE FOOTAGE						
Weapons Activities Account Owned	6,354,725	-102,329	72,160	-617,268	5,707,288	-647,437
Other NNSA Owned (NA-20)	217,692	-45,731	0	-69,529	102,432	-115,260
Other DOE Owned	541,020	-28,531	0	-53,477	459,012	-82,008
Non-DOE Owned	0	0	0	0	0	0
Total	7,113,437	-176,591	72,160	-740,274	6,268,732	-844,705
LEASED GROSS SQUARE FOOTAGE						
Weapons Activities Account Leased	75,400	-1,288	9,329	0	83,441	8,041
Other NNSA Leased (NA-20)	0	0	0	0	0	0
Other DOE Leased	0	0	0	0	0	0
Non-DOE Leased	0	0	0	0	0	0
Total	75,400	-1,288	9,329	0	83,441	8,041
OWNED & LEASED GROSS SQUARE FOOTAGE						
Weapons Activities Account Owned & Leased	6,430,125	-103,617	81,489	-617,268	5,790,729	-639,396
Other NNSA Owned & Leased (NA-20)	217,692	-45,731	0	-69,529	102,432	-115,260
Other DOE Owned & Leased	541,020	-28,531	0	-53,477	459,012	-82,008
Non-DOE Owned & Leased	0	0	0	0	0	0
Total	7,188,837	-177,879	81,489	-740,274	6,352,173	-836,664

Notes

- Data provided in the " Site GSF Baseline" column is derived from the FIMS Snap-shot taken at the end of FY2005.
- Data provided in the "Net Change in GSF from FY06 through FY07" column is derived from the FIMS Snap-shot taken at the end of FY2007.
- Leased Gross Square Footage includes: DOE Leased, Contractor Leased, and Permit space.

Stated Assumptions, per guidance from HQ

- Data excludes OSFs and sitewide assets, regardless of primary measurement unit
- Facilities owned by EM or SC are considered Other DOE Owned
- Facilities with NA-20 as Primary Mission Dependent Program are considered Other NNSA Owned
- All Other facilities owned by NNSA are considered Weapons Activities Account Owned

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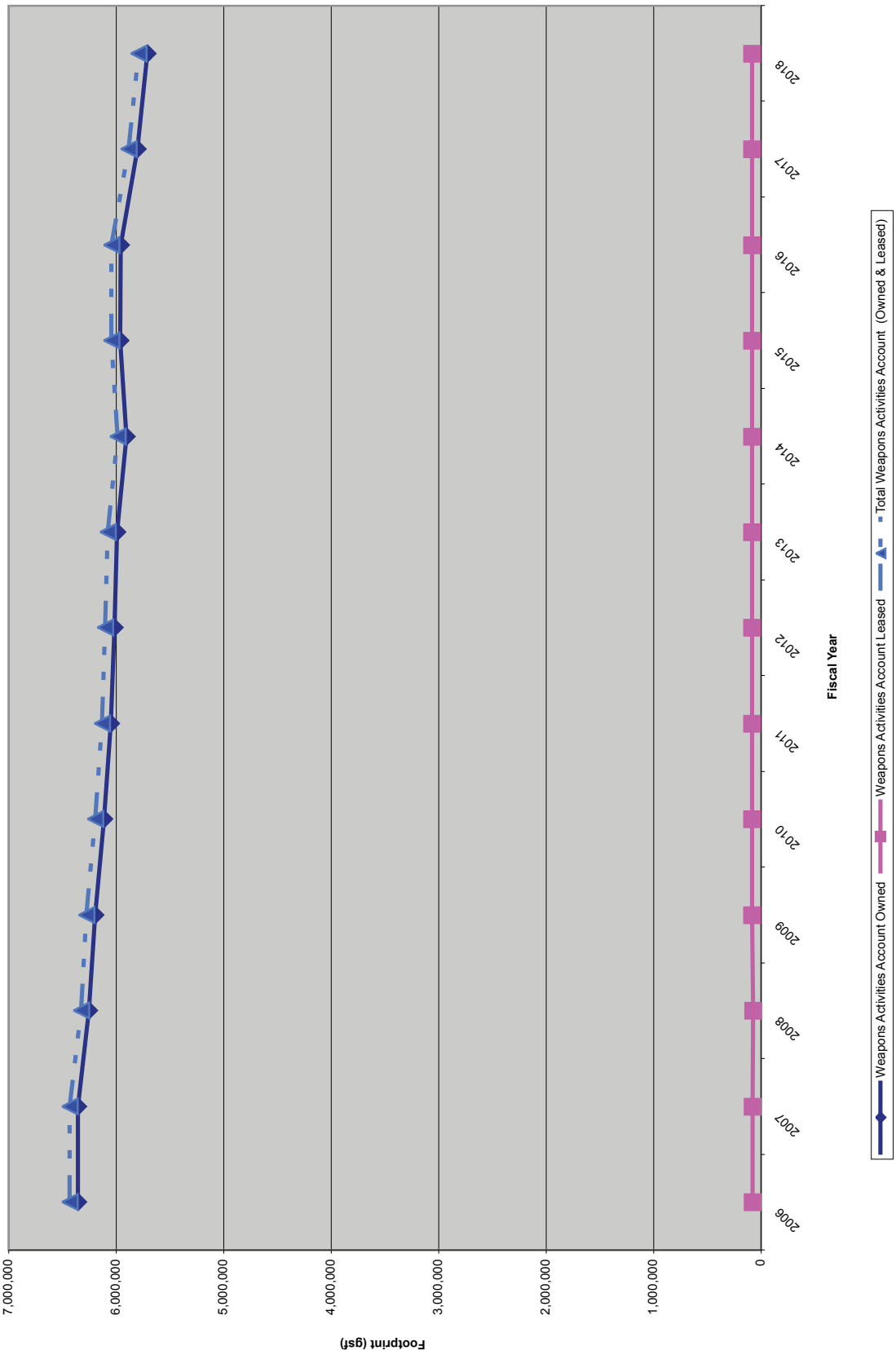

Figure 1-3. LLNL — NNSA Weapons Activities Account Footprint

2.0 Assumptions

LLNL is situated about 50 miles east of San Francisco at the outskirts of the city of Livermore in Alameda County. Lawrence Livermore National Security, LLC, replaced the University of California (UC) in FY08 to assume management of the Laboratory on a seven-year contract, with provision for extension up to an additional 13 years. The Laboratory will continue to operate as a multi-program, continuing-mission site. General assumptions underlying this TYSP are:

- Complex Transformation will proceed along the lines specified by the Preferred Alternative in NNSA's draft Supplemental Programmatic Environmental Impact Statement (SPEIS).
- Consistent with the Preferred Alternative, the size of the workforce will be reduced. The Laboratory's goal is a reduction of up to 750 full-time equivalents (FTE) through workforce restructuring in FY08. Further reductions in the Defense Programs supported workforce will take place through attrition and retirements in accordance with gradual changes in budgets. The overall size of the workforce will stabilize through growth of Work for Others.
- Consistent with the Preferred Alternative, the TSF, the HEAF, and the NIF will be centers of excellence with users from multiple sites in the Nuclear Weapons Complex. NIF, in particular, will complete the transition from a construction project to a full user facility integral to executing the Stockpile Stewardship Program (SSP) and high-energy-density missions. Establishment of NIF as a user facility, integrated with the available computational modeling capabilities and consolidation of the user community into a campus around the facility, is an important part of the Complex Transformation vision.
- Improvements to business and operations at LLNL, which is integral to Complex Transformation and LLNS' vision for the Laboratory, will necessitate significant technological changes in these functions that will affect the Laboratory's operation and work environment.
- LLNL will continue to use a corporate model and the triad facility management model (see Section 5, Figure 5-1) approach to manage F&I, embracing best practices in facility management.

Key assumptions that affect facilities and infrastructure (F&I) at the Laboratory sites are grouped into three categories: site boundaries, facility funding, and security and safeguards. Figure 2-1 summarizes F&I statistics that characterize LLNL's two sites.

At-a-glance		Site 200	Site 300	Total
Facilities:	EM	35 (202K gsf)	9 (6K gsf)	44 (208K gsf)
	SC	19 (304K gsf)	0 (0 gsf)	19 (304K gsf)
	NNSA	405 (6.1M gsf)	180 (388K gsf)	585 (6.5M gsf)
	Total*	459 (6.6M gsf)*	189 (394K gsf)*	648 (7.0M gsf)*
Acres in site area		820 (~1 mi^2)	7,000 (11 mi^2)	7,820 (~12 mi^2)
Population on site:	LLNL	7,659	172	7,831
DOE, contractors, others		3,005	0	3,005
	Total	10,664	172	10,836

* Includes onsite/offsite owned facilities. Does not include tents, leases, land, or sitewide utility assets.

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Figure 2-1. Livermore Main Site and Site 300 facilities and population.

2.1 Site Boundaries

2.1.1 The Livermore Main Site (Site 200)

The site boundaries of the Livermore Main Site will not contract, nor will those for Sandia National Laboratory, California (SNL/CA), for which LLNL will carry site physical security responsibilities at the main entrances. The approximate one-square-mile Livermore Main Site is physically constrained on three sides by major public thoroughfares, and SNL/CA to the south side. The previous rural and agricultural "buffer" at the site perimeter has disappeared as the land becomes rezoned and rapidly developed for residential and industrial use. Although the Laboratory has been reducing its space needs through aggressive facility consolidation in response to the NNSA Complex Transformation guidance, no change to the physical site boundaries is expected; there is no land to be transferred or returned to the federal agencies as all remaining facilities are operating within the contiguous square-mile site. LLNL currently has four off-site leased facilities (see section 4.1), but has no operation on leased land or land that is permitted or out-granted to others. The proximity with the adjacent SNL/CA site to the south could have potential for a closer collaboration in physical security operation in the future.

2.1.2 The High Explosives Test Site (Site 300)

According to the Preferred Alternative, Defense Programs anticipates a 90% reduction in the acreage it will support at LLNL as Site 300 activities cease and the status of the site changes. At this time, however, plans are not being developed to change Site 300 boundaries. Site 300 is currently only about 5% developed; the majority of the site cannot be developed because of the steep terrain, required explosives safety zones that isolate test facilities, and a 160-acre *Amsinckia grandiflora* (large-flowered fiddleneck) reserve established by the Department of Energy (DOE) and the U.S. Wildlife Service in 2000. Site 300 has nearly 400K gsf of mixed facilities and other structures. Site 300 is the primary work location for approximately 200 people.

2.2 Facility Funding

- Defense Programs activities will wind down with the cessation of environmental testing and hydrodynamic testing. The Contained Firing Facility will shut down when programmatic alternatives are available in 2015.
- The Facility and Infrastructure Recapitalization Program (FIRP) initiative will continue through FY13. Site funding "splits" will be as projected according to the Future-Years Nuclear Security Program (FYNSP).
- Maintenance and reinvestment funding will continue to be funded indirectly, consistent with the current investment level.
- Line Item construction funding will be as projected in the current Integrated Construction Program Plan (ICPP).
- Planned construction will be funded as scheduled.
- The Transformation Disposition program initiative is planned to start in 2009 and will fund the D&D of excess facilities. Site funding "splits" will be projected according to the FYNSP.

2.3 Security and Safeguards

- Environment, Safety, Health, and Quality (ESH&Q) and Security will continue to be important functions with sensitive issues requiring due diligence.
- The DBT will continue to impose heightened security measures and restrictions on the Laboratory's operations. However, the planned removal of the Category I/II quantities of SNM from LLNL and the planned downgrade in security requirements of two Superblock buildings will significantly ease physical security requirements for LLNL. In particular, activities to implement 05-DBT have been suspended, per DOE's instruction. LLNL anticipates the requirement to maintain the current security posture until the SNM reduction is completed.

3.0 Mission Needs/Program Descriptions

Lawrence Livermore applies multidisciplinary science and technology to meet national security needs in a global context. Established in 1952 to augment the nation's nuclear weapons design capability, LLNL made major advances in nuclear weapons safety and performance throughout the Cold War and today plays a vital role in ensuring that the nation's nuclear weapons remain safe, secure, and reliable. Innovation at the Laboratory will help NNSA achieve its Complex Transformation goals of converting the weapons complex to improve performance and lower costs while providing the nation an effective 21st-century nuclear deterrent. LLNL also has a primary role in NNSA's mission to prevent the spread and use of nuclear weapons and other weapons of mass destruction. The Laboratory provides advanced technologies, integrated analyses, and operational capabilities to meet these needs and strengthen homeland security.

The Laboratory has pioneered the application of many technologies—from high-performance computers to advanced lasers—to meet national security needs. Today, the special capabilities developed for our stockpile stewardship and nonproliferation activities are also applied to strengthen global security through research and development in advanced defense systems, technologies for abundant energy and environmental quality, biosciences and biotechnology to improve human health, and basic science. These activities—often pursued in partnership with universities and other laboratories—meet vital emerging national and international needs. They also enhance the competencies needed for the Laboratory's national security mission.

Innovative science and technology are exemplified by the receipt of 118 R&D 100 Awards and 25 Ernest O. Lawrence Awards. LLNL is home to two of the world's four most powerful computers, and the NIF, the world's largest laser, will be completed in FY09. With an outstanding workforce of approximately 7,800 employees (see Table 2-1), LLNL attains its mission goals and sustains public trust through scientific and technical excellence as well as safe, secure, and efficient operations.

3.1 NNSA Missions, Programs, and Workload

3.1.1 National Security

National security continues to be Livermore's defining responsibility. LLNL's principal national security activities are:

- *Nuclear weapons stockpile stewardship.* Livermore plays a leading role in NNSA's SSP and efforts to achieve a smaller, more efficient weapons complex. In the absence of nuclear testing, Laboratory scientists and engineers must assure the safety and reliability of the nation's nuclear weapons, certify weapon performance, extend the life of selected weapons, and develop replacement warheads that will enable Complex Transformation.

- *Nonproliferation and homeland security.* LLNL's nuclear weapons expertise and extensive capabilities in physical and life sciences are applied to meet the challenge of an expanding global need for civilian nuclear power and its associated infrastructure while restricting the spread of nuclear materials and weapons technology.

3.1.2 Enduring National Needs

The Laboratory pursues R&D in areas of enduring importance to the nation. In support of DOE mission priorities in energy and environment, bioscience, and fundamental science and advanced technology, Livermore seeks challenges that reinforce its national security mission and have the potential for high-payoff results.

- *Energy and environment.* Long-term research is needed to provide the nation with abundant, reliable energy and a clean environment. Livermore's programs contribute to the scientific and technological basis for secure, sustainable, and clean energy resources for the nation and to reducing environmental risks.

- *Bioscience and biotechnology.* Bioscience research at Livermore is directed at understanding the causes and mechanisms of disease, developing biodefense capabilities, improving disease prevention, and lowering health-care costs. Projects leverage LLNL's extensive physical science, computing, and engineering capabilities.

- *Fundamental science and advanced technology.* Scientists and engineers pursue projects in fundamental science and applied technology that build on the Laboratory's core strengths and take advantage of the unique research capabilities and cutting-edge facilities at Livermore. Many projects entail collaborations with universities, industry, and/or other laboratories.

3.1.3 NNSA/Defense Nuclear Programs: Stockpile Stewardship

The stockpile stewardship mission entails the maintenance of the nuclear weapons stockpile, assurance of weapon-system safety and reliability, assessment and certification of warhead performance, and development of refurbishment plans as necessary. The Laboratory is part of DOE/NNSA's integrated program of surveillance (including efforts to better predict aging phenomena), assessment (validated by simulation and experiments), and refurbishment of stockpile components. Principal activities include:

- *Directed Stockpile Work (DSW).* DSW involves surveillance, maintenance, and refurbishment design activities of the existing stockpile. LLNL has special responsibilities for Laboratory-designed weapons (the W87 and W62 ICBM warheads, the B83 bomb, and the W84 cruise missile warhead), including providing guidance on dismantlement, and is also responsible for the W80 cruise missile warhead designed by LANL. LLNL activities also include efforts to build the scientific base and develop monitoring capabilities to understand aging effects in all stockpiled weapons. In FY07, LLNL was selected as the lead nuclear design laboratory for potential development of an RRW design for the Navy's Mk5 reentry body; that work has been halted by Congressional action that zeroed its budget for FY08.

- *Campaigns.* The campaigns support the scientific, engineering, and computing disciplines and capabilities required for the stockpile. They include scientific and engineering demonstrations that together constitute an integrated program of computational simulation, fundamental scientific research, and experiments.

- *Readiness in Technical Base and Facilities (RTBF).* RTBF provides state-of-the-art F&I, including advanced scientific and technical tools to support NNSA nuclear weapons stockpile operational and mission requirements. The RTBF program at LLNL funds only the unique facilities that are required to conduct the scientific, research, development, and testing activities of the SSP. At Livermore and throughout the weapons complex, the RTBF program seeks operational efficiencies, adding or modifying facilities and equipment, and creates new capabilities to support evolving requirements and workload priorities in the context of declining budgets. The program must also address the cost and complexity of the enormous body of regulations, oversight, and assessments that are inherent to a high-technology research, development, production, and testing complex.

3.1.4 Current Status

Thirty-five NNSA mission-critical F&I at LLNL have been designated in NNSA guidance; of these, 32 are Defense Program (DP) facilities that support the SSP mission work. The DP list is the product of an effort to clarify linkages between program deliverables and infrastructure requirements during the Complex Transformation process. The goal is to facilitate informed infrastructure investment decisions by senior NNSA management.

These DP mission-critical facilities provide direct support to focused stockpile research and the evaluation of warhead performance, including response to the stockpile-to-target sequence environments. Work conducted at these facilities is necessary to meet program milestones in the Campaigns and in DSW. The list includes 18 facilities at the Livermore Main Site and 14 facilities at Site 300.

Major NNSA capital investments in specific campaign-directed work at the Laboratory are markedly improving technological and scientific capabilities supporting the SSP. The largest investments have been in the Advanced Simulation and Computing (ASC) campaign's TSF and the NIF. Facility investments in RTBF continue to support critical capabilities. LLNL relies on Nevada Test Site (NTS) facilities for an important portion of its experimental work; the responsibility as managing agency for a set of these facilities is being transferred to NSTech during FY08.

The TSF houses mission-critical ASC hardware, including ASC Purple and BlueGene/L, which supports efforts at the three NNSA laboratories. At 100-plus teraops, Purple represents the culmination of a sequence of ASC machines (Red, Blue, White) tailored to achieve high-fidelity terascale multiphysics simulations. BlueGene/L is a scalable ultra-computer with 106,496 compute nodes and a benchmarked speed of 480 teraops. It is the world's fastest machine and has been used for simulations that won the prestigious Gordon Bell Prize in 2005, 2006, and 2007.

The NIF will complete the transition from a construction project to a full user facility integral to executing the SSP and high-energy-density physics missions of the DOE over the next three years. Establishing the NIF as a user facility, integrated with the available computational modeling capabilities, and consolidation of the user community into a campus around the facility, are essential parts of the LLNL role in NNSA's Complex Transformation vision.

Other Livermore Main Site facilities support experimental research on stockpile materials properties and physical phenomena key to understanding weapon performance and aging characteristics, and engineering testing and analysis. The recently completed Engineering Technology Complex Upgrade (ETCU) provides improved capability in precision fabrication of parts for weapons and support stockpile stewardship activities.

3.1.5 Future Plans

The SPEIS for Complex Transformation has identified in its Preferred Alternative a strategy for transforming the weapons complex that will significantly affect plans for the LLNL site. Elements of this strategy include designation of LLNL as a Center of Excellence for Nuclear Design and Engineering, and as a Center of Excellence for High Explosive (HE) R&D, with the HEAF being the venue for formulation, processing and confined testing (<10 kg). LLNL's mission will also be enhanced by its continuing role as a supercomputing platform host site. The completed TSF and its current generation of high-performance computers will continue to support the SSP as a national user facility, as plans are developed to incorporate petaop-class machines into that facility. LLNL will continue its leading role in high-energy-density physics, with the NIF as a science magnet.

The full high-energy-density science potential of the NIF will be realized with the integration of a robust and routine ignition capability with the computational modeling resources available within the DP complex. NIF is exploring emerging opportunities to leverage national and international science and technology communities to create a user facility. Such a facility will provide efficient access to the facility's experimental and computational capabilities for external and international users and will accommodate both classified and open environments. State-of-the-art target-fabrication capabilities for directed R&D targets will incorporate advances in cryogenics, nanofabrication, and materials development resulting from DOE and NNSA investments.

As the NIF moves into operational mode, the demand for more complex and technologically challenging targets will increase. Meeting this demand will require consolidating and upgrading of existing capabilities at LLNL. (More stringent environmental controls and mitigation of vibration and electromagnetic fields require upgrading existing facilities.) Such a consolidated Target Fabrication Facility (TFF) will provide the U.S. with a world-class, state-of-the-art capability, consistent with LLNL's role under Complex Transformation as a center for high-energy-density science. The TFF will be efficient, cost-effective, and capable of target science research, development, and production of microfabricated targets equivalent to the high standards of the facilities that will use them for purposes of inertial confinement fusion and high-energy-density research. The Mission Need Gap Information Sheet for the TFF project has been submitted to the NNSA HQ Construction Working Group.

Transformational changes at LLNL will include removal of all Category I/II quantities of SNM from Superblock by the end of 2012; Superblock security level will be reduced to Category III. The inventory reduction process began in 2006 with materials shipped to LANL. This reduction in inventory will be accompanied by downgrading security requirements for two Superblock buildings.

Defense Program activities at Site 300 will be phased out as alternatives for performing this work become available, with all weapons account activity ceasing after 2015, except for a small amount of funding for material storage and waste processing required for HEAF operation, as agreed to by the NNSA Office of Transformation. This will reduce Site 300 acreage supported by Defense Programs by 90%, and remove 14 buildings and structures from Livermore's set of mission-critical facilities. Hydrodynamic testing will be consolidated at other sites, with all hydrotesting involving hazardous materials eventually conducted at the NTS.

Several buildings at Site 300 provide capabilities critical to the HE R&D mission, including facilities for HE formulation and synthesis, HE machining and inspection, and HE pressing and assembly. To support its role as a Center of Excellence for HE R&D, LLNL is proposing an annex to the HEAF on the Main Site to accommodate these capabilities that will be otherwise lost as DP work leaves Site 300 and the facilities are closed down. The proposed HEAF annex addresses shortfalls in two key areas:

- The first shortfall is the loss of critical capabilities to fabricate one-of-a-kind explosive parts for testing in the HEAF and for scale-up of synthesis and formulation processes developed in the HEAF. The maximum capacity of HE testing in the HEAF is 10 kg.
- The second shortfall is the loss of capabilities at the scale required to support energetic materials R&D in the HEAF, where formulation processes are limited to less than 100 grams. HEAF currently relies on Site 300 for these capabilities.

Without the capabilities these shortfalls represent, NNSA will not be able to meet its mission requirements. As part of the Complex Transformation, these two capabilities will not be available at other sites. The HEAF Annex Mission Need Gap Information Sheet has been submitted to the NNSA HQ Construction Working Group.

The majority of other SSP facilities at LLNL are nearing 40–50 years old. In support of the SPEIS for Complex Transformation strategy which designates LLNL as a Center of Excellence for Nuclear Design and Engineering, as well as a Center of Excellence for High Explosives R&D, LLNL has proposed that some of the key major facilities be renovated, consolidated, or replaced over the next 10 years.

For example, much of the core weapons engineering and science buildings were built shortly after LLNL was founded in 1952. These buildings are reaching the end of their life cycle and require replacement or refurbishment. Given the cost to repair seismic and technology deficiencies and the size of the backlog, building a new facility, the Weapons Engineering, Science, and Technology (WEST), is proposed as being the most cost-effective solution to providing the needed capabilities and simultaneously reduce the Deferred Maintenance backlog.

These project proposals, along with others such as footprint reduction and seismic rehabilitation, are included in Attachment B.

3.2 Non-NNSA Missions, Programs, and Workload

LLNL's science and technology resources have great potential for many and diverse national security mission applications. LLNL's new contractor, LLNS, is energetically strengthening current sponsor partnerships and forging new relationships to help the nation meet its national security challenges with the best scientific and technological approaches available. In general, the funding from other national security and science sponsors is expected to increase by at least $30M in FY08 and continue growing. The Department of Defense (DoD) (and intelligence community) sponsors a wide variety of programmatic activities at LLNL, and opportunities for expanded support exist. In addition, funding from the Department of Homeland Security (DHS) has steadily increased in recent years, and this growth is expected to continue. LLNL has unique multidisciplinary capabilities that provide potential for significant increases in funding from science sponsors (e.g., DOE Office of Science, National Aeronautics and Space Administration [NASA], National Institutes of Health [NIH]) in work projects often executed in partnerships with other laboratories and/or universities. We plan to continue to develop the Work for Others process we are building, and will have full cost recovery.

Some principal F&I needs include:

- *Appropriately equipped space for operational response.* As LLNL's role in operational response grows, there will be continued need for space to accommodate 24/7 national operational support and reachback programs (for such programs as the National Atmospheric Release Advisory Center [NARAC] and the Biodefense Knowledge Center [BKC]). Operational support would include a seismically reinforced operations center, secure communications, vault-type rooms, sensitive compartmentalized information spaces, security networks, secure video-teleconference capability, and adequate space for multiple concurrent operations and reachback programs.

- *More space for homeland security activities.* To date LLNL has played a key role in providing technology, analysis, and expertise to the DHS, as funding for homeland-security-related activities showed a dramatic increase from FY02 through the FY07 budget. Assuming that this funding trend continues, one can project significant growth for Global Security. Accommodating such growth could require additional office and laboratory space as well as expanded computation capabilities. If required, funds for these facilities will be requested of the sponsors via the normal process.

- *Upgraded space for fundamental science and engineering activities.* Continual reinvestment is needed to sustain the Laboratory's excellence in science and technology areas that underpin national security activities and provide the basis for Work for Others in complementary areas. Cutting-edge experimental work and engineering excellence require continual reinvestment in F&I.

- *Additional sensitive compartmentalized informational facility space.* LLNL provides science and technology (S&T) analytic and operational support to a wide range of intelligence, policy, and operational customers. LLNL's role in intelligence community support, especially now as they undergo fundamental reformation accompanied by an enhanced need for improved S&T, is taking on increasing importance. As work in this arena increases, the availability of secure space at LLNL in which to conduct highly sensitive work, especially computational analysis, will likewise increase. Augmenting current sensitive compartmentalized informational facility (SCIF) space with additional SCIF space is expected to be an important future infrastructure investment. Additional SCIF space to provide for sensitive computing, with attendant-secure communications systems, access to sensitive data sources and advanced systems/processes, will be needed. Funds for these facilities will be requested via the normal process, but can be expected to include active partnership with non-NNSA DOE and other federal agencies.

- *Disposition of legacy facilities.* A number of facilities at LLNL have outgrown their useful service life and are encumbered with legacy equipment and include space that is ill-configured for today's modern research needs. Redevelopment of the site is important because it will make space available for new facilities or other programmatic activities and reduce costs and potential risks. Additional funding is still needed to address a number of Office of Science (SC) legacy facilities.

- *Environmental management.* Operations continue in the Decontamination and Waste Treatment Facility (DWTF), and personnel migration to support these operations is resulting in the release of several substandard facilities awaiting disposition. Under a current agreement with DOE Environmental Management (EM), NNSA currently has the responsibility for the cleanup of the Main Site and Site 300. An ongoing maintenance issue at Site 300 concerns the capped landfills and the Resource Conservation and Recovery Act (RCRA) and Comprehensive Environmental Response Compensation and Liability Act (CERCLA). Currently, the capped landfills are reported to have a 30-year life expectancy. The oldest of the capped landfills were built in 1992, so financial planning for reconstruction should begin in 10–12 years in anticipation of the end of their service life.

LLNL has identified future liabilities associated with on-site DOE EM and SC facilities that do not fall within current funding sources. LLNL continually pursues funding through non-NNSA channels to address these needs.

One example of a legacy facility that the Laboratory is required to address to meet regulatory requirements dates back to the pre-Laboratory, Naval Air Station, era. There have been multiple uses that have resulted in ground and facility contamination. The facility was last utilized as a hazardous waste management facility subject to regulation by the State of California Department of Toxic Substance Control (DTSC). DTSC ordered the Laboratory to complete a closure plan for remediation of the site under the RCRA. A Closure Plan was submitted to the DTSC. Upon approval by DTSC, the Closure Plan will have to be implemented in accordance with a schedule required by regulation. Closure funds are being sought from EM to avoid potential regulatory enforcement actions or changes in site requirements.

3.2.1 Department of Homeland Security

It is clear that weapons of mass destruction (WMD) and terrorist threats to the United States will continue as geopolitical tensions develop and change. Accordingly, the Laboratory's homeland security programs are expected to grow and evolve. Collocation and close integration of homeland security activities with existing nonproliferation and international security programs and activities remains an important strategic direction enhancing the synergy between the two missions and supporting core capabilities at the Laboratory. Synergy is key to continued success in both mission areas.

Homeland-security-oriented programs are housed in facilities that provide both a secure workplace and access for outside partners. As the DHS mission develops, there will likely be a need for additional open and secure office and laboratory space, which will have a corresponding impact on F&I. As specific needs are identified that cannot be accommodated by current facilities and require new construction, they will be included in future TYSPs.

For example, there may be a future need for a facility to house DHS' Advanced Scientific Computing program (which is distinct from NNSA's ASC program) and other efforts related to DHS' Interagency Modeling and Assessment Center (IMAC). The DHS ASC program goal is to research and develop tools that enable the operational units of DHS to perform their tasks effectively. This encompasses a wide range of activities, including nonproliferation, antiterrorism, antibioterrorism, nuclear and biological detection and identification, interdiction, threat analysis, and intelligence gathering and analysis.

The computational requirements of these activities can be extremely varied and complex. Much of the work leverages R&D performed earlier for NNSA, but a great deal is at the cutting edge of new computational science and deals with extraordinarily large volumes of information that must be collected, processed, and analyzed in nearly real time. The computational requirements of this new mission are uncertain. In the immediate future, this mission can be carried out with the facilities now on-site or to be delivered shortly; however, it is quite possible that requirements for a special-purpose facility or capability not currently existing may rapidly emerge as this work progresses. If a new facility is required, it will be proposed to DHS through the normal process for submitting a Line Item project.

In addition, the DHS has located its BKC at LLNL. The BKC's mission is to provide scientifically rigorous, actionable information to the homeland security community for anticipating, preventing, and responding to biological threats. The BKC collocates biologists, engineers, analysts, and computer scientists in response to threats, creating a national asset for DHS. Advanced telecommunications will eventually be part of the BKC. The Laboratory anticipates further growth of the BKC in the near future, with the need for more space (beyond 2017). This space is expected to be provided through existing space conversion or enhanced utilization through 2017.

A modular biosafety laboratory (Biosafety Level 3) has been completed through General Plant Project (GPP) funding. This facility completed its final readiness review and also completed a revised Environmental Assessment to include the impact of terrorist attacks. The revised document was prepared in response to an October 2006 court ruling requiring DOE to consider the potential environmental impacts of terrorist activity against the facility. DOE has determined the probability of a successful terrorist attack on the Biosafety Level 3 facility is extremely low. The Finding of No Significant Impact was signed in January 2008, and operations in the facility began immediately thereafter.

Laboratory space for a cargo-container security test facility and additional secure space may also be needed, which LLNL may be able to accommodate through facility reuse.

To better position the Laboratory for Work for Others complimentary to Complex Transformation, two alternatives to a proposed project are being pursued. Since both options are being considered, the International Response Operations Center (IROC) and the Tactical Response International Center (TRIC) are included in Attachment B.

- The IROC features 24/7 national operational support and reachback programs (such as NARAC and BKC). A single-story 35K gsf facility will include office space, operations center, vault-type rooms, SCIF, secure network and video-conference capability, plus adequate space for multiple concurrent operations. An additional 8K gsf garage space will support LLNL national emergency response vehicles/apparatus. The facility will be capable of remaining fully operational during/following seismic events with an uninterruptible power supply, satellite communication links, data repositories, data calculation capabilities, and a protected heating, ventilating, and air conditioning (HVAC) system.

- The TRIC combines LLNL emergency management capabilities initially proposed for the Tactical Operations Center with LLNL's programmatic 24/7 national operational support and reachback programs as described above. This facility will be a single-story 45K gsf facility to include the features of the IROC plus the capability for tactical response to site and local emergencies. Approximately 20K gsf of garage space and tactical equipment storage space will support LLNL emergency vehicles (such as fire trucks and ambulance), and a new helipad with permanently installed lighting would be built. This center will be designed to remain habitable and operational for a 14-day continuous time period.

3.3 Significant Other NNSA Work

Four directorates at LLNL provide matrix support (S&T base) to programmatic activities: Chemistry, Materials, Earth, and Life Sciences; Computation; Engineering; and Physical Science. Use of the matrix system fosters the efficient transfer of technical knowledge among programs, and infuses projects with diverse ideas and solutions. Engineering, in particular, has a hand in most of the Laboratory's mission deliverables, such as the design, fabrication, and installation of the NIF target chamber, its beam path infrastructure, and computer control systems. Computation offers the capacity and capability to support NNSA's ASC program, uniting high-performance computing expertise partners including SNL, LANL, and other centers of the ASC academic alliances.

These activities are consistent with and complimentary to NNSA's primary mission, serving to further strengthen core competencies, and bringing positive collateral benefits. For example, programs in astrophysics serve as a pipeline for postdoctoral fellows to careers in weapons design; DoD research on energetic materials and advanced munitions enhance core expertise for stewardship work.

Activities in this area are being consolidated into fewer facilities as part of the footprint reduction initiative, however, most facilities are in need of modernization. LLNL's investment strategy has only limited funds to address non-mission-critical S&T research needs. Rehabilitation and new facilities addressing needs in the S&T base area supporting significant other NNSA work are proposed as Line Item projects as identified in Attachment B.

3.4 Facilities and Infrastructure Impact in Support of Information and Technology

The Laboratory has completed a project to refurbish a computer facility as an unclassified institutional business data center which is designed to Tier 3 24/7 data center standards. Equipment is currently being moved from the old institutional data center, an overcrowded, substandard trailer, into the new data center. Organizations across the Laboratory are continuing to decommission the substandard server rooms and related infrastructure by moving equipment into the new data center to take advantage of the efficient services and information technology space utilization.

Other projects in the early stages of planning are:

- The virtualization of physical servers to reduce power, cooling, and data center facility costs.
- Next-generation network infrastructure addressing uniformity of cabling and electronic infrastructure, increased bandwidth, and improved security posture.
- New functionality such as greater wireless technology deployment and Virtual Local Area Network technology.
- Site-wide centralized network management at the facility level (to the wall jack).

4.0 Real Property Asset Management

4.1 Site Footprint Management/Excess Facilities Disposition

To meet the Complex Transformation goal to reduce the LLNL Weapons Activities Account operational footprint by 1.5M gsf by 2017, the institution utilizes the Institutional Facilities Management (IFM) Organization to guide the analysis, reconfiguration and re-use of space. As a team, various organizations within the IFM Organization provide institution-wide support to programs for managing re-use and assignment of underutilized space, including planning activities and managing transactions.

The Space Management Office under the IFM Organization is LLNL's single point of contact for reconfiguration and re-use of space. It provides metrics, guidance, space utilization analysis, consolidation/migration plans, and support to assist LLNL directorates in their development and clarification of business cases to support new space requests. Brokering of space needs and surplus offerings is conducted monthly to optimize the use of facilities, integrating the institutional objectives.

Once the IFM Organization has assessed the viability for reassignment or final disposition awaiting D&D funding, the Facilities Management Office in the Facilities & Infrastructure Directorate manages space that has been returned to the institution for future disposition and the facility re-assignment process.

Current and future space requirements are analyzed using space metrics and directorate-specific portfolios. The portfolio space-utilization data are linked directly to the Facility Information Tracking System (FITS) and the Facility Information Management System (FIMS), allowing changes to be immediately updated in the metrics and portfolio. This includes Asset Condition Index (ACI), Asset Utilization Index (AUI), gross and net square footage, population, space types, and utilization. Twice yearly, a snapshot is taken to refresh all the data in the metrics, portfolios, dashboards, and Web site, ensuring accurate data to develop utilization plans.

LLNL's initiative that began last year to consolidate operations is timely and synergistic to the NNSA Complex Transformation strategy, with the objective to reduce cost and improve work efficiency, space utilization, and safety by operating with fewer substandard facilities. As the Laboratory pursues facility-consolidation plans, a domino effect of cost-payback benefits will be created. Facilities will be dispositioned, and centralized work groups will reduce inefficiencies and redundant overhead costs (maintenance, utility, and management costs) associated with ownership of multiple smaller buildings. The consolidation effort is designed to realize a cost reduction on facilities that are at the end-of-life cycle. Pending D&D, this reduction is achieved by deactivating utilities (electrical, communications, gas, and air) and tailoring surveillance to the lowest cost while maintaining safe conditions.

A Web-based space planning tool has been developed that uses dashboards to review space metrics, Deferred Maintenance (DM), energy use, data networks, and facility costs. The ultimate goal in developing these plans is to show progress toward overall improvement to space utilization metrics and surplus underutilized buildings, and to increase operational efficiencies and the Laboratory's overall office utilization.

When a directorate determines that a facility is surplus to their organization, a formal Return to Institution (RTI) request is submitted to the Facilities Management Office to initiate the transfer process to the IFM Organization. Preliminary information pertaining to the facility's condition and deficiencies is acquired and reviewed by the institution for redeployment discussions, with respect to its conditions, location, and space needs. The releasing organization establishes the schedule for executing its checklist of requirements for ownership transfer to the institution or to another directorate for re-use.

All information for transferring a facility is managed in the Facility Tracking System (FACTRACS), a facility release-tracking tool, developed by LLNL and submitted as a DOE best practice, to provide a more efficient and streamlined process. FACTRACS offers accountability in the form of an auditable communication tool that informs stakeholders of pending actions and e-signatures, and facilitates gathering historical data. The application uses electronic timestamps and approvals through a roles-and-permissions-based authentication to ensure that action items related to the facility transfer are approved and implemented. FACTRACS reduces costs and workload, and increases accountability and the ability to make informed decisions.

LLNL is currently leasing approximately 69,871 gsf outside the Livermore Main Site infrastructure:

- *Graham Court Facilities.* Leased Building 005. This space is used for storage of unclassified, high-value equipment and fixturing belonging to the Global Security and Weapons & Complex Integration directorates.
- *NIF Storage Space.* Leased Building 007, located on Patterson Pass Road on the northern border of the Livermore Main Site, provides material receiving, shipping, and warehousing functions dedicated to the construction, equipment installation, and commissioning of the NIF project.
- *LLNS Off-Site Office.* Leased Building 008. The LLNS corporate-oversight facility is located in downtown Livermore, housing representatives of the LLNS partners, to handle any business that needs to occur off-site. This is a requirement of the new DOE contract.
- *American Red Cross.* This Rockville, MD facility is laboratory space for the DHS Bio-Watch Program. NNSA leases space from the American Red Cross for DHS, and LLNL manages DHS and contractor personnel at that facility. This is fully pre-funded by DHS.

4.2 Future Space Needs

The current workforce restructuring will result in reduced future space needs, particularly office facilities. The Laboratory plans to consolidate program activities and optimize the use of permanent buildings while targeting the vacated temporary facilities for excess.

The site-specific transformation goals include a 90% reduction in acreage supported by the Weapons Activities Account with status change for Site 300, and a 30% reduction in buildings and structures supported by the Weapons Activities Account, thus reducing the LLNL operational footprint by 1.5M gsf (using the Mission Dependent Programs defined to correlate to Weapons Accounts).

To accomplish these goals, activities are being moved into core buildings, and underutilized buildings are being returned to the institution. In FY07, approximately 210K gsf were returned to the institution for reuse or D&D, bringing the inventory of excess or reuse facilities to over 900K gsf. Evaluations and studies are currently being performed by all organizations to assess the needs of the future facility and infrastructure requirements to support the scientific mission of the Laboratory for the next decade.

The IFM Organization set up the Facilities Consolidation Committee, a Senior Management Task Force to propose initial targets to meet the Congressional requirement for footprint reduction and reduce the overall facility operating expenses.

To reduce the surplus of underutilized buildings, all the occupied office trailers on-site have been targeted for consolidation into permanent buildings. Most of the trailers were installed in the 1980s or earlier and are at the end of their life cycle. Decommissioning trailers has a faster return on investment (ROI) per gsf than decommissioning permanent buildings. Approximately 500K gsf has been identified for consolidation in the initial phase.

The Facilities Consolidation Committee is also assessing duplicated space with the same functions, such as machine shops, service shops, storage facilities, labs, and training facilities. The proposals with the best ROIs will be presented to the Facility Governance Board for concurrence.

4.3 Demolition of Excess Facilities

LLNL has been decommissioning and demolishing substandard facilities since 1994. Most of the facilities removed in the early 1990s were temporary office facilities that were significantly beyond their useful life. Beginning in 1998, a small but consistent annual budget (~$1M/year) was created to continue D&D of office trailers and begin deactivating and stabilizing the more contaminated legacy research facilities.

In 2002 FIRP began funding D&D of excess NNSA facilities. FIRP D&D projects were intended to remove excess facilities that contained little or no process contamination. FIRP funding for D&D projects ends in FY08, by which date LLNL will have demolished approximately 400K gsf with FIRP funding, or 13% of FIRP's complex-wide 3M gsf goal. More than 780K gsf of facilities have been demolished or removed since 1994 with all funding sources. Total D&D projects by the end of FY08 will be approximately 850K gsf. Attachment E contains three related tracking tools that represent the site's disposition goals for demolition, planned facility additions, and the banking and tracking required to ensure conformance to Congressional requirements.

Within FIRP, disposition work at the Laboratory has been recognized as a cost-effective capability that has demonstrated best-in-class safety and environmental stewardship. The reduction in facility footprint has lowered near-term and future programmatic and Laboratory costs while creating building sites for the newest Laboratory missions. One key element of the Laboratory D&D program is partnering with the programmatic operating organizations to compile a detailed operational history of D&D facilities. The compilation identifies potential hazards that may be encountered during D&D and provides more detailed planning information to ensure safe execution of D&D projects.

In FY09 a NNSA sponsored Transformation Disposition program is slated to begin. The Transformation Disposition program will fund the D&D of facilities that are no longer needed to support the Complex Transformation mission at the Laboratory. The Laboratory expects to contribute approximately 470K gsf toward the complex-wide Transformation Disposition goal of 5M gsf by 2017. This represents approximately 9% of the overall Transformation Disposition goal.

As a multiprogram site, LLNL houses facilities for DOE's Program Secretarial Office (PSO) and is responsible for communicating the PSO disposition planning as a component of the site feasibility portfolio management. These actions are integrated in Attachment E-1 to reflect how D&D of non-NNSA facilities are incorporated into the LLNL site disposition plan.

Although the majority of excess square footage is low-hazard space, LLNL places a priority on eliminating high-risk facilities. The IFM Organization provides the strategic perspective to set institutional priorities and the flexibility to adapt to changes in funding cycles, reprioritization, or changes in site requirements.

4.4 Deferred Maintenance Reduction/Facility Condition

4.4.1 NNSA Corporate Goals

NNSA re-evaluated their corporate goals in FY07, due to the recent extension of FIRP's end date to 2013, DP mission dependency recast of its facilities, DOE's establishment of overarching corporate goals and targets for facility condition, utilization, and disposition, and transformation planning:

- By 2008, annually maintain the NNSA Facility Condition Index (FCI) for Mission-Critical facilities at 5%.
- By 2013, improve Mission Dependent, Not Critical facilities and infrastructure to an FCI level of 7%.

LLNL stabilized the DM in FY02–03 to meet the FY05 NNSA corporate goal of stabilization. Stabilization at LLNL is identified as providing sufficient funding to cover any new deficiencies that may enter DM. LLNL remains positioned to meet the NNSA corporate goals developed in FY07.

LLNL was able to reach the goal of stabilization through effective facility management practices, including an aggressive reinvestment program that was formalized in 1998. LLNL has been a significant contributor to NNSA's overall FIRP goal to reduce the FY03 DM baseline by $1.2B. The projects funded by FIRP at LLNL are linked to specific Condition Assessment Survey (CAS) FY03 baseline DM deficiencies. Of the $1.2B, LLNL total reductions will reach $125M by FY13. Including all funding sources, it is estimated that LLNL will contribute over $160M in total reductions to the FY03 DM baseline by the end of FIRP.

4.4.2 Condition

Figure 4-1 shows LLNL's facility conditions, based on the six condition levels identified in FIMS from the FY07 year-end snapshot. The FIMS figure of merit for determining a facility and infrastructure ACI is one minus the asset's DM dollar value (as identified through the CAS system) divided by its replacement plant value (RPV). Figure 4-2 shows facility conditions (ACI, FCI, and Condition Code) for each mission dependency category.

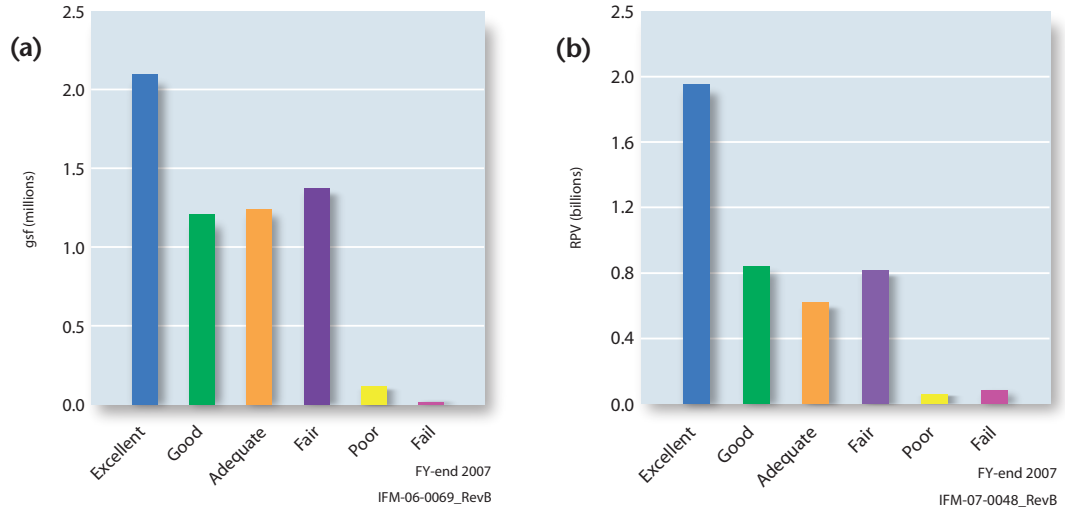

Figure 4-1. Facility conditions for the Livermore Main Site and Site 300 at the end of FY07. (a) Asset conditions by gross square feet. (b) Asset conditions by replacement plant value totals.

Mission Dependency	ACI[1]	FCI[2]	Condition
Mission Critical	95.5%	4.5%	Good
Mission Dependency, Not Critical	91.9%	8.1%	Adequate
Not Mission Dependent	86.9%	13.1%	Fair
Total	92.7%	7.3%	Adequate

[1] Asset condition index.
[2] Facility condition index.

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Figure 4-2. Facility conditions by mission dependency categories.
Note: Includes all operational building status; owned real and personal property not leased; other structure facilities except 3000 series code; off-site owned facilities, not leased; both sites (200 and 300); all program offices; replacement-in-kind. Excludes land records, leases, deactivation, D&D in progress, operating pending D&D, and under construction (NIF).

To identify a more realistic condition for the LLNL site, individual facilities have been purposely left out of the calculations in FY07, including NIF, because it is still under construction, and those facilities that are considered on the path for disposition. These changes will help LLNL to focus clearly on the NNSA corporate goals and objectives.

At the end of FY07, over half of the Laboratory population still resides in facilities built in the early days of the Cold War or as temporary facilities. With a Mission-Critical ACI of 95.5%, the facilities that are key to stockpile stewardship are in a *good* overall condition to meet program needs, while many of the individual NNSA Mission-Critical facilities are in conditions that rank in the *adequate, fair,* and *poor* range. The Laboratory has noted these conditions and, through the already established institutional/programmatic planning and prioritization processes, is ensuring that these facilities receive an adequate amount of maintenance to remain safe and operational.

The Laboratory is faced with the challenge of suitably maintaining its large, aged, core facilities to meet program missions until capital funding becomes available to rehabilitate or replace them. The Mission-Critical Facilities Modernization, Weapons Engineering Science and Technology, and Materials Science Modernization Line Items have been proposed to replace the aged mechanical and electrical systems and to improve the configuration and structural integrity of these key facilities, either through significant rehabilitation or full facility replacement. In the meantime, well-established maintenance/minor recapitalization planning and prioritization processes will help ensure that the F&I condition remains as suitable as possible for program missions.

4.4.3 Condition Assessment

The CAS process at LLNL includes a detailed inspection and evaluation of all facilities. The inspection cycle changed from every 3 years to every 5 years due to budgetary and staffing constraints. Nuclear facilities and facilities with special hazards remain on an annual inspection cycle. Each asset inspected is tracked by multiple discipline inspection efforts, i.e., mechanical, electrical, architectural, roofing, and civil surveys. Data collected by the LLNL CAS inspection group are maintained in the DOE Condition Assessment Information System (CAIS). All deficient items are verified by a CAS inspector or responsible maintenance manager prior to entry into the database. The LLNL CAS group during FY07 re-inspected approximately one third of LLNL's assets, including infrastructure assets such as roads, parking lots, bunkers/magazines, and electrical distribution systems. These efforts included over 800 individual inspection surveys. LLNL uses the detailed data from the CAS process to identify and prioritize maintenance replacement and rehabilitation projects.

4.4.4 Modernization Assessment

The CAS process only collects DM data; it does not capture the overall health or the capacity of the facility to meet today's requirements. Health includes DM, technological obsolescence, life extension, and code compliance. Arresting technical obsolescence is one of the Laboratory's F&I challenges. Since 1997, LLNL has been supplementing the FIMS FCI with its Facility Assessment and Ranking System (FAaRS) process to evaluate the overall viability and adaptability of a facility.

The Laboratory has made significant progress by applying indirect funds to restore F&I systems to as-built conditions through the centrally managed maintenance process. However, an aging site must have the resources to upgrade and remodel outdated buildings and systems—work that requires capital funding (Line Item or GPP). Due to the constraints on capital funds, cost-effective replacement or upgrades of substandard facilities were not possible until the FIRP program was implemented. The FIRP initiative and the Institutional General Plant Project (IGPP) program now provide appropriate funding to significantly improve the cost-effectiveness of the facility management process, reduce the DM, and pursue modernization upgrades.

The Laboratory is continuing its initiative to formalize building-specific modernization plans, with a focus on developing a strategy, methodology, and process to identify potential modernization opportunities and associated costs. Separate studies have been completed on seismic retrofits, lighting adequacy, standby generator replacements, and alarm-system cost options. Studies are in progress to evaluate communication network upgrades and building electrical power density.

Recent assessments to comply with DOE rules for 10CFR851 "Worker Health & Safety" have identified deficiencies related to roof ladders, fire safety, traffic safety, and other required real-property facility corrections. LLNL has taken an aggressive approach regarding traffic safety and 10CFR851 real-property deficiencies, developing programs and system processes that evaluate, prioritize, and plan corrective actions. Modernization assessments normally tend to focus on the entire facility and its systems, but can support individual component replacement if needed. Currently, LLNL's facility maintenance and reinvestment projects tend to focus on replacement of components rather than the entire system.

For reinvestment planning, a broader approach to determine requirements is needed. Facilities, their major subsystems, function, performance, safety, reliability, and integration need to be viewed as a total productive unit; the cost of each component must be combined into a total cost profile. A consistent format in mapping the cost profile against the CAS system would greatly enhance the planning process to analyze and optimize investments to meet program needs. LLNL has benefited since FY02 from FIRP, which has replaced building electrical components and roofing systems, and upgraded HVAC in a number of anchor facilities. LLNL also continues to make progress on its completed seismic plan. Ranking of seismic classifications are as follows: (a) highest priority, especially vulnerable to heavy damage, potential collapse; (b) high priority, potential for heavy damage, collapse not expected; and (c) medium priority, potential local damage, collapse not likely. For details about the seismic study, refer to the *Seismic Safety Study* (May 2006, UCRL-TR-221420). With limited resources, seismic concerns are being addressed within projects when possible (e.g., structurally upgrading the roof of a building when the deficient roof system was replaced) and through operating funded strategic moves and follow-on demolitions. A Line Item project to address the remaining most seriously deficient buildings is proposed in Attachment B.

4.4.5 Maintenance Reinvestment and Prioritization

LLNL annually prioritizes every deficiency in its total DM using the same mission-owner rating process with maintenance-specific ranking definitions. This prioritization has become a best practice and allows LLNL to understand and fund the right maintenance replacements with the available maintenance funds.

Figure 4-3 shows the results of the FY07 prioritizations, illustrating the essential DM or short-term reinvestment goals. Rankings range from A (highest) to F (lowest). A through C are considered essential DM. Deficiencies ranked F receive only safety-related maintenance funding and are generally excess facilities to be demolished when funding is available. D and E deficiencies are reviewed annually for prioritization. After several years of experience with this process, the dynamics of maintenance prioritization and facility aging have been better characterized. As an example, between 2% and 5% of the nonessential DM moves into the essential category each year. This prioritization of discrete activities for individual deficiencies ensures the production of a well-defined set of high-priority DM-reduction projects and a high-quality, out-year DM funding plan, called Maintenance Reinvestment. LLNL has continued to fund all A-, B-, and some C-ranked deficiencies on an annual basis, although it is anticipated that the FY08 budget restructuring plan will significantly reduce the funds allocated for maintenance reinvestment. These reductions will limit projects to only A and B ranked deficiencies. It is also foreseen that future maintenance reinvestment funding levels may stabilize and return to appropriate levels in the near term.

Figure 4-4 shows the maintenance-reinvestment prioritization matrix chart. The prioritization process evaluates each deficiency based on two factors: mission risk level, and maintenance probability of failure.

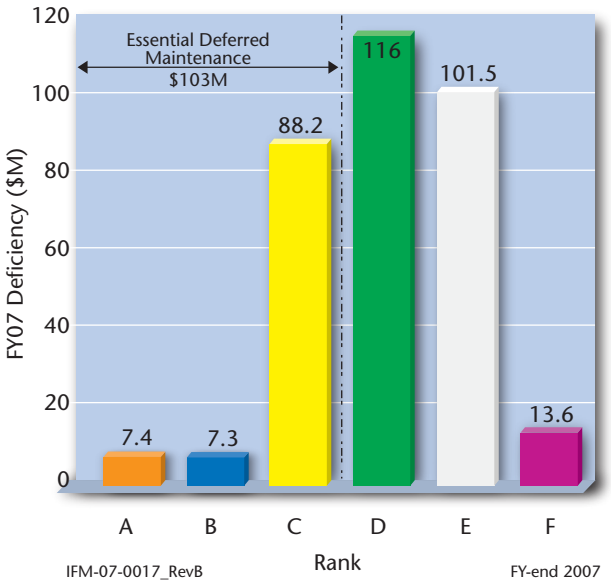


Figure 4-3. Results of FY07 maintenance-reinvestment prioritizations.

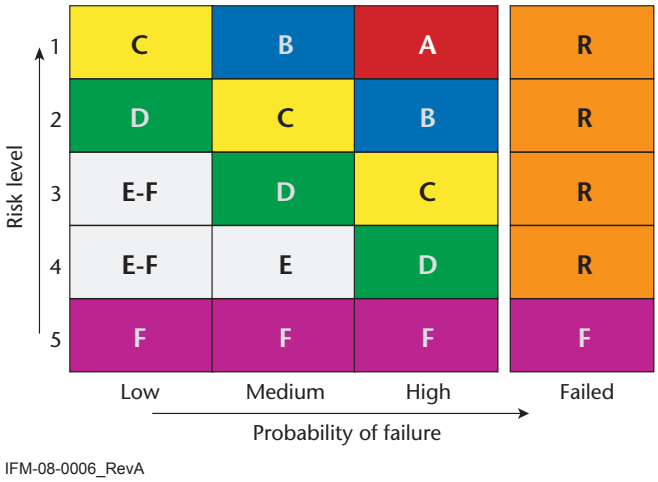


Figure 4-4. Essential deferred maintenance ranking.

4.4.6 Readiness in Technical Base and Facilities Contribution to Maintenance

The RTBF program partners with F&I and the IFM Organization to ensure that the RTBF deferred real-property maintenance and associated facility condition assessment milestones are met. RTBF does not directly fund the routine maintenance and repair, however, it pays the space charge in all RTBF facilities.

The amount of Maintenance Reinvestment funding that RTBF facilities receive varies from year to year, because RTBF facilities form part of the overall LLNL institutional maintenance reinvestment program that uses an "essential backlog" ranking.

4.4.7 Livermore Deferred Maintenance Model

To track and analyze the reduction of DM, LLNL developed a predictive DM model. This model also identifies and tracks urgent needs called LLNL's essential DM. The model in Figure 4-5 projects the Laboratory's DM with and without FIRP funding. Without FIRP funding the total would remain stable, but would not be reduced. The chart includes inflation, the yearly increase in DM from additional equipment and systems passing their optimum year, and the yearly reductions achieved by all funding sources.

The key components to developing the DM model are:

- The Laboratory currently projects DM growth for a three to four-year period by analyzing building systems—their aging, reliability, and actual condition—and projecting the optimum year that the systems should be replaced. When FIRP was instituted, the optimum year for replacement was estimated for all the building systems and components to project the DM. By analyzing the building systems and components in the inventory of LLNL real property, estimates were made for the optimum year to replace these components projected out to 10 years. The nominal growth rate is 0.35% of RPV, and this is sufficiently covered by the maintenance reinvestment portion of LLNL's annual maintenance funding.

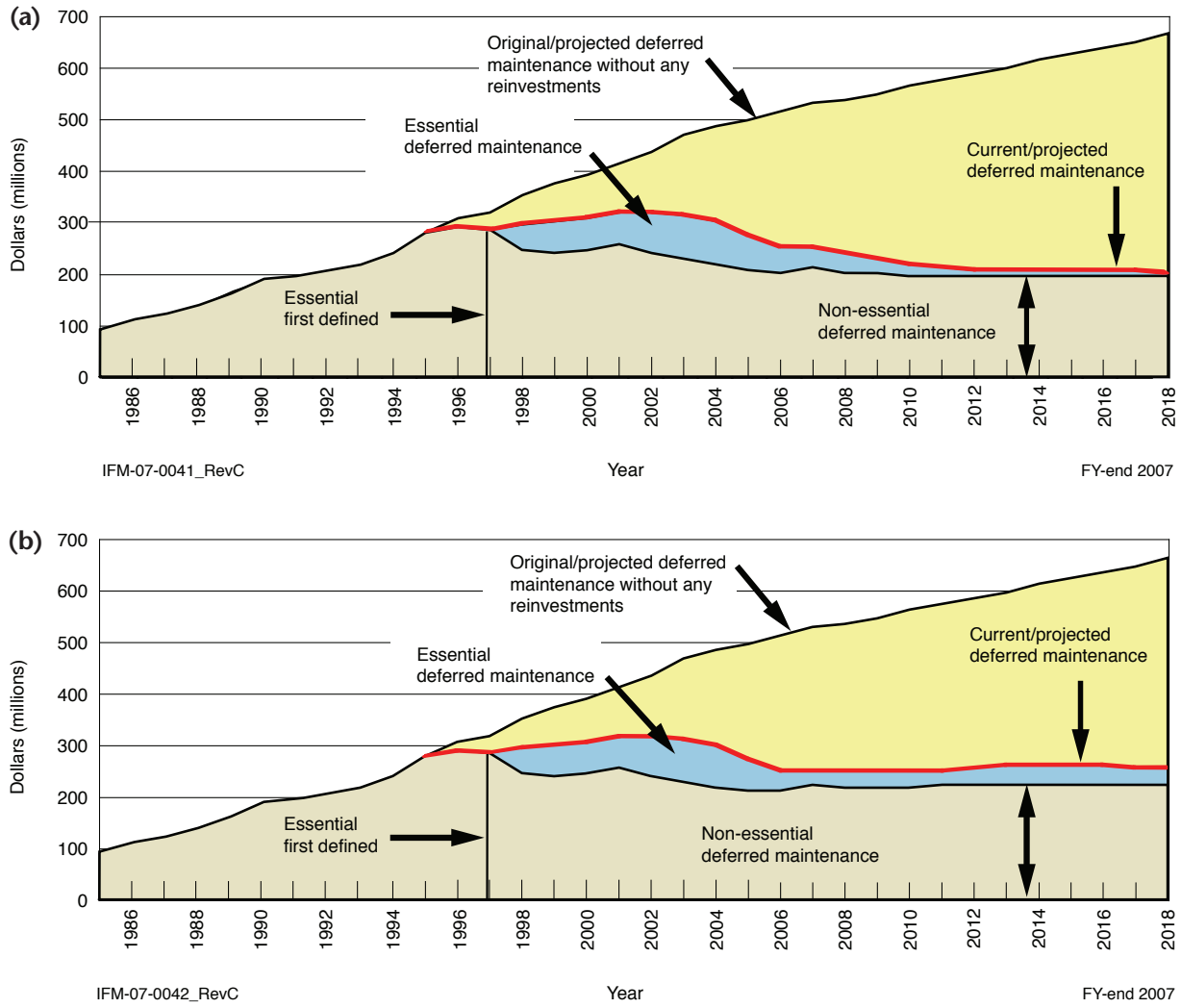


Figure 4-5. Deferred maintenance projections to FY18: (a) with FIRP funding, (b) without FIRP funding.

- LLNL RPV estimates are based on engineered estimates or the original year of acquisition construction costs and any subsequent recapitalization and/or improvements. The RPVs are escalated based on an annual cost-escalation factor generated by *R.S. Means*, provided to the DOE FIMS/CAIS contractor. These cost-escalation factors are developed for each identified FIMS model type. LLNL currently maps each asset to a corresponding FIMS model type to escalate RPVs. To meet the TYSP requirements to forecast RPVs, all assets are inflated with the year-by-year inflation factors provided by NNSA. These factors are used in addition to any new or projected recapitalization/improvement projects and/or new assets. Finally, the projected RPVs are reduced or eliminated for assets projected to be demolished in out-years.
- DM data are collected, developed, and validated using the long-established, detailed methodology of LLNL's standard CAS processes. One key step of the process is the annual review of the individual items that comprise the DM list by both the programmatic facility occupants and the maintenance providers. The results from the data are trended and compared against industry standards to ensure consistency with standard practices.
- Extensive LLNL data show that real-property subsystems routinely have service lives 160% or greater than the standard life cycles recommended by DOE. LLNL worked with Whitestone Research in 2005 to determine potential maintenance practices that can contribute to significantly longer service lives and potential cost savings.

4.4.8 Maintenance

LLNL centrally manages maintenance and operations (M&O) and DM reduction of real property and installed equipment (RP&IE). This centralized organization is composed of a knowledgeable in-house workforce and, as appropriate, subcontract and contract workers to assist in maintenance, new construction, and alterations. LLNL programs pay for F&I maintenance through a space charge. The funding of maintenance out of an indirect space charge, the Institutional Facility Charge (IFC), has been a critical success factor for LLNL's maintenance management program.

Maintenance and operation activities, including DM reduction of RP&IE for specific NIF Directorate facilities (581, 582, 681, 684, and OS682), are directly funded through the NIF account structure.

4.4.9 Budget and Trend

In FY08, the total M&O budget is $97M in burdened dollars. Figure 4-6 shows budget distribution for these funds. Costs are analyzed to track activity levels, spending rates, and relative trends in executing these functions to provide management with data to improve productivity.

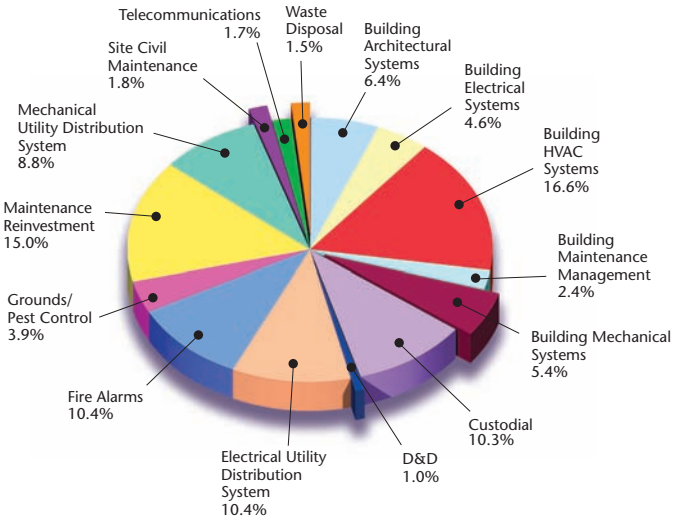


Figure 4-6. FY08 planned facility and infrastructure budget distribution for the Livermore Main Site and Site 300. Total projected budget is $54.7M in non-burdened dollars.

Figure 4-7 summarizes maintenance-funded work categories over the past five years. Operations costs, although stabilized between FY06 and FY07, have fluctuated due to changes in safety and security compliance requirements. In FY07, repairs increased due to unplanned outages in building equipment (e.g., boilers and chillers).

When the maintenance funding is divided by the RPV of the F&I supported by the budget, the resulting number is within the best-practice range of 2% to 4%.

LLNL's success in institutionalized, responsible, and accountable facility management processes are, in part, responsible for the adequate funding of maintenance. LLNL's *Pilot Program Report* (UCRL-AR-154598) describes additional key elements of the Laboratory's successful maintenance program.

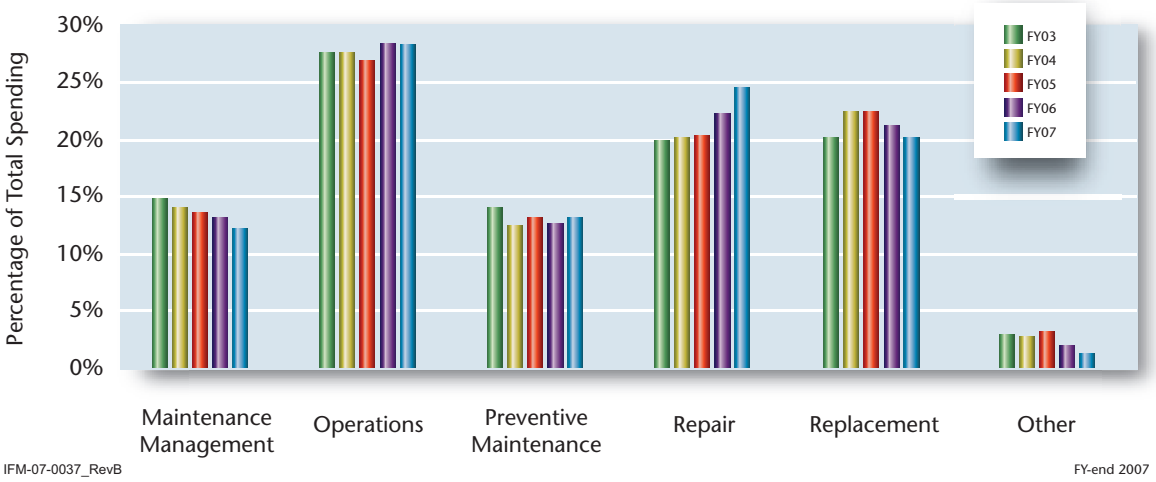


Figure 4-7. Actual facility and infrastructure distribution by fiscal year. Note: Chart does not include electrical utilities system distribution activities prior to FY06.

4.4.10 Maintenance Management Program

The LLNL Maintenance Management Program is a comprehensive approach to facilities and infrastructure maintenance that is applied to all F&I at LLNL. This consistent systematic approach to maintaining the Laboratory's assets is based on a proven philosophy of preventive and predictive maintenance to ensure maximum operational readiness of systems and equipment. The primary objective of the Maintenance Management Program is to significantly reduce the frequency of unscheduled breakdowns and downtime of critical equipment and systems. This objective is achieved through regular interval equipment surveillances, equipment checks, operational tests, system readings, and calibration. Additionally, a large majority of LLNL's maintenance activities are planned and proactive in nature. Potential failure modes are identified during preventive/predictive maintenance activities, CASs, and facility walk-downs. Other objectives of the Maintenance Management Program are to determine the appropriate level of maintenance to perform on facility systems, subsystems, and Laboratory infrastructure to maximize reliability; identify potential problems that may result in equipment breakdown and/or system failure; and maintain warranties for those assets still under manufacturer oversight.

LLNL's Computerized Maintenance Management System (CMMS) is the primary tool utilized for maintenance activities. The CMMS is comprised of two major elements:

- *Work Order System.* This is an Oracle-based application that provides a means of recording historical information on all repairs, improvements and modifications to equipment and facilities, and special program-specific needs by preidentified FIMS asset numbers. All work requests for F&I support are tracked through this system, as well as employee account data for timekeeping. The Work Order System has the capability to generate reports that provide aging, effort hours, costs, work order status, and employee account data.

- *Preventive Maintenance Management System (PMMS).* The PMMS is an interactive Web-based program that generates automated reports and project previews, allows the user to easily modify preventive maintenance task codes, automates preventive maintenance work-order and environment, safety, and health documents generation, automates preventive maintenance schedule distribution to the service provider shops, and allows customers to review upcoming preventive maintenance in specific facilities on-line.

  The PMMS application also allows assignment of priorities for each asset (i.e., equipment piece, system, and/or component) based upon safety, programmatic mission, financial, environmental, facility life cycle, and safeguards and security considerations. The priority for maintaining a given asset is based on equipment type, replacement value, and facility mission dependency category. Exceptions are those assets which must be maintained to meet regulatory and nuclear facility safety requirements (they are given the highest priority). The priority levels are rated from 1 (highest) through 6 (lowest). These levels of prioritization for preventive maintenance performed at LLNL have significantly extended the average service lives of LLNL equipment, systems, and/or components.

Maintenance activities are conducted using a graded approach. The graded approach consists of two levels of maintenance:

- *Maintenance Level 1 (ML 1)* applies to those Systems Structures and Components (SSCs), that because of their impact on safety, programmatic mission, financial, environmental, and facility life cycle are afforded a higher level of rigor in developing, sustaining, and reporting of the maintenance process. Consideration is also given to applying Reliability Centered Maintenance (RCM) or an equivalent program, historical evidence, industry standards, and manufacturer's recommendations. ML 1 is equivalent to PMMS maintenance categories 1, 2, and 3.

- *Maintenance Level 2 (ML 2)* applies to the remaining SSCs and is the standard industry level of maintenance. These levels differ in the sophistication, number, and frequency of maintenance strategies applied, and reporting and record retention. ML 2 is equivalent to PMMS maintenance categories 4, 5, and 6.

Detailed performance indicators comprise an expanded balanced scorecard. These indicators were developed to help measure accomplishments.

LLNL has implemented DOE Order 433.1, Maintenance Management Program for DOE Nuclear Facilities. A Maintenance Implementation Plan (MIP) has been developed by each Laboratory program that either owns and operates a non-reactor nuclear facility or provides services to support the maintenance activities within these facilities. These MIPs were submitted to, and approved by, the DOE Livermore Site Office during FY06.

4.5 Site Infrastructure

4.5.1 Energy Management

Established in the early 1990s, the Laboratory's Federal Energy Management Program (FEMP) tracks and reports energy use, costs, and performance of facilities to meet federal reduction goals. To achieve these goals, the FEMP identifies, develops, seeks funding for, and implements energy conserving retrofits, reviews, and comments on new building, repair, and renovation project designs to assure energy efficiency. The FEMP also encourages updating of construction specifications and procurement practices to assure compliance with ever-increasing criteria.

LLNL has maintained compliance with federal and departmental energy use reduction goals. DOE Order 430.2A, Departmental Energy, Renewable Energy and Transportation Management, has been superceded by DOE Order 430.2B. The energy reduction goal is 3% per year beginning in FY06 with an ultimate savings of 30% by FY16. Funding is not available in the magnitude necessary to support the major efforts needed to achieve future goals.

The Laboratory has implemented several initiatives that do not have a high level of funding which will foster energy savings. A Lab-wide energy savings contest, "Every Watt Counts," began in March 2008. The major impetus is to develop employee energy awareness. The second major initiative is the development of an Energy Savings Performance Contract (ESPC) between the DOE Livermore Site Office and Johnson Controls, Inc. (JCI).

After careful review and coordination with the DOE/NNSA Livermore Site Office, two projects will now be implemented: (1) completion of electric power metering of LLNL facilities to comply with EPAct-2005 metering requirement, and (2) a major rollout of building automation control systems to properly manage building heating and cooling systems. The ESPC is now in the final stages of development. It is expected that the contract between JCI and DOE will be awarded in May 2008.

4.5.2 Leadership in Energy & Environmental Design (LEED)

Executive Order 13423 requires at least 15% of DOE's capital asset building inventory (by square foot) to comply with the Guiding Principles for High Performance Sustainable Buildings by the end of FY15. LLNL has recently been named a Guiding Principles Program beta test site, allowing close collaboration with DOE program authors to further refine the assessment process. The Guiding Principles were created by DOE in a memorandum of understanding that tailors the LEED rating system to the Laboratory's facilities.

A preliminary short list of potential building-assessment candidates to best fulfill the 15% square footage requirement has been developed (based on year of construction, existence of energy meters, recent/planned renovations, primary building use, and square footage), leading to the identification of both the Central Cafeteria and a two-story office building for Guiding Principles' assessment for FY08 (see Attachment C). LLNL is pursuing certification for existing buildings, LEED-EB, for both of these buildings in FY08.

4.5.3 Utilities

On-site utilities at the Livermore Main Site include communication systems, electrical power, natural gas, domestic cold water, low-conductivity cooling water, demineralized water, sewer, compressed air, and networks. In addition to these systems is the life safety alarm system known as A.L.A.R.M.S. (Advanced Livermore Alarm Recognition and Monitoring System), which is comprised of five major systems and one shared subsystem. Information gathered from building detection systems (mostly composed of fire, specific hazard, general equipment, and criticality systems) is collected and multiplexed over special circuits of LLNL's telecommunications utilities to an array of central computers that process and distribute the

information to 24/7 dispatching centers. A separate site-wide voice annunciation system is provided as part of fire alerts and emergency preparedness efforts.

As NNSA continues to require resources sufficient to meet the capability and capacity requirements of the current and projected mission, relying on the Nuclear Design & Engineering and Supercomputing Platform Host capabilities, the Main Site requires an enhanced electrical power grid loop to provide an automatic transfer scheme that will compensate for power interruption and provide important new feeders to Mission Critical facilities such as TSF and NIF. Such enhancement will also serve other major facilities throughout the site. The proposed high-voltage load grid switchgear and distribution project has been submitted to the NNSA HQ Construction Working Group.

Projected demand for some mechanical utilities will be significantly reduced due to EO 13423, requiring a 16% water reduction and a 30% energy reduction by the end of FY15. Efforts in water use reduction for site utilities operation include changing cooling tower chemical treatment to allow higher cycles of concentration, raising low-conductivity water supply temperature setpoint for water and energy savings, and routing discharge from reverse osmosis water filters to cooling towers for water makeup. In addition, landscaping practices on-site have been modified to limit landscaping only to priority areas, increase use of drought tolerant plants, and gradually convert selected areas to xeriscape or ground treatment with minimal planting. The Laboratory continues to explore other irrigation options to reduce demand for potable water.

On-site utilities at Site 300 include water, electric power, sanitary sewer treatment, and communications. The existing systems have adequate capacity to serve anticipated usage with the exception of data networks.

4.5.4 Civil

The Laboratory continues to provide safe and efficient civil infrastructure for on-site motorists, cyclists, and pedestrian traffic, and for emergency response. In FY07, the Laboratory transferred traffic safety responsibilities from volunteer committee members to the IFM Organization, providing the management visibility necessary to achieve one of the Director's goals of ensuring safe and secure operations. LLNL's Traffic Safety Program oversees and regulates the safe movement of personnel, materials, vehicles, bicycles, and other means of transportation around the site, which includes the configuration and use of the Laboratory's roads, parking lots, pathways, and open areas to meet regulatory compliance and standards. Traffic safety, paving, and parking master plans are used to set guidelines for ongoing and incremental improvements to provide paving maintenance and safe, adequate parking. Major civil improvements in FY07 included the E-9 parking lot and the West gate entrance pathway with security access portal.

In addition to paved roads, Site 300 maintains an approximate 80-mile system of fire trails that provide four-wheel access to the site perimeter, and remote areas as necessary, for site operations. The fire trails are simply maintained by grading the trail annually to remove vegetation and repair winter erosion.

4.6 Security/Security Infrastructure

At the direction of NA-70, LLNL has suspended implementation of the 2005 DBT. No infrastructure projects will be pursued to achieve the requirements of the 2005 DBT. Maintaining the system effectiveness of the 2003 DBT is even more critical during the de-inventory process. Reliance on technology to help maintain LLNL security posture will be required.

The maintenance of the real-property F&I used by the Security Organization is conducted out of the Laboratory's space charge. Maintenance for programmatic security infrastructure, when undertaken at LLNL, is funded through the FS20 budget and reporting code. LLNL Security management compiles a list each year of infrastructure projects that could be funded through NNSA's Security Infrastructure Replacement Program, but to date this program has not been funded by NNSA headquarters.

During FY08, several changes will impact the Security operation:

- *TESA locks.* Initiated the site-wide TESA lock within the Property Protection Area which will simplify the procedures for off-hours access by authorized personnel and authorized foreign national employees, increase personal security for those working off-hours, and reduce opportunities for theft, damage, or unauthorized access to U.S. government property.

- *Protective Force Division headquarters facility.* The expansion of the Protective Force Division headquarters facility to address issues related to the 2003 DBT has begun. This construction is expected to be completed by the end of FY08 at a cost of $1.7M.

- *East Avenue Corridor (EAC).* LLNL continues to assume the security control of the EAC. The EAC Phase II upgrades have been initiated. Installation of double-door portals at Vasco Road and the East gate, with the closing of the Greenville gate, will allow LLNL to reduce the Protective Force necessary to staff the EAC corridor. Emphasis on the use of technology to assist with the cost reduction of protective force staffing is a priority for LLNL.

- *Closed-Circuit Television (CCTV) infrastructure.* Incremental improvements to the Central Alarm Station were completed in FY07. Telecommunications upgrades and furniture improvements were installed. The issue of end-of-service life for many of the CCTV surveillance and recording components still remains. The ability of these systems to provide service until de-inventory drives an increase in maintenance cost. As before, the fiber infrastructure is at capacity, which makes it difficult to support additional growth or to provide critical fail-over or redundancy.

- *Pro-force training facilities at Site 300.* In light of the Complex Transformation, the LLNL pro-force personnel are required to remain proficient, which will require LLNL to seek capital improvements to the current LLNL training facilities. The Site 300 Range facilities require improvements to maintain efficient training capabilities.

  As an alternative, LLNL is pursuing possible arrangements with local agencies to help offset facility cost. Shared-use facilities would allow LLNL to upgrade needed training facilities without the risk of long-term capital acquisition cost. If achieved, these facilities would improve LLNL pro-force training capabilities and coordination with agencies local training capabilities.

- *Argus/HSPD-12.* The field components of the Laboratory's electronic access control are becoming unserviceable. Site-wide access-control portals need to be replaced because they are past their service life of 25 years and require constant maintenance. The Argus equipment, including field processors and Remote Access Panels (RAPs), are also approaching the end-of-service life. As LLNL moves toward implementation of the HSPD-12, a Common Identification Standard for Federal Employees and Contractors, Argus Security System upgrades will be required.

4.7 Land Use and Environmental Management

4.7.1 Land Use

Development has occurred over 80% of the 820.6 acres at the Livermore Main Site, and nearly all of the developable area at Site 300's 7,000-acres are fully utilized. Since 1952, the Laboratory has added facilities, roads, and landscaping to what began as a Naval airbase in the 1940s. As a continuing mission site, LLNL's physical development evolves with mission changes and program requirements.

The Royston Master Plan (adopted by the Laboratory in its early years) has been the foundation for the Laboratory to configure and adapt the physical site to meet changing operational requirements. LLNL continues to follow a land-use concept based on functional zones sharing common site infrastructure requirements as presented in previous plans, providing a framework to assess facility sites for new development and redevelopment of reclaimed sites and unassigned land. The fluid boundaries allow for some flexibility as program activities evolve with Complex Transformation priorities. The current site configuration is being reviewed and analyzed for effective functional and visual management of the areas where facilities have been vacated and turned "cold-and-dark" as a result of the aggressive consolidation and cost-reduction initiatives.

Site utilization at Site 300 has generally been restricted by requirements specific to explosives testing zoning separations. The Complex Transformation effort could modify these restrictions for alternate use proposals.

The Laboratory has a centralized site-planning process through the IFM Organization that ensures program facilities, and any future site reconfiguration in response to the reduced footprint, are analyzed with stakeholders' participation, in conjunction with the Laboratory's environmental management system (EMS), which is an integral part of the Integrated Safety Management System (ISMS). EMS employs compliance with the National Environmental Policy Act (NEPA), the Endangered Species Act, the National Historic Preservation Act, and evaluation of pollution prevention opportunities. In addition, subject matter experts consider potential environmental impacts on surface and groundwater quality, air quality, chemical management, waste management, natural and cultural resource management, and radiological emissions. The Site-Wide Environmental Impact Statement (SWEIS) becomes a baseline for future environmental evaluations. A final SWEIS for continued operation of LLNL was published in March 2005. Its Record of Decision defining the scope of continuing LLNL operations by NNSA was filed on November 29, 2005.

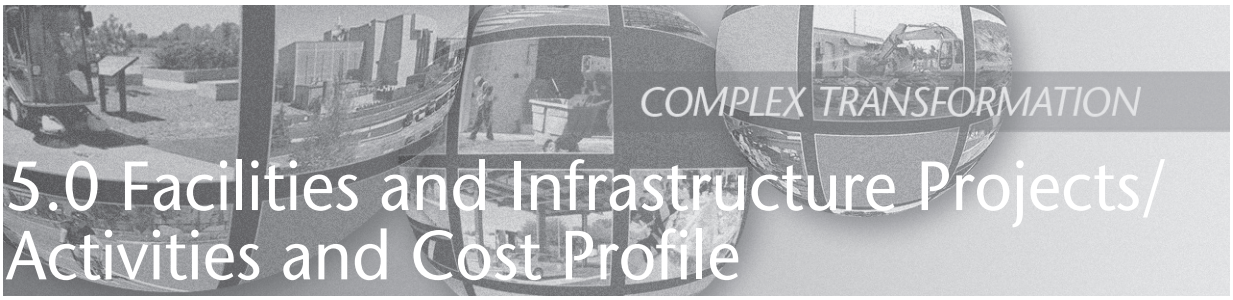
4.7.2 Long-Term Stewardship and Environmental Cleanup/Restoration

Long-Term Stewardship (LTS) is an overall strategy for the environmental restoration projects at LLNL. Executing environmental restoration projects consists of two steps: (1) remedial action buildout, followed by (2) LTS, which includes all activities necessary to ensure protection of human health and the environment following the completion of the buildout.

The objectives in LTS are site cleanup and delisting from the National Priorities List. Site cleanup is considered complete when contaminant concentrations remain below regulatory criteria and risk has been reduced to acceptable levels. After site cleanup is complete, DOE will prepare a petition to delist the site from the National Priorities List in accordance with the provisions of CERCLA and RCRA. The most current model estimates indicate that this will be complete in FY77 for the Livermore Main Site. The life-cycle cost estimate for soil and groundwater remediation from FY08–77 is estimated to be about $650M. These costs include both capital and operations costs.

At the Livermore Main Site, all remedial action buildout milestones were completed at the end of FY06, and the project transitioned from DOE's Office of Environmental Management to LTS under DOE/NNSA during FY08. NNSA has assumed responsibility for the ongoing cleanup under LTS. LTS activities for Site 300 are scheduled to begin following completion of remedial action buildout. Portions of Site 300 that require LTS include areas with soil and groundwater contamination resulting from past operations and releases from spills, as well as closed waste treatment and land disposal facilities.

Groundwater and soil-vapor treatment facilities are used to clean up the contaminated subsurface during LTS. Ongoing soil vapor and groundwater monitoring will ensure continued effectiveness of the controls. When the regulatory criteria for site closure are achieved, LTS will end. A decision on DOE funding levels could enable the Laboratory to take a more aggressive approach to the contaminant source areas.



5.0 Facilities and Infrastructure Projects/ Activities and Cost Profile

LLNL uses a comprehensive and interactive process to identify and prioritize the projects that most effectively support NNSA's overall mission. This prioritization process was built upon a highly successful maintenance reinvestment prioritization process that began in the late 1990s. The expanded process prioritizes all of the institution's investments in F&I, with the goal of identifying the Laboratory's overall highest priorities for investments, including those in the mission-critical facilities supporting the SSP; those that support transformation of the nuclear weapons complex (Preferred Alternative); and those that ensure the quality, the operational readiness, and the efficiency of F&I to meet mission needs of the Laboratory.

To successfully achieve multiprogrammatic F&I challenges, a triad facility management model is used to develop and implement plans, priorities, projects and policies. A partnership among the Institution, the Mission Owners (i.e., directorates), and the F&I support organizations, this triad works closely to ensure a balanced approach in addressing infrastructure investments, essential institutional demands, and support of mission priorities (see Figure 5-1).

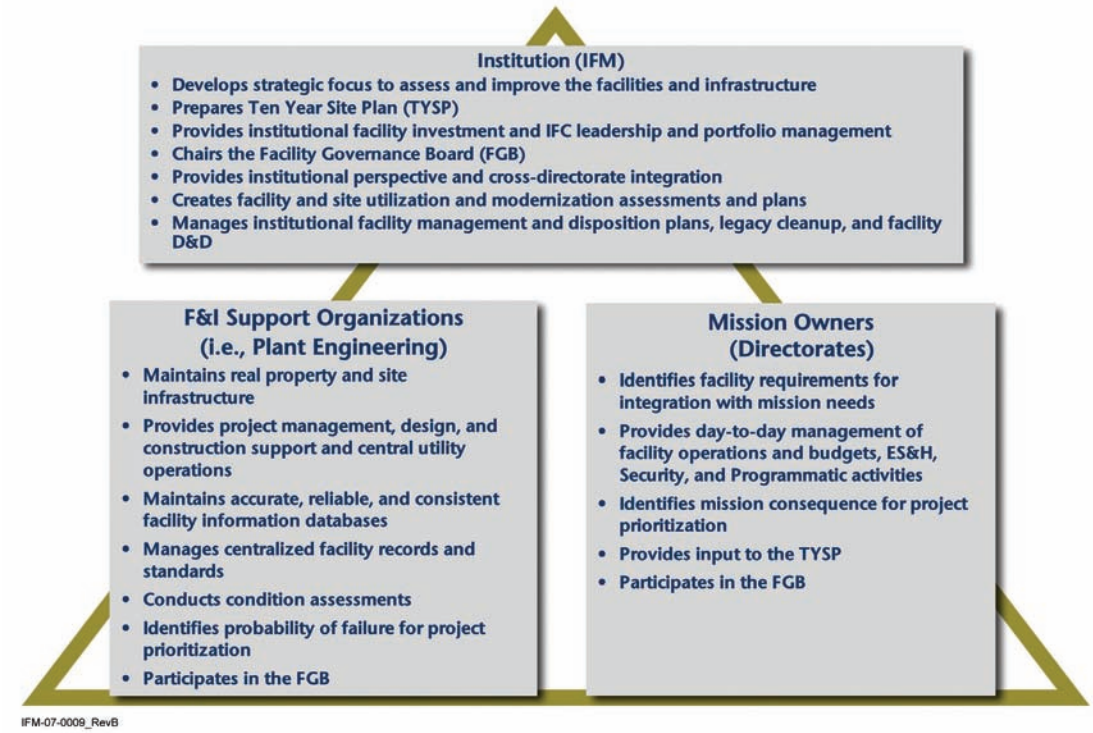


Figure 5-1. The triad facility management model creates the strategic tension necessary to balance the system to meet mission needs.

One of the tools for F&I decision-making is the Facility Governance Board (FGB), which develops institutional cross-cutting strategies, priorities, solutions, and variances, and identifies institutional risks to prioritize facility related deficiencies and investments. The FGB reviews new F&I proposals to develop a prioritized list of projects and budgets that most effectively support the total mission. The prioritization process is flexible and maintains a coherent balance as new mission requirements and changing funding scenarios develop. The FGB enhances the partnership between NNSA and the Laboratory by serving as a tool to develop and maintain a shared vision and goals for both the programs and new facilities. This partnership is essential for maintaining momentum in site reinvestment. The Institutional Facilities Manager (IFM) provides guidance and oversight for the process.

The FGB helps set the strategic focus of Laboratory investments and multiprogram operating budgets in facilities and plant infrastructure. In addition, the FGB acts as an advocate for F&I issues, policies, procedures, and standards.

The FGB interacts with the Laboratory's Strategic Operations Council for making decisions and recommendations. This mechanism gives organizations a forum for facility-related issues and for institutional solutions, and provides a process for facility policies, appeals, and discrepancy resolution.

The FGB, chaired by the IFM, is composed of members who represent a wealth of competencies with institutional perspective from the operations activities at the Laboratory. In addition, external and internal experts are invited to participate in the review process for F&I project proposals, as needed. Figure 5-2 lists the board members, technical advisors, and staff support.

Facility Governance Board	
Board Members	One from each Principal Directorate (plus Director's Office) • Weapons Complex Integration • National Ignition Facility and Photon Science • Global Security • Science and Technology • Operations and Business Institutional Facilities Manager (IFM) Chair
Technical Advisors	From each of the following organizations: • ESH&Q • Safeguards and Security • Facilities and Infrastructure • Nuclear Operations • IT Operations • CIO
Staff Support	• IFM staff • CFO • Facilities and Infrastructure • Others as needed

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Figure 5-2. Membership of the Facility Governance Board. The IFM chairs the FGB and provides guidance and oversight.

Each year the FGB considers F&I projects that address the modernization, DM, new capability, cleanup, and footprint reduction of Laboratory F&I. The projects are directed at arresting deterioration, extending useful life, reducing maintenance and operating costs, modernization, eliminating legacy materials and equipment, and disposing of excess facilities. The primary goal of these projects is to increase the operational readiness of F&I to meet mission needs.

The need for a project can be identified by any member of the triad. Potential projects are also identified by examining F&I databases. These projects arise when there is an imminent projected end-of-life for a system or major component and when physical inspection confirms an unacceptable level of reliability or performance. Other potential projects are identified in an annual review of mission facility requirements. Figure 5-3 shows the process by which projects are generated, submitted, reviewed, prioritized, and executed through the triad's efforts.

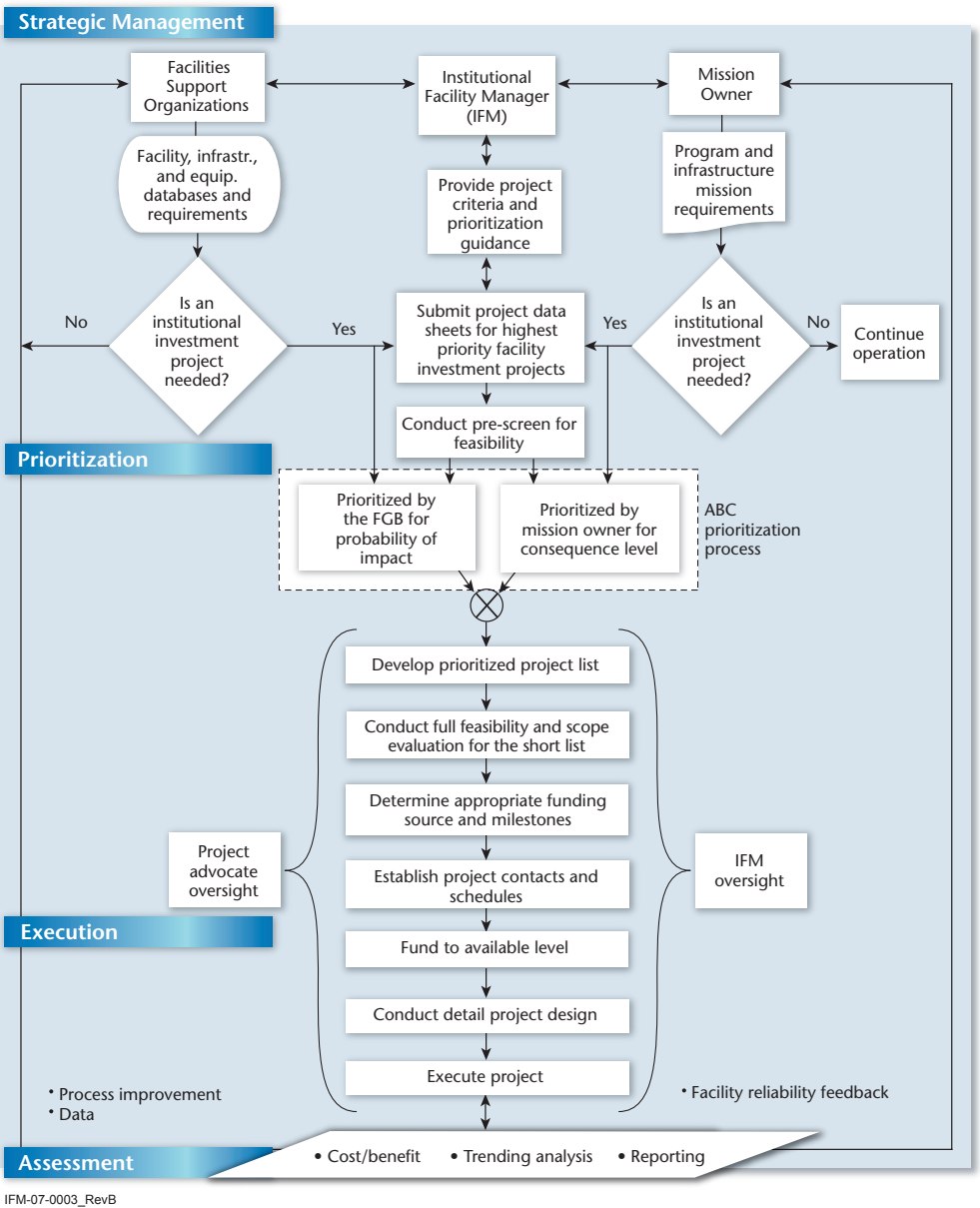

Figure 5-3. Facility investment project process.

The prioritization process begins with each organization developing a list of their required projects prioritized in accordance with mission consequence as delineated in Figure 5-4. Independently, the FGB ranks the projects according to the probability of having an institutional impact (see Figure 5-5). For FIRP projects, the institutional impact ranking takes into consideration the NNSA goals of DM in mission-critical facilities, and the critical infrastructure that supports those facilities and Complex Transformation. This allows us to ensure that the missions of the SSP are adequately considered for funding. For D&D projects, LLNL provides ranking scores that assist in prioritizing the institutional impact.

Rating number	Category	Rating criteria
1	Mission shutdown	Impact of deferral or failure will shut down a mission function or have major sponsor impact, or cause major ES&H, security, cost, employee, or community issues. May be a critical domino in a series of projects that would result in an inability to implement the series deferred. Deferral would result in a future mission shutdown condition. May be critical future project. May have a very short payback (≤2 years), major cost avoidance, or risk reduction.
2	Significant mission delay	Impact of deferral or failure will significantly reduce ability to perform mission or may result in serious sponsor, community, or employee reaction, or serious ES&H/security issues. May be an important domino in a series of projects—deferral will result in a significant mission delay. May have an attractive payback (≤5 years), significant cost avoidance, or risk reduction.
3	Moderate mission delay	Impact of deferral or failure will reduce efficiency in mission performance or increase operating costs. May result in sponsor, community, or employee concerns, or in ES&H/security issues. Reduces LLNL image and external perception. May be a domino project that would delay a series of projects. May have a reasonable payback (≤10 years), cost avoidance, or risk reduction.
4	Minor mission delay	Impact of deferral or failure will have only minor or local impact on mission performance, ES&H, security, or employee/community satisfaction. Has minor cost avoidance or imperceptible payback (≥10 years). May be deferred within current mission requirements. Typically only requires repair if fails.
5	No mission delay	No perceivable impact of deferral or failure. No impact on mission performance, sponsor, ES&H, security, community, or employee satisfaction. No perceivable cost avoidance or payback. Can be deferred indefinitely under current mission requirements. Generally run to failure and don't repair.

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Figure 5-4. Mission-owner-rated consequences of proposed F&I projects; rating criteria defined by LLNL.

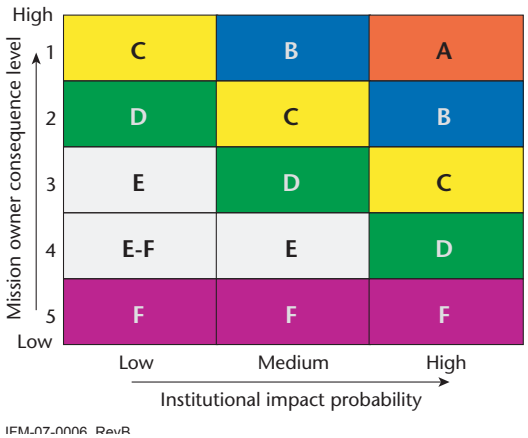
Rating number	Category	Rating criteria
1	High	Institutional impact imminent. Action required—e.g., immediate solution required or needs to be submitted to line item project list as soon as possible.
2	Medium	Institutional impact will be short-term. Negative impacts are beginning now. Action required in the short term.
3	Low	Institutional impact timing uncertain, longer term if at all. Impact limited to single organization.

IFM-07-0005_RevA

Figure 5-5. LLNL's definition of impact probability; rated by the institution.

The combination of the "mission owner consequence level rank" and "institutional impact probability" provides an "overall priority" as described in Figure 5-6. The result is an ABC ranking of all the projects. The key to the F&I prioritization process is that it is an interactive but independent determination of consequence versus probability, which provides a balanced and thorough ranking of top-priority projects across all Laboratory organizations.

For replacement building projects, the prioritization goes one step further by scoring projects according to seven criteria. The criteria are organized by the TYSP objectives of mission capability, flexibility, safety, and security with efficiency, and people. Each criterion is scored from 0, 1, or 2 for low, medium, or high (see Figure 5-7 for a summary).



IFM-07-0006 RevB

Figure 5-6. F&I project risk-based, prioritization matrix ABC chart.

To finalize the prioritization for FIRP projects, the top ranked projects are reviewed and ranked using the FIRP matrices to ensure a self-consistent set of prioritized projects.

The Laboratory uses NNSA's evaluation and selection criteria to assure consistency with its Line Item projects (see Figure 5-8). The Laboratory's goal is to fund F&I projects in order of priority, consistent with the amount of funding available in the various categories and with appropriate use of funding guidelines. Attachment A summarizes these projects.

Criteria	Description
Growth and Dominos	Does the new facility prepare the Laboratory for strategic growth or is it a critical domino in a series that will, if not implemented, cause serious mission impacts?
Institutional Entity	How institutional is the function that will occupy the new facility?
Other Options	Does the directorate/program that wants to occupy the new facility have other options, including operating as-is and the ability to pursue direct funding?
Maintenance and adaptation costs	Does the new facility have a quick return on investment or does it significantly reduce the site's deferred maintenance by vacating space for renovation or D&D?
ES&H & Security	Will the new facility allow the Laboratory to address a health and safety (e.g., "sick" building) or security issue?
Operational Efficiency	Will the new facility allow the directorate/program to operate more efficiently?
Employee & Community	Will the facility correct or prevent major employee/sponsor/community issues, including retention of employees and funding, plus recruiting abilities?

IFM-07-0007 RevB

Figure 5-7. Criteria used to prioritize replacement building projects.

Level	Criteria
Level One	Projects required for meeting near-term, high-priority program deliverables and program commitments. Projects in this level may also include critical environment, safety, security, and health needs that must be addressed to maintain these program deliverables.
Level Two	Projects required for meeting longer-term program deliverables that are not time-sensitive towards meeting the program deliverables identified above. These projects will establish or maintain capabilities that are necessary for longer-term program success.
Level Three	Projects that are not program specific and do not fit within the definitions above.

IFM-07-0008_RevB

Figure 5-8. NNSA's summary evaluation and selection criteria for Line Item projects.

6.0 Changes from Prior Year TYSP

Following the Guidance resulting from Complex Transformation, the text of the FY09 TYSP is significantly shorter than in previous years. The focus of the document is on the data sets in the Attachments.

In response to the intent and objectives of the initiative on Transformation Disposition, the TYSP presents the Laboratory's efforts to aggressively reduce the facility footprint and re-examine its D&D planning to achieve its objectives within a tighter time frame.

Per Guidance, the FY09 TYSP establishes an FY06 baseline on security operations and related F&I for tracking business metrics regarding footprint reduction and security level downgrades which correspond to a reduction of weapon-related activities at LLNL called for in Complex Transformation.

The FY09 TYSP responds to the new mandate on sustainable design in EO 13423, including the Laboratory's plan to pursue LEED certification toward compliance with the Executive Order.

Significant Project Deletions and Additions

Specific project and data changes are marked with asterisks in Attachments A and E and are noted in change logs maintained at the site.

- *Attachment A-1.* The Line Item tables have been modified to match the latest ICPP.
- *Attachment A-3.* Cost projections were adjusted to match FYNSP targets in the TYSP Guidance Appendix 1.
- *Attachment A-4.* The FIRP project list has changed to match planning targets released January 2008 and to modify projects to meet strategic objectives, in particular Complex Transformation. All projects retain their links to the congressionally mandated DM identifiers.
- *Attachment A-5.* The IGPP list identifies projects for newly emerging institutional needs to meet Complex Transformation guidance. Several future projects have been reprioritized due to the closure of Site 300.
- *Attachment A-6.* Changes match funded activities in Safeguards and Security for FY08 and FY09. Projects to achieve the requirements of the 2005 DBT will not be pursued; LLNL will maintain the system effectiveness of the 2003 DBT.
- *Attachment B.* The Site's Asset Utilization Index has been replaced by NNSA Potential Facilities and Infrastructure Impacts of Future Nuclear Weapons Complex Planning for LLNL. This attachment identifies potential facilities and infrastructure impacts of ongoing and future transformation of the complex. Projects include facility shutdown, transfer, demolition, renovation, or new construction.

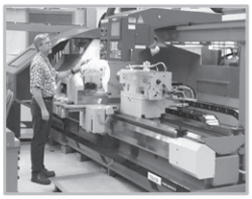
- *Attachment C* . This attachment identifies DOE new building and major renovation projects seeking or registered for LEED certification.
- *Attachment D.* This attachment establishes LLNL's security baseline for facilities, areas, and systems.
- *Attachment E.* The FIRP Facility Disposition Plan project list has changed to match planning targets released in January 2008 and to modify the project list to meet Complex Transformation strategic objectives. Transformation Disposition planning targets have also been added for facility disposition in FY09–18. Disposition plan strategies are discussed in Section 4 and reflected in Attachment E data.

ATTACHMENTS















Attachment A-1
Facilities and Infrastructure Cost Projection Spreadsheet
Line Item Projects for LLNL
($000s)

Priority (1)	Project Name (2)	Project Number (3)	Deferred Main-tenance & Identifier(s) (3a)	Mission Depen-dency (4)	Mission Depen-dency Program (4a)	Deferred Main-tenance Reduction (5)	GSF Added or Elimin-ated (6)	Funding Type (7)	Total (8)	Prior Years Funding (9)	FY 2007 (10)	FY 2008 (11)	FY 2009 FYNSP (12)	FY 2010 FYNSP (13)	FY 2011 FYNSP (14)	FY 2012 FYNSP (15)	FY 2013 FYNSP (16)	FY 2014 (17)	FY 2015 (18)	FY 2016 (19)	FY 2017 (20)	FY 2018 (21)
A. Readiness in Technical Base and Facilities (RTBF) Line Items																						
1	**Protection of Real Property PH II (Roof Reconstruction) (a)**	99-D-104		MC, MD	PMC, ENG, SCI, DSW			LI	18,363	18,363												
								PE&D	0	0												
								OPC	70	70												
						10,500	0	Total (TPC)	18,433	18,433	0	0	0	0	0	0	0	0	0	0	0	0
2	**Isotope Sciences Facilities (b)**	99-D-103		MD	DSW			LI	17,342	17,342												
								PE&D	0	0												
								OPC	300	300												
						50	+21,742	Total (TPC)	17,642	17,642	0	0	0	0	0	0	0	0	0	0	0	0
3	**International Security Research Facility (c)**	01-D-800		MC	Other			LI	24,318	24,318												
								PE&D	0	0												
								OPC	505	505												
						0	+66,660	Total (TPC)	24,823	24,823	0	0	0	0	0	0	0	0	0	0	0	0
4	**Engineering Technology Complex Upgrade (d)**	02-D-105		MC	SCI			LI	24,349	24,349												
		01-D-103-04						PE&D	2,250	2,250												
								OPC	1,000	1,000												
						680	+54	Total (TPC)	27,599	27,599	0	0	0	0	0	0	0	0	0	0	0	0
5	**Tritium Facility Modernization**	06-D-403		MC	DSW			LI	10,384	2,574	7,810											
		03-D-103-04						PE&D	1,494	1,494												
								OPC	1,321	601	0	360	360									
						100	+2,160	Total (TPC)	13,199	4,669	7,810	360	360	0	0	0	0	0	0	0	0	0

Attachment A-1
Facilities and Infrastructure Cost Projection Spreadsheet
Line Item Projects for LLNL
($000s)

Priority (1)	Project Name (2)	Project Number (3)	Deferred Maintenance & Identifier(s) (3a)	Mission Dependency (4)	Mission Dependency Program (4a)	Deferred Maintenance Reduction (5)	GSF Added or Eliminated (6)	Funding Type (7)	Total (8)	Prior Years Funding (9)	FY 2007 (10)	FY 2008 (11)	FY 2009 FYNSP (12)	FY 2010 FYNSP (13)	FY 2011 FYNSP (14)	FY 2012 FYNSP (15)	FY 2013 FYNSP (16)	FY 2014 (17)	FY 2015 (18)	FY 2016 (19)	FY 2017 (20)	FY 2018 (21)
6	Energetic Materials Processing Center (e)	06-D-401		MC	DSW			LI	0	0												
		03-D-103-03						PE&D	2,888	2,888												
								OPC	870	870												
						0	0	Total (TPC)	3,758	3,758	0	0	0	0	0	0	0	0	0	0	0	0
B. Facilities and Infrastructure Recapitalization Program (FIRP) Line Items																						
	None						0	LI	0	0												
							0	PE&D	0	0												
							0	OPC	0	0												
							0	Total (TPC)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C. Safeguards & Security (S&S) Line Items																						
	None						0	LI	0	0												
							0	PE&D	0	0												
							0	OPC	0	0												
							0	Total (TPC)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D. Other Defense Programs Line Items (for example, Campaigns/Directed Stockpile Work (DSW))																						
1	National Ignition Facility (f)	96-D-111		MC	ICF			LI	2,094,897	1,973,339	111,419	10,139										
								PE&D	0	0												
								OPC	153,200	153,200												
						0	+752,176	Total (TPC)	2,248,097	2,126,539	111,419	10,139	0	0	0	0	0	0	0	0	0	0
2	Terascale Simulation Facility (g)	00-D-103		MC	ASC			LI	90,927	90,927												
								PE&D	0	0												
								OPC	3,200	3,200												
							+249,701	Total (TPC)	94,127	94,127	0	0	0	0	0	0	0	0	0	0	0	0
								SubTotal Costs for All NNSA Weapons Activities Account Line Items	2,447,678	2,317,590	119,229	10,499	360	0	0	0	0	0	0	0	0	0

Attachment A-1
Facilities and Infrastructure Cost Projection Spreadsheet
Line Item Projects for LLNL
($000s)

Priority (1)	Project Name (2)	Project Number (3)	Deferred Main-tenance & Identifier(s) (3a)	Mission Depen-dency (4)	Mission Depen-dency Program (4a)	Deferred Main-tenance Reduction (5)	GSF Added or Elimin-ated (6)	Funding Type (7)	Total (8)	Prior Years Funding (9)	FY 2007 (10)	FY 2008 (11)	FY 2009 FYNSP (12)	FY 2010 FYNSP (13)	FY 2011 FYNSP (14)	FY 2012 FYNSP (15)	FY 2013 FYNSP (16)	FY 2014 (17)	FY 2015 (18)	FY 2016 (19)	FY 2017 (20)	FY 2018 (21)
E. Nuclear Nonproliferation (NN) Line Items																						
	None							LI	0	0												
								PE&D	0	0												
								OPC	0	0												
								Total (TPC)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Costs for All NNSA Site Line Items									2,447,678	2,317,590	119,229	10,499	360	0	0	0	0	0	0	0	0	0
F. Non-NNSA Line Items Environmental Management																						
1	**Decontamination and Waste Treatment Facility (h)**	86-D-103		MD	RTBF			LI	62,362	62,362												
								PE&D	0	0												
								OPC	769	769												
								Total (TPC)	63,131	63,131	0	0	0	0	0	0	0	0	0	0	0	0
Total Costs for Environmental Management									63,131	63,131	0	0	0	0	0	0	0	0	0	0	0	0
Total Site Costs									2,510,809	2,380,721	119,229	10,499	360	0	0	0	0	0	0	0	0	0

Footnotes:
(a) The Protection of Real Property PH II (Roof Reconstruction) project was completed in FY 2005.
(b) The Isotope Sciences Facility project was completed in FY 2004.
(c) The International Security Research Facility was completed in FY 2005.
(d) The Engineering Technology Complex Upgrade is to be completed in FY 2007.
(e) The Energetic Materials Processing Center project was cancelled.
(f) Does not include NIF demonstration funding (Total 1,254,281, Prior Year 818,344, FY06 101,306, FY07 143,438, FY08 136,912, FY09 54,281).
(g) The Terascale Simulation Facility project was completed during FY 2006.
(h) The EM-funded Decontamination and Waste Treatment Facility project was completed in FY 2006. Newly generated waste scope was transferred from EM to NNSA in FY 2006.

Attachment A-3
NNSA Facilities and Infrastructure Cost Projection Spreadsheet
RTBF/Operations of Facilities for LLNL
($000s)

Priority (1)	Project Name (2)	Project Number (3)	Mission Dependency (4)	Mission Dependency Program (4a)	Deferred Maintenance Reduction (5)	GSF Added or Eliminated (6)	Funding Type (7)	Total (8)	Prior Years' Funding (9)	FY 2007 (10)	FY 2008 (11)	FY 2009 FYNSP (12)	FY 2010 FYNSP (13)	FY 2011 FYNSP (14)	FY 2012 FYNSP (15)	FY 2013 FYNSP (16)	FY 2014 (17)	FY 2015 (18)	FY 2016 (19)	FY 2017 (20)	FY 2018 (21)
1	Balance of RTBF O&M (a)*	n/a	MC	RTBF	800	0	E	1,294,205	79,646	86,799	95,210	83,710	84,086	86,639	103,595	106,375	108,723	111,123	113,575	116,081	118,643
2	Minor expense funded construction	n/a	MC	RTBF	0	0	E	5,150	1,400	1,000	250	250	250	250	250	250	250	250	250	250	250
3	GPP project funding	n/a	MC	RTBF	0	0	GPP	2,900	0	100	500	1,200	300	100	100	100	100	100	100	100	100
TOTAL RTBF/Operations of Facilities (Facilities & Infrastructure reported under this category)								1,302,255	81,046	87,899	95,960	85,160	84,636	86,989	103,945	106,725	109,073	111,473	113,925	116,431	118,993

Footnotes:
* Change from last year's TYSP
(a) The deferred maintenance reduction averages approximately $800K per year.
Prior Years Funding (9) is FY2006 since RTBF is "ongoing" and not a "project" by definition.

Attachment A-4(a)
NNSA Facilities and Infrastructure Cost Projection Spreadsheet
Facilities and Infrastructure Recapitalization Program (FIRP) for LLNL
($000s)

FIRRS Priority (1)	Project Name (2)	FIRRS Score (2a)	Project Number (3)	Deferred Maintenance Identifier (3a)	Mission Dependency (4)	Mission Dependency Program (4a)	FY03 Baseline Deferred 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 FYNSP (16)
	FY2001 Projects:																	
1	B321 HVAC Backlog Reduction	n/a	n/a	n/a	Y	n/a	368	0	E	1,000	1,000							
	FY2002 Projects:																	
1	Electrical Power Systems Replacement	n/a	LL-R-02-01	n/a	Y	n/a	685	0	GPP	3,860	3,860							
2	HEPA Filter Standard Implementation	n/a	LL-R-02-02	n/a	Y	n/a	0	0	GPP	2,000	2,000							
3	B231 Vault Ventilation/HEPA Replacements	n/a	LL-R-02-03	n/a	Y	n/a	32	0	GPP	1,700	1,700							
4	HVAC Essential Backlog Reduction (B341)	n/a	LL-R-02-04	n/a	Y	n/a	671	0	GPP	1,000	1,000							
5	Ventilation/Ductwork and Filtration System Renovation	n/a	LL-R-02-05	n/a	Y	n/a	1000	0	E	1,000	1,000							
6	Site 300 HE Processing Area Replacements	n/a	LL-R-02-06	n/a	Y	n/a	0	120	GPP	1,400	1,400							
7	HE Test Facilities Control Sys. & Diag. Equip. Replacement	n/a	LL-R-02-07	n/a	Y	n/a	0	0	GPP	1,000	1,000							
8	B131 High Bay Renovation	n/a	LL-R-02-08	n/a	Y	n/a	0	0	GPP	1,000	1,000							
8	Engineering Test Facilities and Equipment Rehabilitation	n/a	LL-R-02-09	n/a	Y	n/a	0	0	GPP	1,000	1,000							
10	B235 AC and Boiler	n/a	LL-R-02-10	n/a	Y	n/a	530	0	GPP	1,000	1,000							
1	Building 222S D&D	n/a	LL-D-02-01	n/a	N	n/a	See Attach E	See Attach E	E	4,500	4,500							
2	Building 177 D&D	n/a	LL-D-02-02	n/a	N	n/a	See Attach E	See Attach E	E	950	950							
1	Planning (Scoping & Design for FY03)	n/a	LL-P-02-01	n/a	n/a	n/a	0	0	E	1,040	1,040							
	FY2003 Projects:																	
1	B298 Roof Replacement	n/a	LL-R-03-01	n/a	Y	n/a	2966	0	GPP	2,752	2,752							
2	Ductwork Replacement	n/a	LL-R-03-02	n/a	Y	n/a	2016	0	E	2,100	2,100							
3	Support Services Equipment Rehab	n/a	LL-R-03-03	n/a	Y	n/a	0	0	GPE	1,300	1,300							
4	Bldg 511 Backlog Reduction	n/a	LL-R-03-04	n/a	N	n/a	1609	0	GPP	2,971	2,971							
5	Replacement Building (B142)	n/a	LL-R-03-05	n/a	N	n/a	0	+20,307	GPP	4,950	4,950							
6	Road Repair/Reroute 5th street	n/a	LL-R-03-06	n/a	Y	n/a	237	0	GPP	2,462	2,462							
7	Site 300 HE Lightning Protection	n/a	LL-R-03-07	n/a	Y	n/a	0	0	GPP	550	550							
8	B801 Utilities and Support Systems Rehabilitation	n/a	LL-R-03-08	n/a	Y	n/a	625	0	GPP	1,200	1,200							
9	B131 Backlog Reduction	n/a	LL-R-03-09	n/a	Y	n/a	1340	0	GPP	2,765	2,765							
10	B871 Backlog Reduction	n/a	LL-R-03-10	n/a	Y	n/a	517	0	GPP	1,000	1,000							
11	B451 Computer Bay and Office Roof Replacement	n/a	LL-R-03-11	n/a	Y	n/a	1292	0	GPP	750	750							
12	Site Utilities Upgrade - Heat Exchanger	n/a	LL-R-03-12	n/a	Y	n/a	830	0	GPP	805	805							
13	Engineering Discipline Equipment	n/a	LL-R-03-13	n/a	Y	n/a	0	0	GPE	1,300	1,300							
14	Small Essential Backlog Reduction	n/a	LL-R-03-14	n/a	Y	n/a	1512	0	GPP	1,417	1,417							
1	FY03 FIRP D&D	n/a	LL-D-03-XX	n/a	N	n/a	See Attach E	See Attach E	E	11,099	11,099							
1	Planning for FY04 Projects	n/a	LL-P-03-XX	n/a	n/a	n/a	0	0	E	2,488	2,488							
	FY2004 Projects:																	
1	Mission Essential Facilities Backlog Reduction - B191	n/a	LL-R-04-01	n/a	Y	n/a	2625	+1,000	GPP	3,490	3,495							
2	B391 Backlog Reduction	n/a	LL-R-04-02	n/a	Y	n/a	1800	+320	GPP	3,606	3,653							
3	U325 Aging Controls Replacement	n/a	LL-R-04-03	n/a	Y	n/a	2186	0	GPP	1,812	1,816							
4	Replacement Building (B242)	n/a	LL-R-04-04	n/a	N	n/a	0	+20,384	GPP	4,578	4,633							
5	Supporting Sci. & Engin. Facility Backlog	n/a	LL-R-04-05	n/a	Y	n/a	580	0	GPP	638	669							
6	Small Essential Backlog Reduction	n/a	LL-R-04-06	n/a	Y	n/a	1406	0	E	1,283	1,620							
7	Roofing Backlog Reduction B490	n/a	LL-R-04-07	n/a	Y	n/a	5825	0	GPP	3,164	3,164							
8	Small Quick Backlog Reduction *	n/a	LL-R-04-08	n/a	Y	n/a	604	0	E	670	673	(3)						
9	B324 Backlog Reduction and Rehabilitation	n/a	LL-R-04-09	n/a	N	n/a	850		GPP	1,583	1,585							
1	FY04 FIRP D&D	n/a	LLNL-04-09	n/a	N	n/a	See Attach E	See Attach E	E	7,891	7,891							
1	Planning for FY05 Projects	n/a	LL-P-04-01	n/a	n/a	n/a	0	0	E	2,391	2,391							

Attachment A-4(a)
NNSA Facilities and Infrastructure Cost Projection Spreadsheet
Facilities and Infrastructure Recapitalization Program (FIRP) for LLNL
($000s)

FIRRS Priority (1)	Project Name (2)	FIRRS Score (2a)	Project Number (3)	Deferred Maintenance Identifier (3a)	Mission Dependency (4)	Mission Dependency Program (4a)	FY03 Baseline Deferred 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 FYNSP (16)
	FY2005 Projects:																	
1	B113 Backlog Reduction Windowing *	65	LL-R-05-01	LLNL-06-210	Y	n/a	2821	0	GPP	3,922	3,950	-28						
2	Utilities and Infrastructure Backlog Reduction *	65	LL-R-05-02	LLNL-05-198	Y	n/a	2105	+1,000	GPP	3,700	3,300	400						
3	Essential Building HVAC Replacement *	65	LL-R-05-03	LLNL-05-216	Y	n/a	1478	0	GPP	2,242	2,250	-8						
4	Mission Essential Facilities Backlog Reduction *	65	LL-R-05-04	LLNL-05-197	Y	n/a	2815	0	GPP	4,270	4,450	-180						
5	Site 300 Backlog Reduction and Modernization *	55	LL-R-05-05	LLNL-05-218	Y	n/a	482	0	GPP	2,708	2,710	-2						
6	B261 Backlog Reduction and Rehabilitation *	55	LL-R-05-06	LLNL-05-209	Y	n/a	2063	0	GPP	4,728	4,730	-2						
7	High DM Roofing Backlog Reduction *	55	LL-R-05-07	LLNL-05-211	Y	n/a	4700	0	GPP	4,344	4,130	214						
8	Replacement Building Northeast (B583) (formerly 245) *	55	LL-R-05-08	LLNL-05-205	N	n/a	0	+21,978	GPP	4,913	4,950	-37						
9	BTA Roofing Project Support	55	LL-R-05-09	LLNL-05-219	N	n/a	0	0	E	171	182							
10	Contractor Support to NA-52 Headquarters *	n/a	LL-R-05-10	n/a	N	n/a	0	0	E	96	100	-4						
11	Road Improvements/Backlog Reduction *	55	LL-R-05-11	LLNL-04-213	Y	n/a	950	0	GPP	1,234	1,500	-266						
12	Large DM Utilities & Infra. Deferred Maint. Reduction *	65	LL-R-05-12	LLNL-11-204	Y	n/a	5537	0	GPP	2,944	3,000	-56						
13	Building Envelope Replacement	55	LL-R--05-13	LLNL-06-209	N	n/a	1015	0	GPP	1,080	1,080							
14	Roofing Backlog Reduction (cancelled)	65	LL-R-05-14	LLNL-06-205	Y	n/a	0	0	GPP	25	25							
15	Barracks Building Backlog Reduction (cancelled)	55	LL-R-05-15	LLNL-04-209	Y	n/a	0	0	GPP	64	64							
16	Mechanical Systems DM Reduction *	55	LL-R-05-16	LLNL-09-216	N	n/a	1148	0	E	978	970	8						
1	FY05 FIRP D&D	n/a	LLNL-05-09	See Attach E	N	n/a	See Attach E	See Attach E	E	15,600	15,600							
1	Planning for FY06 Projects	n/a	LL-P-05-01	n/a	n/a	n/a	0	0	E/GPP	2,509	2,509							
	FY2006 Projects:																	
1	RAMP Project Support *	n/a	LL-R-06-01	LLNL-06-232	MD	DSW	133	0	E	349	370	(21)						
2	Quick Deferred Maintenance Reduction *	65	LL-R-06-02	LLNL-06-203	MD	SCI	207	0	E	186	200	(14)						
1	FY06 FIRP D&D	n/a	LLNL-06-09	See Attach E	N	n/a	See Attach E	See Attach E	E	3,780	3,780							
1	Planning for FY07 Projects	n/a	LL-P-06-01	n/a	n/a	n/a	0	0	E/GPP	1,245	1,245							
	FY2007 Projects:																	
1	Mission Essential Facilities Backlog Reduction *	65	LL-R-07-01	LLNL-06-201	MC	DSW	1805	0	GPP	2,500		1,000	1,500					
2	Transformer Replacements	65	LL-R-07-02	LLNL-05-202	MC	SCI	279	0	GPP	4,400		1,000	3,400					
3	Supporting Sci. & Engin. Facility Backlog	65	LL-R-07-03	LLNL-05-229	MD	DOD	540	0	E	800		800						
4	Engineering Technology Facility Backlog	65	LL-R-07-04	LLNL-06-206	MC	SCI	1386	0	GPP	2,330		1,050	1,280					
5	Essential Low Voltage Electrical DM Reduction *	65	LL-R-07-05	LLNL-08-205	MC	DSW	850	0	GPP	1,000		500	500					
6	Utilities and Infrastructure Backlog Reduction *	60	LL-R-07-06	LLNL-06-202	MD	OTHER	2045	0	GPP	3,650		3,150	500					
7	Essential HVAC Deferred Maintenance Reduction	65	LL-R-07-07	LLNL-08-209	MC	ICF	1400	0	E/GPP	2,300		1,500	800					
8	Building Support Systems Replacement *	65	LL-R-07-08	LLNL-09-224	MC	ICF	550	0	GPP	2,250		1,550	700					
9	Small Quick Deferred Maintenance Reduction *	65	LL-R-07-09	LLNL-07-118	MC	SCI	1049	0	E	1,660		1,340	320					
10	B151 Deferred Maintenance Reduction	55	LL-R-07-10	LLNL-07-108	MD	DSW	906	0	GPP	1,000		600	400					
11	Paving and Roads Replacement/Upgrade *	55	LL-R-07-11	LLNL-06-207	MD	NA	427	0	GPP	1,400		1,348	52					
12	RAMP Project Support *	55	LL-R-07-12	LLNL-07-124	MD	SCI	100	0	E	281		281						
1	FY07 FIRP D&D *	n/a	LLNL-07-09	See Attach E	NMD	n/a	See Attach E	See Attach E	E	4,000		4,000						
1	Planning for FY08 Projects	n/a	LL-P-07-01	n/a	n/a	n/a	0	0	E/GPP	1,450		1,450						
	FY2008 Candidate Projects:																	
1	Roofing Deferred Maintenance Reduction (RAMP Support) *	50	LL-R-08-01	LLNL-07-120	MD	SCI	200	0	E	300			300					
2	Mission Critical Refurbirshment Laser Facilties *	70	LL-R-08-02	LLNL-07-100	MC	SCI	200	0	GPP	4,700			1,000	3,700				
3	Mechanical HVAC Systems DM Reduction *	60	LL-R-08-03	LLNL-10-213	MC	ICF	1619	0	GPP	4,600			1,500	3,100				
4	Building Electrical DM Reduction *	60	LL-R-08-04	LLNL-08-217	MC	ENG	1897	0	GPP	4,500			1,500	3,000				
5	Northeast Quadrant DM Reduction *	60	LL-R-08-05	LLNL-08-211	MC	ICF	1433	0	GPP	4,700			1,300	3,400				
1	FY08 FIRP D&D *	n/a	LLNL-08-09	See Attach E	NMD	n/a	See Attach E	See Attach E	E	3,188			3,188					
1	Planning for FY09 Projects *	n/a	LL-P-08-01	n/a	n/a	n/a	0	0	E/GPP	1,000			1,000					

Attachment A-4(a)
NNSA Facilities and Infrastructure Cost Projection Spreadsheet
Facilities and Infrastructure Recapitalization Program (FIRP) for LLNL
($000s)

FIRRS Priority (1)	Project Name (2)	FIRRS Score (2a)	Project Number (3)	Deferred Maintenance Identifier (3a)	Mission Dependency (4)	Mission Dependency Program (4a)	FY03 Baseline Deferred 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 FYNSP (16)
	FY2009 Candidate Projects:																	
1	Mission Critical Facilities DM Reduction - FY09 *	70	LLNL-08-201	LLNL-08-201	MC	TBD	1000	0	GPP	4,000				1,400	2,600			
2	Utilities and Infrastructure Upgrade *	55	LLNL-07-102	LLNL-07-102	MD	OTHER	1706	0	GPP	4,400				1,400	3,000			
3	Building HVAC Deferred Maintenance Reduction *	55	LLNL-08-219	LLNL-08-219	MD	DSW	267	0	GPP	1,800				800	1,000			
4	Small Quick Deferred Maintenance Reduction *	55	LLNL-08-225	LLNL-08-225	MD	RTBF	313	0	E	1,800				800	1,000			
5	Electrical Utilities Deferred Maintenance	55	LLNL-09-204	LLNL-09-204	MD	OTHER	478	0	GPP	4,800				1,000	3,800			
6	RAMP Project Support *	50	LLNL-05-211	LLNL-05-211	MD	TBD	55	0	E	251				251				
1	Planning for FY10 Projects *	n/a	LLNL-09-230	n/a	n/a	TBD	0	0	E/GPP	1,000				1,000				
	FY2010 Candidate Projects:																	
1	Mission Essential Facilties DM Reduction - FY10 *	70	LLNL-09-202	LLNL-09-202	MC	TBD	600	0	GPP	4,000					1,400	2,600		
2	Engineering Technology Facilty DM Reduction *	60	LLNL-07-112	LLNL-07-112	MC	TBD	750	0	GPP	2,500					1,200	1,300		
3	Facilties Deferred Maintenance Reduction Windowing *	55	LLNL-10-217	LLNL-10-217	MD	TBD	1000	0	GPP	4,000					1,300	2,700		
4	Small Quick Deferred Maintenance Reduction - FY10 *	55	LLNL-09-228	LLNL-09-228	MD	TBD	400	0	E	1,200					1,200			
5	Mechanical Utilities Deferred Maintenance Reduction *	55	LLNL-09-206	LLNL-09-206	MD	TBD	1000	0	GPP	3,200					1,200	2,000		
6	Building Electrical Distribution Systems Replacement *	55	LLNL-09-214	LLNL-09-214	MD	TBD	800	0	GPP	3,200					1,200	2,000		
7	Supporting Science & Engin. Facility DM	55	LLNL-08-223	LLNL-08-223	MD	TBD	900	0	GPP	2,000					1,000	1,000		
8	Civil Deferred Maintenance Reduction *	50	LLNL-07-122	LLNL-07-122	MD	TBD	303	0	GPP	1,500					1,500			
9	RAMP Project Support *	50	LLNL-05-211	LLNL-05-211	MD	TBD	55	0	E	371					371			
1	Planning for FY11 Projects *	n/a	LLNL-10-230	n/a	n/a	TBD	0	0	E/GPP	1,000					1,000			
	FY2011 Candidate Projects:																	
1	Mission Essentials Facilities DM Reduction - FY11	70	LLNL-10-201	LLNL-10-201	MC	TBD	550	0	GPP	4,000						1,500	2,500	
2	Building Low Voltage DM Reduction *	60	LLNL-10-219	LLNL-10-219	MC	TBD	663	0	GPP	3,000						1,500	1,500	
3	Small Quick Deferred Maintenance Reduction - FY11 *	55	LLNL-10-227	LLNL-10-227	MD	TBD	500	0	E	1,500						1,500		
4	Facilities Deferred Maintenance Reduction Windowing FY11 *	55	LLNL-11-216	LLNL-11-216	MD	TBD	600	0	GPP	4,000						1,500	2,500	
5	Utilities and Infrastructure DM Reduction - FY11 *	55	LLNL-08-203	LLNL-08-203	MD	TBD	600	0	GPP	4,000						1,500	2,500	
6	Electrical Systems Deferred Maintenance Reduction - FY11 *	55	LLNL-11-210	LLNL-11-210	MD	TBD	600	0	GPP	4,000						1,500	2,500	
7	Civil Deferred Maintenance Reduction *	50	LLNL-09-222	LLNL-09-222	MD	TBD	500	0	GPP	1,400						1,400		
8	RAMP Project Support *	50	LLNL-05-211	LLNL-05-211	MD	TBD	50	0	E	200						200		
1	Planning for FY12 Projects *	n/a	LLNL-11-230	n/a	n/a	TBD	0	0	E/GPP	1,000						1,000		
	FY2012 Candidate Projects:																	
1	Mission Essential Facilities DM Reduction - FY12	70	LLNL-11-202	LLNL-11-202	MC	TBD	680	0	GPP	4,000							1,200	2,800
2	Southeast Quadrant Deferred Maintenance Reduction*	55	LLNL-09-225	LLNL-09-225	MD	TBD	1200	0	GPP	4,000							1,200	2,800
3	Electrical Utilities Deferred Maintenance	55	LLNL-10-211	LLNL-10-211	MD	TBD	600	0	GPP	4,000							1,200	2,800
4	Building Support Systems DM Reduction	55	LLNL-11-226	LLNL-11-226	MD	TBD	600	0	GPP	4,000							1,200	2,800
5	Utilities and Infrastructure DM Reduction - FY12 *	55	LLNL-10-203	LLNL-10-203	MD	TBD	600	0	GPP	4,000							1,200	2,800
6	HVAC Systems DM Reduction *	55	LLNL-11-212	LLNL-11-212	MD	TBD	1692	0	GPP	4,000							1,200	2,800
7	Engineering Technology Facilty DM Reduction *	55	LLNL-08-207	LLNL-08-207	MD	TBD	800	0	GPP	3,200							1,000	2,200
8	Building Envelope Replacement *	50	LLNL-08-221	LLNL-08-221	MD	TBD	1350	0	GPP	2,000							1,000	1,000
9	Civil Deferred Maintenance Reduction *	50	LLNL-11-218	LLNL-11-218	MD	TBD	949	0	GPP	1,000							1,000	
10	RAMP Project Support *	50	LLNL-05-211	LLNL-05-211	MD	TBD	50	0	E	340							340	
1	Planning for FY13 Projects *	n/a	LLNL-12-230	n/a	n/a	TBD	0	0	E/GPP	1,000							1,000	

Attachment A-4(a)
NNSA Facilities and Infrastructure Cost Projection Spreadsheet
Facilities and Infrastructure Recapitalization Program (FIRP) for LLNL
($000s)

FIRRS Priority (1)	Project Name (2)	FIRRS Score (2a)	Project Number (3)	Deferred Maintenance Identifier (3a)	Mission Dependency (4)	Mission Dependency Program (4a)	FY03 Baseline Deferred 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 FYNSP (16)
	FY2013 Candidate Projects:																	
1	Facilities Deferred Maintenance Reduction Windowing *	55	LLNL-08-215	LLNL-08-215	MD	TBD	800	0	GPP	1,100								1,100
2	Small Quick Deferred Maintenance Reduction - FY13 *	55	LLNL-11-228	LLNL-11-228	MD	TBD	1500	0	E	1,100								1,100
3	RAMP Project Support *	50	LLNL-05-211	LLNL-05-211	MD	TBD	25	0	E	300								300
1	Planning for FIRP Close Out *	n/a	LLNL-13-XXX	n/a	n/a				E/GPP	500								500
	UNFUNDED Due to New Site Funding Profiles																	
1	Southwest Replacement Building **	40	LLNL-06-211	LLNL-06-211	MD	TBD	392	+35,000	GPP	9,800								
2	B131 Deferred Maintenance Reduction	50	LLNL-07-104	LLNL-07-104	MD	TBD	250	0	GPP	2,500								
3	Building Envelope Deferred Maintenance Reduction *	55	LLNL-07-106	LLNL-07-106	MD	TBD	1120	0	GPP	3,000								
4	Supporting Sci. & Eng. DM Reduction *	50	LLNL-07-110	LLNL-07-110	MD	TBD	400	0	E	2,000								
5	Replacement Building **	40	LLNL-07-114	LLNL-07-114	MD	TBD	392	+35,000	GPP	9,800								
6	Site 300 Deferred Maintenance Reduction *		LLNL-07-116	LLNL-07-116	NMD	TBD	500	0	GPP	2,500								
8	Replacement Building **	40	LLNL-08-213	LLNL-08-213	MD	TBD	192	+22,000	GPP	9,800								
9	Roofing Deferred Maintenance Reduction *	45	LLNL-09-208	LLNL-09-208	MD	TBD	800	0	GPP	4,700								
10	Engineering Technology Facility DM Reduction *	50	LLNL-09-210	LLNL-09-210	MD	TBD	709	0	GPP	3,500								
11	National Security Programs DM Reduction *	65	LLNL-09-212	LLNL-09-212	MC	TBD	640	0	GPP	4,000								
12	Replacement Building **	40	LLNL-09-218	LLNL-09-218	MD	TBD	192	+35,000	GPP	9,800								
13	Site 300 Deferred Maintenance Reduction *		LLNL-09-220	LLNL-09-220	NMD	TBD	500	0	GPP	2,500								
14	Architectural Systems DM Reduction *	45	LLNL-09-226	LLNL-09-226	MD	TBD	2640	0	GPP	4,500								
15	National Security Programs DM Reduction *	65	LLNL-10-205	LLNL-10-205	MC	TBD	575	0	GPP	2,500								
16	Northeast Quadrant Deferred Maintenance Reduction *	50	LLNL-10-207	LLNL-10-207	MD	TBD	1030	0	GPP	3,400								
17	Engineering Technology Facility DM Reduction *	50	LLNL-10-209	LLNL-10-209	MD	TBD	700	0	GPP	3,500								
18	Replacement Building **	40	LLNL-10-215	LLNL-10-215	MD	TBD	700	0	GPP	9,800								
19	Building Envelope Replacement Project *	45	LLNL-10-221	LLNL-10-221	MD	TBD	1400	0	GPP	3,300								
20	Southeast Quadrant Deferred Maintenance Reduction *	45	LLNL-10-223	LLNL-10-223	MD	TBD	1360	0	GPP	3,400								
21	Architectural Deferred Maintenance Reduction *	45	LLNL-10-225	LLNL-10-225	MD	TBD	800	0	GPP	2,000								
22	Utilities and Infrastructure DM Reduction *	45	LLNL-11-204	LLNL-11-204	MD	TBD	800	0	GPP	2,000								
23	Roofing Deferred Maintenance Reduction *	45	LLNL-11-206	LLNL-11-206	MD	TBD	960	0	GPP	2,500								
24	Engineering Technology Facility DM Reduction *	50	LLNL-11-208	LLNL-11-208	MD	TBD	960	0	GPP	2,500								
25	Replacement Building **	40	LLNL-11-214	LLNL-11-214	MD	TBD	960	0	GPP	9,800								
26	Building Envelope Replacement Project *	65	LLNL-11-220	LLNL-11-220	MC	TBD	900	0	GPP	2,500								
27	Supporting Science & Engin. Facility DM	50	LLNL-11-222	LLNL-11-222	MD	TBD	900	0	GPP	2,000								
28	Building Electrical Distribution Systems Replacement *	50	LLNL-11-224	LLNL-11-224	MD	TBD	700	0	GPP	3,500								
29	HVAC Systems		LLNL-12-210	LLNL-12-210														
30	B611		LLNL-12-212	LLNL-12-212														
31	U & I for FY04 def		LLNL-12-214	LLNL-12-214														
32	Roofing for FY04 def		LLNL-12-216	LLNL-12-216														
	~~Building Envelope Replacement Project~~		~~LLNL-11-220~~	~~LLNL-11-220~~			~~900~~	~~0~~		~~2,200~~								
							900	0		2,200								
	Adjustments									(1,989)	(1,982)	(7)						
									TOTAL (FIRP)	428,735	153,062	19,563	19,240	19,851	22,771	23,200	23,040	23,000

Footnotes:
* Changes from last year's TYSP
** Assumes the GPP limit is raised
For projects prior to FY06 (when Mission Dependency (4) was re-cast) Y/N designates Mission Essential or Non-Mission Essential. The Mission Dependency Program (4a) did not exist, therefore n/a.

Attachment A-4(b)
NNSA Facilities and Infrastructure Cost Projection Spreadsheet
Other Facilities and Infrastructure Recapitalization Program (FIRP) Projects for LLNL
($000s)

FIRRS Priority (1)	Project Name (2)	FIRRS Score (2a)	Project Number (3)	Deferred Maintenance Identifier(s) (3a)	Mission Dependency (4)	Mission Dependency Program (4a)	FY04 Identified Deferred Maintenance Reduction (5)	GSF Added or Eliminated (6)	Funding Type (7)	Total (8)	FY 2008 (11)	FY 2009 (12)	FY 2010 (13)	FY 2011 (14)	FY 2012 (15)	FY 2013 (16)
1	U&I Deferred Maint. Reduction	40	LLNL-12-214	LLNL-12-214	MD	OTHER	1,207	0	GPP	1,630		1,630				
2	HVAC Systems DM Reduction	40	LLNL-12-210	LLNL-12-210	MD	ICF	1,662	0	GPP	2,245			2,245			
3	Roofing DM Reduction	40	LLNL-12-216	LLNL-12-216	MD	DSW	1,475	0	GPP	1,991				1,991		
4	B611 Electrical Systems DM Reduction	40	LLNL-12-212	LLNL-12-212	MD	NA	260	0	GPP	351					351	
									TOTAL (FIRP)	6,217	-	1,630	2,245	1,991	351	-

Attachment A-5
Other Facilities and Infrastructure Cost Projection Spreadsheet
For LLNL
($000s)

Priority (1)	Project Name (2)	Project Number (3)	Mission Dependency (4)	Mission Dependency Program (4a)	Deferred Maintenance Reduction (5)	GSF Added or Eliminated (6)	Funding Type (7)	Total (8)	Prior Years' Funding (9)	FY 2006 (--)	FY 2007 (10)	FY 2008 (11)	FY 2009 FYNSP (12)	FY 2010 FYNSP (13)	FY 2011 FYNSP (14)	FY 2012 FYNSP (15)	FY 2013 FYNSP (16)	FY 2014 (17)	FY 2015 (18)	FY 2016 (19)	FY 2017 (20)	FY 2018 (21)
NNSA Facilities and Infrastructure Cost Projection Spreadsheet (IGPP)																						
Complete	Consolidated Data Center (B112)	LLNL-I-06-06	MD	Other	0	0	IGPP	4,963		-	4,950	13										
Complete	*Parking Lot Improvements	LLNL-I-06-02	MD	NA	418	0	IGPP	2,450		1,996	454											
Complete	*Ethanol Refueling Station	LLNL-I-06-10	MD	NA	0	0	IGPP	1,350		584	766											
Complete	*High Voltage Undergrounding	LLNL-I-06-11	MD	Other	0	0	IGPP	1,800		556	1,244											
Cancelled	*Replacement Office Building - CANCELLED	LLNL-I-06-12	--	--	0	0	IGPP	53		53												
Complete	*Lake Haussmann Bridges	LLNL-I-06-13	MD	NA	0	0	IGPP	405		128	277											
Postponed	*B261 Adaptive Reuse	LLNL-I-07-07	MD	Other	0	0	IGPP	4,950			56	2,500	2,394									
In progress	*Western Livermore Substation (WLS) Replacement	LLNL-I-07-03	MD	Other	196	0	IGPP	2,200			741	1,459										
In progress	*Roads and Paving Improvements	LLNL-I-07-01	MD	NA	0	0	IGPP	3,580			1,072	2,508										
In progress	*B511 Seismic Upgrade	LLNL-I-07-06	MD	NA	0	0	IGPP	4,950			107	2,843	2,000									
In progress	*LGS Switchgear Upgrade and Looping Extension	LLNL-I-08-01	MD	Other	0	0	IGPP	4,950			154	1,500	3,296									
1	Electronics for Open LabNet Mesh Extension	LLNL-I-09-06	MD	Other	0	0	IGPP	820					820									
2	Mocho Gabion Installation (multi-year)	LLNL-I-09-07	MD	Other	0	0	IGPP	767					767									
3	Generic Office Addion	LLNL-I-10-08	MD	Other	0	0	IGPP	4,950					1,000	3,950								
4	Redundant Network Path to Buildings	LLNL-I-10-09	MD	Other	0	0	IGPP	3,144					500	2,644								
7	*Site 300 Water System Controls Analyzers	LLNL-I-09-01	MD	Other	0	0	IGPP	1,115						1,115								
8	Site 300 Water Distribution System Upgrades	LLNL-I-09-02	MD	Other	0	0	IGPP	2,300						2,300								
9	*B241 Seismic Upgrade	LLNL-I-09-03	MD	NPV	0	0	IGPP	4,390							2,290	2,100						
10	*U454 Cooling Tower Build-out	LLNL-I-09-04	MD	NA	0	0	IGPP	2,000							2,000							
11	*LGS-37 Switchgear Upgrade and Looping Extension	LLNL-I-09-05	MD	Other	0	0	IGPP	3,500							3,500							

Attachment A-5
Other Facilities and Infrastructure Cost Projection Spreadsheet
For LLNL
($000s)

Priority (1)	Project Name (2)	Project Number (3)	Mission Depen-dency (4)	Mission Depen-dency Program (4a)	Deferred Main-tenance Reduc-tion (5)	GSF Added or Elimi-nated (6)	Funding Type (7)	Total (8)	Prior Years' Funding (9)	FY 2006 (--)	FY 2007 (10)	FY 2008 (11)	FY 2009 FYNSP (12)	FY 2010 FYNSP (13)	FY 2011 FYNSP (14)	FY 2012 FYNSP (15)	FY 2013 FYNSP (16)	FY 2014 (17)	FY 2015 (18)	FY 2016 (19)	FY 2017 (20)	FY 2018 (21)
12	*Portal Infrastructure Modernization	LLNL-I-10-01	MD	Other	0	0	IGPP	780							780							
13	*Paving/Roads Upgrades	LLNL-I-10-02	MD	NA	0	0	IGPP	2,000							1,500	500						
14	*Southwest Overhead to Underground Conversion	LLNL-I-10-03	MD	Other	0	0	IGPP	4,500							700	3,800						
15	*Institutional Archives	LLNL-I-06-05	MD	ASC	0	0	IGPP	4,950								4,400	550					
16	*Northwest Overhead to Underground Conversion	LLNL-I-12-01	MD	Other	0	0	IGPP	4,950									4,950					
17	*South Gate Drive Reconfiguration	LLNL-I-12-02	MD	NA	0	0	IGPP	4,950									4,950					
18	*Available for projects in outyears	n/a	n/a	n/a	n/a	n/a	IGPP	44,259										10,690	10,936	11,188	11,445	11,708
Prior Year Completed Projects Listed for Historical Purposes																						
Complete	Central Cafeteria Replacement	LLNL-02-114	MD	NA	0	+15,827	IGPP	4,893	4,893													
Complete	Maintenance Services Facility ADA Upgrade	LLNL-I-03-01	MD	NA	0	0	IGPP	611	611													
Complete	Parking Upgrades	LLNL-I-03-02	MD	NA	0	0	IGPP	569	569													
Complete	Operations Center Expansion	LLNL-I-04-02	MC	ICF	0	0	IGPP	1,439	1,439													
Complete	Communications Facility Fire Suppression System	LLNL-I-04-03	MD	Other	0	0	IGPP	300	300													
Complete	Institutional Office Building (B264)	LLNL-I-04-01	MD	DSW	0	+20,461	IGPP	4,806	4,806													
Complete	T4725 Backup Power	LLNL-I-04-05	MD	Other	0	0	IGPP	698	698													
Complete	Avenue N Reconfiguration	LLNL-I-04-06	MD	NA	0	0	IGPP	1,849	1,849													
Cancelled	Comm & Software Development and Control Sys Integration Bldg - CANCELLED	LLNL-I-04-07	--	--	0	0	IGPP	217	212	5												
Complete	Arroyo Seco Rehab	LLNL-I-05-01	MD	NA	250	0	IGPP	1,187	957	230												
TOTAL IGPP (facilities & infrastructure reported under this category)								137,595	16,334	3,552	9,821	10,823	10,777	10,009	10,770	10,800	10,450	10,690	10,936	11,188	11,445	11,708

Attachment A-5
Other Facilities and Infrastructure Cost Projection Spreadsheet
For LLNL
($000s)

Priority (1)	Project Name (2)	Project Number (3)	Mission Depen-dency (4)	Mission Depen-dency Program (4a)	Deferred Main-tenance Reduc-tion (5)	GSF Added or Elimi-nated (6)	Funding Type (7)	Total (8)	Prior Years' Funding (9)	FY 2006 (--)	FY 2007 (10)	FY 2008 (11)	FY 2009 FYNSP (12)	FY 2010 FYNSP (13)	FY 2011 FYNSP (14)	FY 2012 FYNSP (15)	FY 2013 FYNSP (16)	FY 2014 (17)	FY 2015 (18)	FY 2016 (19)	FY 2017 (20)	FY 2018 (21)
NNSA Facilities and Infrastructure Cost Projection Spreadsheet (Safeguards and Security Program)																						
Complete	*SBK Protective Force Upgrades	06-L-GP-SS-02	MC	PMC	0	0	GPP	1,050	800	250												
Complete	Enhancements I Buffer Fence (DBT)	n/a	MC	PMC	0	0	GPP	2,800		2,800												
Complete	B239 (DBT)	n/a	MC	ENG	0	0	E	450		450												
1	Live Fire Shoot House Lighting (Safety)	n/a	MD	DNS	0	0	E	70			70											
2	*B271 Renovation Project	n/a	MC	DNS	0	0	GPP	1,200			1,200											
3	*Action Target Replacement	n/a	MD	DNS	0	0	E	25			25											
4	*Running Man Target	n/a	MD	DNS	0	0	E	15			15											
5	*Available for minor projects in outyears	n/a	n/a	n/a	n/a	n/a	E	1,289				184	177	170	163	157	150	144	144			
Prior Year Completed Projects Listed for Historical Purposes																						
Complete	*East Ave Security Upgrade	SEC-02-004	MD	DNS	0	+4,453	GPP	4,949	4,949													
Complete	*SBK Perimeter Security Barriers	n/a	MC	PMC	0	0	GPP	3,775	3,775													
Complete	B216 Upgrades	n/a	MD	NA	0	0	GPP	625	625													
TOTAL Safeguards and Security Program (facilities & infrastructure reported under this category)								16,248	10,149	3,500	1,310	184	177	170	163	157	150	144	144	0	0	0
NNSA Facilities and Infrastructure Cost Projection Spreadsheet (Defense Programs)																						
Complete	*High Explosives Facilities (B809B Pressing)	809-98-002	MD	DSW	0	+838	GPP	3,378	3,378													
Complete	*B332 Fire Protection System Upgrade	n/a	MC	PMC	0	0	GPP	866	866													
TOTAL Defense Programs (facilities & infrastructure reported under this category)								4,244	4,244	0	0	0	0	0	0	0	0	0	0	0	0	0
NNSA Facilities and Infrastructure Cost Projection Spreadsheet (Long-Term Stewardship)																						
In progress	*Site 300 Site Restoration Projects (a)	n/a	MD	NA	0	0	E	271,436	164,052	11,426	11,800	8,900	10,177	9,047	10,085	8,407	7,810	7,774	7,808	7,624	6,526	
In progress	*Livermore Site Restoration Projects (a)	n/a	MD	NA	0	0	E	361,892	223,778	13,434	12,556	11,432	12,097	11,291	11,363	11,300	11,298	11,121	10,922	10,735	10,565	
TOTAL Long-Term Stewardship (facilities & infrastructure reported under this category)								633,328	387,830	24,860	24,356	20,332	22,274	20,338	21,448	19,707	19,108	18,895	18,730	18,359	17,091	0

Attachment A-5
Other Facilities and Infrastructure Cost Projection Spreadsheet
For LLNL
($000s)

Priority (1)	Project Name (2)	Project Number (3)	Mission Dependency (4)	Mission Dependency Program (4a)	Deferred Maintenance Reduction (5)	GSF Added or Eliminated (6)	Funding Type (7)	Total (8)	Prior Years' Funding (9)	FY 2006 (--)	FY 2007 (10)	FY 2008 (11)	FY 2009 FYNSP (12)	FY 2010 FYNSP (13)	FY 2011 FYNSP (14)	FY 2012 FYNSP (15)	FY 2013 FYNSP (16)	FY 2014 (17)	FY 2015 (18)	FY 2016 (19)	FY 2017 (20)	FY 2018 (21)
NNSA Facilities and Infrastructure Cost Projection Spreadsheet (Indirect Funded Non-Capital Investment) (b)																						
In progress	*Maintenance Reinvestment Deferred Maintenance Reduction	n/a	Various	Various	8,000 average	0	E	147,615	n/a	10,162	11,181	11,427	11,678	11,935	12,198	12,466	12,740	13,021	13,307	13,600	13,899	14,205
In progress	*Misc Non-Cap Alterations	n/a	Various	Various	0	0	E	40,974	n/a	4,094	3,000	3,066	3,133	3,202	3,273	3,345	3,418	3,494	3,570	3,649	3,729	3,811
In progress	*Legacy Material & Equipment Cleanup	n/a	NMD	Other	300 average	-5,000 average	E	15,492	n/a	752	1,199	1,225	1,252	1,280	1,308	1,337	1,366	1,396	1,427	1,458	1,490	1,523
TOTAL Indirect Funded Non-Capital Investment (facilities & infrastructure reported under this category)								204,082	0	15,008	15,380	15,718	16,064	16,418	16,779	17,148	17,525	17,911	18,305	18,707	19,119	19,540
Non-NNSA Facilities and Infrastructure Cost Projection Spreadsheet (Office of Science)																						
Complete	*T4325 D&D	n/a	NMD	Other	0	-2,130	E	49		49												
1	*B3777 D&D	n/a	NMD	Other	0	-3,690	E				109											
Prior Year Completed Projects Listed for Historical Purposes																						
Complete	*Removal of Magnetic Fusion DC Power Yard	n/a	NMD	Other	0	0	E	350	350													
Complete	*Overhead Bridge/Utility Bundle (B435) D&D	n/a	NMD	Other	0	0	E	250	250													
Complete	*MFE Legacy Yard Disposition	n/a	NMD	Other	0	0	E	234	234													
Complete	*MFE Legacy Research Cleanout	n/a	NMD	Other	0	0	E	158	158													
TOTAL Office of Science (facilities & infrastructure reported under this category)								1,041	992	49	109	0	0	0	0	0	0	0	0	0	0	0
Non-NNSA Facilities and Infrastructure Cost Projection Spreadsheet (Department of Homeland Security)																						
Complete	*Biosafety Level 3 Laboratory (B368) (c)	03-L-GP-DP-01	MD	DHS	0	+1,590	GPP	2,450	2,450													
TOTAL Department of Homeland Security (facilities & infrastructure reported under this category)								2,450	2,450	0	0	0	0	0	0	0	0	0	0	0	0	0
Non-NNSA Facilities and Infrastructure Cost Projection Spreadsheet (Work for Others)																						
Complete	*B490 Separator D&D	n/a	MC	ICF	0	0	E	2,200	2,200													
TOTAL Work for Others (facilities & infrastructure reported under this category)								2,200	2,200	0	0	0	0	0	0	0	0	0	0	0	0	0

Footnotes:
* Change from last year's TYSP
(a) Prior Years' Funding (9) for Long-Term Stewardship includes direct funding only. Activities now shifting from construction to operations.
(b) Indirect Funded Non-Capital Investment activities are on-going and Prior Years' Funding column is not applicable.
(c) Project funded jointly by Office of Science and Department of Homeland Security.

Attachment A-6(a) - FY 2008 -- FY 2010
NNSA Facilities and Infrastructure Cost Projection Spreadsheet
Currently Funded Security Infrastructure Projects for LLNL ($000s)

Priority (1)	Project Name (2)	Site Specific Project Number (3)	Mission Dependency (4)	Mission Dependency Program (4a)	Estimated Total Project Cost (8)	Planned Funding Source				
						Line Item A-1,2	RTBF A-3	FIRP A-4	Other A-5	DBT Related? Y or N
	FY 08 Projects									
1	Lab-Wide Video Analog Switcher Replacement	n/a	**MC**	DNS	**$350**				X	**Y**
2	B271 Renovation Project	n/a	**MC**	DNS	**$1,780**				X	**N**
3	East Ave Corridor Upgrades Phase II	n/a	**MD**	Other	**$900**				X	**N**
4	MotoMesh Wireless Network Installation	n/a	**MD**	Other	**$1,165**				X	**N**
5	Equipment (Barriers) Maintenance	n/a	**MD**	Other	**$198**				X	**Y**
	FY 09 Projects									
1	Available for minor projects in out years	n/a	**MD**	Other	**$206**				X	**N**
	FY10 Projects									
1	Available for minor projects in out years	n/a	**MD**	Other	**$198**				X	**N**

Attachment A-6(b) - FY09 and FY10 Unfunded
NNSA Facilities and Infrastructure Cost Projection Spreadsheet
Security Infrastructure Projects for LLNL
($000s)

Priority (1)	Prioritization Score (2a)	Project Name (2)	Site Specific Project Number (3)	Mission Dependency (4)	Mission Dependency Program (4a)	Total (8)	Proposed for either FY09 or FY10 funding	DBT Related? Y or N
1	50	Site-Wide Video/CCTV Project	n/a	MD	Other	$3,980	FY09	Y
2	50	Argus Critical Component Lifecycle Needs	n/a	MD	Other	$5,040	FY09	N
3	50	CAS/SAS Redundancy for Entire Site	n/a	MC	PMC, DNS	$2,300	FY09	Y
4	50	SBK Lighting Upgrade	n/a	MC	PMC	$590	FY10	N
5	50	3CI	n/a	MC	PMC, DNS	$3,020	FY09	Y
6	40	Miscellaneous Access Control Components & IDS	n/a	MD	Other	$1,900	FY09	N
7	40	Range Lead Mitigation Bullet Trap	n/a	MD	DNS	$2,800	FY09	N
8	40	Power Subsystem at Property Protection Area	n/a	MD	Other	$3,360	FY09	N
9	30	Small Firearms Training Facility Upgrades	n/a	MD	DNS	$4,900	FY09	Y
10	30	Linkage to Tactical Operations Center	n/a	MC	DNS	$1,120	FY10	N
11	20	B111Portal/Turnstile Installation	n/a	MD	DSW	$650	FY09	N
TOTAL						$29,660		

Attachment B
NNSA Potential Facilities and Infrastructure Impacts of Future Nuclear Weapons Complex Planning for LLNL

Mission Area (1)	Mission Dependency Program (2)	Site Impact[1] (3)	Potential Facility Impact[2] (4)	Project or Facility Number (5)	Project or Facility Name (6)	GSF Eliminated (7)	GSF Added (8)	Within FYNSP?[3] (9)	Start/ Needed Date (10)	Estimated Completion Date (11)	Total Estimated Funding (12)	Notes (13)
S300 Shutdown, Demolition, or Transition												
Hydrodynamic Testing	SCI	Discontinue Operations	Shutdown	812A, 812D, 812E	Firing Facility, Laboratory, Laboratory	4,291		No	FY09	FY09	TBD	
Hydrodynamic Testing	DSW	Discontinue Operations	Shutdown	850	Firing Facility	5,095		No	FY09	FY09	TBD	
Hydrodynamic Testing	SCI	Discontinue Operations	Shutdown	851A, 851B, 851C	Firing Facility, Machine Shop, Fabrication Shop	14,633		No	FY09	FY09	TBD	
Hydrodynamic Testing	SCI	Discontinue Operations	Shutdown	801A, 801B, 801D	Firing Facility (FXR), Technical Maintnce Shop, Administration	49,738		No	FY15	FY15	TBD	
Hydrodynamic Testing	DSW	Discontinue Operations	Demolition	823A, 823B	Linac Radiography, Linac Radiography	2,931		Yes	FY16[4]	FY16	TBD	Operational through FY15
Hydrodynamic Testing	SCI	Discontinue Operations	Shutdown	867	Bunker Support Facility	4,342		No	FY15	FY15	TBD	
Hydrodynamic Testing	SCI	Discontinue Operations	Shutdown	892	Central Control Post	866		No	FY15	FY15	TBD	
High Explosives R&D	DSW	Donor	Transfer	805	Inert Machng/Explvs Wst Packng	6,830		No	FY15	FY15	TBD	Relocate "capability" to Site 200 at Livermore
High Explosives R&D	DSW	Donor	Demolition	806A, 806B, 806C, 806D	HE Machining, HE Machining, Machining Storage, Machining Storage	8,337		Yes	FY16[4]	FY16	TBD	Relocate "capability" to Site 200 at Livermore
High Explosives R&D	DSW	Donor	Transfer	807	HE Machining	1,575		No	FY15	FY15	TBD	Relocate "capability" to Site 200 at Livermore
High Explosives R&D	DSW	Discontinue Operations	Demolition	809A, 809B, 809C	HE Pressing, Mechanical Support, HE Oven Facility	3,793		Yes	FY16[4]	FY16	TBD	
High Explosives R&D	DSW	Donor	Transfer	810A, 810B, 810C	HE Assembly, HE Assembly, Assembly Storage	5,200		No	FY15	FY15	TBD	Relocate "capability" to Site 200 at Livermore
High Explosives R&D	DSW	Discontinue Operations	Shutdown	813	Change House	2,870		No	FY15	FY15	TBD	
High Explosives R&D	DSW	Donor	Demolition	817A, 817B, 817D, 817E, 817F, 817G, 817H	HE Pressing Control Room, HE Pressing Cell, HE Presssing Storage, HE Pressing Inactive, HE Pressing Ovens, HE Pressing Boilers, HE Pressing Inert Storage	3,102		Yes	FY11	FY11	TBD	Capability transfers upon activation of B809
High Explosives R&D	DSW	Donor	Transfer	825	Chem Process Facility	1,370		No	FY14	FY15	TBD	Relocate "capability" to Site 200 at Livermore
High Explosives R&D	DSW	Donor	Transfer	826	Chem Process Facility	1,638		No	FY14	FY15	TBD	Relocate "capability" to Site 200 at Livermore
High Explosives R&D	DSW	Donor	Transfer	827A, 827B, 827C, 827D, 827E	Chemistry Bldg, Service Shop, Chem Process Facility, Chem Process Facility, Chem Process Facility	18,975		No	FY14	FY15	TBD	Relocate "capability" to Site 200 at Livermore

Attachment B
NNSA Potential Facilities and Infrastructure Impacts of Future Nuclear Weapons Complex Planning for LLNL

Mission Area (1)	Mission Dependency Program (2)	Site Impact[1] (3)	Potential Facility Impact[2] (4)	Project or Facility Number (5)	Project or Facility Name (6)	GSF Eliminated (7)	GSF Added (8)	Within FYNSP?[3] (9)	Start/ Needed Date (10)	Estimated Completion Date (11)	Total Estimated Funding (12)	Notes (13)
High Explosives R&D	DSW	Donor	Demolition	855A, 855B, 855C	HE Machining, HE Machining, HE Machining	1,916		Yes	FY16	FY16	TBD	Relocate "capability" to Site 200 at Livermore
Env. Testing	DSW	Donor	Shutdown	834A, 834B, 834C, 834D, 834E, 834F, 834G, 834H, 834J, 834K, 834L	Thermal Test Facility, Vacant, Vacant, Vacant, Thermal Test Facility, Storage, HE Storage, Thermal Test Facility, Vacant, Pump Station, Vacant	10,399		No	FY10	FY10	TBD	Possibly relocate equipment to PANTEX
Env. Testing	DSW	Donor	Shutdown	836A, 836B, 836C, 836D	Dynamic Test Facility, Storage Facility, Dynamic Test Facility, Dynamic Test Facility	13,023		No	FY10	FY10	TBD	Possibly relocate equipment to PANTEX
Env. Testing	DSW	Donor	Shutdown	334	HETB	10,652		No	FY12	FY12	TBD	Possibly relocate equipment to PANTEX
New Construction and Modernization												
Nuclear Design and Engineering	TBD	Ongoing Operations	New Construction	TBD	Weapons Engineering Science & Technology		60,000	No	FY10	FY16	TBD	Necessary for maintenance of Nuclear Design & Engineering Center of Excellence
Nuclear Design and Engineering	TBD	Ongoing Operations	Renovation	TBD	Seismic Rehabilitation of Laboratory Bldings	TBD	TBD	No	FY10	FY14	TBD	Necessary for maintenance of Nuclear Design & Engineering Center of Excellence
Nuclear Design and Engineering	TBD	Ongoing Operations	Renovation	TBD	Mission Critical Facilities Modernization	TBD	TBD	No	FY13	FY18	TBD	Necessary for maintenance of Nuclear Design & Engineering Center of Excellence
Nuclear Design and Engineering	TBD	Ongoing Operations	New Construction	TBD	Materials Science Modernization Facility		60,000	No	FY12	FY18	TBD	Necessary for maintenance of Nuclear Design & Engineering Center of Excellence
Complex Transformation	TBD	Ongoing Operations	Demolition	TBD	Complex Transformation Footprint Reduction and D&D	Approximately 1,200,000		No	FY12	FY23	TBD	Necessary to achieve reduced footprint and facility costs
Other	TBD	Ongoing Operations	New Construction	TBD	Tactical Operations Center		10,000	No	FY13	FY16	TBD	Required for Institutional Emergency Management Operations
Other	TBD	Ongoing Operations	New Construction	TBD	International Response Operations Center	42,000	43,000	No	TBD	TBD	TBD	Required for International Response Operations
Other	TBD	Ongoing Operations	New Construction	TBD	Tactical Response International Center[5]	42,000	65,000	No	TBD	TBD	TBD	Required for International Response Operations

[1] Site Impacts include: (1) Donor; (2) Receiver; (3) Ongoing Operations; (4) Discontinue Operations.

[2] Potential Facility Impacts include: (1) Demolition; (2) Shutdown; (3) Sale; (4) Transfer; (5) Lease (New or Termination); (6) Renovation; (7) New Construction.

[3] Existing or planned project identified in TYSP Attachment A or E (within Site FYNSP constraints).

[4] Estimated demolition dates in Attachments B and E are not aligned, but will be adjusted based on funding and overall strategic approach in support of Complex Transformation.

[5] TRIC is an alternate project proposal that combines the International Response Operations Center project with the Tactical Operations Center project.

Attachment C
DOE New Building and Major Renovation Projects Seeking or Registered for Leadership in Energy and Environmenal Design (LEED) Certification

Program (1)	Site (2)	Project Title (3)	USGBC or Equivalent Project ID (4)	FIMS Property ID Critical Decision 4 and Higher (5)	FIMS Property Description Critical Decision 4 and Higher (6)	LEED or Equivalent Rating System (7)	Critical Decision Level (8)	Gross SqFt (9)	Building Construction Cost (10)	USGBC or Equivalent Registration Date (11)	Estimated Occupancy Date (12)	Planned LEED or Equivalent Certification Level (13)	LEED or Equivalent Certification Level Met and Date (14)	Notes (15)
NNSA	LLNL	Central Cafeteria B471	10001318			LEED-EB		16,021	$4.40M	2005	Occupied	Certified		
NNSA	LLNL	Office Building B264	TBD			LEED-EB		20,461	$4.75M	2008	Occupied	Certified		
NNSA	LLNL	HEAF (High Explosives Application Facility)	TBD			LEED-EB		TBD	TBD	TBD	TBD	Certified		
NNSA	LLNL	TFF (Target Fabrication Facility)	TBD			LEED-NC		TBD	TBD	TBD	TBD	Gold		

Attachment D
Establishment of Security Baseline for LLNL

Facility/System Type (1)	Number of Security Areas (2)	Gross Square Feet of Security Areas (3)	Acres (4)	Linear Feet (5)
(1) PIDAS Protected Area	1	N/A	10	
(2) Other Protected Areas (excluding PIDAS Protected Area)	384	5,201,215	N/A	N/A
(3) Limited Areas	154	2,945,316	N/A	N/A
(4) Exclusion Areas	None	None	N/A	N/A
(5) Material Access Areas	1	104,771	N/A	N/A
(6) Vital Areas	None	None	N/A	N/A
(7) Functionally Specialized Security Areas (i.e., SCIF, classified computer facilities, secure communication facilities)	11	400,768	N/A	N/A
(8) Vault Type Rooms	233	439,975	N/A	N/A

Attachment E-1
Facilities Disposition Plan
(Within FYNSP/Outyear Planning Targets)

Funding Source (1)	Facility Identification Number (FIMS) (2)	Facility Name (3)	Mission Dependency Program (4)	Priority Score (5)	Priority Rank (6)	Gross Square Footage (gsf) (7)	Excess Year (8)	Estimated Disposition Year (9)	TEC to Disposition ($000s) (10)	Yearly S&M Costs ($000s) (11)	Contaminated (Yes or No) (13)	Notes (14)
NA52 FIRP Funded												
FY2006 Projects												
NA 52 FIRP Funded	212	VACANT		In Progress	In Progress	0	2005	2007	$0	$0	Yes	Multi-year project. TEC, DM shown for this FY.
NA 52 FIRP Funded	2425	CHEMISTRY		Complete	Complete	2,704	2005	2006	$73	$41	No	Complete
NA 52 FIRP Funded	2428	CHEMISTRY		Complete	Complete	4,179	2005	2006	$113	$63	No	Complete
NA 52 FIRP Funded	2526	HC SPD OFFICES		Complete	Complete	1,549	2005	2006	$42	$23	No	Complete
NA 52 FIRP Funded	2529	HC RML OFFICES		Complete	Complete	1,040	2005	2006	$28	$16	No	Complete, Personal Property, not Bankable
NA 52 FIRP Funded	2530	HC SFTY ANALYS OFFICES		Complete	Complete	1,595	2005	2006	$43	$24	No	Complete
NA 52 FIRP Funded	4177	HC EMD OFFICES		Complete	Complete	1,577	2005	2006	$43	$24	No	Complete
NA 52 FIRP Funded	431A	*Accelerator Research Center		Complete	Complete	0	2004	2007	$3,782	$0	Yes	Complete. Multi-year project. TEC, DM shown for this FY.
NA 52 FIRP Funded	5981	OFFICE		Complete	Complete	5,744	2005	2006	$155	$87	No	Complete
NA 52 FIRP Funded	5982	OFFICE		Complete	Complete	5,742	2005	2006	$155	$87	No	Complete
NA 52 FIRP Funded	5983	OFFICE		Complete	Complete	5,680	2005	2006	$153	$86	No	Complete
NA 52 FIRP Funded	5984	OFFICE		Complete	Complete	5,680	2005	2006	$153	$86	No	Complete
NA 52 FIRP Funded	5985	OFFICE		Complete	Complete	5,680	2005	2006	$153	$86	No	Complete
NA 52 FIRP Funded	639	STORAGE		Complete	Complete	448	2004	2006	$25	$7	No	Complete
NA 52 FIRP Funded	Planning	NA		Complete	Complete	NA	NA	NA	$97	NA	NA	Complete
			NNSA	40,578	MultiSite	40,578			$5,016	$630		

Attachment E-1
Facilities Disposition Plan
(Within FYNSP/Outyear Planning Targets)

Funding Source (1)	Facility Identification Number (FIMS) (2)	Facility Name (3)	Mission Dependency Program (4)	Priority Score (5)	Priority Rank (6)	Gross Square Footage (gsf) (7)	Excess Year (8)	Estimated Disposition Year (9)	TEC to Disposition ($000s) (10)	Yearly S&M Costs ($000s) (11)	Contaminated (Yes or No) (13)	Notes (14)
FY2007 Projects												
NA 52 FIRP Funded	212	*VACANT	NA	In Progress	In Progress	0	2005	2008	$2,550	$0	Yes	Multi-year project. TEC reflects this FY only.
NA 52 FIRP Funded	431A	*Accelerator Research Center	SCI	Complete	Complete	95,442	2004	2007	$800	$0	Yes	Complete. Multi-year project. TEC reflects this FY only.
NA 52 FIRP Funded	Planning	NA		Complete	Complete	NA	NA	NA	$650	NA	NA	
			NNSA	95,442	MultiSite	95,442			$4,000	$0		
FY2008 Projects (FIRP Budget = $3.19M)												
NA 52 FIRP Funded	212	*VACANT	NA	In Progress	In Progress	57,128	2005	2008	$440	$165	Yes	Partial demolition. Multi-year project. TEC reflects this FY only.
NA 52 FIRP Funded	175	*VACANT	DNS	In Progress	In Progress	0	2006	2009	$2,900	$0	Yes	Partial demo. Remaining facility is NNSA. Multi-year project. TEC reflects this FY only. No gsf this FY.
NA 52 FIRP Funded	Planning	NA		NA	NA	NA	NA	NA	$422	NA	NA	
			NNSA	57,128	MultiSite	57,128			$3,762	$165		
FY2009 Projects (Target TD Budget = $6.5M)												
NA 52 FIRP Funded	175	*VACANT	DNS	In Progress	In Progress	8,400	2006	2009	$0	$22	Yes	Partial demolition. Remaining facility is NNSA. Multi-year project. TEC reflects FY09 funding only.
NA 52 FIRP Funded	221	*VACANT	OTHER	In Progress	In Progress	1,764	2005	2009	$600	$5	No	Includes Retention System, On Hold. No GSF this FY. No funding. May cancel project.
NA 52 FIRP Funded	443	*VACANT	OTHER	In Progress	In Progress	8,981	2005	2009	$990	$24	No	On Hold. No GSF this FY. No funding. May cancel project.
NA 52 FIRP Funded	444	*VACANT	OTHER	In Progress	In Progress	805	2005	2009	$35	$2	No	On Hold. No GSF this FY. No funding. May cancel project.
			NNSA	19,950	MultiSite	19,950			$0	$22		

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Funding Source (1)	Facility Identification Number (FIMS) (2)	Facility Name (3)	Mission Dependency Program (4)	Priority Score (5)	Priority Rank (6)	Gross Square Footage (gsf) (7)	Excess Year (8)	Estimated Disposition Year (9)	TEC to Disposition ($000s) (10)	Yearly S&M Costs ($000s) (11)	Contaminated (Yes or No) (13)	Notes (14)
NA52 TD Funded												
FY2009 Projects (Target TD Budget = $6.5M)												
NA 52 TD Funded	243	*ENERGY AND ENVIRONMENT LAB SPACE	ENG	38	2	0	None	2010	$2,200	$0	Yes	Multi-year project. TEC reflects this FY only.
NA 52 TD Funded	292	*CAMS LAB FACILITY	OTHER	36	4	0	None	2010	$1,700	$0	Yes	Multi-year project. TEC reflects this FY only.
NA 52 TD Funded	1401	*VACANT	DSW	38	3	5,113	2007	2009	$156	$14	No	
NA 52 TD Funded	1402	*ENERGY AND ENVIRONMENT OFFICES	SC	34	9	5,113	2007	2009	$156	$14	No	
NA 52 TD Funded	1403	*VACANT	OTHER	42	1	5,113	2006	2009	$156	$14	No	
NA 52 TD Funded	1404	*ENERGY AND ENVIRONMENT OFFICES	NPV	36	5	5,226	2007	2009	$160	$14	No	
NA 52 TD Funded	1405	*ENERGY AND ENVIRONMENT OFFICES	NPV	36	6	5,113	2007	2009	$156	$14	No	
NA 52 TD Funded	1406	*ENERGY AND ENVIRONMENT OFFICES	ASC	36	7	5,200	2007	2009	$160	$14	No	
NA 52 TD Funded	1456	*ENERGY AND ENVIRONMENT OFFICES	OTHER	34	8	4,914	2007	2009	$156	$13	No	
NA 52 TD Funded	Planning	N/A		NA	NA	NA	NA	NA	$1,500	NA	NA	NA
			NNSA	35,792	MultiSite	35,792			$6,500	$96		
FY2010 Projects (Target TD Budget = $7.5M)												
NA 52 TD Funded	241	*MATERIALS SCIENCE	NPV	34	4	0	None	2012	$2,000	$0	Yes	Multi-year project. TEC reflects this FY only.
NA 52 TD Funded	243	*ENERGY AND ENVIRONMENT LAB SPACE	ENG	38	1	17,885	None	2010	$1,000	$48	Yes	Multi-year project. TEC reflects this FY only.
NA 52 TD Funded	292	*CAMS LAB FACILITY	OTHER	36	2	20,709	None	2010	$3,000	$55	Yes	Multi-year project. TEC reflects this FY only.
NA 52 TD Funded	5125	*PE CONSTRUCTION	NA	34	5	2,912	None	2010	$90	$8	No	
NA 52 TD Funded	5225	*PE/LABOR ONLY	NA	34	6	1,960	None	2010	$80	$5	No	
NA 52 TD Funded	5976	*EPD/DO OFFICE-COMPUTER SUPP	DSW	34	7	6,209	None	2010	$190	$17	No	
NA 52 TD Funded	5979	*EPD/RHWM OFFICE	RTBF	34	8	5,680	None	2010	$170	$15	No	
NA 52 TD Funded	5980	*EPD/RHWM OFFICE	RTBF	34	3	5,680	None	2010	$170	$15	No	
NA 52 TD Funded	Planning	N/A		34	NA	NA	NA	NA	$800	NA	NA	NA
			NNSA	61,035	MultiSite	61,035			$7,500	$163		

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Funding Source (1)	Facility Identification Number (FIMS) (2)	Facility Name (3)	Mission Dependency Program (4)	Priority Score (5)	Priority Rank (6)	Gross Square Footage (gsf) (7)	Excess Year (8)	Estimated Disposition Year (9)	TEC to Disposition ($000s) (10)	Yearly S&M Costs ($000s) (11)	Contaminated (Yes or No) (13)	Notes (14)
FY2011 Projects (Target TD Budget = $8.0M)												
NA 52 TD Funded	241	*MATERIALS SCIENCE	NPV	34	1	0	None	2012	$4,000	$0	Yes	Multi-year project. TEC reflects this FY only.
NA 52 TD Funded	341	*PAT	RTBF	34	9	0	None	2013	$2,500	$0	Yes	Multi-year project. TEC reflects this FY only.
NA 52 TD Funded	817A	*HE PRESSING CONTROL ROOM	DSW	44	4	417	None	2011	$74	$1	Yes	
NA 52 TD Funded	817B	*HE PRESSING CELL	DSW	42	7	639	None	2011	$103	$2	Yes	
NA 52 TD Funded	817D	*HE PRESSING STORAGE	DSW	48	2	207	None	2011	$30	$1	No	
NA 52 TD Funded	817E	*HE PRESSING-INACTIVE	DSW	44	5	186	None	2011	$29	$0	Yes	
NA 52 TD Funded	817F	*HE PRESSING OVENS	DSW	42	6	526	None	2011	$91	$1	Yes	
NA 52 TD Funded	817G	*HE PRESSING BOILERS	DSW	46	3	237	None	2011	$35	$1	No	
NA 52 TD Funded	817H	*HE PRESSING INERT STORAGE	DSW	40	8	890	None	2011	$138	$2	Yes	
NA 52 TD Funded	Planning	N/A		NA	NA	NA	NA	NA	$1,000	NA	NA	NA
			NNSA	3,102	MultiSite	3,102			$8,000	$8		
FY2012 Projects (Target TD Budget = $9.7M)												
NA 52 TD Funded	241	*MATERIALS SCIENCE	NPV	34	1	53,652	None	2012	$3,000	$143	Yes	Multi-year project. TEC reflects this FY only.
NA 52 TD Funded	341	*PAT	RTBF	34	2	0	None	2013	$2,700	$0	Yes	Multi-year project. TEC reflects this FY only.
NA 52 TD Funded	343	*IFM MANAGED OFFICE/LAB FACILITY	ENG	38	3	0	None	2013	$1,200	$0	Yes	Multi-year project. TEC reflects this FY only.
NA 52 TD Funded	231	*DEVLMT & ASSBLY ENGNG	SCI	34	4	0	None	2016	$1,000	$0	Yes	Multi-year project. TEC reflects this FY only.
NA 52 TD Funded	809A[1]	*HE PRESSING	DSW	32	5	2,570	None	2012	$360	$7	Yes	See footnote[1].
NA 52 TD Funded	809B[1]	*MECHANICAL SUPPORT	DSW	32	6	617	None	2012	$330	$2	No	See footnote[1].
NA 52 TD Funded	809C[1]	*HE OVEN FACILITY	DSW	32	7	606	None	2012	$110	$2	Yes	See footnote[1].
NA 52 TD Funded	Planning	N/A		NA	NA	NA	NA	NA	$1,000	NA	NA	NA
			NNSA	57,445	MultiSite	57,445			$9,700	$153		

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FY2013 Projects (Target TD Budget = $11.1M)												
NA 52 TD Funded	341	*PAT	RTBF	34	1	44,322	None	2013	$2,100	$118	Yes	Multi-year project. TEC reflects this FY only.
NA 52 TD Funded	343	*IFM MANAGED OFFICE/LAB FACILITY	ENG	38	2	25,590	None	2013	$3,000	$68	Yes	Multi-year project. TEC reflects this FY only.
NA 52 TD Funded	231	*DEVLMT & ASSBLY ENGNG	SCI	34	3	0	None	2016	$5,000	$0	Yes	Multi-year project. TEC reflects this FY only.
NA 52 TD Funded	825[1]	*CHEM PROCESS FACILITY	DSW	42	4	1,370	None	2013	$220	$4	Yes	See footnote[1].
NA 52 TD Funded	826[1]	*CHEM PROCESS FACILITY	DSW	40	5	1,638	None	2013	$280	$4	Yes	See footnote[1].
NA 52 TD Funded	Planning	N/A		NA	NA	NA	NA	NA	$500	NA	NA	NA
			NNSA	72,920	MultiSite	72,920			$11,100	$195		
FY2014 Projects (Proposed TD Budget = $15.0M)												
NA 52 TD Funded	231	*DEVLMT & ASSBLY ENGNG	SCI	34	1	0	None	2016	$10,000	$0	Yes	Multi-year project. TEC reflects this FY only.
NA 52 TD Funded	251	*HEAVY ELEMENT FAC-VACANT	DSW	32	4	0	None	2017	$4,000	$0	Yes	Multi-year project. TEC reflects this FY only.
NA 52 TD Funded	823A[1]	*LINAC RADIOGRAPHY	DSW	38	3	1,089	None	2012	$186	$3	Yes	See footnote[1].
NA 52 TD Funded	823B[1]	*LINAC RADIOGRAPHY	DSW	42	2	1,842	None	2012	$314	$5	Yes	See footnote[1].
NA 52 TD Funded	Planning	N/A		NA	NA	NA	NA	NA	$500	NA	NA	
			NNSA	2,931	MultiSite	2,931			$15,000	$8		
FY2015 Projects (Proposed TD Budget = $15.8M)												
NA 52 TD Funded	231	*DEVLMT & ASSBLY ENGNG	SCI	34	1	0	None	2016	$5,000	$0	Yes	Multi-year project. TEC reflects this FY only.
NA 52 TD Funded	251	*HEAVY ELEMENT FAC-VACANT	DSW	32	2	0	None	2017	$4,000	$0	Yes	Multi-year project. TEC reflects this FY only.
NA 52 TD Funded	865	*VACANT	OTHER	32	3	0	2003	2017	$6,000	$0	Yes	Multi-year project. TEC reflects this FY only. Historical Bldg.
NA 52 TD Funded	807[1]	*HE MACHINING	DSW	44	3	1,575	None	2015	$300	$4	Yes	See footnote[1].
NA 52 TD Funded	Planning	N/A		NA	NA	NA	NA	NA	$500	NA	NA	NA
			NNSA	1,575	MultiSite	1,575			$15,800	$4		

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FY2016 Projects (Proposed TD Budget = $15.8M)												
NA 52 TD Funded	231	*DEVLMT & ASSBLY ENGNG	SCI	34	1	136,736	None	2016	$5,000	$365	Yes	Multi-year project. TEC reflects this FY only.
NA 52 TD Funded	251	*HEAVY ELEMENT FAC-VACANT	DSW	32	2	0	None	2017	$4,000	$0	Yes	Multi-year project. TEC reflects this FY only.
NA 52 TD Funded	865	*VACANT	OTHER	32	3	0	2003	2017	$6,000	$0	Yes	Multi-year project. TEC reflects this FY only.
NA 52 TD Funded	855A	*HE MACHINING	DSW	38	6	667	None	2016	$105	$2	No	
NA 52 TD Funded	855B	*HE MACHINING	DSW	44	4	637	None	2016	$100	$2	Yes	
NA 52 TD Funded	855C	*HE MACHINING	DSW	42	5	612	None	2016	$95	$2	Yes	
NA 52 TD Funded	Planning	N/A		NA	NA	NA	NA	NA	$500	NA	NA	
			NNSA	138,652	MultiSite	138,652			$15,800	$370		
FY2017 Projects (Proposed TD Budget = $10.7M)												
NA 52 TD Funded	251	*HEAVY ELEMENT FAC-VACANT	DSW	32	1	31,809	None	2017	$4,000	$646	Yes	Multi-year project. TEC reflects this FY only.
NA 52 TD Funded	865	*VACANT	OTHER	32	2	61,360	2003	2017	$6,000	$164	Yes	Multi-year project. TEC reflects this FY only.
NA 52 TD Funded	845A[1]	*EXPL WASTE TREATMNT FAC	DSW	36	3	431	None	2017	$100	$1	Yes	EM. See footnote[1].
NA 52 TD Funded	845B[1]	*EWTF	DSW	36	4	290	None	2017	$50	$1	Yes	EM. See footnote[1].
NA 52 TD Funded	Planning	N/A		NA	NA	NA	NA	NA	$500	NA	NA	NA
			NNSA	93,169	MultiSite	93,890			$10,650	$812		

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Indirect Funded												
FY2006 Projects												
Indirect Funded	1477	OFFICE TRAILER		Complete	Complete	10,749	2006	2006	$218	$288	No	Complete
Indirect Funded	377	Biology & Biotech Research		Complete	Complete	4,333	2006	2006	$400	$121	Yes	Complete, SC
			NNSA	10,749	MultiSite	15,082			$618	$409		
FY2007 Projects												
Indirect Funded	2804	OFFICE	OTHER	Complete	Complete	720	2009	2007	$26	$20	No	Complete. Personal Property, not Bankable
Indirect Funded	2807	OFFICE	OTHER	Complete	Complete	600	2009	2007	$22	$16	No	Complete. Personal Property, not Bankable
Indirect Funded	3502	SC&CD	OTHER	Complete	Complete	684	2006	2007	$19	$18	No	Complete. Personal Property, not Bankable
Indirect Funded	3520	OFFICE	OTHER	Complete	Complete	9,733	2007	2007	$289	$262	No	Complete
Indirect Funded	3703	OFFICE	OTHER	Complete	Complete	10,068	2006	2007	$280	$269	No	Complete, SC
Indirect Funded	5974	OFFICE	OTHER	Complete	Complete	5,781	2007	2007	$119	$71	No	Complete, EM
Indirect Funded	5975	OFFICE	OTHER	Complete	Complete	6,480	2005	2007	$181	$173	No	Complete
Indirect Funded	5977	OFFICE	OTHER	Complete	Complete	6,340	2005	2007	$178	$169	No	Complete
Indirect Funded	5978	OFFICE	OTHER	Complete	Complete	6,480	2005	2007	$181	$173	No	Complete
Indirect Funded	858A	STORAGE	OTHER	Complete	Complete	865	2003	2007	$130	$23	No	Complete
			NNSA	29,898	MultiSite	45,747			$1,425	$1,193		

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FY2008 Projects (FIRP Budget = $3.19M)												
Indirect Funded	Planning	NA		NA	NA	NA	NA	NA	$100	NA	NA	
			NNSA	NA	MultiSite	NA			$100	NA		
FY2009 Projects (Target TD Budget = $6.5M)												
Indirect Funded	1407	*RESTROOM TRAILER	NA	27	4	520	2007	2009	$16	$1	No	Personal Property, not Bankable
Indirect Funded	1408	*VACANT	NA	29	1	184	2007	2009	$6	$0	No	Personal Property, not Bankable
Indirect Funded	1413	*ENERGY AND ENVIRONMENT COMPUTER LAB	NPV	27	3	1,040	2007	2009	$31	$3	No	Personal Property, not Bankable
Indirect Funded	213	*VACANT	OTHER	18	8	2,012	2007	2009	$60	$5	No	Real estate needed future project
Indirect Funded	2128	*VACANT	OTHER	11	9	2,000	2007	2009	$60	$5	No	Real estate needed future project
Indirect Funded	2177	*VACANT	OTHER	10	10	2,160	2007	2012	$65	$6	No	Real estate needed future project
Indirect Funded	4385	*VACANT	OTHER	21	16	3,744	2005	2009	$112	$10	No	
Indirect Funded	6203	*PLANT ENGINEERING	NA	26	7	2,185	None	2009	$66	$6	No	
Indirect Funded	3180	*OFFICE	OFO	23	13	4,300	None	2009	$129	$11	No	
Indirect Funded	328B	*VACANT	OTHER	29	2	288	2004	2009	$9	$1	No	
Indirect Funded	3751	*VACANT	OTHER	18	17	2,240	2008	2009	$67	$6	No	
Indirect Funded	3775	*VACANT	OTHER	17	18	1,386	2008	2009	$42	$4	No	Personal Property, not Bankable
Indirect Funded	4161	*VACANT	OTHER	21	15	1,229	2008	2009	$37	$3	No	Personal Property, not Bankable
Indirect Funded	4182	*VACANT	OTHER	24	12	5,180	2007	2009	$155	$14	No	
Indirect Funded	4184	*VACANT	OTHER	22	14	4,000	2007	2009	$120	$11	No	
Indirect Funded	4187	*VACANT	OTHER	13	19	5,760	2007	2009	$73	$15	No	EM. Listed on congressional list as 4442.
Indirect Funded	445	*VACANT	OTHER	24	11	5,121	2008	2009	$154	$14	No	
Indirect Funded	4905	*VACANT	NA	26	6	322	2008	2009	$10	$1	No	Personal Property, not Bankable
Indirect Funded	4906	*VACANT	NA	27	5	322	2008	2009	$10	$1	No	Personal Property, not Bankable
Indirect Funded	Planning	NA		NA	NA	NA	NA	NA	$100	NA	NA	
			NNSA	33,230	MultiSite	38,990			$1,300	$116		

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FY2010 Projects (Target TD Budget = $7.5M)												
Indirect Funded	4302	*EPD/ERD OFFICES	EM	25	1	5,022	None	2010	$151	$13	No	EM
Indirect Funded	4377	*EPD/ERD OFFICES	EM	23	5	4,920	None	2010	$148	$13	No	EM
Indirect Funded	4378	*EPD/ERD OFFICES	EM	25	2	5,180	None	2010	$155	$14	No	EM
Indirect Funded	4383	*VACANT	EM	24	4	4,988	None	2010	$150	$13	No	EM
Indirect Funded	4384	*VACANT	EM	25	3	1,577	2008	2010	$47	$4	No	EM
Indirect Funded	4387	*VACANT	EM	22	6	3,658	2008	2010	$110	$10	No	EM
Indirect Funded	4388	*VACANT	EM	22	7	320	2008	2010	$10	$1	No	EM. Personal Property, not Bankable
Indirect Funded	2127	*PAT	DHS	8	8	2,133	None	2010	$64	$6	No	
Indirect Funded	Planning	NA		NA	NA	NA	NA	NA	$165	NA	NA	
			NNSA	0	MultiSite	27,478			$1,000	$74		
FY2011 Projects (Target TD Budget = $8.0M)												
Indirect Funded	2512	*VACANT	OTHER	18	6	360	2005	2011	$10	$1	No	Personal Property, not Bankable
Indirect Funded	2701	*SECURITY SHOWER TRAILER	DNS	28	1	720	None	2011	$26	$2	No	Personal Property, not Bankable
Indirect Funded	2728	*VACANT	OTHER	17	7	2,130	2008	2011	$64	$6	No	
Indirect Funded	2775	*SECURITY	DNS	14	9	9,831	None	2011	$357	$26	No	
Indirect Funded	2777	*SECURITY TRAINING	DNS	21	4	1,400	None	2011	$51	$4	No	Personal Property, not Bankable
Indirect Funded	3175	*VACANT	OTHER	26	2	1,612	2008	2011	$59	$4	No	
Indirect Funded	3577	*VACANT	OTHER	16	8	4,614	None	2011	$138	$12	No	
Indirect Funded	4475	*VACANT	OTHER	21	5	4,176	2008	2011	$113	$11	No	SC
Indirect Funded	4926	*VACANT	NA	25	3	1,638	2008	2011	$49	$4	No	
Indirect Funded	5425	*VACANT	OTHER	14	10	5,260	2008	2011	$161	$14	No	
Indirect Funded	Planning	NA		NA	NA	NA	NA	NA	$100	NA	NA	
			NNSA	25,085	MultiSite	29,261			$1,128	$85		

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FY2012 Projects (Target TD Budget = $9.7M)												
Indirect Funded	1601	*VACANT	SCI	17	5	2,228	2008	2012	$89	$6	No	
Indirect Funded	1602	*CHEMISTRY & MATL SCIE	DSW	25	2	2,217	None	2012	$89	$6	No	
Indirect Funded	1735	*PAT	SCI	15	6	3,261	None	2012	$130	$9	No	
Indirect Funded	1736	*SECURITY	DNS	15	7	4,526	None	2012	$181	$12	No	
Indirect Funded	1925	*PAT	SCI	18	4	2,176	None	2012	$87	$6	No	
Indirect Funded	2726	*OFFICE	DNS	15	8	2,098	None	2012	$86	$6	No	
Indirect Funded	2787	*SECURITY EXERCISE TRAILER	DNS	20	3	2,160	None	2012	$86	$6	No	
Indirect Funded	4352	*EPD/ERD OFC-FIELD OPERTNS	EM	15	9	240	None	2012	$10	$1	No	Personal Property, not Bankable
Indirect Funded	4406	*VACANT	OTHER	29	1	1,560	2008	2012	$62	$4	No	
Indirect Funded	Planning	NA		NA	NA	NA	NA	NA	$179	NA	NA	
			NNSA	20,226	MultiSite	20,226			$1,000	$55		
FY2013 Projects (Target TD Budget = $11.1M)												
Indirect Funded	1826	*OFFICE	NA	21	8	3,590	None	2013	$130	$10	No	
Indirect Funded	1884	*PAT	DHS	12	9	2,880	None	2013	$105	$8	No	
Indirect Funded	1885	*PAT	DHS	12	10	4,266	None	2013	$155	$11	No	
Indirect Funded	2525	*HC OPERATIONS OFFICES	DSW	21	5	2,160	None	2013	$78	$6	No	
Indirect Funded	2554	*HC BIO ASSAY OFFICES	DSW	19	7	740	None	2013	$27	$2	No	Personal Property, not Bankable
Indirect Funded	2580	*SECURE COMMUNICATION CENTER	NA	20	6	4,203	None	2013	$153	$11	No	
Indirect Funded	2801	*VACANT	NIS	26	3	2,130	2008	2013	$77	$6	No	
Indirect Funded	2802	*VACANT	NIS	24	4	2,130	2008	2013	$77	$6	No	
Indirect Funded	2808	*TOILET TRAILER	NIS	27	2	238	None	2013	$9	$1	No	Personal Property, not Bankable
Indirect Funded	4150	*VACANT	NA	TBD	11	540	None	2013	$20	$1	No	Personal Property, not Bankable
Indirect Funded	Planning	NA		NA	NA	NA	NA	NA	$161	NA	NA	
			NNSA	21,359	MultiSite	21,359			$992	$61		

Attachment E-1
Facilities Disposition Plan
(Within FYNSP/Outyear Planning Targets)

Funding Source (1)	Facility Identification Number (FIMS) (2)	Facility Name (3)	Mission Dependency Program (4)	Priority Score (5)	Priority Rank (6)	Gross Square Footage (gsf) (7)	Excess Year (8)	Estimated Disposition Year (9)	TEC to Disposition ($000s) (10)	Yearly S&M Costs ($000s) (11)	Contaminated (Yes or No) (13)	Notes (14)
FY2014 Projects (Proposed TD Budget = $15.0M)												
Indirect Funded	806A	*HE MACHINING	DSW	26	2	3,417	None	2014	$528	$9	Yes	
Indirect Funded	806B	*HE MACHINING	DSW	26	3	4,088	None	2014	$631	$11	Yes	
Indirect Funded	806C	*MACHINING STORAGE	DSW	25	4	640	None	2014	$99	$2	No	
Indirect Funded	806D	*MACHINING STORAGE	DSW	28	1	192	None	2014	$30	$1	Yes	
Indirect Funded	Planning	NA		NA	NA	NA	NA	NA	$100	NA	NA	
			NNSA	8,337	MultiSite	8,337			$1,389	$22		
FY2015 Projects (Proposed TD Budget = $15.8M)												
Indirect Funded	162	*RESEARCH/CRYSTAL GTH	ICF	17	1	0	None	2017	$1,663	$0	No	Multi-year project. TEC, DM shown for this FY.
Indirect Funded	Planning	NA		NA	NA	NA	NA	NA	$100	NA	NA	
			NNSA	0	MultiSite	0			$1,763	$0		
FY2016 Projects (Proposed TD Budget = $15.8M)												
Indirect Funded	162	*RESEARCH/CRYSTAL GTH	ICF	17	1	19,197	None	2017	$1,663	$51	No	Multi-year project. TEC, DM shown for this FY.
Indirect Funded	Planning	NA		NA	NA	NA	NA	NA	$100	NA	NA	
			NNSA	19,197	MultiSite	19,197			$1,763	$51		
FY2017 Projects (Proposed TD Budget = $10.7M)												
Indirect Funded	345	*VACANT	OTHER	28	1	0	2007	2018	$1,250	$0	Yes	SC: Multi-year project. TEC reflects this FY only.
Indirect Funded	Planning	NA		NA	NA	NA	NA	NA	$100	NA	NA	
			NNSA	0	MultiSite	0			$1,350	$0		
FY2018 Projects (Indirect Funded)												
Indirect Funded	345	*VACANT	OTHER	28	1	9,468	2007	2018	$1,250	$25	Yes	SC: Multi-year project. TEC reflects this FY only.
Indirect Funded	Planning	NA		NA	NA	NA	NA	NA	$100	NA	NA	
			NNSA	0	MultiSite	9,468			$1,350	$25		

Attachment E-1
Facilities Disposition Plan
(Within FYNSP/Outyear Planning Targets)

Funding Source (1)	Facility Identification Number (FIMS) (2)	Facility Name (3)	Mission Dependency Program (4)	Priority Score (5)	Priority Rank (6)	Gross Square Footage (gsf) (7)	Excess Year (8)	Estimated Disposition Year (9)	TEC to Disposition ($000s) (10)	Yearly S&M Costs ($000s) (11)	Contaminated (Yes or No) (13)	Notes (14)
SC Funded												
FY2006 Projects												
SC Funded	4325	OFFICE TRAILER		Complete	Complete	2,130	2005	2006	$58	$57	No	Complete, SC
			NNSA	0	MultiSite	2,130			$58	$57		
FY2007 Projects												
SC Funded	3777	OFFICE	OTHER	Complete	Complete	6,390	2007	2007	$109	$171	No	Complete, SC
			NNSA	0	MultiSite	6,390			$109	$171		
IGPP Funded												
FY2006 Projects												
IGPP Funded	623	Fire Riser Storage		Complete	Complete	146	2006	2006	$12	$2	No	Complete, funded from carryover
			NNSA	146	MultiSite	146			$12	$2		
WFO Funded												
FY2008 Projects (FIRP Budget = $3.19M)												
WFO Funded	1632	*VACANT	OTHER	In Progress	In Progress	4,290	2008	2009	$150	$11	No	
			NNSA	4,290	MultiSite	4,290			$150	$11		
TBD												
FY2009 Projects (Target TD Budget = $6.5M)												
TBD	419	*EPD/RHWM INDUSTRIAL	RTBF	40	1	7,687	2007	2009	$4,200	$21	Yes	EM owned facility: RCRA Closure; Funding Source being resolved.
			NNSA	0	MultiSite	7,687			$4,200	$21		

Attachment E-1
Facilities Disposition Plan
(Within FYNSP/Outyear Planning Targets)

Funding Source (1)	Facility Identification Number (FIMS) (2)	Facility Name (3)	Mission Dependency Program (4)	Priority Score (5)	Priority Rank (6)	Gross Square Footage (gsf) (7)	Excess Year (8)	Estimated Disposition Year (9)	TEC to Disposition ($000s) (10)	Yearly S&M Costs ($000s) (11)	Contaminated (Yes or No) (13)	Notes (14)
Prior Year History												
NA 52 FIRP Funded												
FY2002 Projects												
NA 52 FIRP Funded	177	Laser Support		Complete	Complete	14,448	2002	2002	$942	$195	Yes	Complete
NA 52 FIRP Funded	222S	Chemistry Building		Complete	Complete	19,444	1999	2002	$4,205	$262	Yes	Complete
			NNSA	33,892	MultiSite	33,892			$5,147	$457		
FY2003 Projects												
NA 52 FIRP Funded	222C	Chemistry Building		Complete	Complete	0	1999	2003	$4,500	$285	Yes	Complete. Multi-year project. TEC, DM shown for this FY.
NA 52 FIRP Funded	222N	Chemistry Building		Complete	Complete	0	1999	2003	$4,900	$365	Yes	Complete. Multi-year project. TEC, DM shown for this FY.
NA 52 FIRP Funded	Trailers (1478, 2626,2633, 2629, 238A)	Office Trailer		Complete	Complete	20,212	2002	2003	$312	$285	No	Complete
			NNSA	20,212	MultiSite	20,212			$9,712	$936		

Attachment E-1
Facilities Disposition Plan
(Within FYNSP/Outyear Planning Targets)

Funding Source (1)	Facility Identification Number (FIMS) (2)	Facility Name (3)	Mission Dependency Program (4)	Priority Score (5)	Priority Rank (6)	Gross Square Footage (gsf) (7)	Excess Year (8)	Estimated Disposition Year (9)	TEC to Disposition ($000s) (10)	Yearly S&M Costs ($000s) (11)	Contaminated (Yes or No) (13)	Notes (14)
FY2004 Projects												
NA 52 FIRP Funded	1253	Office Trailer		Complete	Complete	1,080	2004	2004	$33	$20	No	Complete
NA 52 FIRP Funded	1830	PROPERTY MANAGEMENT		Complete	Complete	0	2004	2005	$196	$119	No	Complete. Multi-year project. TEC, DM shown for this FY.
NA 52 FIRP FY03 Funded	222C	Chemistry Building		Complete	Complete	20,266	1999	2004	$0	$373	Yes	Complete. Multi-year project. TEC, DM shown for this FY.
NA 52 FIRP FY03 Funded	222N	Chemistry Building		Complete	Complete	25,888	1999	2004	$0	$476	Yes	Complete. Multi-year project. TEC, DM shown for this FY.
NA 52 FIRP Funded	3903	Office Trailer		Complete	Complete	2,130	2004	2004	$66	$39	No	Complete
NA 52 FIRP Funded	3904	Office Trailer		Complete	Complete	2,130	2004	2004	$66	$39	No	Complete
NA 52 FIRP Funded	3905	Office Trailer		Complete	Complete	2,130	2004	2004	$66	$39	No	Complete
NA 52 FIRP Funded	3907	Office Trailer		Complete	Complete	1,855	2004	2004	$56	$34	No	Complete
NA 52 FIRP FY04/06 Funded	412	Hanger		Complete	Complete	0	2000	2006	$1,000	$526	Yes	Complete. Multi-year project. TEC, DM shown for this FY.
NA 52 FIRP Funded	4180	SUPPLEMENTAL LABOR OFF		Complete	Complete	0	2004	2005	$95	$57	No	Complete. Multi-year project. TEC, DM shown for this FY.
NA 52 FIRP Funded	4181	Office Trailer		Complete	Complete	3,692	2004	2004	$111	$68	No	Complete
NA 52 FIRP FY04/06 Funded	431A	*Accelerator Research Center		Complete	Complete	0	2004	2006	$4,256	$1,725	Yes	Complete - Multi year project
NA 52 FIRP Funded	4440	Office Trailer		Complete	Complete	0	2004	2005	$158	$97	No	Complete. Multi-year project. TEC, DM shown for this FY.
NA 52 FIRP Funded	5926	VACANT		Complete	Complete	0	2004	2005	$64	$39	No	Complete. Multi-year project. TEC, DM shown for this FY.
NA 52 FIRP Funded	5928	Office Trailer		Complete	Complete	2,160	2004	2004	$65	$40	No	Complete
NA 52 FIRP Funded	808	Vacant		Complete	Complete	1,484	2004	2004	$199	$27	Yes	Complete
NA 52 FIRP Funded	814	Vacant		Complete	Complete	2,122	2004	2004	$285	$39	Yes	Complete
NA 52 FIRP Funded	820	Vacant		Complete	Complete	2,208	2004	2004	$297	$41	Yes	Complete
NA 52 FIRP Funded	838	Vacant		Complete	Complete	598	2004	2004	$80	$11	Yes	Complete
NA 52 FIRP Funded	840A	Vacant		Complete	Complete	441	2004	2004	$59	$8	Yes	Complete
NA 52 FIRP Funded	840B	Vacant		Complete	Complete	336	2004	2004	$45	$6	Yes	Complete
NA 52 FIRP Funded	865C	Vacant		Complete	Complete	2,400	2000	2004	$323	$44	No	Complete
NA 52 FIRP Funded	Planning	NA		Complete	Complete	NA	NA	NA	$432	NA	NA	FY2004 Planning Funds
			NNSA	70,920	MultiSite	70,920			$7,952	$3,868		

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Facilities Disposition Plan
(Within FYNSP/Outyear Planning Targets)

Funding Source (1)	Facility Identification Number (FIMS) (2)	Facility Name (3)	Mission Dependency Program (4)	Priority Score (5)	Priority Rank (6)	Gross Square Footage (gsf) (7)	Excess Year (8)	Estimated Disposition Year (9)	TEC to Disposition ($000s) (10)	Yearly S&M Costs ($000s) (11)	Contaminated (Yes or No) (13)	Notes (14)
FY2005 Projects												
NA 52 FIRP Funded	169	VACANT		Complete	Complete	903	2004	2005	$140	$28	No	Complete
NA 52 FIRP Funded	171	VACANT		Complete	Complete	8,632	2004	2005	$1,468	$266	Yes	Complete
NA 52 FIRP FY04 Funded	1830	PROPERTY MANAGEMENT		Complete	Complete	6,470	2004	2005	$0	$199	No	Complete. Multi-year project. TEC, DM shown for this FY.
NA 52 FIRP Funded	212	VACANT		In Progress	In Progress	0	2005	2007	$2,000	$853	Yes	Multi-year project. TEC, DM shown for this FY.
NA 52 FIRP Funded	230	GUARD HOUSES		Complete	Complete	377	2005	2005	$77	$12	No	Complete
NA 52 FIRP Funded	232	VACANT		Complete	Complete	2,030	2004	2005	$300	$62	Yes	Complete
NA 52 FIRP Funded	412	Hanger		Complete	Complete	28,607	2000	2006	$3,500	$880	Yes	Complete
NA 52 FIRP FY04 Funded	4180	Office Trailer		Complete	Complete	3,120	2004	2005	$0	$114	No	Complete. Multi-year project. TEC, DM shown for this FY.
NA 52 FIRP Funded	431A	*Accelerator Research Center		Complete	Complete	0	2004	2006	$4,000	$0	Yes	Complete. Multi-year project. TEC, DM shown for this FY.
NA 52 FIRP FY04 Funded	4440	Office Trailer		Complete	Complete	5,276	2004	2005	$0	$162	No	Complete. Multi-year project. TEC, DM shown for this FY.
NA 52 FIRP FY04 Funded	5926	Office Trailer		Complete	Complete	2,128	2004	2005	$0	$65	No	Complete. Multi-year project. TEC, DM shown for this FY.
NA 52 FIRP Funded	832F	STORAGE		Complete	Complete	2,995	2004	2005	$225	$92	No	Complete
NA 52 FIRP Funded	854B	VACANT		Complete	Complete	331	2005	2005	$51	$10	Yes	Complete
NA 52 FIRP Funded	854C	VACANT		Complete	Complete	1,623	2005	2005	$252	$50	Yes	Complete
NA 52 FIRP Funded	854D	VACANT		Complete	Complete	530	2005	2005	$82	$16	Yes	Complete
NA 52 FIRP Funded	854E	VACANT		Complete	Complete	905	2005	2005	$140	$28	Yes	Complete, funded from carryover
NA 52 FIRP Funded	854F	VACANT		Complete	Complete	826	2005	2005	$128	$25	Yes	Complete
NA 52 FIRP Funded	854G	VACANT		Complete	Complete	1,333	2005	2005	$207	$41	Yes	Complete
NA 52 FIRP Funded	854J	VACANT		Complete	Complete	5,316	2005	2005	$824	$164	Yes	Complete
NA 52 FIRP Funded	Planning	NA		Complete	Complete	NA	NA	NA	$1,883	NA	NA	Complete
			NNSA	71,402	MultiSite	71,402			$15,277	$3,068		

Attachment E-1
Facilities Disposition Plan
(Within FYNSP/Outyear Planning Targets)

Funding Source (1)	Facility Identification Number (FIMS) (2)	Facility Name (3)	Mission Dependency Program (4)	Priority Score (5)	Priority Rank (6)	Gross Square Footage (gsf) (7)	Excess Year (8)	Estimated Disposition Year (9)	TEC to Disposition ($000s) (10)	Yearly S&M Costs ($000s) (11)	Contaminated (Yes or No) (13)	Notes (14)
Indirect Funded												
FY2002 Projects												
Indirect Funded	1734	Office Trailer		Complete	Complete	960	2002	2002	$16	$13	No	Complete
Indirect Funded	2527	Office Trailer		Complete	Complete	1,440	2002	2002	$24	$0	No	Complete, Personal Property, not Bankable
Indirect Funded	592	Research		Complete	Complete	1,919	2002	2002	$146	$26	Yes	Complete
Indirect Funded	593	Research		Complete	Complete	1,537	2002	2002	$117	$21	Yes	Complete
			NNSA	4,416	MultiSite	4,416			$303	$61		
FY2003 Projects												
Indirect Funded	1877	Office Trailer		Complete	Complete	5,770	2002	2003	$97	$81	No	Complete
			NNSA	5,770	MultiSite	5,770			$97	$81		
FY2005 Projects												
Indirect Funded	3629	Bio Offices		Complete	Complete	2,160	2005	2006	$63	$69	Yes	Complete, SC
			NNSA	0	MultiSite	2,160			$63	$69		
SC Funded												
FY2002 Projects												
SC Funded	OS DCYard	MFE DC Power Yard		Complete	Complete	NA	2002	2002	$350	$0	No	non-accountable footage
			NNSA	0	MultiSite	0			$350	$0		
EM - Line Item Funded												
FY2004 Projects												
EM - Line Item Funded	513	Waste TSDF-Liquid		Complete	Complete	3,500	2004	2004	NA	$64	Yes	Complete, EM
EM - Line Item Funded	513A	Waste TSDF-Liquid		Complete	Complete	2,138	2004	2004	NA	$39	Yes	Complete, EM
EM - Line Item Funded	514	Waste TSDF-Liquid		Complete	Complete	2,484	2004	2004	NA	$46	Yes	Complete, EM
			NNSA	0	MultiSite	8,122			$0	$149		

[1] Estimated demolition dates in Attachments B and E are not aligned, but will be adjusted based on funding and overall strategic approach in support of Complex Transformation.

Attachment E-1a
Facilities Disposition Plan
(Above FYNSP/Funding is "TBD")

HQ Program Office (1)	Facility Identification Number (FIMS) (2)	Facility Name (3)	Mission Dependency Program (4)	Gross Square Footage (gsf) (7)	Excess Year (8)	Estimated Disposition Year (9)	TEC to Disposition ($000s) (10)	Yearly S&M Costs ($000s) (11)	Candidate for Transfer (12)	Contaminated (Yes or No) (13)	Notes (14)
NNSA	41	LONG TERM STORAGE	ASC	25,621	TBD	TBD	TBD	$38	No	No	
NNSA	125	WEST CAFETERIA	NA	12,871	TBD	TBD	TBD	$19	No	No	
NNSA	165	OPTICS/DEVELOPMENT LAB	ICF	9,712	TBD	TBD	TBD	$15	No	No	
NNSA	166	DEVELOPMENT LAB	PMC	13,229	TBD	TBD	TBD	$20	No	No	
NNSA	174	PAT	ICF	19,360	TBD	TBD	TBD	$29	No	No	
NNSA	176	PAT	SCI	3,958	TBD	TBD	TBD	$6	No	No	
NNSA	182	VACANT	NA	1,958	TBD	TBD	TBD	$3	No	Yes	
NNSA	194	PAT	SCI	42,033	TBD	TBD	TBD	$63	No	Yes	
NNSA	195	EPD/ORAD SHOP	DNS	400	TBD	TBD	TBD	$1	No	No	
NNSA	196	EPD/ORAD SRVC-MNTRNG STAT	DSW	853	TBD	TBD	TBD	$1	No	No	
NNSA	198	VACANT	OTHER	966	TBD	TBD	TBD	$1	No	No	
NNSA	214	CIO	DSW	4,922	TBD	TBD	TBD	$7	No	No	
NNSA	216	OFFICE	NA	19,089	TBD	TBD	TBD	$29	No	No	
NNSA	217	CYBER SECURITY	DNS	18,100	TBD	TBD	TBD	$27	No	No	
NNSA	218	IFM MANAGED OFFICE FACILITY	SCI	18,065	TBD	TBD	TBD	$27	No	No	
NNSA	219	UNIVERSITY RELATION PROG	OTHER	17,612	TBD	TBD	TBD	$26	No	No	
NNSA	233	MATERIALS MANAGEMENT	SCI	4,900	TBD	TBD	TBD	$7	No	Yes	
NNSA	253	HC DEPT OFFICES & LABS	DSW	32,277	TBD	TBD	TBD	$48	No	Yes	
NNSA	254	HC BIO ASSAY LAB	DSW	2,465	TBD	TBD	TBD	$4	No	Yes	
NNSA	261	VACANT	OTHER	52,247	TBD	TBD	TBD	$78	No	Yes	
NNSA	262	NHI	NPV	11,968	TBD	TBD	TBD	$18	No	No	
NNSA	263	VACANT	OTHER	77	TBD	TBD	TBD	$0	No	No	
EM	280	VACANT	OTHER	5,341	TBD	TBD	TBD	$8	No	Yes	
NNSA	281	ENERGY AND ENVIRONMENT LAB SPACE	OTHER	18,394	TBD	TBD	TBD	$28	No	Yes	
NNSA	282	PAT	OFO	2,160	TBD	TBD	TBD	$3	No	No	
NNSA	297	PE/PAPER DISPOSAL	NA	992	TBD	TBD	TBD	$1	No	No	
NNSA	314	CFO	DSW	13,401	TBD	TBD	TBD	$20	No	No	
NNSA	315	CFO	DSW	17,977	TBD	TBD	TBD	$27	No	No	
NNSA	316	IFM MANAGED OFFICE FACILITY	OFO	14,343	TBD	TBD	TBD	$22	No	No	
NNSA	317	NETWORKING GROUP FACILITY	DSW	1,228	TBD	TBD	TBD	$2	No	No	
NNSA	318	POOL CHANGE ROOM	DSW	6,119	TBD	TBD	TBD	$9	No	No	
NNSA	319	UNIVERSITY RELATION PROG	OTHER	17,826	TBD	TBD	TBD	$27	No	No	
NNSA	322	PLATING SHOP	SCI	5,822	TBD	TBD	TBD	$9	No	Yes	
NNSA	323	HC/FIRE STATION#1	DSW	18,555	TBD	TBD	TBD	$28	No	No	
NNSA	326	VACANT	OTHER	3,474	TBD	TBD	TBD	$5	No	No	
NNSA	327	RADIOGRAPHY	SCI	19,116	TBD	TBD	TBD	$29	No	Yes	
NNSA	328	HC FIRE TEST	DSW	372	TBD	TBD	TBD	$1	No	No	
SC	362	BIOSCIENCES RESEARCH	SC	3,749	TBD	TBD	TBD	$6	No	Yes	
SC	363	VACANT	SCI	1,584	TBD	TBD	TBD	$2	No	No	
SC	364	BIOSCIENCES RESEARCH	SC	10,952	TBD	TBD	TBD	$16	No	No	
SC	365	BIO LAB	SC	8,871	TBD	TBD	TBD	$13	No	No	
SC	366	BIOSCIENCES RESEARCH	NA	2,620	TBD	TBD	TBD	$4	No	No	
SC	367	BIOSCIENCES RESEARCH	SC	625	TBD	TBD	TBD	$1	No	No	
SC	373	BIO WAREHOUSE	SC	1,784	TBD	TBD	TBD	$3	No	No	
SC	376	BIO MACHINE SHOP	SC	1,560	TBD	TBD	TBD	$2	No	No	
SC	378	ENERGY AND ENVIRONMENT LAB SPACE	OTHER	3,840	TBD	TBD	TBD	$6	No	Yes	
SC	379	ENERGY AND ENVIRONMENT LAB SPACE	OTHER	1,500	TBD	TBD	TBD	$2	No	No	
NNSA	404	PE/BATTERY SHOP/WARHSE	NA	6,460	TBD	TBD	TBD	$10	No	No	
NNSA	405	INDUSTRIAL ELECTRONICS	NA	8,702	TBD	TBD	TBD	$13	No	No	
NNSA	411	SHIPPING/RECEIVING	NA	69,505	TBD	TBD	TBD	$104	No	No	
NNSA	415	IAP	DSW	19,020	TBD	TBD	TBD	$29	No	No	
NNSA	418	PE/PAINT SHOP	NA	12,414	TBD	TBD	TBD	$19	No	No	
NNSA	423	PAT	ENG	8,032	TBD	TBD	TBD	$12	No	No	

Attachment E-1a
Facilities Disposition Plan
(Above FYNSP/Funding is "TBD")

HQ Program Office (1)	Facility Identification Number (FIMS) (2)	Facility Name (3)	Mission Dependency Program (4)	Gross Square Footage (gsf) (7)	Excess Year (8)	Estimated Disposition Year (9)	TEC to Disposition ($000s) (10)	Yearly S&M Costs ($000s) (11)	Candidate for Transfer (12)	Contaminated (Yes or No) (13)	Notes (14)
NNSA	431	ACCELERATOR RESCH CNTR	SCI	54,545	TBD	TBD	TBD	$82	No	Yes	Balance of existing B431 accelerated into D&D/multi-year project. TPC TBD. Possible transfer to EM
SC	432	IFM MANAGED LAB FACILITY	OTHER	34,748	TBD	TBD	TBD	$52	No	No	
SC	435	IFM MANAGED LAB FACILITY	OTHER	57,928	TBD	TBD	TBD	$87	No	Yes	
NNSA	436	PAT	SC	9,693	TBD	TBD	TBD	$15	No	No	
EM	442	VACANT	OTHER	4,098	TBD	TBD	TBD	$6	No	No	
SC	446	VACANT	OTHER	1,730	TBD	TBD	TBD	$3	No	No	
NNSA	491	VACANT	OTHER	13,138	TBD	TBD	TBD	$20	No	Yes	
NNSA	492	IFM MANAGED LAB FACILITY	ICF	9,602	TBD	TBD	TBD	$14	No	Yes	
NNSA	509	PE/SHEET MTL SHOP STO	NA	254	TBD	TBD	TBD	$0	No	No	
NNSA	512	PE/CRAFTS STORAGE	NA	5,896	TBD	TBD	TBD	$9	No	No	
NNSA	515	PE/CRAFTS STO/RECEIVING	NA	8,409	TBD	TBD	TBD	$13	No	No	
NNSA	516	PE/CRAFTS FACILITY/ME	NA	6,333	TBD	TBD	TBD	$9	No	No	
NNSA	517	ELECT UTILITY OFFICES	NA	6,090	TBD	TBD	TBD	$9	No	No	
NNSA	519	PE/EQUIPMENT REPAIR	NA	10,006	TBD	TBD	TBD	$15	No	No	
NNSA	520	PE PESTICIDE STORAGE	NA	400	TBD	TBD	TBD	$1	No	No	
NNSA	523	PE/WELD/CARPTRY WK SHED	NA	3,507	TBD	TBD	TBD	$5	No	No	
NNSA	534	VACANT	OTHER	245	TBD	TBD	TBD	$0	No	No	
NNSA	571	HUMAN RESOURCES	DSW	41,954	TBD	TBD	TBD	$63	No	No	
NNSA	611	AUTO FLEET MAINTENANCE	NA	14,790	TBD	TBD	TBD	$22	No	No	
EM	612	EPD/RHWM WASTE TSDF	RTBF	7,024	TBD	TBD	TBD	$11	No	Yes	
EM	614	EPD/RHWM WASTE TSDF	RTBF	1,221	TBD	TBD	TBD	$2	No	No	
NNSA	615	TRNING/OFFICE FACILITY	NA	3,421	TBD	TBD	TBD	$5	No	No	
NNSA	616	DONATION,UTIL&SALES	NA	2,216	TBD	TBD	TBD	$3	No	No	
NNSA	619	DONATION,UTIL&SALES	NA	2,047	TBD	TBD	TBD	$3	No	No	
NNSA	622	CORP. YARD	NA	1,039	TBD	TBD	TBD	$2	No	No	
EM	624	EPD/RHWM OFFICE	RTBF	240	TBD	TBD	TBD	$0	No	No	
EM	625	EPD/RHWM WASTE TSDF	RTBF	4,854	TBD	TBD	TBD	$7	No	No	
NNSA	651	VISITOR CENTER	OTHER	2,390	TBD	TBD	TBD	$4	No	No	
NNSA	652	TELESCOPE BUILDING	OTHER	253	TBD	TBD	TBD	$0	No	No	
NNSA	671	PROCUREMENT AND MATERIEL	NA	41,978	TBD	TBD	TBD	$63	No	No	
NNSA	691	LODTM FACILITY	SCI	18,407	TBD	TBD	TBD	$28	No	No	
NNSA	803	EPD/ORAD STRG WRHS	DSW	1,719	TBD	TBD	TBD	$3	No	No	
NNSA	804	STAGING AREA	SCI	107	TBD	TBD	TBD	$0	No	Yes	
NNSA	805	INERT MACHNG/EXPLVS WST PACKNG	DSW	6,830	TBD	TBD	TBD	$10	No	Yes	
NNSA	811	VACANT	OTHER	1,081	TBD	TBD	TBD	$2	No	No	
NNSA	813	CHANGE HOUSE	DSW	2,870	TBD	TBD	TBD	$4	No	No	
NNSA	819	PE/STORAGE-C&M SHOPS	NA	828	TBD	TBD	TBD	$1	No	No	
NNSA	821	CHEMISTRY STORAGE	DSW	650	TBD	TBD	TBD	$1	No	Yes	
NNSA	824	HE STORAGE FACILITY	SCI	300	TBD	TBD	TBD	$0	No	Yes	
NNSA	830	VACANT	OTHER	1,764	TBD	TBD	TBD	$3	No	No	
EM	833	EPD/ERD SERVICE-R&D	EM	1,892	TBD	TBD	TBD	$3	No	No	
EM	835	EPD/ERD STORAGE	EM	1,216	TBD	TBD	TBD	$2	No	No	
NNSA	837	VACANT	DSW	1,031	TBD	TBD	TBD	$2	No	No	
NNSA	841	PE/STORAGE - C&M SHOPS	NA	1,786	TBD	TBD	TBD	$3	No	No	
NNSA	850	FIRING FACILITY	DSW	5,095	TBD	TBD	TBD	$8	No	Yes	
NNSA	856	VACANT	OTHER	1,613	2003	TBD	TBD	$2	No	No	
NNSA	859	STORAGE	SCI	1,500	TBD	TBD	TBD	$2	No	No	
NNSA	860	STORAGE	SCI	298	TBD	TBD	TBD	$0	No	No	
NNSA	870	OFFICE	SCI	4,000	TBD	TBD	TBD	$6	No	No	
NNSA	871	ADMINISTRATION	SCI	7,928	TBD	TBD	TBD	$12	No	No	
NNSA	872	PE/PAINT SHOP	NA	1,887	TBD	TBD	TBD	$3	No	No	
NNSA	873	PE/C&M SHOPS	NA	17,452	TBD	TBD	TBD	$26	No	No	
NNSA	874	MECHANICAL SHOPS	SCI	19,972	TBD	TBD	TBD	$30	No	No	

Attachment E-1a
Facilities Disposition Plan
(Above FYNSP/Funding is "TBD")

HQ Program Office (1)	Facility Identification Number (FIMS) (2)	Facility Name (3)	Mission Dependency Program (4)	Gross Square Footage (gsf) (7)	Excess Year (8)	Estimated Disposition Year (9)	TEC to Disposition ($000s) (10)	Yearly S&M Costs ($000s) (11)	Candidate for Transfer (12)	Contaminated (Yes or No) (13)	Notes (14)
NNSA	875	PE/SUPPLY & MAINTENANCE	NA	15,171	TBD	TBD	TBD	$23	No	No	
NNSA	876	STORES & RECLAMATION	NA	2,400	TBD	TBD	TBD	$4	No	No	
NNSA	877	COMPUTER TECHL SUPPORT	SCI	3,352	TBD	TBD	TBD	$5	No	No	
NNSA	878	PE/MAINT SHOP STORAGE	NA	488	TBD	TBD	TBD	$1	No	No	
NNSA	879	MOTOR POOL & GARAGE	NA	2,879	TBD	TBD	TBD	$4	No	No	
NNSA	880	CAFETERIA	NA	2,839	TBD	TBD	TBD	$4	No	No	
NNSA	895	EPD/ORAD OFFICE	DSW	380	TBD	TBD	TBD	$1	No	No	
NNSA	1277	DNT FACILITY	SCI	4,058	TBD	TBD	TBD	$6	No	No	
NNSA	1280	PAT	OTHER	5,644	TBD	TBD	TBD	$8	No	No	
NNSA	1481	ELECTRONIC ENGNG	SCI	5,275	TBD	TBD	TBD	$8	No	No	
NNSA	1492	VACANT	NA	1,040	TBD	TBD	TBD	$2	No	No	
NNSA	1526	VACANT	SCI	1,380	TBD	TBD	TBD	$2	No	No	
NNSA	1527	ENGINEERING 2	SCI	3,841	TBD	TBD	TBD	$6	No	No	
NNSA	1541	CHEMISTRY	DSW	2,149	TBD	TBD	TBD	$3	No	No	
NNSA	1578	ENGINEERING 2	SCI	6,385	TBD	TBD	TBD	$10	No	No	
NNSA	1579	VACANT	SCI	1,305	TBD	TBD	TBD	$2	No	No	
NNSA	1631	OFFICE	SCI	1,490	TBD	TBD	TBD	$2	No	No	
NNSA	1677	IFM MANAGED OFFICE FACILITY	HEU-TIP	28,789	TBD	TBD	TBD	$43	No	No	
NNSA	1678	OFFICE	ICF	3,550	TBD	TBD	TBD	$5	No	No	
NNSA	1680	ICS OFFICE	NA	5,697	TBD	TBD	TBD	$9	No	No	
NNSA	1726	PAT	SCI	2,160	TBD	TBD	TBD	$3	No	No	
NNSA	1727	PAT	SCI	1,837	TBD	TBD	TBD	$3	No	No	
NNSA	1739	PAT	SC	5,724	TBD	TBD	TBD	$9	No	No	
NNSA	1802	TOILET TRAILER	DSW	411	TBD	TBD	TBD	$1	No	No	
NNSA	1878	VACANT	DOD	6,292	TBD	TBD	TBD	$9	No	No	
NNSA	1879	LABORATORY TRAINING CNTR	DSW	11,118	TBD	TBD	TBD	$17	No	No	
NNSA	1886	INVENTORY FACILITY	NA	3,643	TBD	TBD	TBD	$5	No	No	
NNSA	1887	OFFICE	NA	5,108	TBD	TBD	TBD	$8	No	No	
NNSA	1888	ICS ADMINISTRATION	NA	11,520	TBD	TBD	TBD	$17	No	No	
NNSA	1889	COMPUTATION	ASC	17,380	TBD	TBD	TBD	$26	No	No	
NNSA	1927	CHEMISTRY	DSW	2,160	TBD	TBD	TBD	$3	No	No	
NNSA	2180	OFFICE	NA	1,643	TBD	TBD	TBD	$2	No	No	
EM	2552	VACANT	DSW	2,100	TBD	TBD	TBD	$3	No	No	
NNSA	2625	HC TOILET TRAILER	DSW	240	TBD	TBD	TBD	$0	No	No	
NNSA	2627	HC CLASSROOM #2	DSW	1,867	TBD	TBD	TBD	$3	No	No	
NNSA	2632	SECURITY	DHS	2,202	TBD	TBD	TBD	$3	No	No	
NNSA	2679	HC TRAINING CNTR	DSW	12,310	TBD	TBD	TBD	$18	No	No	
NNSA	2684	VACANT	OTHER	5,284	TBD	TBD	TBD	$8	No	No	
NNSA	2727	PAT	ICF	4,950	TBD	TBD	TBD	$7	No	No	
NNSA	2825	OFFICE	ICF	5,922	TBD	TBD	TBD	$9	No	No	
NNSA	2925	CAMS PROGRAM OFFICES	OTHER	4,909	TBD	TBD	TBD	$7	No	No	
NNSA	3203	MATERIAL FABRICATION DIV	SCI	632	TBD	TBD	TBD	$1	No	Yes	
NNSA	3204	MATERIAL FABRICATION DIV	SCI	647	TBD	TBD	TBD	$1	No	No	
NNSA	3340	OFFICES	SCI	2,160	TBD	TBD	TBD	$3	No	No	
NNSA	3427	NHI	DHS	6,365	TBD	TBD	TBD	$10	No	No	
NNSA	3526	LAB ASSURANCE OFFICE	DSW	2,165	TBD	TBD	TBD	$3	No	No	
NNSA	3527	DOE OFFICES	OFO	9,792	TBD	TBD	TBD	$15	No	No	
NNSA	3555	LAB ASSURANCE OFFICE	DSW	508	TBD	TBD	TBD	$1	No	No	
SC	3649	BIOSCIENCES RESEARCH	SC	4,800	TBD	TBD	TBD	$7	No	No	
NNSA	3724	COMPUTATION FACILITY BLDG	ASC	19,810	TBD	TBD	TBD	$30	No	No	
NNSA	3725	BIO OFFICE	SC	19,813	TBD	TBD	TBD	$30	No	No	
NNSA	3726	COMPUTATION FACILITY BLDG	ASC	19,824	TBD	TBD	TBD	$30	No	No	
NNSA	3925	REDWOOD ROOM-CONFERENCE/CLASSROOM	ICF	1,081	TBD	TBD	TBD	$2	No	No	
NNSA	3982	TECH SUPPORT	ICF	1,920	TBD	TBD	TBD	$3	No	No	
NNSA	4107	SCIENCE&TECH EDUC PROG	OTHER	382	TBD	TBD	TBD	$1	No	No	

Attachment E-1a
Facilities Disposition Plan
(Above FYNSP/Funding is "TBD")

HQ Program Office (1)	Facility Identification Number (FIMS) (2)	Facility Name (3)	Mission Dependency Program (4)	Gross Square Footage (gsf) (7)	Excess Year (8)	Estimated Disposition Year (9)	TEC to Disposition ($000s) (10)	Yearly S&M Costs ($000s) (11)	Candidate for Transfer (12)	Contaminated (Yes or No) (13)	Notes (14)
NNSA	4113	STORAGE	NA	203	TBD	TBD	TBD	$0	No	No	Was 4509, moved/renumbered
NNSA	4128	LLESA STORE	DSW	960	TBD	TBD	TBD	$1	No	No	
EM	4316	VACANT	EM	299	TBD	TBD	TBD	$0	No	No	
NNSA	4675	RECREATIONAL FACILITY	DSW	11,287	TBD	TBD	TBD	$17	No	No	
NNSA	4725	ICS OPERATIONS	OTHER	9,265	TBD	TBD	TBD	$14	No	No	
NNSA	4726	ICS OFFICE	NA	9,362	TBD	TBD	TBD	$14	No	No	
NNSA	4727	TID LIBRARY	DSW	9,909	TBD	TBD	TBD	$15	No	No	
NNSA	4728	TID LIBRARY	DSW	6,710	TBD	TBD	TBD	$10	No	No	
NNSA	4729	TID LIBRARY	DSW	9,948	TBD	TBD	TBD	$15	No	No	
NNSA	5104	INDUSTRIAL GAS FACILITY	NA	624	TBD	TBD	TBD	$1	No	No	
NNSA	5105	PE CONSTRUCTION	NA	510	TBD	TBD	TBD	$1	No	No	
NNSA	5207	PE/AC STORAGE	NA	320	TBD	TBD	TBD	$0	No	No	
NNSA	5226	LOCKS AND KEYS	DNS	2,548	TBD	TBD	TBD	$4	No	No	
EM	5426	VACANT	DSW	5,180	TBD	TBD	TBD	$8	No	No	
NNSA	5475	EPD/DO OFFICE	DSW	32,409	TBD	TBD	TBD	$49	No	No	
NNSA	5477	EPD/ORAD OFFICE	DSW	6,650	TBD	TBD	TBD	$10	No	No	
NNSA	5626	AUDIT & OVERSIGHT	OTHER	4,372	TBD	TBD	TBD	$7	No	No	
NNSA	5627	LEGAL SERVICES	OTHER	8,415	TBD	TBD	TBD	$13	No	No	
NNSA	5675	STAFF RELATIONS	OTHER	4,259	TBD	TBD	TBD	$6	No	No	
EM	6127	EPD/RHWM OFFICE	RTBF	1,560	TBD	TBD	TBD	$2	No	No	
EM	6178	EPD/RHWM OFF/CHANGE HOUSE	RTBF	1,040	TBD	TBD	TBD	$2	No	No	
EM	6179	EPD/RHWM OFFICE	RTBF	3,904	TBD	TBD	TBD	$6	No	No	
NNSA	6205	PE HEAVY EQUIPMENT YARD	NA	404	TBD	TBD	TBD	$1	No	No	
NNSA	6206	INDUSTRIAL ELECTRONICS	NA	684	TBD	TBD	TBD	$1	No	No	was 3550, moved/renumbered
EM	6325	VACANT	RTBF	4,320	TBD	TBD	TBD	$6	No	No	
NNSA	6424	TOILET TRAILER	OTHER	390	TBD	TBD	TBD	$1	No	No	Was 4104, moved/renumbered
NNSA	6501	PUBLIC AFFAIRS OFFICE	OTHER	875	TBD	TBD	TBD	$1	No	No	
NNSA	6525	VISITORS CTR AUDITRM	OTHER	960	TBD	TBD	TBD	$1	No	No	
NNSA	6526	PUBLIC AFFAIRS OFFICE	OTHER	2,801	TBD	TBD	TBD	$4	No	No	
NNSA	6527	PUBLIC AFFAIRS OFFICE	OTHER	2,100	TBD	TBD	TBD	$3	No	No	
NNSA	6575	PUBLIC AFFAIRS OFFICE	OTHER	1,440	TBD	TBD	TBD	$2	No	No	
NNSA	6870	OFFICE	ICF	1,416	TBD	TBD	TBD	$2	No	No	
NNSA	6901	CONSTRUCTION TRAILER	ICF	520	TBD	TBD	TBD	$1	No	No	was 5801, moved/renumbered
NNSA	6925	IP&C OFFICES	DSW	5,893	TBD	TBD	TBD	$9	No	No	
NNSA	6926	IP&C OFFICES	DSW	2,160	TBD	TBD	TBD	$3	No	No	
NNSA	6928	IP&C OFFICES	DSW	1,886	TBD	TBD	TBD	$3	No	No	
EM	6951	EPD/RHWM SERVICE BUILDING	RTBF	1,440	TBD	TBD	TBD	$2	No	No	
NNSA	7990	DINE COLLEGE OFFICES	DSW	880	TBD	TBD	TBD	$1	No	No	
EM	8340	EPD/ERD SRVC-MNTRNG TF834	EM	282	TBD	TBD	TBD	$0	No	No	
NNSA	8710	VACANT	OTHER	563	TBD	TBD	TBD	$1	No	No	
NNSA	8711	VACANT	OTHER	475	TBD	TBD	TBD	$1	No	No	
NNSA	8806	VACANT	OTHER	509	TBD	TBD	TBD	$1	No	No	
NNSA	8825	SHOWER FACILITY	DNS	370	TBD	TBD	TBD	$1	No	No	
NNSA	8826	SECURITY FITNESS	DNS	943	TBD	TBD	TBD	$1	No	No	
NNSA	196A	EPD/ORAD STORAGE	DSW	112	TBD	TBD	TBD	$0	No	No	
NNSA	297A	PE/CLASS DOC DESTRUCTION	NA	320	TBD	TBD	TBD	$0	No	No	
NNSA	517A	PE/CUSTODIAN LAUNDRY RM	NA	462	TBD	TBD	TBD	$1	No	No	
NNSA	519A	HEAVY EQUIPMENT STORAGE	NA	401	TBD	TBD	TBD	$1	No	No	
EM	612A	EPD/RHWM WASTE TSDF	RTBF	4,283	TBD	TBD	TBD	$6	No	Yes	
NNSA	801B	TECHNICAL MAINTNCE SHOP	SCI	790	TBD	TBD	TBD	$1	No	Yes	
NNSA	802A	VACANT	OTHER	3,264	TBD	TBD	TBD	$5	No	Yes	
NNSA	810A	HE ASSEMBLY	DSW	3,365	TBD	TBD	TBD	$5	No	Yes	
NNSA	812A	FIRING FACILITY	SCI	2,656	TBD	TBD	TBD	$4	No	Yes	
NNSA	812D	LABORATORY	SCI	325	TBD	TBD	TBD	$0	No	Yes	
NNSA	812E	LABORATORY	SCI	1,310	TBD	TBD	TBD	$2	No	No	
NNSA	818A	HE STORAGE FACILITY	SCI	1,244	TBD	TBD	TBD	$2	No	Yes	

Attachment E-1a
Facilities Disposition Plan
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NNSA	818C	HE STORAGE FACILITY	SCI	578	TBD	TBD	TBD	$1	No	Yes	
NNSA	827A	CHEMISTRY BLDG	DSW	4,539	TBD	TBD	TBD	$7	No	Yes	
NNSA	827B	SERVICE SHOP	DSW	871	TBD	TBD	TBD	$1	No	No	
NNSA	827C	CHEM PROCESS FACILITY	DSW	4,579	TBD	TBD	TBD	$7	No	Yes	
NNSA	827D	CHEM PROCESS FACILITY	DSW	4,579	TBD	TBD	TBD	$7	No	Yes	
NNSA	827E	CHEM PROCESS FACILITY	DSW	4,407	TBD	TBD	TBD	$7	No	Yes	
NNSA	828A	OFFICE	OTHER	212	TBD	TBD	TBD	$0	No	No	
NNSA	828B	HE MACHINING-INACTIVE	OTHER	199	TBD	TBD	TBD	$0	No	No	
NNSA	828C	HE MACHINING-INACTIVE	OTHER	258	TBD	TBD	TBD	$0	No	Yes	
NNSA	832A	STORAGE	SCI	540	TBD	TBD	TBD	$1	No	No	
NNSA	832C	STORAGE	SCI	335	TBD	TBD	TBD	$1	No	No	
NNSA	834A	THERMAL TEST FACILITY	DSW	1,694	TBD	TBD	TBD	$3	No	No	
NNSA	834B	VACANT	DSW	751	TBD	TBD	TBD	$1	No	No	
NNSA	834C	VACANT	DSW	751	TBD	TBD	TBD	$1	No	No	
NNSA	834D	VACANT	DSW	1,694	TBD	TBD	TBD	$3	No	No	
NNSA	834E	THERMAL TEST FACILITY	DSW	998	TBD	TBD	TBD	$1	No	No	
NNSA	834F	STORAGE	DSW	649	TBD	TBD	TBD	$1	No	No	
NNSA	834G	HE STORAGE	DSW	527	TBD	TBD	TBD	$1	No	No	
NNSA	834H	THERMAL TEST FACILITY	DSW	998	TBD	TBD	TBD	$1	No	No	
NNSA	834J	VACANT	DSW	511	TBD	TBD	TBD	$1	No	No	
NNSA	834K	PUMP STATION	NA	545	TBD	TBD	TBD	$1	No	No	
NNSA	834L	VACANT	DSW	1,281	TBD	TBD	TBD	$2	No	No	
NNSA	836A	DYNAMIC TEST FACILITY	DSW	2,191	TBD	TBD	TBD	$3	No	No	
NNSA	836B	STORAGE FACILITY	DSW	4,505	TBD	TBD	TBD	$7	No	No	
NNSA	836C	DYNAMIC TEST FACILITY	DSW	2,900	TBD	TBD	TBD	$4	No	No	
NNSA	851A	FIRING FACILITY	SCI	12,996	TBD	TBD	TBD	$19	No	Yes	
NNSA	851B	MACHINE SHOP	SCI	985	TBD	TBD	TBD	$1	No	No	
NNSA	854A	VACANT	OTHER	2,458	TBD	TBD	TBD	$4	No	No	
NNSA	899A	GUN SHOP	DNS	572	TBD	TBD	TBD	$1	No	No	
NNSA	899B	PISTOL RANGE TRNING/OFFICE	DNS	688	TBD	TBD	TBD	$1	No	No	
Total				1,604,455			0	$2,407			

Attachment E-2
New Construction Footprint Added

Funding Source (1)	Project Number (2)	Facility Name (3)	Mission Dependency Program (4)	Funding Type (LI, GPP, IGPP) (5)	Project Area (GSF) (6)	Year of Beneficial Occupancy (7)	Notes (8)
DHS	03-L-GP-DP-01	B368 - BSL 3 Laboratory	DHS	GPP	1,590	FY05	
DP	809-98-002	High Explosive Facility Upgrade (B809B)	DSW	GPP	734	FY04	
DP	809-98-002	HE Facility Upgrade Magazine (OSM 10)	DSW	GPP	104	FY04	
DP	02-D-105	ETCU - (OS321E)	DNS	LI	54	FY05	
DP	LLNL-06-01 LLNL-04-01	*Tritium Facility Modernization	DSW	LI	2,160	FY09	Project almost complete. Occupancy date moved out.
FIRP	LLNL-02-108	Site 300 HE Processing Area Replacement (OSM15)	DSW	GPP	120	FY03	
FIRP	LLNL-03-205	Replacement Building (B142)	DHS	GPP	20,307	FY04	
FIRP	LLNL-04-201	B391 Backlog Reduction	ICF	GPP	320	FY05	
FIRP	LLNL-04-216	B191 - Mission Essential Backlog Reduction	SCI	GPP	1,000	FY05	
FIRP	LLNL-04-206	Replacement Building (B242)	NA	GPP	20,328	FY05	
FIRP	LLNL-05-205	Replacement Building (B583) (formerly 245)	ICF	GPP	21,978	FY06	
FIRP	LL-R-05-02	Utilities & Infrastructure Essential Backlog Reduction	NA	GPP	1,000	FY07	
FIRP	LLNL-06-211	Southwest Replacement Building		GPP	35,000	FY14	Assuming GPP limit is raised
FIRP	LLNL-07-114	Replacement Building		GPP	35,000	FY14	Assuming GPP limit is raised
Indirect	LLNL-02-114	Central Cafeteria (B471)	NA	IGPP	15,827	FY04	
Indirect	LLNL-I-04-01	Replacement Building (B264)	DSW	IGPP	20,461	FY05	
Security	SEC-02-004	East Avenue Security Kiosk	DNS	GPP	49	FY04	
Security	SEC-02-004	Truck Inspection Station - (B610)	DNS	GPP	4,314	FY04	East Avenue Security Upgrade
Security	SEC-02-004	East Avenue Security Upgrade (OS231S)	DNS	GPP	90	FY05	
n/a	n/a	Conversion of Personal Property to Real Property	NA	n/a	442,373	FY02-04	Documented conversion (Camille Yuan-Soo Hoo memo dated 7/7/04) of incorrectly identified Personal Property to correct identification of Real Property.
n/a	n/a	Trailer 4729	DSW	n/a	-37	FY02	Subtracted building plan accounting adjustments
n/a	n/a	Trailer 5926	NA	n/a	2,128	FY04	Converted NNSA trailer to real property separate from global conversion - no growth in site
n/a	n/a	Trailer 2552	DSW	n/a	2,100	FY03	Converted EM trailer to real property separate from global conversion - no growth in site
n/a	n/a	Trailer 3340	SCI	GPP	2,160	FY03	Leased trailer converted to NNSA ownership
n/a	n/a	Key Plan Adjustments from minor modifications	NA	n/a	482	FY03	Key Plan adjustments to correct data varience in drawing files conversion due to outdated systems technology.
n/a	n/a	Key Plan Adjustments from minor modifications	NA	n/a	-12,926	FY05	Key Plan adjustments to correct data varience in drawing files conversion due to annual non-capital alterations.
n/a	n/a	Key Plan Adjustments from minor modifications	NA	n/a	5,777	FY06	Key Plan adjustments to correct drawing files due to internal space audit/re measures against original as-built drawings as well as data varience (5777), OSM58 being identified as real property (61), and personal property construction of 653 (96).
n/a	n/a	**Key Plan Adjustments from minor modifications	NA	n/a	17,525	FY07	Key Plan adjustments to correct drawing files due to internal space audit/re measures against original as-built drawings. Site 300 completed. Working Site 200.
n/a	n/a	**Inherited property from SNL, and Other	N/A	n/a	750	FY07	Security kiosks from SNL on East Avenue, and one trailer at Site 300: 012D, OS012A, OS012B, OS012C, OS601, 8580)
n/a	n/a	No New Construction Identified in FY08		na	0	FY08	
n/a	n/a	No New Construction Identified in FY09		na	0	FY09	
n/a	n/a	No New Construction Identified in FY10		na	0	FY10	
n/a	n/a	No New Construction Identified in FY11		na	0	FY11	
n/a	n/a	No New Construction Identified in FY12		na	0	FY12	
n/a	n/a	No New Construction Identified in FY14		na	0	FY14	
n/a	n/a	No New Construction Identified in FY15		na	0	FY15	
n/a	n/a	No New Construction Identified in FY16		na	0	FY16	
n/a	n/a	No New Construction Identified in FY17		na	0	FY17	
n/a	n/a	No New Construction Identified in FY18		na	0	FY18	
Total					636,540		

Footnotes:
* Changed Year of Beneficial Occupancy
** New Entry

Attachment E-3
FY 2008 Leased Space
LLNL

#	FIMS # (2)	Property Name (3)	Mission Dependency Program (4)	Mission Dependency (5)	# Occupants (6)	Gross Square Feet (7)	Rental Rate per Rentable s.f. (8)	Annual Cost (9)	Lease Type (10)	Lease Term - yrs. (11)	Exp. Month / Year (12)	Renewal Options (13)
1	005	Graham Court	DSW	MD	-	14,288	0.70	$120,019	Contractor	1	Aug-08	N
2	007	*Warehouse	ICF	MD	9	51,936	0.42	$262,285	Contractor	2	Sep-08	N
3	008	**LLNS Offsite Office			7	3,647	1.95	$111,598	Contractor	7	Mar-14	
4	N/A	***American Red Cross, Rockville, MD										

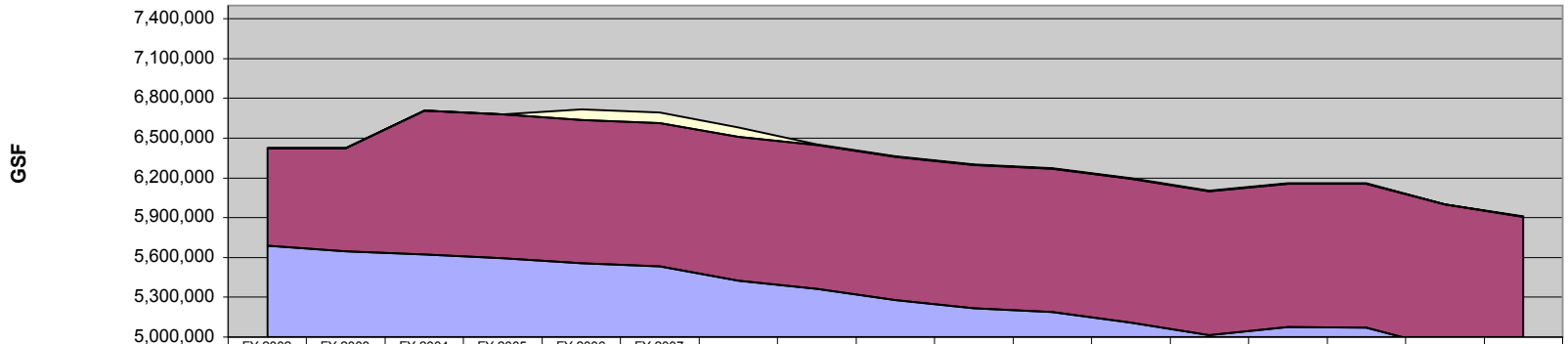
Footnotes:
* The Annual Cost includes an additional monthly operating cost, which is not reflected in the base rental rate.
** The offsite office is not fully built and leased yet. Details still to be worked (FIMS entry, etc). The Annual Cost includes an additional monthly operating cost, which is not reflected in the base rental rate.
*** NNSA and LLNL jointly agreed on this lease for DOE's Dept of Homeland Security. NNSA holds the lease for DHS, however LLNL pays for the lease. Details to be worked on where/how this is reported.

Attachment E-4(a)
Footprint Tracking Summary Spreadsheet
LLNL Footprint Tracking Summary — NNSA

Fiscal Year (1)	Beginning Site Footprint (gsf) (2)	Excess Facilities Footprint Elimination (gsf) (3)	New Construction/ Footprint Added (gsf) (4)	Site Footprint Reduction by FY (gsf) (5)	Footprint "Banked" (gsf) (6)	Waiver/ Transfer (gsf) (7)	"Grandfathered" Footprint Added (gsf) (8)	Cumulative "Grandfathered" Footprint Added (gsf) (8a)	NNSA Site Total Footprint (gsf) (9)	NNSA Leased Space (10)	Weapons Activities Account (gsf) (11)
FY 2002 Actual	5,686,431	-38,308	0	5,648,123	-38,308		738881	738,881	6,387,004		N/A
FY 2003 Actual	5,648,123	-25,982	2,762	5,624,903	-61,528		36829	775,710	6,400,613		N/A
FY 2004 Actual	5,624,903	-70,920	41,335	5,595,318	-91,113		307857	1,083,567	6,678,885		N/A
FY 2005 Actual	5,595,318	-71,402	30,917	5,554,833	-131,598		0	1,083,567	6,638,400		N/A
FY 2006 Actual	5,554,833	-51,473	27,755	5,531,115	-155,316		0	1,083,567	6,614,682	80,764	N/A
FY 2007 Actual	5,531,115	-125,340	19,275	5,425,050	-261,381		0	1,083,567	6,508,617	80,764	95,442
FY 2008	5,425,050	-61,418	0	5,363,632	-322,799		0	1,083,567	6,447,199	69,871	0
FY 2009	5,363,632	-88,972	2,160	5,276,820	-409,611		0	1,083,567	6,360,387	3,647	26,400
FY 2010	5,276,820	-61,035	0	5,215,785	-470,646		0	1,083,567	6,299,352	3,647	35,454
FY 2011	5,215,785	-28,187	0	5,187,598	-498,833		0	1,083,567	6,271,165	3,647	15,053
FY 2012	5,187,598	-77,671	0	5,109,927	-576,504		0	1,083,567	6,193,494	3,647	22,459
FY 2013	5,109,927	-94,279	0	5,015,648	-670,783		0	1,083,567	6,099,215	3,647	75,820
FY 2014	5,015,648	-11,268	70,000	5,074,380	-612,051		0	1,083,567	6,157,947	3,647	11,268
FY 2015	5,074,380	-1,575	0	5,072,805	-613,626		0	1,083,567	6,156,372	3,647	1,575
FY 2016	5,072,805	-157,849	0	4,914,956	-771,475		0	1,083,567	5,998,523	3,647	157,849
FY 2017	4,914,956	-93,169	0	4,821,787	-864,644		0	1,083,567	5,905,354	3,647	32,530
FY 2018	4,821,787	0	0	4,821,787	-864,644		0	1,083,567	5,905,354	3,647	0

Footnote:
TYSP guidance states to enter Weapons Activities Account (gsf) for FY2006-2018. The Primary Mission Dependent Program was a new data field, required to be populated by Nov 3, 2006, therefore, that data exists only for active facilities at begin-FY07.

Attachment E-4(a)
LLNL Space Tracking Summary — NNSA

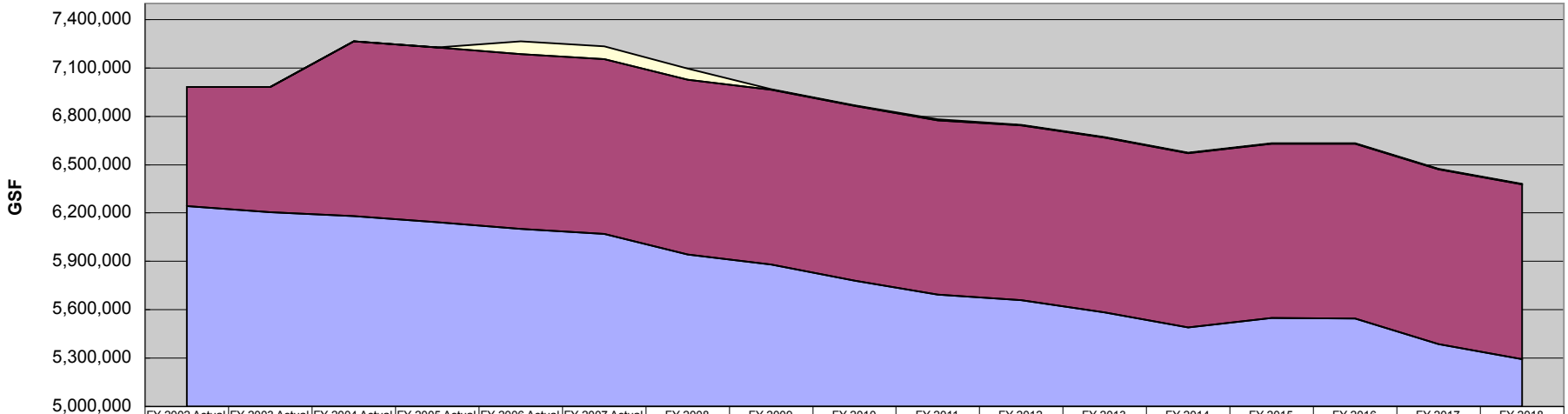


	FY 2002 Actual	FY 2003 Actual	FY 2004 Actual	FY 2005 Actual	FY 2006 Actual	FY 2007 Actual	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
NNSA Leased Space (10)					80,764	80,764	69,871	3,647	3,647	3,647	3,647	3,647	3,647	3,647	3,647	3,647	3,647
Cumulative "Grandfathered" Footprint Added (gsf) (8a)	738,881	775,710	1,083,567	1,083,567	1,083,567	1,083,567	1,083,567	1,083,567	1,083,567	1,083,567	1,083,567	1,083,567	1,083,567	1,083,567	1,083,567	1,083,567	1,083,567
Beginning Site Footprint (gsf) (2)	5,686,431	5,648,123	5,624,903	5,595,318	5,554,833	5,531,115	5,425,050	5,363,632	5,276,820	5,215,785	5,187,598	5,109,927	5,015,648	5,074,380	5,072,805	4,914,956	4,821,787

Attachment E-4 (b)
Footprint Summary Spreadsheet
LLNL Footprint Tracking Summary — Site-Wide (Multi-Program)

Fiscal Year (1)	Beginning Site Footprint (gsf) (2)	Excess Facilities Footprint Elimination (gsf) (3)	New Construction Footprint Added (gsf) (4)	Site Footprint Reduction by FY (5)	Footprint "Banked" (gsf) (6)	Waiver/Transfer (gsf) (7)	"Grandfathered" Footprint Added (gsf) (8)	Cumulative Grandfathered Footprint Added (gsf) (8a)	Site Total Footprint (Multi-Program) (gsf) (9)	Leased Space (10)
FY 2002 Actual	6,243,518	-38,308	0	6,205,210	-38,308		738881	738,881	6,944,091	
FY 2003 Actual	6,205,210	-25,982	2,762	6,181,990	-61,528		36829	775,710	6,957,700	
FY 2004 Actual	6,181,990	-79,042	41,335	6,144,283	-99,235		307857	1,083,567	7,227,850	
FY 2005 Actual	6,144,283	-73,562	30,917	6,101,638	-141,880		0	1,083,567	7,185,205	
FY 2006 Actual	6,101,638	-57,936	27,755	6,071,457	-172,061		0	1,083,567	7,155,024	80,764
FY 2007 Actual	6,071,457	-147,579	19,275	5,943,153	-300,365		0	1,083,567	7,026,720	80,764
FY 2008	5,943,153	-61,418	0	5,881,735	-361,783		0	1,083,567	6,965,302	69,871
FY 2009	5,881,735	-102,419	2,160	5,781,476	-462,042		0	1,083,567	6,865,043	3,647
FY 2010	5,781,476	-88,513	0	5,692,963	-550,555		0	1,083,567	6,776,530	3,647
FY 2011	5,692,963	-32,363	0	5,660,600	-582,918		0	1,083,567	6,744,167	3,647
FY 2012	5,660,600	-77,671	0	5,582,929	-660,589	128,549	0	1,083,567	6,666,496	3,647
FY 2013	5,582,929	-94,279	0	5,488,650	-754,868		0	1,083,567	6,572,217	3,647
FY 2014	5,488,650	-11,268	70,000	5,547,382	-696,136		0	1,083,567	6,630,949	3,647
FY 2015	5,547,382	-1,575	0	5,545,807	-697,711		0	1,083,567	6,629,374	3,647
FY 2016	5,545,807	-157,849	0	5,387,958	-855,560		0	1,083,567	6,471,525	3,647
FY 2017	5,387,958	-93,890	0	5,294,068	-949,450		0	1,083,567	6,377,635	3,647
FY 2018	5,294,068	-9,468	0	5,284,600	-958,918	50000	0	1,083,567	6,368,167	3,647

Attachment E-4(b)
LLNL Footprint Tracking Summary — Site-Wide (Multi-Program)



	FY 2002 Actual	FY 2003 Actual	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
Leased Space (10)					80,764	80,764	69,871	3,647	3,647	3,647	3,647	3,647	3,647	3,647	3,647	3,647	3,647
Cumulative Grandfathered Footprint Added (gsf) (8a)	738,881	775,710	1,083,567	1,083,567	1,083,567	1,083,567	1,083,567	1,083,567	1,083,567	1,083,567	1,083,567	1,083,567	1,083,567	1,083,567	1,083,567	1,083,567	1,083,567
Beginning Site Footprint (gsf) (2)	6,243,518	6,205,210	6,181,990	6,144,283	6,101,638	6,071,457	5,943,153	5,881,735	5,781,476	5,692,963	5,660,600	5,582,929	5,488,650	5,547,382	5,545,807	5,387,958	5,294,068

Attachment F-1
FIRP FY 2003 Legacy Deferred Maintenance Baseline and Projected Deferred Maintenance Reduction from Baseline
NNSA
($000s)

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. **FIRP DEFERRED MAINTENANCE (DM) BASELINE (Excludes Programmatic Real Property or Equipment)**	314,406	291,201	254,963	232,557	211,684	193,427	178,831	165,283	153,952	144,324	134,633	129,889	126,011	122,111	119,673	119,068
2. **DEFERRED MAINTENANCE BASELINE (DM) REDUCTION TOTAL**	43,480	23,205	36,238	22,407	20,873	18,257	14,596	13,548	11,331	9,628	9,691	4,744	3,878	3,899	2,438	605
A. Reduction in DM Baseline (total due to FIRP ONLY) for all F&I	23,452	10,827	30,615	12,740	15,205	16,857	10,441	11,111	9,187	7,076	6,223					
i. Reduction in DM for Mission-Critical F&I (due to FIRP ONLY)				3,276	1,495	4,698	1,733	1,649	1,389	1,150	951					
ii. Reduction in DM for Mission Dependent, Not Critical F&I (due to FIRP ONLY)				6,076	12,021	6,609	8,708	9,462	7,798	5,926	5,272					
iii. Reduction in DM for Not Mission Dependent F&I (due to FIRP ONLY)				3,388	1,689	5,550	-	-	-	-	-					
3. **REPLACEMENT PLANT VALUE (RPV) FOR NNSA FACILITIES & INFRASTRUCTURE**	3,821,792															

Attachment F-2
NNSA Total Deferred Maintenance and Projected Deferred Maintenance Reduction
($000s)

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	85,205	83,888	86,145	91,913	100,045	103,662	100,555	102,012	103,539	103,656	105,803	108,416	109,955	112,353	114,654	117,176
2. ANNUAL PLANNED MAINTENANCE TOTAL	85,205	88,297	86,145	91,913	100,045	103,652	105,274	106,824	108,445	108,634	110,888	113,618	115,257	117,772	120,189	122,833
a. Direct	6,976	8,933	3,007	3,203	3,455	3,545	3,634	3,717	3,799	3,883	3,968	4,055	4,145	4,237	4,331	4,426
b. Indirect	78,229	79,364	83,138	88,710	96,590	100,107	101,640	103,107	104,646	104,751	106,920	109,562	111,112	113,534	115,858	118,407
3. NNSA DEFERRED MAINTENANCE (DM) TOTAL (Excludes Programmatic Real Property or Equipment) *= Inflation Prior Year DM Total + DM New - Prior Year DM Reduction*	314,406	311,636	295,608	301,471	316,543	307,170	300,506	293,279	290,863	292,294	297,274	305,778	313,898	318,377	320,479	325,421
i. Backlog Inflation Rate (%)		2.5%	6.0%	6.5%	7.9%	2.6%	2.5%	2.3%	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%
ii. DM Inflation		7,923	18,823	19,215	23,786	8,230	7,679	6,912	6,452	6,399	6,430	6,540	6,727	6,906	7,004	7,051
iii. DM NEW		13,097	12,014	31,732	29,132	15,735	18,251	19,247	21,861	21,758	25,456	22,209	24,213	22,329	20,306	20,721
A. DM, Mission-Critical F&I ONLY				44,110	41,831	37,245	36,410	35,646	35,396	35,462	36,081	37,766	39,290	40,777	42,022	43,298
B. DM, Mission-Dependent, Not Critical F&I ONLY				245,120	262,524	260,887	256,479	250,545	247,648	247,551	249,878	258,076	264,774	270,943	275,329	279,751
C. DM, Not Mission-Dependent F&I ONLY				12,240	12,189	9,038	7,616	7,088	7,819	9,281	11,316	9,936	9,833	6,657	3,128	2,372
4. DEFERRED MAINTENANCE (DM) REDUCTION TOTAL	43,480	23,790	46,865	45,084	37,846	33,338	32,595	33,386	30,728	26,727	26,906	20,245	22,820	24,755	25,208	22,830
i. Reduction Total attributed to FIRP ONLY	23,452	11,100	33,282	14,750	18,993	21,605	13,716	14,932	12,618	9,932	8,927					
A. Reduction in DM for Mission-Critical F&I				7,621	3,908	7,541	4,113	4,202	3,892	3,343	3,066	1,739	2,226	2,458	2,799	2,861
1. Reduction attributed to FIRP ONLY				3,793	1,867	6,021	2,277	2,216	1,908	1,614	1,364					
B. Reduction in DM for Mission-Dependent, Not Critical F&I				32,656	28,673	18,643	23,730	26,008	23,991	19,889	18,950	11,638	14,894	16,449	18,733	19,145
1. Reduction attributed to FIRP ONLY				7,035	15,016	8,470	11,439	12,716	10,710	8,318	7,563					
C. Reduction in DM for Not Mission-Dependent F&I				4,807	5,265	7,154	4,752	3,176	2,845	3,495	4,890	6,869	5,700	5,848	3,676	824
1. Reduction attributed to FIRP ONLY				3,923	2,109	7,113	-	-	-	-	-					
5. REPLACEMENT PLANT VALUE (RPV) for Facilities and Infrastructure (F&I) *= Inflation of PY RPV + Increase or Decrease due to other causes*	3,821,792	3,958,144	4,269,301	4,651,781	4,917,717	5,005,334	5,081,991	5,155,331	5,232,303	5,237,564	5,345,976	5,478,122	5,555,612	5,676,716	5,792,901	5,920,345
A. RPV for Mission-Critical F&I ONLY				1,383,413	1,493,881	1,532,722	1,577,243	1,586,615	1,621,520	1,657,193	1,690,946	1,719,132	1,756,953	1,795,605	1,835,109	1,875,481
B. RPV for Mission-Dependent, Not Critical F&I				3,169,986	3,324,059	3,361,982	3,403,464	3,477,369	3,446,386	3,515,538	3,568,585	3,688,431	3,768,481	3,851,106	3,935,831	4,022,419
C. RPV for Not Mission-Dependent F&I				98,382	99,777	110,630	101,285	91,348	164,397	64,833	86,444	70,559	30,178	30,004	21,962	22,445
D. RPV Increase from prior year attributed to inflation				277,505	367,025	127,861	125,133	116,886	113,417	115,111	115,226	117,611	120,519	122,223	124,888	127,444
E. RPV Increase / decrease attributed to causes other than inflation (provide separate supporting narrative behind F-2 exhibit)				104,975	(101,089)	(40,244)	(48,476)	(43,546)	(36,445)	(109,849)	(6,815)	14,534	(43,028)	(1,120)	(8,702)	(0)

Facility Condition Index (FCI)	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
FCI TOTAL	8.2%	7.9%	6.9%	6.5%	6.4%	6.1%	5.9%	5.7%	5.6%	5.6%	5.6%	5.6%	5.7%	5.6%	5.5%	5.5%
FCI Mission Critical				3.2%	2.8%	2.4%	2.3%	2.2%	2.2%	2.1%	2.1%	2.2%	2.2%	2.3%	2.3%	2.3%
FCI Mission Dependent, Not Critical				7.7%	7.9%	7.8%	7.5%	7.2%	7.2%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
FCI Not Mission Dependent				12.4%	12.2%	8.2%	7.5%	7.8%	4.8%	14.3%	13.1%	14.1%	32.6%	22.2%	14.2%	10.6%
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	0.92	0.92	0.93	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.95
ACI Mission Critical				0.97	0.97	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
ACI Mission Dependent, Not Critical				0.92	0.92	0.92	0.92	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
ACI Not Mission Dependent				0.88	0.88	0.92	0.92	0.92	0.95	0.86	0.87	0.86	0.67	0.78	0.86	0.89

Footnote: Calculations do not include cumulative RIK, per FY09 TYSP guidance. FY06 DM total corrected as the database for the Mission Dependent, Not Critical deducted the cumulative RIK twice resulting in an understatement of the DM backlog for Mission Dependent, Not Critical. Refer to lines 3, 3iii, and 3A under column FY2006.