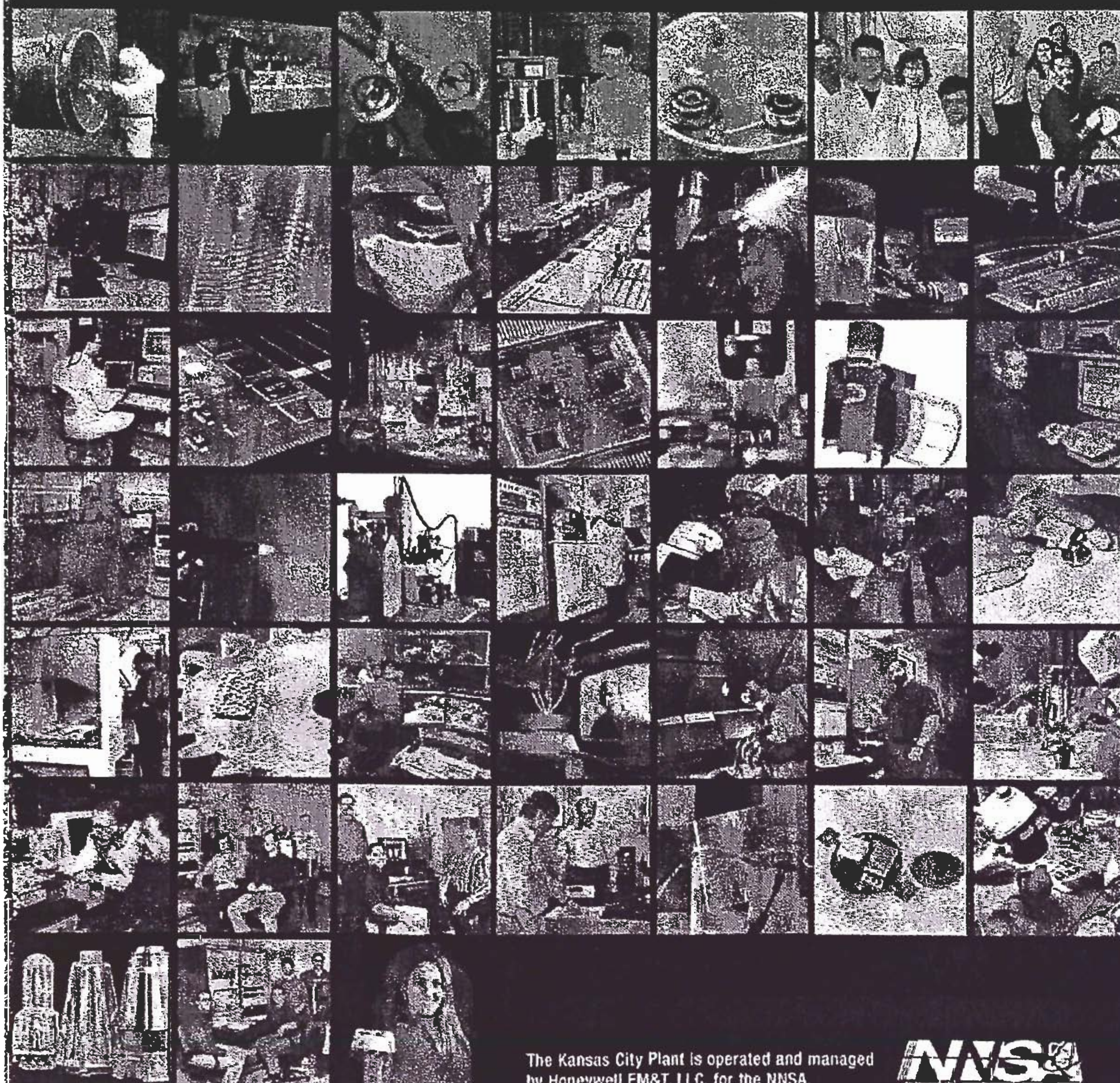
Kansas City Plant
National Security Asset

FY2008
KCP Ten-Year Site Plan



The Kansas City Plant is operated and managed by Honeywell FM&T, LLC, for the NNSA.

NNSA
National Nuclear Security Administration

FY2008
Kansas City Plant
Ten-Year Site Plan

Prepared by
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March 16, 2007

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Points of Contact

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Preface

This Ten-Year Site Plan (TYSP) for the Kansas City Plant (KCP) has been prepared in accordance with the TYSP Guidance for Fiscal Year 2008 – 2017, dated December 2006. It contains the sections in the order specified in the guidance in which the requirements have been fully addressed in accordance with the guidance document.

This TYSP contains the plans and strategies in place to manage the facilities and infrastructure with available funds to support all assigned missions now and throughout the next ten years. Questions about the contents of this TYSP should be directed to the Points of Contact listed on page 7 of this document.

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List of Abbreviations (Cont.)

IPSS	–	Integrated Programmatic Scheduling System
IRS	–	Internal Revenue Service
IT	–	Information Technology
IWPF	–	Industrial Wastewater Pretreatment Facility
JSOC	–	Joint Special Operations Command
KAFB	–	Kirtland Air Force Base
KCP	–	Kansas City Plant
KCP&L	–	Kansas City Power and Light
KCRIMS	–	Kansas City Responsive Infrastructure Manufacturing & Sourcing
KCSO	–	Kansas City Site Office
KO	–	Kirtland Operations
KV	–	kilovolt
LANL	–	Los Alamos National Laboratory
LEP	–	Life Extension Program
LI	–	Line Item
LLNL	–	Lawrence Livermore National Laboratory
LTS	–	Long Term Stewardship (Environmental)
M&O	–	Management and Operating (contractors)
MDNR	–	Missouri Department of Natural Resources
MEMF	–	Mobile Electronic Maintenance Facility
NEPA	–	National Environmental Policy Act
NNR	–	Nonnuclear Readiness
NNSA	–	National Nuclear Security Administration
NPDES	–	National Pollutant Discharge Elimination System
NPR	–	Nuclear Posture Review
NSMC	–	National Secure Manufacturing Center
NWC	–	Nuclear Weapons Complex
OMB	–	Office of Management and Budget
OPC	–	Other Project Costs
OSF	–	Other Structure and Facility
OST	–	Office of Secure Transportation
P&PD	–	Production and Planning Directive
PDRD	–	Plant-Directed Research and Development
PE & D	–	Project Engineering and Design
RAMP	–	Roof Asset Management Program
RCRA	–	Resource Conservation and Recovery Act
RI	–	Responsive Infrastructure
RIK	–	Replacement-In-Kind
RPV	–	Replacement Plant Value
RRW	–	Reliable Replacement Warhead
RTBF	–	Readiness in Technical Base and Facilities
SCA	–	Site Condition Assessment
SCMC	–	Supply Chain Management Center
SEAB	–	Secretary of Energy Advisory Board
SNL	–	Sandia National Laboratory
SPFPA	–	Security Police and Fire Protection Association (Union)

List of Abbreviations

ADAPT	–	Advanced Design and Production Technologies
AEC	–	Atomic Energy Commission
AF&F	–	Arming, Fuzing, and Firing
AHU	–	Air Handling Unit
ATECC	–	Alternate Transportation Emergency Control Center
ATTC	–	Albuquerque Transportation & Technology Center
AUI	–	Asset Utilization Index
BCE	–	basic capital expense
BFC	–	Bannister Federal Complex
BMP	–	best management practices
BTA	–	Building Technology Associates, Inc.
CAIS	–	Condition Assessment Information System
CAS	–	Central Alarm System
CAS	–	Condition Assessment Survey
CBDPP	–	Chronic Beryllium Disease Prevention Program
COTS	–	Commercial-Off-The-Shelf
CRADA	–	Cooperative Research and Development Agreement
CSA	–	Canned Sub-Assembly
DBT	–	Design Basis Threat
DDC	–	Direct Digital Controls
DM	–	Deferred Maintenance
DoD	–	Department of Defense
DSA	–	Detonator Sensing Assembly
DSW	–	Directed Stockpile Work
DTRA	–	Defense Threat Reduction Agency
EM	–	Environmental Management
ENS	–	Emergency Notification System
EPH	–	East Powerhouse
ES	–	Enhanced Surveillance
ES&H	–	Environmental, Safety and Health
ESC	–	Enhanced Surveillance Campaigns
F&I	–	Facilities & Infrastructure
FBI	–	Federal Bureau of Investigation
FCI	–	Facility Condition Index
FEMP	–	Federal Energy Management Program
FIMS	–	Facilities Information Management System
FIRP	–	Facilities Infrastructure Recapitalization Program
FPU	–	First Production Unit
FYNSP	–	Future Years Nuclear Security Program
GPP	–	General Plant Projects
GSA	–	General Services Administration
HERT	–	High Explosive Radio Telemetry
HVAC	–	Heating, Ventilating & Air Conditioning
ICPP	–	Integrated Construction Program Plan
ICSI	–	Integrated Cyber Security Initiative

List of Abbreviations (Cont.)

IPSS	–	Integrated Programmatic Scheduling System
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MDNR	–	Missouri Department of Natural Resources
MEMF	–	Mobile Electronic Maintenance Facility
NEPA	–	National Environmental Policy Act
NNR	–	Nonnuclear Readiness
NNSA	–	National Nuclear Security Administration
NPDES	–	National Pollutant Discharge Elimination System
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NWC	–	Nuclear Weapons Complex
OMB	–	Office of Management and Budget
OPC	–	Other Project Costs
OSF	–	Other Structure and Facility
OST	–	Office of Secure Transportation
P&PD	–	Production and Planning Directive
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PE & D	–	Project Engineering and Design
RAMP	–	Roof Asset Management Program
RCRA	–	Resource Conservation and Recovery Act
RI	–	Responsive Infrastructure
RIK	–	Replacement-In-Kind
RPV	–	Replacement Plant Value
RRW	–	Reliable Replacement Warhead
RTBF	–	Readiness in Technical Base and Facilities
SCA	–	Site Condition Assessment
SCMC	–	Supply Chain Management Center
SEAB	–	Secretary of Energy Advisory Board
SNL	–	Sandia National Laboratory
SPFPA	–	Security Police and Fire Protection Association (Union)

List of Abbreviations (Cont.)

SPMD	–	semi-permeable membrane device
TAR	–	Targeted Asset Review
TEC	–	Total Estimated Cost
TECC	–	Transportation Emergency Control Center
TRALOC	–	Training Logistics Command
TSCM	–	technical surveillance countermeasure
TYRT	–	DOE Three Year Rolling Timeline
TYSP	–	Ten-Year Site Plan
UMP	–	Utilities Management Plan
VDC	–	Volts Direct Current
VOC	–	Volatile Organic Compound
WCI	–	Weapons Complex Integration
WFO	–	Work For Others
WPH	–	West Powerhouse
WR	–	War Reserve

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Executive Summary

For more than 50 years, the National Nuclear Security Administration's Kansas City Plant (KCP) has served as one of our nation's foremost national security assets. Managed and operated by Honeywell Federal Manufacturing & Technologies LLC, the Kansas City Plant manufactures a wide array of sophisticated, nonnuclear mechanical, electronic and engineered material components for national defense systems, accounting for 85 percent of the components used in nuclear weapons.

With operations in Missouri, New Mexico and Arkansas, Kansas City Plant customers include the NNSA, DOE, national labs, DoD, other government agencies, United Kingdom and industry partners. The Kansas City Plant is recognized for its innovation, quality and safety performance. We support 40 technically demanding product families, including arming devices, microcircuits, polymers, plastics, and radars. We engage 90 advanced technologies, including concurrent engineering environments, laminates and optics.

Our unique expertise extends beyond the nuclear weapons complex to benefit national security, enhance the global competitiveness of U.S. businesses, and promote nonproliferation. Our Work for Others (WFO) program helps develop new processes and products for other governmental agencies, while defraying NNSA costs.

This KCP Ten-Year Site Plan (TYSP) contains the status and planning of facilities, infrastructure, capital, construction, and capacity requirements for the KCP and Kirtland Operations (KO). The plans and cost projections in this TYSP reflect a balanced approach by the KCP in support of NNSA's Strategic Plan, the DOE Three Year Rolling Timeline (TYRT), and NNSA's Complex 2030.

Introduction of Complex 2030 Transformation

The current state of the KCP calls for the most drastic change experienced since its inception in 1949. As part of the NNSA Complex 2030, the KCP is the first to embrace the changes proposed by this new NNSA strategy. The major change being proposed for the KCP, relative to the TYSP, is the construction and relocation into a new facility. This new facility will be "right-sized" to meet the future NNSA mission and will offer the advantages of flexibility and efficiency not currently available in the existing building. The KCP should be fully occupying this new building in late 2012 and it will serve to meet the NNSA mission at the KCP for the foreseeable future.

This new building is part of the Kansas City Responsive Infrastructure Manufacturing & Sourcing (KCRIMS) program developed to implement Complex 2030 transformation for the KCP.

Because of the KCRIMS proposal, the whole state of funding and project planning is based on only sustaining the existing building infrastructure until operations are relocated to the new building. This philosophy is reflected throughout this TYSP as future minimal capital investment will be made in the existing facility. Between FY2007 and FY2012, the current facility will continue to support the NNSA mission.

Current State (FY2008)

The KCP is currently meeting all of its stated mission requirements. Product quality remains excellent with a total of 99.9% of product shipped on schedule. Planned Life Extension Programs (LEPs) will drive an increase in manufacturing workload. Critical skills are in place to support this increase.

KCP facilities, utilities, site services, equipment, and personnel are adequate for the NNSA-assigned mission. Existing floor space will continue to be used primarily for manufacturing, storage and office activities in support of this mission. Facility modifications required to support the current LEP workload have been completed, or should be minimal in the future. Facilities and infrastructure related Line Item and General Plant Projects have been deferred or postponed indefinitely to offset the cost of the new facility.

The latest capacity analysis using, as its basis, the FY2009 budget forecast shows that existing facilities are adequate for the current workload (FY2007) and capacity is exceeded, on a one-shift basis, in only three manufacturing areas.

The KCP has achieved its objective of establishing a process-based manufacturing environment, to the extent possible at this time. The current footprint of the KCP is not expected to change prior to relocating to a new facility under the KCRIMS proposal. In addition, no new facilities for the support of any future mission assignments are being considered for the current site. Based on the decisions currently being made, in light of the KCRIMS program, neither the long-term viability of the infrastructure systems or deferred maintenance (DM) reduction is sufficient justification for recapitalization projects.

FIRP was used to effectively buy down the FY2003 DM backlog until FY2006 when funding was cut and $4.4 million was returned in line with the Transformation planning. The KCP infrastructure sustainment management process has been modified appropriately to provide for management of KCP assets during the transformation period (FY2007 – FY2012). The current DM forecast reflects anticipated future growth based on the infrastructure maintenance posture that is in place as a result of the KCRIMS initiative. This forecast will not be updated until the KCP Transformation is complete. At the completion of transformation, maintenance requirements for the new facility will be minimal and items previously considered deferred will no longer be required. Thus, $230 million of DM will be satisfied. The DM will be $0 for FY2013 and beyond for the existing KCP facility, as it is decommissioned.

Condition of mission critical facilities is currently adequate for LEP completion and mission critical facilities will be maintained as needed for mission support and allowed to decline otherwise until those facilities are vacated. Safety and security issues will be given priority and remedied in a timely fashion.

The environmental restoration cleanup projects funded by Environmental Management (EM) have been completed. Long Term Stewardship is required at the existing KCP site to ensure that all remediation activities continue to be effective and protective of human health and the environment following transition out of the DOE EM program. The NA-56 funded LTS program must continue in order to meet the regulatory requirements of KCP's Resource

Conservation and Recovery Act (RCRA) Part B Post Closure Permit with the Missouri Department of Natural Resources (MDNR).

The Weapons Complex Integration (WCI) RTBF recasting process resulted in 11 KCP buildings being designated mission critical; 13 mission dependent, not critical; and 14 non-mission dependent. At Kirtland Operations (KO) in New Mexico, nine buildings were designated mission critical and 17 mission dependent, not critical.

Future State (FY2017)

Complex 2030 established the vision for transforming the nuclear weapons complex into a smaller, more efficient, more responsive enterprise. KCRIMS is the KCP program developed to implement this vision for the manufacture and supply of nonnuclear components and materials required in nuclear weapons to maintain the US nuclear deterrence. KCRIMS proposes transforming KCP business processes, sourcing of selected products and services and relocation/consolidation of operations into new smaller modern facilities by 2012. This state-of-the-art production facility will provide the flexibility needed to meet the changing requirements of the Nuclear Weapons Complex (NWC), thus establishing the responsive infrastructure essential to the future NNSA mission.

The design and infrastructure of the new building will support the design requirements of the LEPs, the Reliable Replacement Warhead (RRW), and other future weapons programs. This new building will offer more operational efficiency and also provide the flexibility necessary to quickly meet changing production requirements. The vision is of a secure plant with facilities and infrastructure in excellent condition optimized to provide the necessary manufacturing environment without the burden of maintaining excess capacity and obsolete capabilities.

Work For Others will continue to be part of the overall KCP business model. This program will continue to be successful because of the critical need for secure engineering and manufacturing services that the KCP provides. In addition, WFO helps cover the NNSA fixed infrastructure costs and share best commercial practices.

Kirtland Operations (KO), independently and not related to KCRIMS, will also be consolidated along with the Office of Secure Transportation (OST) to new modern facilities within the Albuquerque Transportation & Technology Center (ATTC) to be constructed by the GSA with completion in FY2009.

The physical effect of KCRIMS will be fully realized by 2017. However, the KCP will continue to evolve and always strive to exceed the expectations set by the NNSA. In 2017, the KCP will be reaping the benefits of the Transformation effort and will have the ability to deliver a wide diverse set of products faster and at less cost than ever before.

Transition and Transformation from Current State to Future State (FY2017)

The KCRIMS transformation utilizes three interrelated strategic thrust areas for change. These include: strategic sourcing and sizing; business excellence facilitated by reduced operating requirements; and a new modern facility sized for the future NNSA mission. This is expected to reduce the operational footprint of the non-nuclear component production by two-thirds (approximately two million square feet).

The new facility for the KCP will be completed in late 2010 and become fully operational in late 2012. The infrastructure and operations in the existing building will only be sustained until 2012. The existing building will be sustained in a viable condition until 2015, after which the property will be excess to the NNSA and final disposition will be provided under separate funding authority.

The KCP, in concurrence with the Kansas City Site Office (KCSO), has developed a "Pause Plan", whereby facility projects originally to be funded as Line Item projects, General Plan Projects (GPP), and Facilities Infrastructure Recapitalization Program (FIRP) projects are being "paused" (that is deferred or postponed indefinitely) rather than "cancelled". This means that a majority of the facility projects have been stopped, with a final determination being made on rescoping, rescheduling, or canceling these projects once the direction for the Transformation plan is established in the next year. As a result of this posture, the KCP will be relying primarily on RTBF funding to sustain operations; as no projects requiring GPP or FIRP funding are planned. Facilities and infrastructure projects will focus on sustaining Powerhouse central systems, roofing systems, environmental remediation systems, structural/seismic systems and safety/code compliance systems with a run-to-failure approach balanced by LEP program completion requirements for the remaining plant equipment/systems. Projects will be developed to keep critical departments operational but will shift from proactive and long-term in nature to a more reactive short-term response driven by immediate production needs.

No further consolidation of manufacturing areas is planned. Manufacturing capabilities will remain in place to support the sourcing decisions from the KCRIMS effort. Because of the available capacity in the existing facilities, it is not anticipated that the additional work required for build-ahead or requalification will cause any major capacity issues. This specific impact will become more evident as the KCRIMS relocation planning matures. Additional capacity could be made available in certain areas as the sourcing efforts are implemented. The workload/capacity issue will continue to be closely monitored to ensure that the sourcing and relocation transition does not negatively impact production schedules.

During transformation, maintenance will be performed at both sites concurrently; in the existing facility to support LEP production requirements, meet safety and code compliance, and ensure central plant systems reliability. Other non-critical equipment and systems will be evaluated and maintenance support levels will be adjusted to sustain equipment life through LEP production at the existing facility. It is anticipated that preventive maintenance activities will be reduced by 15% – 25% as the run-to-failure philosophy is adopted. During the 2012-2015 timeframe, maintenance support will shift to a "cold shutdown" state in the existing facility and full support of production in the new facility. In the new facility, central systems and equipment needed to support future NNSA missions will be maintained for life cycle management, much as they are today.

In light of the proposal for KCRIMS, options are being studied for the disposition of the existing building. In that event, it is envisioned that normal asset disposition processes and studies used by the General Services Administration (GSA) will be employed for the facility.

FY2008

Kansas City Plant

Ten-Year Site Plan

1.0 Introduction

1.1 Overview

The "Complex 2030 Planning Scenario" established the vision for transforming the nuclear weapons complex into a smaller, more efficient, and more responsive enterprise. KCRIMS is the KCP program developed to implement this vision for nonnuclear production. It proposes transforming KCP business processes, sourcing of selected products and services and relocation/consolidation of operations into new smaller modern facilities by 2012. This FY2008 TYSP introduces the strategy and planning currently in development that will transform the KCP into the non-nuclear production operation supporting Complex 2030.

In a separate action, not related to KCRIMS, Kirtland Operations (KO) will also be consolidated along with the Office of Secure Transportation (OST) to new modern facilities within the Albuquerque Transportation & Technology Center (ATTC) to be constructed by the GSA with completion in FY2009.

This TYSP describes the current situation, conditions and planning in place for the existing facilities and infrastructure as well as the plans and strategies that will be used during the transformation phase.

Actions necessary to sustain the production infrastructure and to ensure the vitality and readiness of the KCP and KO through the ten-year TYSP planning window are described herein. The current status of facilities, infrastructure, capacity, capital, and construction as well as the progress and planning to meet the NNSA corporate performance goals for deferred maintenance reduction are discussed. The plan defines 2017 needs based on mission and workload estimates, and on projected advancements in technologies and applications. The TYSP also addresses gaps that must be closed to maintain readiness during the transformation phase and while responding to anticipated increases in workload. The plans and cost projections in this TYSP reflect a balanced approach by the KCP in support of NNSA's Strategic Plan, the DOE Three Year Rolling Timeline (TYRT), and NNSA's Complex 2030.

1.2 Assumptions

The plans and data provided in this TYSP are consistent with the references identified in the FY2008-2017 TYSP Guidance provided by the NNSA in December 2006. Any deviations from these references are cited in the text. In addition, the key assumptions underlying the programmatic, budget and planning assumptions and constraints contained in this TYSP are as follows:

- Budget Constraints: The NNSA Facilities and Infrastructure Cost Projections (provided as Attachment A) adhere to the budget targets established in the FYNSP. In addition, the data presented in Attachments A-1 and A-2 – Line Item Projects for the KCP, conform to the budget targets provided in the Integrated Construction Program Plan (ICPP), with the exceptions as noted to show proposed Line Items.

- Transformation: The new facility for the KCP will be completed in late 2010 and become fully operational in late 2012. The infrastructure and operations in the existing building will only be sustained until 2012. The existing building will be maintained in a capable state until 2015 (at the latest), after which the property will be excess to NNSA and final disposition will be provided under separate funding authority.

- Security: The KCP will transition to a Site Specific oversight model, which is tailored towards an industrial security program based upon its missions.

- Directed Stockpile Work: Current issues of Production Control Documents for each weapon in the enduring stockpile were issued into the Integrated Programmatic Scheduling System (IPSS) in accordance with the Nuclear Weapons Production and Planning Directive (P&PD), 2007-0, dated January 2007. This is the basis for the workload assumptions used in this document.

- Environment, Safety and Health: The KCP continues to operate within the established thresholds for Energetic Material, Radiological Material, and Hazardous Chemicals and in compliance with the approved operating requirements. In addition, the KCP will continue the transition to an industrial model.

- Environmental Long Term Stewardship (LTS): The Environmental LTS program is the responsibility of NNSA's Office of Environmental Projects and Operations, NA-56, in FY2007 and beyond. It is believed that full target funding in the amount of $1.7 million for FY2007 will be received as requested in the approved Annual Work Plan. Outyear funding amounts are listed in the project closeout and transition plan.

- Kirtland Operations: Kirtland Operations' activities located in Albuquerque will be consolidated along with the Office of Secure Transportation (OST) within the Albuquerque Transportation & Technology Center (ATTC) to be constructed by a private developer and leased by the GSA. Construction will be completed by late FY2009. OST will have primary site responsibility for the ATTC. NNSA has identified a continuing need for the NC-135 site to support other critical missions needing access to the flight line. NNSA is working with Air Force representatives to retain the property to support these programs.

1.3 Current Situation

The KCP, including property, facilities, equipment and people located in Missouri, New Mexico, and Arkansas, is a NNSA security asset. The plant produces, maintains, and ensures the safety and reliability of 85% of all components in the nuclear weapons stockpile. Current employment is approximately 2,800 people.

The physical location of the Kansas City site is on 136 acres of a 300-acre federal complex located within the city limits, twelve miles south of downtown Kansas City, Missouri. The plant shares the site with other federal agencies including the General Services Administration (GSA) and their tenants. The plant occupies 3.1 million square feet of floor space, of which 3.0 million square feet is designated as a limited/exclusion security area.

The Kirtland Operations (KO) provides engineering and technical support and services to the NNSA, the national laboratories, and other customers that complement the NNSA mission. KO operates and manages three separate sites located in Albuquerque, New Mexico: 18.2 fenced acres owned by the U.S. Air Force and occupied under permit to the NNSA, the leased Craddock facility, and the Air Park facility which is also leased. In addition, KO operates and manages a small leased facility located in Los Alamos, New Mexico, for support to Los Alamos National Laboratory. The current employment at KO is approximately 300 people. There are additional locations where KO provides programmatic support but whose facilities are not managed by KO. These locations include the Office of Secure Transportation's (OST) Mobile Electronic Maintenance Facility (MEMF), located in Albuquerque, the OST's Training Logistics Command at Fort Chaffee, Arkansas, and the OST's New Mexico Relay Station.

The KCP is generally in good condition, however, it offers too much manufacturing capacity and is too costly to operate in support of the current and projected NWC mission and reduced weapons stockpile. RTBF-funded projects ensure that the right facilities and infrastructure are in place to operate the physical infrastructure and facilities in a safe, secure, reliable and "ready for operations" manner. RTBF generally includes the purchase of general-purpose equipment and minor expense funded projects.

The KCP is now preparing to meet the NWC's future needs and their new Strategic Triad Model. One of the legs of the new triad is "Responsive Infrastructure". A transformation of the KCP facility is necessary to prepare for the next generation of weapons production. This includes a new smaller, state-of-the-art production facility with significantly lower operating costs. This facility will provide rapid reconfiguration of production lines to meet the changing requirements of the NWC, thus establishing a responsive infrastructure.

The KCP internal name for this transformation program is "Kansas City Responsive Infrastructure Manufacturing and Sourcing" or KCRIMS. The proposed transformation utilizes the following three interrelated strategic thrust areas for change:

- Strategic Sourcing and Sizing
- Business Excellence Facilitated by Reduced Operating Requirements
- New Modern Facility Sized for the Future NNSA Mission by 2012

The new facility will be the most dramatic result of this strategy and the current plan is for the existing building to remain operational through 2012. The design and infrastructure of the new building will support the LEPs, the RRW and other future weapons designs. This new building will not only be much cheaper to operate, but will also provide the flexibility necessary to quickly meet changing production requirements.

The existing building would remain viable until 2015, at which time it would no longer be the responsibility of the RTBF program.

Execution of these plans is expected to reduce the operational footprint of the non-nuclear component production mission by two-thirds (two million square feet). The transformation aligns with the NNSA's vision presented in *Complex 2030 – An Infrastructure Planning Scenario of a Nuclear Weapons Complex Able to Meet the Threats of the 21st Century.*

During the transformation phase, until 2012, all facilities and infrastructure related Line Item and General Plant Projects have been deferred/postponed indefinitely and recapitalization funding is being eliminated. The KCP infrastructure sustainment management process has been revised to provide for management of KCP assets during this period. Facilities and infrastructure projects will focus on sustaining Powerhouse central systems, roofing systems, environmental remediation systems, structural/seismic systems and safety/code compliance systems with a run-to-failure approach balanced by LEP program completion requirements for the remaining plant equipment/systems.

1.4 Changes from Prior Year TYSP

The decision to go forward with a new building has not been officially given, but current momentum around the desire to get out of the existing facility has significantly impacted the projects being planned and executed. The KCP, in concurrence with the KCSO, has developed a Pause Plan, whereby facility projects originally to be funded as Line Items, General Plan Projects (GPP), and Facilities Infrastructure Recapitalization Program (FIRP) will be "paused" (that is deferred or postponed indefinitely) rather than "cancelled" until the new facility is established. This means that a majority of the facility projects were stopped; with a final determination being made on rescoping, rescheduling, or canceling these projects once the direction for the Transformation plan is established in the next year. As a result of this posture, the KCP will be relying primarily on RTBF funding to sustain operations; as no projects requiring GPP or FIRP funding will be executed. Historically, the primary focus around the development of projects has been to keep the production capabilities viable for the long term. Since the onset of FIRP, additional emphasis on reducing deferred maintenance has also influenced which projects were funded. Based on the decisions currently being made, neither the long-term viability of the infrastructure systems or deferred maintenance reductions are sufficient justification for projects. The focus has shifted to executing projects that address code compliance issues, safety issues, preserve the central infrastructure systems, or maintain the integrity of the building envelope. Projects will be developed to keep critical departments operational but will shift from proactive and long-term in nature to a more reactive short-term response as driven by an immediate need.

The adoption of this strategy actually began in FY2005 with the FIRP plating building HVAC project and D/26 therminol system project being put "on-hold". To date, approximately $40 million of FIRP projects, $4.5 million of RTBF, and $400,000 of basic capital expense (BCE) projects have either been canceled or significantly delayed.

The effects of this new philosophy can be seen in Attachments A-1, A-2, A-3, and A-4. Those projects highlighted in yellow in all of these attachments have been delayed. As stated above under Budget Constraints in Section 1.2 – Assumptions, Line Item construction projects are consistent with the latest NNSA ICPP, with exceptions as noted to show proposed Line Items. The following changes are from the FY2007 TYSP:

- The Gas Transfer Capacity Expansion project has been completed and is in the process of being closed out. The Consolidate and Renovate Computing Facilities and Replace Main Switchgear (Design) projects have both been delayed as they will not be currently executed under the Pause Plan. These changes are shown in Attachment A-1.

- A new Line Item, "KCRIMS Facility" is now shown in Attachment A-2. The costs shown are only for the acquisition of the new building and do not include any equipment relocation or procurement costs. Also, any disposition cost associated with the existing building is not included.

- Three proposed Line Items previously shown: Facilities and Equipment for Responsive Infrastructure, Specialty Materials Production Facility, and Replace Main Switchgear have all been delayed.

- Under the current planning, the KCP will not receive any FIRP funding after FY2007. Because of this, the projects beyond then shown in Attachment A-4 are not planned to be completed.

In addition to the above changes, compliance with the recently enacted DOE 10 CFR Part 851 Worker Safety and Health Program; Final Rule, which becomes effective February 9, 2007, creates uncertainties around legacy facility infrastructure needs. A compliance gap analysis has been completed. Projects are on record that will address some of the findings of this analysis. Working with KCSO, equivalencies or variances will be requested and projects will be prepared as needed to address issues.

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2.0 Site Description

2.1 General Site Description

2.1.1 Kansas City Plant (KCP)

The KCP is situated on approximately 136.1 acres of the approximately 300-acre Bannister Federal Complex, located 12 miles south of downtown, within the city limits of Kansas City, Missouri. The plant shares the site with other federal agencies. In contrast to some other NNSA plants, the KCP resides on a very compact, highly developed site. Low hills nearly encircle the plant, which is situated in the Blue River Valley approximately 800 feet above sea level. A 500-year flood level protection system protects the federal complex.

The area is zoned for heavy industry with the surrounding area characterized by single and multiple family dwellings, commercial establishments, industrial districts and public use lands. Because of these restrictions, there are no long-range plans to change the boundaries of the site.

Two four-lane city streets adequately serve the site: Troost Avenue on the west and Bannister Road on the south. These city streets provide excellent access to nearby interstate highways and housing communities. The Kansas City metropolitan area has an excellent pool of high-tech labor.

The KCP operates two powerhouses on site. The West Powerhouse produces steam, compressed air and chilled water for environmental and process control in support of the plant mission. The East Powerhouse produces chilled water. These utilities are delivered throughout the Bannister Federal Complex to the GSA, their various tenants who share the main building, and several others buildings on the site. Only electrical service is distributed to the (partially vacant) Internal Revenue Service (IRS) building at the eastern side of the site.

The KCP has two primary energy needs: electricity and boiler fuel (natural gas and fuel oil). The Kansas City Power and Light Company provides electricity. Natural gas is the primary fuel and is purchased through the DoD nation-wide contract. It is then transmitted to the KCP through local transmission lines. Fuel oil, drawn from on-site storage tanks is used as a backup boiler fuel for periods when natural gas is not available. Various commercial suppliers provide fuel oil when needed and on a competitive bid basis. Water is supplied by the city of Kansas City, Missouri.

The KCP portion of the Federal Complex consists of three primary buildings in generally good condition. The large Main Manufacturing Building, (building #1), constructed in 1943; the Manufacturing Support Building, (building #13), constructed in 1957; and Building 92, constructed in 1985.

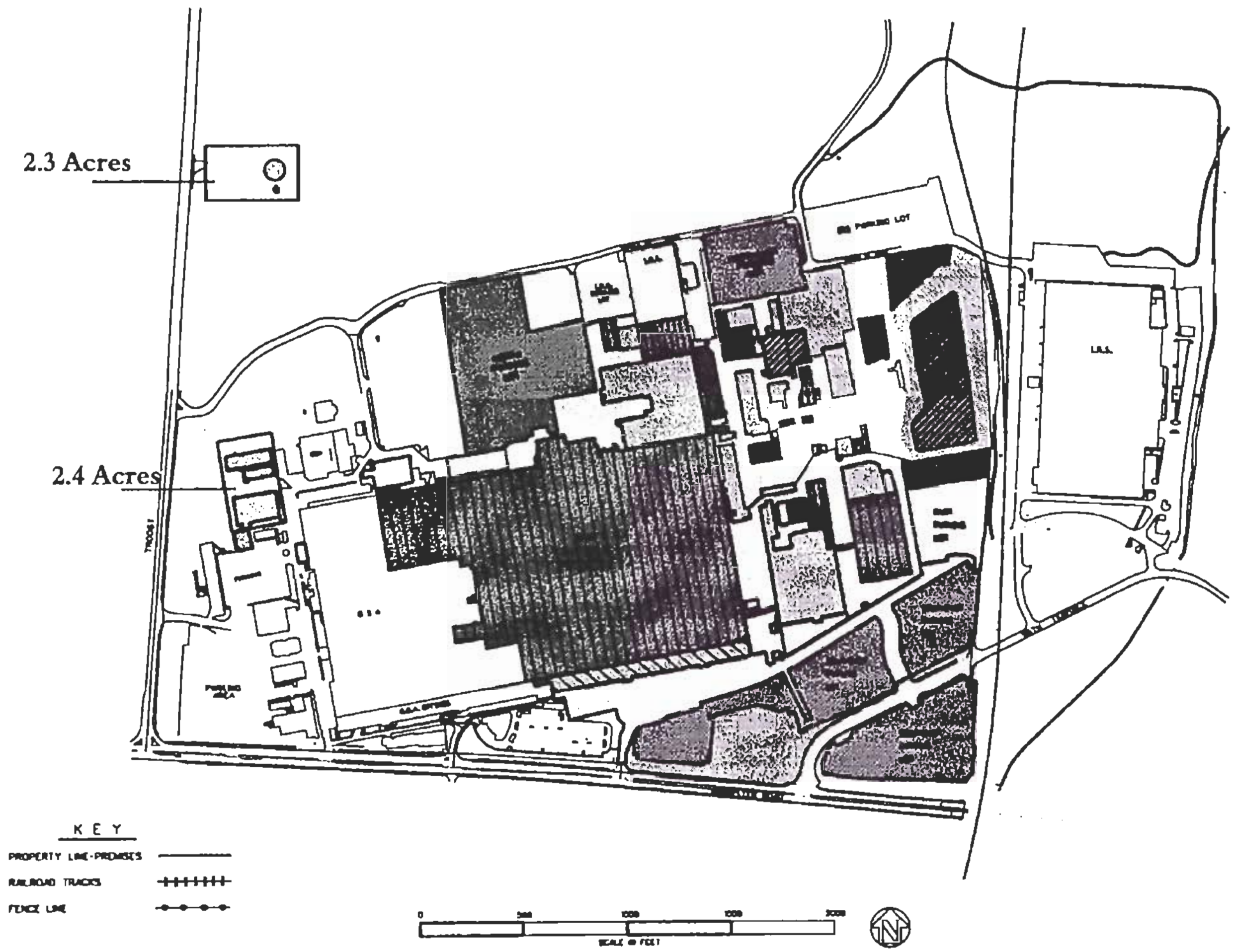
The NNSA and the General Services Administration (GSA) share the 2.6 million square foot Main Manufacturing Building. Of that, the NNSA has control of, or permit to, approximately 2 million square feet of that space. There are approximately 1.1 million square feet of space within the additional buildings, for an approximate total of 3.1 million square feet of space.

2.1.2 Kirtland Operations (KO)

The KO is located on 18.2 fenced acres of Kirtland Air Force Base (KAFB), adjacent to the city of Albuquerque, New Mexico, where it has resided since 1964. Officially designated the NC-135 Site, the area consists of 36 buildings and trailers totaling approximately 63,000 square feet. KO occupies the NC-135 Site under the current land use permit, number O-KI-98-0013, granted to the NNSA by the Department of the Air Force for a term of five years beginning October 1, 1998, and ending September 30, 2003. The permit has been amended to extend the term for another five years beginning October 1, 2003 and ending September 30, 2008. KO also leases approximately 35,000 square feet in the Craddock facility and 10,000 square feet in the Air Park facility, both near the air base, plus an additional 2,800 square feet in Los Alamos, New Mexico.

2.2 Site Maps

Figures 1 and 2, on the following pages, show the current KCP land utilization and facility status, respectively. The KO site layout follows in Figure 3.



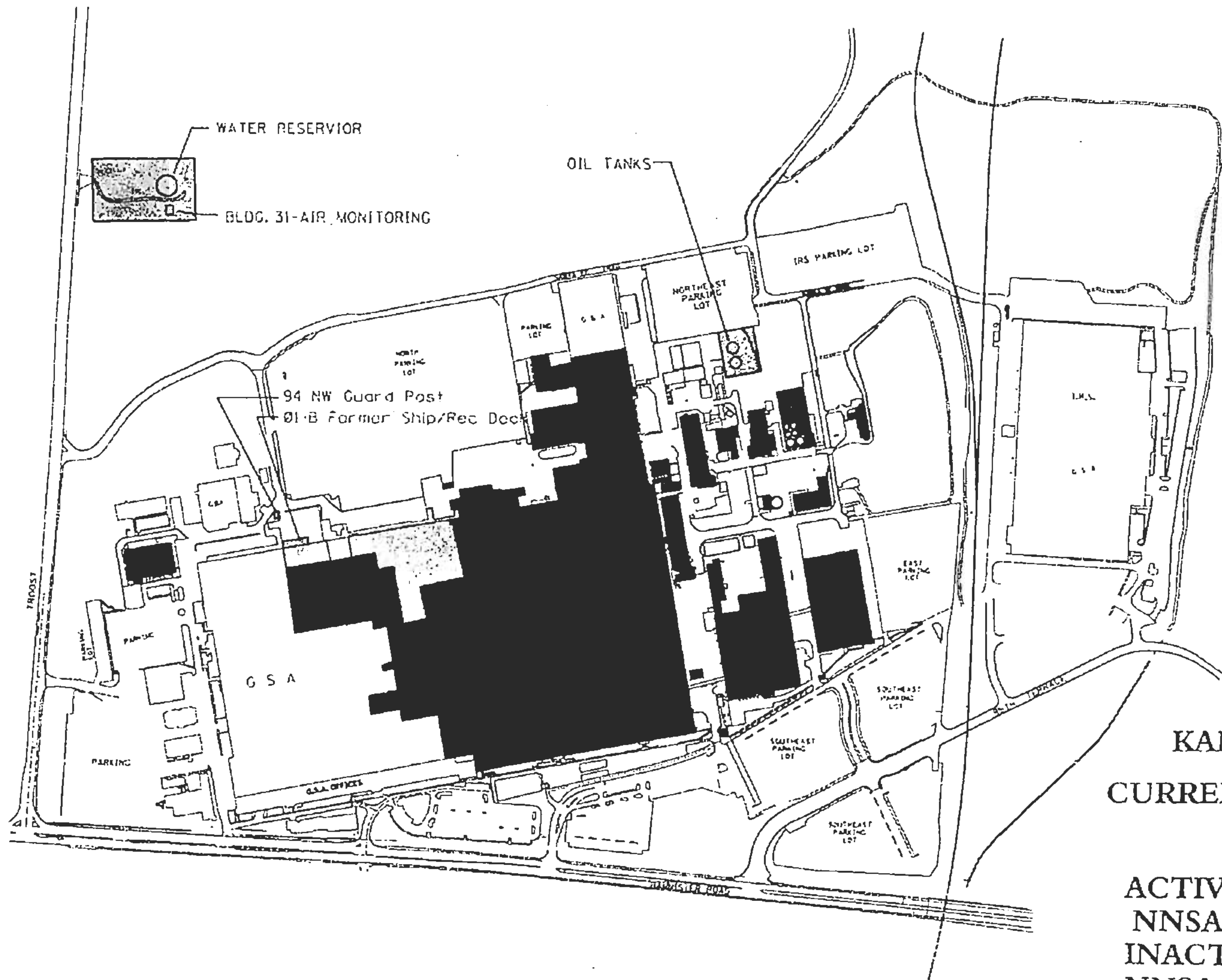
LEGEND

Acreage		
30.2 A		PARKING
34.8 A		PRODUCTION
11.9 A		ADMINISTRATIVE, LAB & SUPPORT
1.8 A		ADMINISTRATIVE
1.0 A		MAJOR STRUCTURES
4.8 A		OUTDOOR STORAGE YARDS
16.9 A		MAJOR SETBACKS & OPEN LAND
32.2 A		ROADS & OTHER SETBACKS
—		RESTRICTED LAND USE AREAS
4.7 A	—	PARCELS AS INDICATED
136.1 A		

KANSAS CITY PLANT

LAND UTILIZATION MAP

Figure 1



KANSAS CITY PLANT

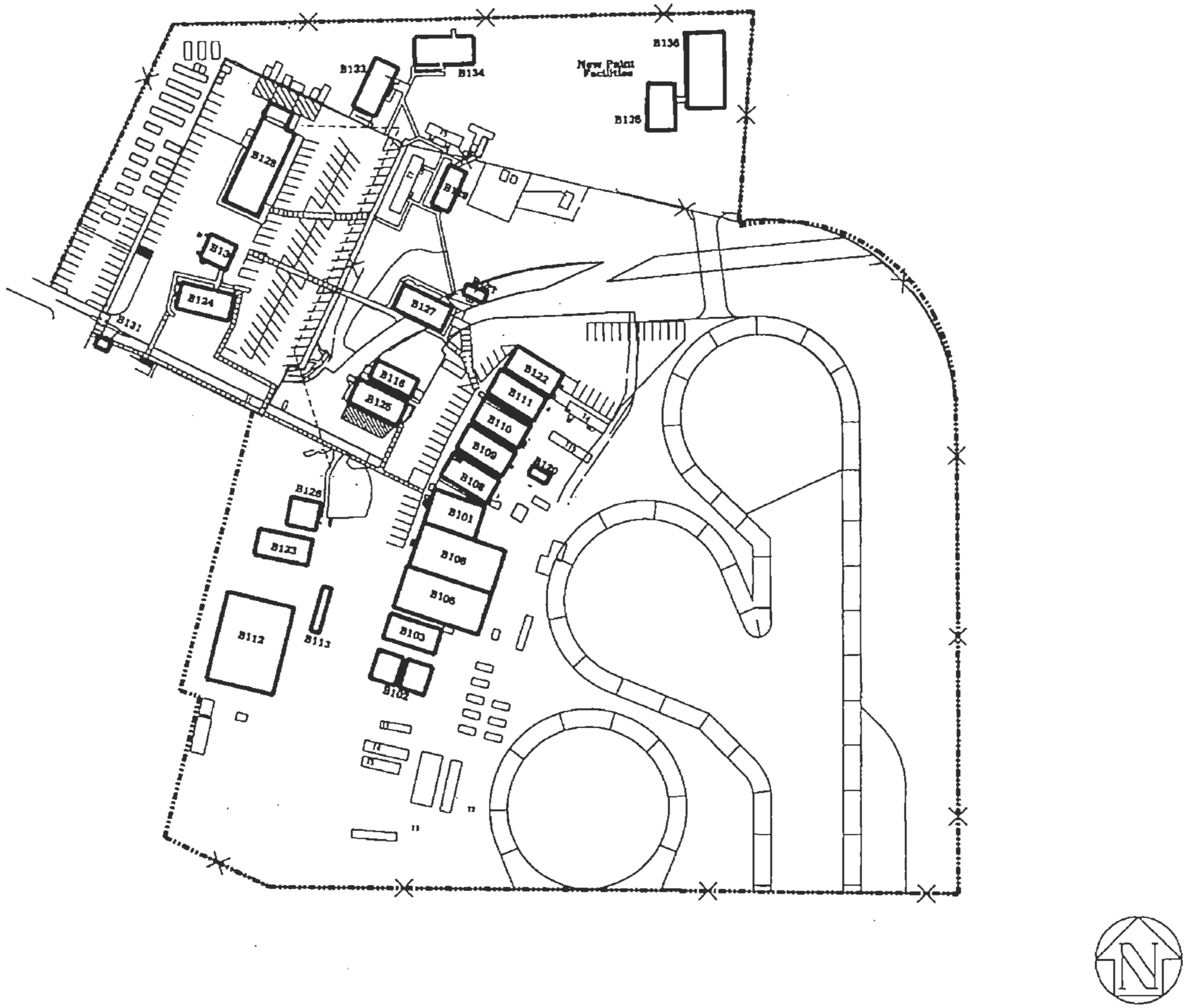
CURRENT FACILITY STATUS

ACTIVE NNSA

INACTIVE NNSA

EXCESS NNSA

Figure 2



KIRTLAND
OPERATIONS

18.2 Acres

SITE MAP

Figure 3

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3.0 Mission Needs/Program Descriptions

3.1 Current Missions and Programs

The KCP provides a broad array of products and services which are closely aligned with current and future efforts of the NNSA to ensure the safety and reliability of the nuclear stockpile. KCP manufactures many of the NNSA's most intricate and technically demanding products, including radars, programmers, reservoirs, joint test assemblies, trajectory sensing signal generators, and mechanical cases. These products comprise approximately 85% of the components that constitute a nuclear weapon as well as 85% of the parts manufactured within the nuclear weapons complex. Today, the KCP supports 40 product families and 90 advanced technologies, shipping more than 60,000 product packages annually.

To accomplish its mission, the KCP directs resources into specific business areas—DSW; RTBF; Campaigns; Safeguards and Security; Construction; and Reimbursable Work. Figure 4 shows the mission allocation in FY2007 for each of these categories.

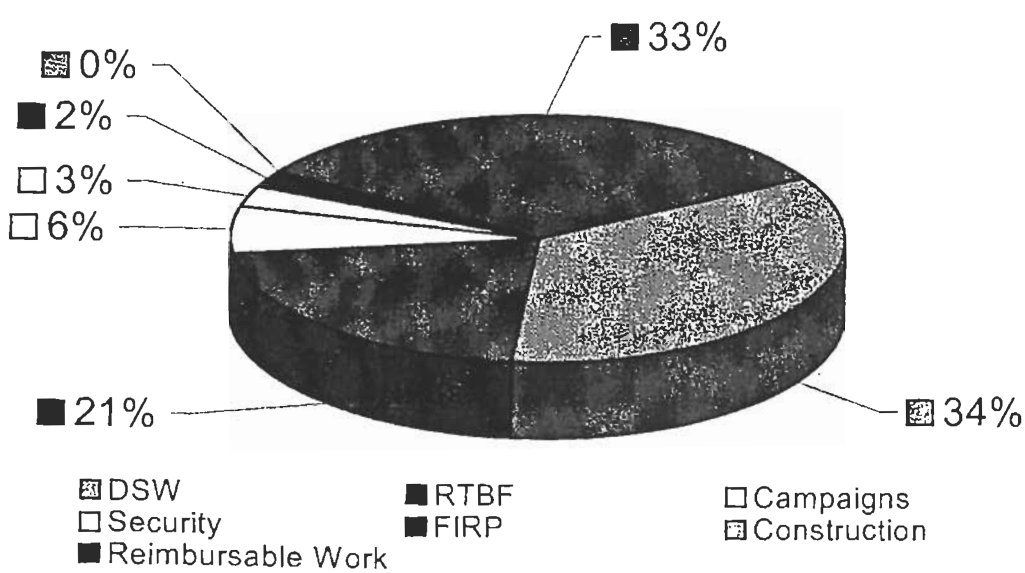


Figure 4 – KCP Mission Allocations for FY2007 by Budget Category

3.1.1 Programs

3.1.1.1 Directed Stockpile Work

The core mission of the KCP is to satisfy DSW requirements. The KCP is the main NNSA production site for nonnuclear weapon products. These products perform the electrical-electronic functions for weapon command and control; to arm and supply detonating energy; and to report test data for weapon performance during deployment simulations. Weapon structural features and component containers are made from engineered materials such as plastics and composites or from a variety of metals. Reservoirs, actuators, and items in the Nuclear

Explosive Package (NEP) perform in the weapon explosive sequence and provide survivability during storage and usage situations.

The Production and Planning Directive (P&PD) 2007-0, dated January 2007, is the basis for workload assumptions and budgetary inputs. The President has not yet signed the Nuclear Weapons Stockpile Plan (NWSP), so stockpile quantities beyond FY2007 are provided for planning purposes. Once the NWSP is signed, P&PD 2007-0 may be updated.

The currently approved program continues the reliance on planning for refurbishment programs to extend the life of the current stockpile. This approach will significantly change once the RRW and Complex 2030 infrastructure modernization efforts are fully adopted.

There are five major technology activities, funded through the Campaigns program that are critical to DSW support: Plant-Directed Research and Development (PDRD), Advanced Design and Production Technologies (ADAPT), Nonnuclear Readiness (NNR), Pit Manufacturing, and Enhanced Surveillance (ES). Each area supports the KCP mission and each plays a vital role in meeting NNSA's future expectations. Figure 5 illustrates the interrelationship among these activities and to DSW and RTBF.

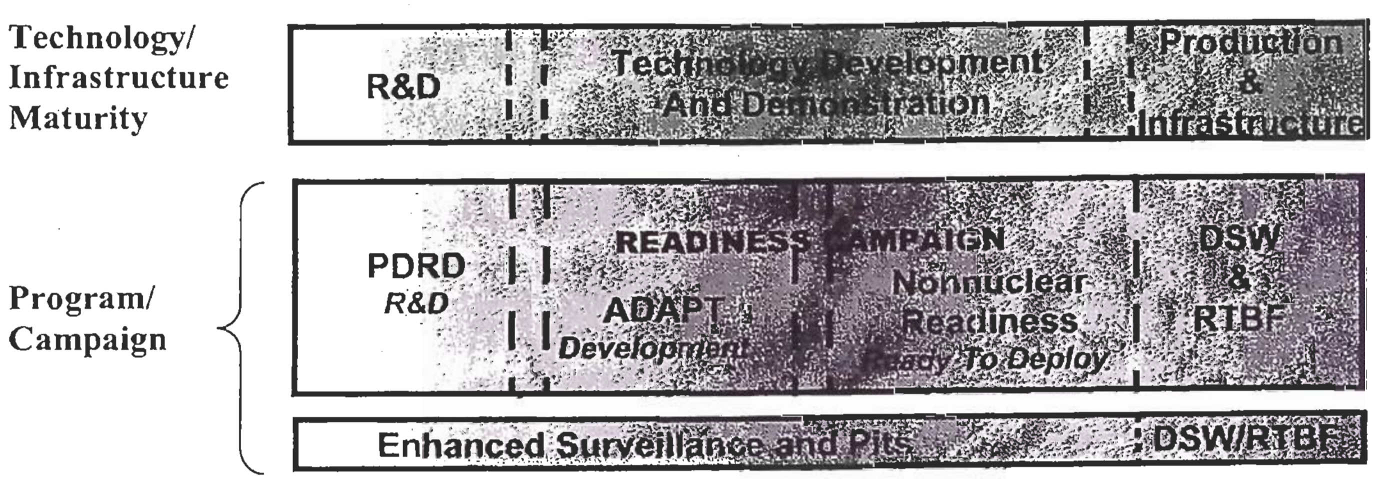


Figure 5 – Technology Activities Provide Affordable Manufacturing Capabilities For DSW

3.1.1.1.1 Plant-Directed Research and Development (PDRD)

The PDRD program focuses on advanced technology development that supports the NNSA mission.

Freeform Capacitor Concept

PDRD Project: Proof of concept study to fabricate ceramic capacitors using rapid prototyping techniques.

The projects funded by PDRD are "research and development" in nature. If successful, the concepts demonstrated by these projects can be developed further through ADAPT or Enhanced Surveillance and matured to production readiness in NNR. It is expected that ADAPT, Enhanced Surveillance and NNR projects are customer driven and will therefore be deployed and maintained by DSW and RTBF.

An annual PDRD "Call for Proposals" process focuses on technology categories that address technological capabilities strategic to the KCP mission. A two-tiered review and selection process identifies the highest priority PDRD projects for the plant. The PDRD Steering Committee, comprised of all five KCP members of the Network of Senior Scientists and Engineers (NSSE), and selected technical and program managers, recommend projects to senior management and subsequently to the KCSO for concurrence. Criteria established by KCP management for PDRD project selection include creativity and innovation, technical impact, programmatic soundness, and resources including partnerships with universities and other entities.

PDRD strongly helps to maintain critical technical skills by providing the opportunity for the KCP technical staff to interject creative new concepts into technology development. Approximately 200 KCP associates per year participate in PDRD projects.

3.1.1.1.2 Readiness Campaign

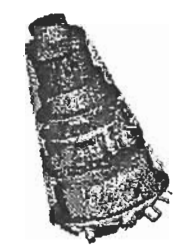
The Readiness Campaign assures that materials are available, processes are designed and established and manufacturing capabilities are intact to meet nuclear weapon alteration, refurbishment, and other stockpile stewardship activities. Through ADAPT and NNR (two subprograms of the Readiness Campaign), technologies are developed and demonstrated to provide turn-key insertion to DSW requirements. ADAPT projects bring lesser mature technologies to war reserve (WR) -capable demonstration and NNR further matures the technologies to provide robust, right-scaled capabilities. Capacity is not provided by the campaigns but is the responsibility of the DSW or RTBF customer.

Advanced Design and Production Technologies (ADAPT)

ADAPT activities develop new design, manufacturing and information technologies that support stockpile refurbishment, limited life components, LEPs, current production and support the design laboratories by having these capabilities available for them to procure test hardware during the qualification and surveillance phases of weapon life. ADAPT provides tools and processes to ensure that the KCP can deliver affordable nonnuclear components to all NNSA schedules. ADAPT promotes collaboration for concurrent assessment of manufacturability with design laboratories.

ADAPT provides challenging technical work for about 120 KCP technical employees per year, and thereby helps maintain critical skills. The product and process engineers work early in the design phase with their laboratory counterparts to influence the design. This concurrent engineering activity strives to lower product costs and provide designs that are easier to build. The work benefits pre-production engineering and optimizes the transition to DSW production engineering.

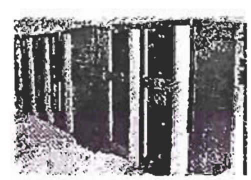
ADAPT focuses on developing new manufacturing processes, reviving dormant processes, and identifying and characterizing alternate materials and components as the existing ones become commercially scarce or unavailable. Major activities include: developing manufacturing processes to ensure that the W76-1 Arming, Fuzing, and Firing (AF&F) can proceed on schedule, as well as processes for manufacturing replacement or refurbished parts for the W76; developing manufacturing aids and tooling concepts using modern science-based approaches; developing manufacturing processes for limited life components to provide manufacturing improvements on gas transfer systems, lightning arrestor connectors, and detonator cables; developing manufacturing capabilities to build advanced electrical and electromechanical systems for future nuclear weapon refurbishments; developing techniques and capabilities for miniature metal assemblies; developing microelectronic technology for advanced telemetry; and developing processes for manufacturing and testing of new command and control products.



AF&F

ADAPT also provided the secure, high-speed computing infrastructure for the KCP to collaborate and efficiently transact WR business with other sites. Major activities included development of the computing infrastructure for secure data exchange and interactive engineering collaborations. Tasks included collaborative desktop and visualization tools, business practices specific to model-based product realization, and complex-wide real time secure digital collaboration. ADAPT coordinates activities closely with the Integrated Cyber-Security Initiative (ICSI)

ADAPT also develops, tests, and validates 3-D model-based tools and processes for designing, engineering, manufacturing and accepting weapon components. The tools generate product and process knowledge critical to delivering manufacturable designs and high quality products that require fewer prototype units.



High Performance Computing System

Nonnuclear Readiness (NNR)

Nonnuclear Readiness (NNR) is a technology scale-up and demonstration program that moves new design, manufacturing and information technologies to the production environment in support of WR activities. Participants in NNR include Sandia National Laboratory (SNL), Los Alamos National Laboratory (LANL) and the KCP. For the

High Pressure Gas Vessel

next year, the primary emphasis for NNR is capabilities to assure that the W76-1 LEP production is sustainable and affordable after achieving the first production unit. The emphasis for the next few years is technologies to reduce footprint and capabilities critical for transformation and the planned RRW and other national security needs.

Eleven NNR projects areas are required to address three critical business needs and have a positive impact on each during project execution:

Rapid Prototyping
Direct Fabrication

- Readiness of Production Technology: Readiness of production technology advances deployment of new manufacturing processes required for the next-generation weapon systems in the factory at the KCP. These production technologies improve the operability and sustainability of the manufacturing enterprise. Production and development process enhancements improve data acquisition.

- Readiness of Production Operations: Readiness of production operations involves a broad spectrum of activities including obsolete test equipment replacement and consolidation, analytical laboratory and metrology capabilities, improvements to process flow and production infrastructure that provide at least a 35% efficiency improvement. This includes quality improvements like understanding, characterizing, and simulating products and processes to manufacture and accept products based on scientific criteria. The benefits of this project include reduced process variability, cycle time, and waste of ongoing activities.

Stronglink Assembly
Simulation

- Readiness of Workforce: Readiness of workforce assures that new technologies developed and proved in ADAPT and NNR can be deployed and successfully used in WR production. This includes formal knowledge preservation of critical activities at start-up or shut-down to assure longevity of WR processes, workforce training and integration of diversely skilled into improvement efforts. Six sigma teams are utilized as a best practice in assuring workforce readiness. The benefits of this project are reduced process variability, cycle time, and waste during restart from a dormant period or with transfer of responsibility among persons.

3.1.1.1.3 Pit Manufacturing

The NNSA's pit manufacturing capability is at LANL. KCP performs evaluations for the design laboratories in the tabulation area and shell area. KCP also supports LLNL with dies for experiments. For longer term planning, the KCP plans to utilize KCRIMS capabilities to provide tools, gages, and other nonnuclear parts to support this LANL pit production capability and quantity production.

3.1.1.1.4 Enhanced Surveillance

Enhanced Surveillance (ES) provides advance warning of manufacturing and aging defects to allow refurbishment before performance is impaired. With diagnostic techniques for screening weapons systems, campaign efforts also predict material and component aging rates as a basis for annual certification, refurbishment scope and timing, and nuclear weapon complex planning.

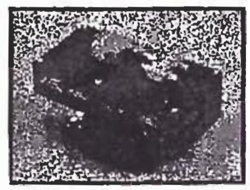
This critical effort involves partnerships between the KCP, the design laboratories, and other production agencies.

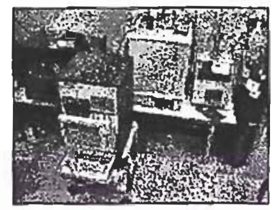
The Enhanced Surveillance work is divided into six Major Technical Elements (MTEs):

- Systems: Efforts to develop a system that will be able to transmit large amounts of end event data prior to destruction, known as High Explosive Radio Telemetry (HERT), are in partnership with LANL. The Distributed Telemetry effort, in conjunction with SNL, is working to finalize a system of data sensors that will fit within the spaces between production parts. The Detonator Sensing Assembly (DSA) effort partners with LLNL to develop new diagnostics supporting the W87 JTA-4.


DSA
Detonator Sensing Assembly
(Optical Electronics)


HERT
High Explosive
Radio Telemetry


EDTM
Engineering Development
Telemetry


8-Channel FOHS System

- Canned Sub-Assemblies (CSA): Optical sensors projects, in partnership with LANL and Y-12, continue work to develop a real-time optical diagnostic system that can evaluate the hydrogen, water, and pressure in CSA over a simulated aging test. The data are used to develop kinetics for validation of salt-compatibility models.

- Nonnuclear Components: B61 component evaluation activities are a subset of the Component MTE. These efforts evaluate components and materials in the B61 for age-related defects. The Component MTE is a wide-ranging partnership with Sandia National Laboratories to look at the aging of components in the stockpile; the data are the basis of re-use, refurbishment, and new-manufacture LEP decisions. A second major area is evaluating environmental sensing devices for age-related issues supporting SNL.


Environmental Sensing
Device (ESD)

- Nonnuclear Materials: Polymer aging tasks characterizes polymers, used in weapons, as they age and as they are exposed to different environments. This process generates data critical to LEP decision making. This work supports LANL, LLNL, and SNL.


Sample Temperature
Controller

- Pits: Development of diagnostics to characterize material behavior and aging effects.

- High Explosive: These efforts require micro-scale optical surface analyses of high explosive components.


Sample Acquired Image

Enhanced surveillance will continue to provide technologies to nondestructively diagnose the health of the stockpile in the next ten years.

3.1.1.1.5 Readiness in Technical Base and Facilities (RTBF)

The RTBF sustains the foundation required to perform fundamental services to external customers. It has two interlocking missions—to serve internal needs and to diminish performance risks to the other missions. To that end, this program's activities refine, clarify, and articulate how RTBF relates to other functions to mitigate interference while controlling costs.

Under the RTBF umbrella are Facilities Management and Site Planning; Maintenance; Utilities; Capital Equipment; General Plant Projects (GPP); Expense Funded Projects; Facilities Startup and Project Support (Other Project Costs-OPC); Environmental; Safety and Health; and Production Process Readiness. In 2003, NNSA Portal and Containers were added to RTBF. These two items will contribute to the FYNSP funding targets (just like Production Process Readiness), but will not be part of the RTBF Operations of Facilities. Because of the Kansas City Responsive Infrastructure, Manufacturing and Sourcing (KCRIMS) there are currently no Line Items and therefore no OPC. There is also no projected GPP.

Recently, the Kansas City Plant (KCP) has been asked to work around a $16M rescission associated with the RTBF program in FY2007. The rescission represents a subsistence level of funding for the KCP in the current FY. At the proposed funding level, the KCP will cancel all remaining capital equipment and expense projects. Utility operations and maintenance material procurement will be minimized posing an unacceptable risk to production operations. Contracted service labor will be reduced adding risk to the W76 LEP.

Figure 6 provides a cost profile for RTBF. Projects are deferred as required to remain within FYNSP targets. Funding types have been provided when applicable. Since each of these activities is ongoing and of equal importance, they have not been prioritized in this table. In addition, RTBF components do not carry project numbers and cannot be broken down any further than shown in Figure 6. For this submittal, the FY2002 actual costs have been dropped off the table and FY2015 projected costs have been added. The FY2003 actual costs are limited to FY2003 and do not include all prior years. Funding is broken out separately for each activity through FY2013. All of the dollars along the Totals row are consistent with the FYNSP.

Since FYNSP numbers do not currently exist by site after FY2013, two percent escalation was applied to each subsequent year (FY2013 and FY2014). Any attempt to fill in individual project forecasts beyond FY2013 would be an allocation process based on historical percentages.

Project Name	Funding Type	FY2003 Actuals	FY2004 Actuals	FY2005 Actuals	FY2006 Funding	FY2007 Budget	FY2008 Budget	FY2009 Budget	FY2010 Budget	FY2011 Budget	FY2012 Budget	FY2013 Budget	FY2014 Budget	FY2015 Budget	Linkage
Facilities Management & Site Planning		12,210.0	12,142.0	13,845.0	18,327.0	16,000.0	25,822.0	32,005.0	34,992.0	27,867.0	33,971.0	65,264.0			R
Maintenance	MD	34,577.4	39,348.0	37,655.0	35,200.0	34,000.0	35,206.0	35,123.0	34,208.0	38,625.0	36,492.0	22,064.0			R
Utilities		16,119.5	16,642.0	17,400.0	18,800.0	19,400.0	18,162.0	18,424.0	18,451.0	23,656.0	24,041.0	13,538.0			R
Expense Funded Projects	E	7,969.3	10,218.0	10,573.0	7,400.0	3,124.0	4,500.0	4,500.0	4,500.0	4,500.0	4,500.0	4,500.0			R
Facilities Startup & OPC	OI	402.5	627.0	1,308.0	500.0	0.0	0.0	0.0	0.0	0.0	0.0				R
Environmental		4,818.7	5,660.0	5,127.0	5,400.0	5,137.0	5,218.0	4,276.0	4,463.0	4,566.0	3,541.0	2,974.0			R
Safety & Health		6,648.8	6,539.0	6,206.0	6,000.0	5,512.0	4,446.0	3,601.0	3,657.0	3,741.0	2,499.0	2,556.0			R
Capital Equipment	GPE	7,273.9	10,493.0	8,816.0	7,393.0	1,000.0	3,000.0	3,000.0	3,000.0	3,000.0	3,000.0				R
General Plant Projects	GPP	1,739.5	434.0	3,044.0	2,500.0	0.0	0.0	0.0	0.0	0.0	0.0				R
Production Process Readiness		8,537.0	8,834.0	5,379.0	5,320.0	4,738.0	4,940.0	5,529.0	5,683.0	5,931.0	6,048.0	6,199.0			R
NNSA Portal		540.7	199.0	101.0	100.0										
Containers		38.0	20.0	1,409.0	368.0	195.0	246.0	142.0	142.0	142.0	146.0				
Line Item															
Inventory Change		-2.7	-776.0	122.0											R
	Totals	100,872.6	110,380.0	110,985.0	107,308.0	89,106.0	101,540.0	106,600.0	109,096.0	112,028.0	114,238.0	117,095.0	119,437.0	121,826.0	

Figure 6 – NNSA RTBF/Operations of Facilities Cost Projection Spreadsheet for the Kansas City Plant ($000)

3.1.1.1.6 Supply Chain Management Center

In August 2006, NNSA tasked Honeywell to lead the Supply Chain Management Center (SCMC) to leverage NNSA's purchasing power and gain pricing and process efficiencies. The SCMC is a critical step in transforming business processes and operating practices across the nuclear weapons complex to align with the NNSA's Complex 2030 plan. The purpose of the SCMC is to ensure improved efficiencies and economies in the NWC acquisitions. The long-term objective of the SCMC is to transform the Management and Operating (M&O) Contractor community's acquisition process from a tactical and reactive function to a strategically driven integrated function that ensures maximum value for every acquisition dollar spent. The SCMC will accomplish this goal by implementing an enterprise system and strategic sourcing processes on a NWC-wide basis, driven by strategic planning, an in-depth understanding of internal purchasing needs, and insight and knowledge of supply markets. SCMC will apply an integrated, cross-functional/cross-business unit strategic sourcing approach to the entire NWC enterprise. In doing so, the NWC can begin to look for opportunities to create efficiencies and enhance the total cost of acquisition across the entire complex. Such opportunities include:

- Enhanced purchasing coordination across the NWC's M&O procurement offices to maximize value from supplier relationships and ensure supplier price uniformity for comparable goods and services while reducing total cost of acquisition;
- Greater standardization of total cost of acquisition processes to deliver supplies/services more quickly to end users; retaining or enhancing other supplier provided services; and, streamline the total cost of acquisition;
- Improve knowledge-sharing mechanisms across the NWC to exchange supplier intelligence, market analysis, and total cost of acquisition best practices; and,
- Optimally leverage small business capabilities to meet the NWC's socio-economic based acquisition goals, while being mindful of regional socio-economic concerns.

The SCMC effort is funded through the DSW Stockpile Management, Technology, and Production budget.

3.1.1.2 Kirtland Operations (KO)

Kirtland Operations provides a wide range of technical support and services to the NNSA, the national laboratories, other NNSA contractors, the Department of Defense (DOD), other federal agencies, and non-DOE agencies that complement the NNSA missions. Services include engineering, technical support, information technology, training, field support, and small-scale production.

The majority of Kirtland Operations' work is in support of the Office of Secure Transportation (OST). The remainder is to customers that fall into the categories of National Laboratories, Emergency Response, Kansas City Plant, and Special Technologies.

3.1.1.2.1 OST Support

OST is the primary source of Kirtland Operations business. Approximately 70% of the work performed by Kirtland Operations is in support of OST. Kirtland Operations' full complement of services supports practically every facet of OST operations.

Activities supporting OST include operational and design engineering, fabrication and assembly, construction, test and evaluation, maintenance, technician training and certification, federal employee training development and operations, and logistical support. Work is performed at OST headquarters; the Transportation Emergency Control Center (TECC); the Alternate Transportation Emergency Control Center (ATECC) sites; the Mobile Electronic Maintenance Facility (MEMF); the Training Logistics Command (TRALOC); the New Mexico Relay Station; all Kirtland Operations' locations, including the Communications Consolidated Depot, and various U.S. locations while deployed during field exercises and while conducting on-site training and certification of technicians.

3.1.1.2.2 National Laboratories Support

Kirtland Operations services closely align with the needs of the National Laboratories. The laboratories include Sandia National Laboratories (SNL), Lawrence Livermore National Laboratory (LLNL), Los Alamos National Laboratory (LANL), and Battelle (Brookhaven, Oak Ridge, and Pacific Northwest). Traditionally, Kirtland Operations has provided SNL and LANL with technical support (engineers, information technology, and technicians) and small-scale production work. Kirtland Operations provides all the laboratories with technical support in various areas of their weapons, physical security and programmatic business. Kirtland Operations typically supports the laboratories as residents in their facilities and works as an integrated project team with their staff. Kirtland Operations supports Dynamic Experimentation and Applied Physics, Process Engineering and Quality Assurance, Calibration and Production Controls, Electrical Engineering, Programming and Software Analysis, Drafting and Design, Computer Configuration and Repair, Electronic Prototyping and Testing, Security System Evaluation, and Engineering Analysis and Testing.

3.1.1.2.3 Emergency Response Support

The organizations in this category of support consist of the NNSA Office of Emergency Management (NA-40), the Defense Threat Reduction Agency (DTRA), the Federal Bureau of Investigation (FBI), and the Joint Special Operations Command (JSOC). Kirtland Operations' support includes engineering, procurement, technical and security specialists, small-scale production, logistics support, and technical documentation.

3.1.1.2.4 Kansas City Plant Support

This work is in support of Kansas City Plant funded projects. It may be managed and controlled by Kirtland Operations or it may utilize Kirtland Operations resources to support KCP reimbursable work. Examples of work that is managed and controlled by Kirtland Operations include, test equipment design, PDRD, ADAPT, Enhanced Surveillance Campaigns (ESC), Knowledge Preservation, and detonator cable fabrication. An example of work that uses Kirtland Operations resources but is managed by the KCP is the OST SGT (Safeguards Transport) battery housing fabrication effort.

3.1.1.2.5 Special Technologies

Special Technologies is the work not under any of the previous categories. It includes work for other DOE/NNSA organizations (e.g., Defense Nuclear Nonproliferation, Office of Intelligence), other Federal agencies (e.g., Department of Homeland Security, Department of Transportation, United States Department of Agriculture, Department of Defense), state and local governments (e.g., Kansas Department of Agriculture, Missouri Department of Transportation), and private industry (typically in the form of a Cooperative Research and Development Agreement – CRADA).

3.1.1.3 Reimbursable Work

The primary role of reimbursable work is to exercise the engineering and production infrastructure in order to maintain and enhance the manufacturing capabilities and readiness of the plant to support its assigned mission into the future. Additional benefits include: 1) offsetting a portion of the fixed overhead, 2) enhancing the ability to retain and attract a highly skilled workforce, and 3) supporting national security. This work is performed on a full cost recovery basis and is consistent with the KCP Technology Plan and NNSA Technology Roadmap.

Reimbursable work at the KCP includes work not included in the KCP Laboratory Table in NNSA's budget documents. In FY2006, approximately 60% of the reimbursable dollars supported NNSA activities including paid work from the laboratories and plants, Department of Defense (in support of NNSA programs), Office of Secure Transportation, Office of Emergency Response, Defense Nuclear Nonproliferation, and in support of other NNSA objectives. WFO (customers outside the DOE/NNSA) generated approximately 40% of the reimbursable work in FY2006. The WFO portion includes work for other government agencies, the Department of Defense, the FBI and commercial entities.

As KCP continues to grow its reimbursable work, it is pursuing potential opportunities in the WFO category, along with work to support the NNSA/DOE in areas of Emergency Response, Defense Nuclear Nonproliferation, Global Nuclear Energy Partnership, and DOE Security Operations. It is anticipated that the KCP will continue to generate no less than 50% of its reimbursable work from the NNSA/DOE.

3.1.1.4 Security Programs

The KCP Security organization provides all aspects of security protection for classified and sensitive material and information, government property, and employees on a year-round, 24-hour, seven-day-a-week basis. The KCP has and controls documents up to and including Top Secret National Security Information. Additionally, the plant processes both secret and confidential information and material up to and including Secret Restricted Data (SRD).

The highest classified level of information processed at the KO is SRD. Its security operation also provides facility support and training for Fort Chaffee, Arkansas, which supports the OST. In addition, KO supplies engineering and technical support for LANL.

The mission of the KCP security program is to:

- Protect NNSA and other partners' unclassified and classified information and material from theft and unauthorized disclosure, destruction, or modification.
- Protect property against theft, sabotage, misuse, or hostile acts.
- Protect employees, subcontractors, and visitors.
- Integrate ethics and environment, safety, and health regulations into all security operations.

Integrated Safeguards and Security Management drives security requirements into all aspects of daily operations and provides education to associates on security roles and responsibilities.

3.1.2 The KCP Workload

A capacity analysis was conducted with the latest FY2009 budget forecast as the basis. This study shows that existing facilities are adequate for the current workload (FY2007). There are three manufacturing areas where capacity is exceeded on a one-shift basis. These are Detonator Cable Fabrication, Electromechanical Assembly, and Plastics Machining. These can all be accommodated by adding shifts since these capacity overages are in the 5–15% range. No other action should be required beyond that to meet this workload.

Current utilization is below 20% capacity in seven process areas. This is a result of delaying the First Production Unit (FPU) on the W80 program as well as the build-out of other products. Also, two of these areas support field returns. This condition disappears in three of these areas as future utilization levels are anticipated to range from 20% to 33%.

Declining workload has prompted shutting down the flexible manufacturing system. No further consolidation of manufacturing areas is planned. Manufacturing capabilities need to remain in place to support the sourcing decisions from the KCRIMS effort.

Long-term workload increases and resulting capacity implications are further addressed in Section 3.3.3, Workload Impact to Facilities and Infrastructure.

3.2 Mission Critical Facilities and Infrastructure/Linkages between Facilities and Infrastructure and Mission Needs

Changes in technologies and processes require corresponding changes to equipment, training and in the facility infrastructure. This is the situation at the KCP today. To meet its mission demands, manufacturing at the KCP must be more responsive and agile, products must be cheaper while maintaining high quality, and processes must be both cleaner and more efficient.

The KCP is dedicated to Stockpile Stewardship and supporting missions. Ninety five percent of the 3.1 million square feet making up the KCP footprint is in three inter-connected buildings under one roof. As part of the WCI RTBF recasting process, all of the buildings at the KCP and KO were reviewed to determine their mission status. The previous two categories, mission essential and non-mission essential were expanded into three: mission critical; mission dependent, not critical; and non-mission dependent. For the KCP, this analysis resulted in some changes as 11 buildings were designated mission critical, 13 mission dependent, and 14 non-mission dependent. At KO, nine buildings were designated mission critical and 17 mission dependent.

The KCP has achieved its objective of establishing a process-based manufacturing environment, to the extent possible at this time. Implementing process-based manufacturing, retaining existing technical and production capacity leads to a more agile facility to better link the KCP facilities to its core mission. The result is being better able to support a wide range of production requirements, and yet be more responsive to satisfying unforeseen requirements.

The Gas Transfer Capacity Expansion LI was completed in FY2006 and will be closed out in the second quarter of FY2007.

Overall, the buildings, structures, and systems at the KCP are performing as intended. KCP maintains the facilities to support long-term operation in support of the NNSA mission. The RTBF program funds ongoing maintenance of the plant. In the past, FIRP funded the-replacement and recapitalization of aging systems, thus reducing the deferred maintenance backlog. However, no new-start infrastructure Line Items or FIRP projects are anticipated in the future, given the philosophy of the Pause Plan. As a result, the KCP will have to use its limited RTBF funding to address any infrastructural deficiencies previously covered by those funding sources through 2012.

3.3 Future NNSA Mission, Programs, Workload, and Impacts

The KCP is committed to meeting the challenges of the future. Fulfilling the primary DSW mission will require creative engineering, manufacturing and management talent to successfully accomplish refurbishment and stockpile modernization. The following list highlights workload expectations and their impact on the modernization effort:

- Increasing production driven by the W76, Reliable Replacement Warhead (RRW), and B61 life extension requires:
  - "Full weapon scope" of nonnuclear work for both W76-1 and RRW includes firing systems, stronglinks, plastics & metal products, cables, valves, new surety features, and telemetry upgrades
  - B61–7/11 requires plastic products, cables, refurbished metal cases, electrical assemblies, spin rocket, and nitrogen cartridges
  - B61-3/4/10 requires surety upgrade, GTS, electrical assemblies, plastic products, cables, radar nose, and spin rocket
- Sustained focus on new product and process technologies in partnership with design agencies to:
  - Provide production readiness for new weapon surety features and GTS features
  - Assure successful application of commercial-off-the-shelf (COTS) electronic components
  - Improve flight testing surveillance with less intrusive telemetry and reduced sensor dimensions plus expanded diagnostic functions
  - Production start in design modernization of telemetries for the W88

- Continue responsive infrastructure position regarding discontinued commercial availability of products as has occurred for rolamites, launch accelerometers, and polymers

- Achieving a balance between the DSW workload to available funding

- Maintain effective alliances with diverse supplier base to avoid interruptions in long term production commitments for telemetry products and assure readiness for future life extensions

As shown below, in Figure 7, the labor content for directed stockpile work is relatively flat through FY2010 with a slight decrease in FY2011. The increases in FY2012 and FY2013 are due to the production work beginning on the B61 NNLEO and the RRW programs.

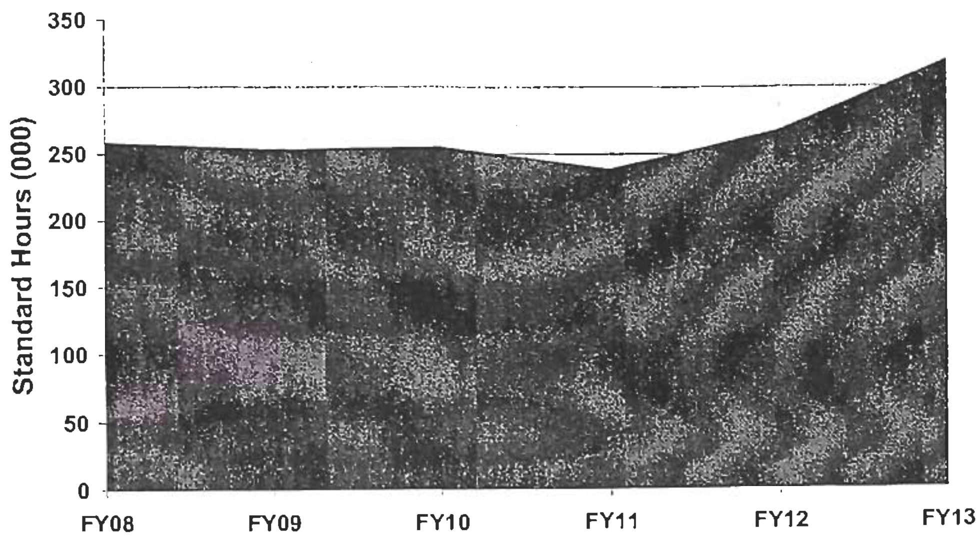


Figure 7 – DSW Labor Content

3.3.1 Breakdown of Current Mission

3.3.1.1 Stockpile Maintenance

During the FY2008 through FY2013 period, these major stockpile maintenance efforts are, or will be under way:

- Ongoing reservoir production for B61, B83, W76, W78, W80, W87, and W88
- Commercial forging shelf life support for all programs
- W62, W68, and W79 dismantlement
- Ongoing schedule support of W76-1
- Fabrication of development RRW parts
- Process prove in and qualification of RRW parts

3.3.1.2 Stockpile Evaluation

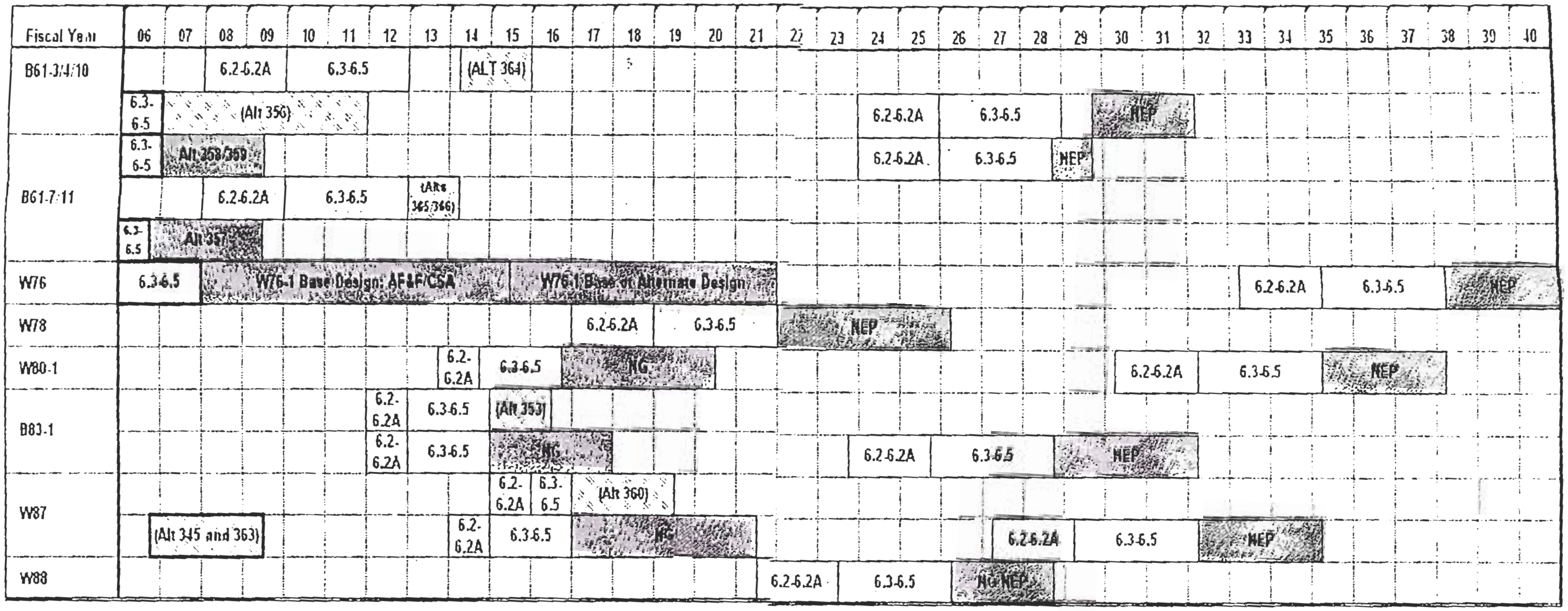
Stockpile Evaluation mission assignments include these program activities:

- Production of telemetry systems and other associated Joint Test Assembly (JTA) items for the B61, W76, W78, W80, B83, W87 and W88 to support approximately 36 weapon system flight tests per year
- B61-3/4/10 rebuild product deliveries
- W87 rebuild requirements for the MC3719 Firing Set, Mechanical Safing and Arming Device (MSAD), and E-Assembly production
- W87 JTA4 redesign with delivery beginning in FY2008
- Development of W88 telemetry testworks
- Provide approximately 8 sets of test bed hardware (expendables) annually for all stockpile programs.

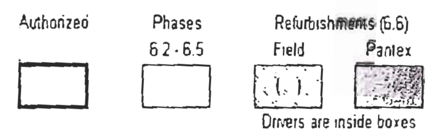
3.3.2 Future Workload

A work content summary assigned by current Production and Planning Directive is shown on the following pages in Figures 8 and 9. These figures reveal the following:

- The KCP work supports production for the W76-1 major life extension programs, RRW, and other program upgrades, thus challenging mission demands.
- In the 10-year planning horizon, future LEPs and RRW will sustain the KCP DSW work at levels through FY2025.



As of January 29, 2007
P&PD 2007-0



Notes:

Dates represent deliveries of kits or refurbished weapons to DOD.

Non-authorized activities represent our best current estimate.

Alt 356 replaces spin rocket motors in the B61-3/4/10s; Alt 358 and 359 replace spin rocket motors in the B61-7 and B61-11, respectively.

Alt 357 is the life extension program for the B61-7/11

Alt 364 replaces the radar and programmer in the B61-3/4/10s; Alt 365 replaces the radar and programmer in the B61-7; Alt 366 replaces the programmer in the B61-11.

Alt 353 replaces the gas transfer system (GTS) on the B83.

Alt 345 GTS deployment was completed on the required W87 warheads in early FY 2003; Alt 345 will restart with deployment of W87s on Minuteman III (SERV configuration).

Alt 363 changes fire set assembly covers on W87s prior to deployment on Minuteman III (SERV configuration).

Alt 360 replaces the GTS on W87s.

Figure 8 – NNSA Refurbishment Plan (Source of Work Assignments to the KCP)

Program	Replace/New	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	Comments
B61-7/11	Foam Supports, Cushions, Cables, Getter, Refurbished Case, Nitrogen Cartridge	Production										
	Nose/Radar, TSSG, Encryp. PAL, GTS, Spin Rocket							6.3-6.4		Production		
W76-1	AF&F, Acorn, Cables, Filled Elastomers, Valve, Pads, & Cushions, Getters, Seal, Cover, Foam Supports, Tapered Tapes, Misc Metal Parts.	6.3-6.4	Production									Production Continues Through 2022
B83-0/1	Valves, Reservoir, Brackets, Tubes, Cable				6.3-6.4		Production					
B61-3/4	Surety Upgrade, Gas Transfer System, Foam Supports, Elect. Comp. Assy, Pads, Cables, Nose/Radar, Spin Rocket				6.3-6.4		Production					
W87	Acorn, Cable, Tube						6.3-6.4	Production				
W88	New GTS	6.3-6.4	Production									
RRW	New GTS, Mechanical and Electrical System Add Surety	6.3-6.4					Production					Production continues through 2022

NOTES: (1) All programs require on-going JTA support and some have Telemetry redesigns
(2) All programs require ongoing replacement of limited life components, primarily reservoirs
(3) Production period, rate, scope or funding has not been identified at this time

TRANSITION PERIOD

Figure 9 – KCP Weapon Refurbishment Summary

3.3.3 Workload Impact to Facilities and Infrastructure

In light of the Transformation planning currently underway, there are no direct infrastructure requirements driven by planned and potential program workload for the current facility. The primary objective will be to maintain the current infrastructure in support of the production to be completed in the existing building. That infrastructure is currently in-place and no new modifications are necessary to accommodate the 2012 timeframe.

New mission assignments requiring the introduction of new technologies at the KCP would provide their own infrastructure, including process equipment and air handling units. The timing of these new assignments would have to be carefully analyzed to determine if it would be more economically feasible to establish that capability in the new building; rather than having to relocate it at a later date. At this time, no new mission assignments are expected through 2012.

The KCP may become responsible for the manufacture of nonnuclear components, tools, gages, and process materials, and providing technical support for the start-up of pit manufacturing. The current KCRIMS planning includes the support of this new mission assignment.

The KCP conducted a capacity study, based on the latest P&PD (2007-0). The P&PD is issued by NNSA-HQ and authorizes all program work. Weapon schedules and monthly delivery rates are developed based on the P&PD to support the ultimate user.

This long-range capacity study determined the percentage of direct labor capacity utilized in each manufacturing area for the next six years (FY2007-FY2012). This workload is detailed in Figure 10 and illustrates the peak capacity utilization for each product/process area and the year(s) in which it would occur. The headcount capacity for each area is based on a one-shift operation. Areas shown in yellow and red are those where 100% capacity would be exceeded on one shift. Adding a second shift can generally accommodate those capacity shortfalls shown as yellow (100% - 166%).

There are two areas shown in red: Detonator Cable Fabrication and Plastics Machining. The Detonator Cable Fabrication workload can be supported by adding shifts. In Plastics Machining, the product set driving this workload is still in the qualification phase with the processes still being finalized. Therefore, the labor estimates are conservative and are contributing to this overage. However, this is not expected to present any major problems as the workload can be supported by adding shifts, implementing productivity improvements, and increasing product yields. Additional shifts should also allow the Final assembly (Clean Bench) and Electromechanical Assembly areas to meet these workload demands.

Generally, in the future, the capacity utilization in nearly every manufacturing area is essentially flat. This is a result of the steady-state LEP schedules and no new programs having to be supported. As compared to previous capacity studies, the utilization has decreased in most areas. This is a direct result of the delay in the W80 FPU as this program was a large contributor to the plant workload. Prior planning at the KCP called for both the W76 and W80 to be manufactured concurrently. While, the W80 schedule slide has caused the utilization to decrease in most of the manufacturing areas, there are no current plans to downsize them or further consolidate operations in place. Instead, consolidation and downsizing will occur through KCRIMS.

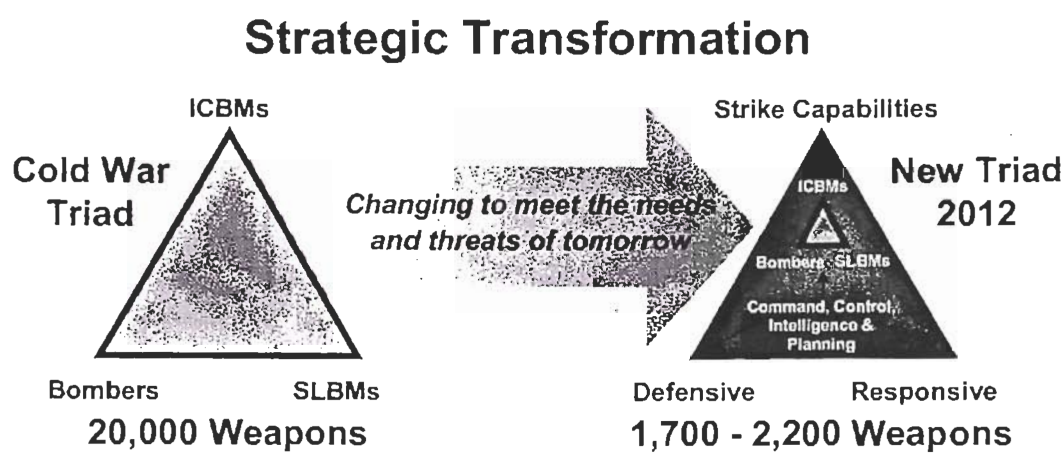
It should be pointed out that the workload and schedules forming the basis for this analysis did not include any build-ahead or requalification quantities that may be required as part of the relocation to the new building. However, because of the available capacity remaining, it is not anticipated that this additional work will cause any major capacity issues. This specific impact will become more evident as the KCRIMS relocation planning matures. Also, more capacity could be made available in certain areas as the sourcing efforts are implemented. Therefore, these two effects could offset each other in some areas. The workload/capacity issue will continue to be closely monitored to ensure that the sourcing and relocation transition is as smooth as possible and minimizes any negative effect on supporting production schedules.

Product/Process Line	% of Capacity Utilized	Peak FY(s) For Workload	Remarks	FY07	FY08	FY09	FY10	FY11	FY12
ELECTRICAL									
MICROMINIATURE ELECTRONICS	21%	FY2007		21%	14%	13%	11%	10%	8%
SEMICONDUCTOR PACKAGE ASSY.	34%	FY2007		34%	28%	24%	24%	19%	12%
PRINTED WIRING ASSEMBLY FAB.	89%	FY2010		44%	75%	86%	89%	86%	57%
CABLE FAB	29%	FY2012		22%	23%	27%	27%	27%	29%
LAC FAB.	48%	FY2009, FY2010, FY2011		32%	42%	48%	48%	48%	44%
DETONATOR CABLE FAB.	173%	FY2009	Multiple shifts will increase capacity	109%	136%	173%	172%	167%	165%
DETONATOR CABLE ASSY.	91%	FY2007		91%	81%	73%	39%	32%	31%
CABLE ENCAPSULATION	53%	FY2007		53%	45%	30%	25%	20%	23%
FINAL ASSY. (CLEAN BENCH)	149%	FY2011	Multiple shifts will increase capacity	66%	109%	136%	147%	149%	129%
RADAR NOSE ASSY.	2%	FY2012		1%	1%	1%	1%	1%	2%
FINAL ASSY. (RH-CONT./PLANT ENV.)	14%	FY2010		8%	9%	12%	14%	13%	12%
TSD MODULE FAB	18%	FY2007		18%	2%	2%	2%	2%	2%
FINAL ASSY. (CLEAN)- HMC/RADARS	22%	FY2010		17%	15%	20%	22%	21%	21%
AFT SUB ASSY.	74%	FY2012		56%	58%	66%	70%	66%	74%
WELDING & ENCAPSULATION	65%	FY2010, FY2011		30%	43%	62%	65%	65%	62%
MECHANICAL									
MECHANICAL MACHINING	45%	FY2009		35%	42%	45%	44%	40%	42%
ELECTROMECHANICAL ASSY.	143%	FY2008	Multiple shifts will increase capacity	115%	143%	137%	132%	132%	130%
MECHANICAL WELDING	19%	FY2010		13%	16%	16%	19%	14%	16%
SHEET METAL FAB. & ASSY. (H-GEAR)	10%	FY2009		8%	5%	10%	9%	8%	9%
HEAT TREAT	33%	FY2008. FY2010		25%	33%	32%	33%	32%	30%
RESERVOIR FABRICATION	101%	FY2008		97%	101%	89%	81%	59%	62%
CASE ASSY.	2%	FY2007		2%	1%	1%	1%	1%	1%
PLASTICS MACHINING	245%	FY2011	Multiple shifts will increase capacity	107%	184%	215%	242%	245%	235%
FOAM PRODUCTS/DESICCANTS/POLY	36%	FY2011		20%	34%	31%	35%	36%	35%
PLASTIC MOLDING & FILLED ELAST.	44%	FY2008		41%	44%	38%	38%	38%	37%
CELLULAR SILICONE	47%	FY2009		36%	43%	47%	45%	44%	43%
PLATING	26%	FY2007, FY2008		26%	26%	23%	19%	17%	13%
PAINTING	86%	FY2007, FY2008		86%	86%	73%	61%	61%	61%
OST FABRICATION	50%	FY2009, FY2010		42%	46%	50%	50%	30%	50%

Figure 10 – KCP Capacity Assessment

3.3.4 Responsive Infrastructure

According to the Terms of Reference for the NNSA's Responsive Infrastructure (RI) Implementation, the 2001 Nuclear Posture Review (NPR) concluded that the future national security environment may evolve more quickly, be more variable in nature, and be less predictable than in the past. It also recognized that the roles of US nuclear forces and the infrastructure to support those forces must evolve to meet the requirements of the new threat environment. It called for a transition from a threat-based nuclear deterrent with large numbers of deployed and reserve weapons to a deterrent based on capabilities with a smaller nuclear weapons stockpile and greater reliance on the capability and responsiveness of the DoD and NNSA infrastructure to respond to threats.



The nuclear weapons infrastructure must evolve to be more responsive. While continuing to support an aging stockpile, it must meet future requirements in a timely, agile, and more cost effective manner. It must demonstrate resilience to unanticipated events and support the ability to anticipate innovations by an adversary and to counter them before the US nuclear deterrent is degraded. The future stockpile is expected to include weapons with enhanced reliability, safety, and security, all without nuclear testing. These stockpile changes will drive transformation to a responsive infrastructure.

As a minimum, the Responsive Infrastructure initiative set the following interim goals to be reached by 2012:

1. *Fix stockpile problems* - 18 months.
2. *Maintain existing weapons thru LEPs* - 36 months.
3. *Adapt weapons for new capabilities* - 24 months.
4. *Warhead design, development, and initial production* - 48 months.
5. *Quantity interim production of warheads* - Ongoing.
6. *Force augmentation with transport and LLC replacement* - Ongoing.
7. *Underground nuclear test readiness* - 18 months.

Following the July 2005 delivery of the Secretary of Energy Advisory Board's (SEAB's) NWC infrastructure task force report, entitled Recommendations for the Nuclear Weapons Complex of the Future, Honeywell FM&T studied the best way to transform the nonnuclear manufacturing mission for the NNSA. Honeywell proposed a multi-faceted transformation concept for the KCP in a December 2005 document entitled Roadmap to a Responsive Infrastructure – The Kansas City Plant 2012. The proposal offered a two-thirds reduction in operational square footage while providing an infrastructure that is more responsive to potential changes in technical capabilities and schedule demands. The proposed transformation utilized the following three interrelated strategic thrust areas for change:

- Strategic Sourcing and Sizing
- Business Process Transformation Facilitated by Reduced Operating Requirements
- New Modern Facility Sized for the Future NNSA Mission by 2012

Shortly thereafter, the NNSA assembled all NWC contractors for a month-long strategic caucus in Washington, DC. The caucus resulted in the publication of the NNSA's transformation plan for the future entitled Complex 2030 – An Infrastructure Planning Scenario of a Nuclear Weapons Complex Able to Meet the Threats of the 21st Century. Most of the NNSA's proposals for transformation were in alignment with the earlier SEAB report and added realistic funding and timelines for accomplishing the transformation.

In April 2006, Tom D'Agostino, (then NNSA Deputy Administrator for Defense Programs, currently NNSA Acting Administrator) testified to Congress that, "A new, modern and efficient nonnuclear production facility would be in operation by 2012 and sized to produce components and conduct operations that cannot be purchased commercially (e.g. use control components and component final assembly)". The driving force for this timetable is not just to align with potential first production of an RRW, but also to begin realizing infrastructure costs savings and providing a more responsive, adaptable infrastructure in the most aggressive timeframe possible.

On April 19th, 2006, D'Agostino, authorized the KCSO to direct Honeywell FM&T to begin planning and implementing changes. These changes would significantly reduce the overall operating cost for accomplishing nonnuclear mission work, leverage commercial production, and provide a smaller, more responsive facility for nonnuclear production. This request resulted in Honeywell FM&T's delivery of four interrelated plans in May and June of 2006. These plans included:

- Transformation Plan for NNSA Nonnuclear Production
- Nonnuclear Strategic Sourcing Plan
- Nonnuclear Inventory Reduction Plan
- Responsive Infrastructure Model (also known as "*Facilities Pause Plan*")

Upon acceptance of these plans, the KCSO authorized Honeywell FM&T to further develop and analyze the transformation business case, including an evaluation of facility acquisition options. At that time the KCP transformation program was named "Kansas City Responsive Infrastructure Manufacturing and Sourcing" or KCRIMS. Honeywell FM&T delivered the Nonnuclear Production Transformation Draft Business Case and the Nonnuclear Production Facility Acquisition Report in December 2006. These reports lend considerable strategic and tactical detail on how the transformation will be accomplished and the resulting benefits in cost effective performance. The following is a summary.

Strategic Sourcing and Sizing

The current KCP facility comprises approximately 3.1 million gross square feet including 2.8 million square feet of operational space in approximately 40 manufacturing departments; numerous production support areas such as stores, test equipment, metrology, and laboratories; and large administrative support areas such as offices and maintenance. To enable a smaller facility and drive the operational model to a lower fixed cost, it is necessary to transform the current state into a new model. In the new model, capabilities that are commercially available will be outsourced and remaining in-house capabilities will be properly sized for the anticipated production rates of future weapon programs.

In many cases, existing departments with redundant capabilities will be consolidated into one common process area. Whenever practical, capabilities across the NWC will be assessed and utilized to reduce the expense of redundant and underutilized capabilities within the complex. A summary of the current results of the strategic sourcing and sizing element is shown below.

	From	To
Manufacturing Space	1.26 M	0.65 M
Administrative Space	1.84 M	0.35 M
Total Usable Space	3.10 M	1.00 M

	From	To
Make Parts (approx)	3800 (46%)	2900 (35%)
Buy Parts (approx)	4400 (54%)	5300 (65%)

Major Outsourced Processes:
- *Sheet Metal*
- *Plating*
- *Cables*
- *Heavy Machining*
- *Injection Molding*
- *Printed Wiring Boards*
- *Air Heat Treat*

Processes No Longer Supported:
- *Liquid Spray Paint*
- *Tape Wrap*
- *LIGA*

Business Process Transformation

Business process transformation will be less visible and draw less attention than the physical transformation of the plant, but it is no less important in the overall success of the KCRIMS program. Honeywell FM&T believes that considerable cost savings can be realized from more closely aligning nonnuclear production with commercial industrial practices rather than those driven by DOE orders formulated for the operation of facilities that handle nuclear material.

One of the key supporting documents to the transformation plan is a proposed new oversight model that would reengineer the relationship between the Kansas City Site Office and the KCP contractor. A new oversight model is critical to achieving all of the goals of KCRIMS. In particular, cost savings assumptions are based on a more commercial-like operation that cannot be achieved without a dramatically different oversight approach. The proposed new oversight model has the following key components:

- A set of operating requirements that is flexible, yet sufficient to assure that contract and legal obligations will be met.
- An audit system consisting of corporate, internal and self, third-party, and field assessments in key mission areas.
- A Management Assurance System developed by the contractor and its parent that provides visibility to the customer on how the leadership assesses the health of the enterprise.
- Contract changes that define all deliverables, and formalize a baseline change control management process.

One last element of the business transformation is that the workforce (both NNSA and Honeywell FM&T) needs to culturally adapt to working in a less constrained environment to fully benefit from the reduced requirements. This culture change may be the most difficult to achieve, but beginning now, and coinciding with a physical move to a new facility, is the best opportunity for a true business excellence transformation.

To drive a true change in business processes, cost targets were developed for each operating division. The process for setting these targets involved gathering FY2006 baseline data, benchmarking other comparable Honeywell sites, contracting with a consultant to review divisional functions and perform additional benchmarking, and presentations and negotiations with the divisional leadership. Two divisions, Kirtland Operations, and Applied Technologies (T00) did not participate in this exercise because they are out of the scope of the KCRIMS transformation. The cost targets were then adjusted through an iterative process before being finalized. The targets for expected performance by FY2013 (in FY2006 comparable dollars) are shown below.

Division	FY06 Total Labor Expenses	FY06 Dept Expenses	FY06 Labor & Expense Total	Targets 10/23/06	Percent Reduction	Percent of FY06 Operation	Percent of FY13 Operations
010 Senior Management	5,065,579	512,611	5,578,190	4,500,000	19.3%	1.6%	1.8%
100 Facilities & Maintenance	31,115,822	31,636,325	62,752,147	25,000,000	60.2%	18.0%	10.3%
200 Program Management & Business Development	10,658,973	699,636	11,358,609	8,000,000	29.6%	3.3%	3.3%
400 Quality & Business Excellence	16,165,645	288,476	16,454,121	10,800,000	34.4%	4.7%	4.4%
500 Human Resources	3,244,792	828,902	4,073,694	2,000,000	50.9%	1.2%	0.8%
600 Integrated Supply Chain	61,075,046	3,766,555	64,841,601	54,000,000	16.7%	18.6%	22.2%
700 Finance	5,755,874	147,976	5,903,850	4,000,000	32.2%	1.7%	1.6%
800 Engineering	80,859,879	2,555,868	83,415,747	62,100,000	25.6%	23.9%	25.5%
A00 Information Systems	15,577,637	13,722,826	29,300,463	18,000,000	38.6%	8.4%	7.4%
K00 Kirtland Operations	27,939,244	3,212,138	31,151,382	31,151,382	0.0%	8.9%	12.8%
S00 Environmental Safety & Health	5,721,036	915,945	6,636,981	1,700,000	74.4%	1.9%	0.7%
T00 Applied Technologies	12,432,523	890,270	13,322,793	13,322,793	0.0%	3.8%	5.5%
X00 Security	10,282,493	3,758,507	14,041,000	9,000,000	35.9%	4.0%	3.7%
Grand Total	**285,894,543**	**59,177,528**	**348,830,578**	**243,574,175**	**30.2%**	**100.0%**	**100.0%**

Each division developed a functional transformation plan to reach the stated targets by FY2013. These plans included the following elements.

- Executive Summary
- Introduction and Background
- Current Functions and Services
- Business Process Transformation – Future State
- Critical Success Factors and Assumptions

- Budget and Resource Profile by Year
- Transformation Schedule
- Transformation Metrics
- Transformation Risk and Opportunity Assessment
- Spreadsheet of Current and Future Functions and Costs

New, Modern Facility

Acquisition of a new, modern, flexible manufacturing facility is the visible cornerstone of the KCRIMS transformation program. While the current facility has served the mission well for the last six decades, the costs to maintain and reconfigure this facility in a responsive manner have become excessive relative to the costs of the primary production mission. The new facility is the pacing item that will enable many of the other business savings. As such, this portion of the program has received priority attention to assure that overall transformation schedules can be met in alignment with Complex 2030.

The KCRIMS facility team is following the process for the acquisition of capital assets as stated in DOE Program and Project Management Manual DOE Order O 413.3A. At this point, CD-0 approval has been received. While all potential facility acquisition options are being examined as part of the CD-1 process, the study has focused on the following options:

A. Renovate existing adjacent GSA offices, demolish the existing GSA warehouse and build new manufacturing space adjacent to offices on the GSA side of the Bannister Federal Complex.

B. All new construction on the NNSA side of the Bannister Federal Complex which would require demolition of some existing structures.

C. Complete renovation of existing GSA offices and warehouse space on the GSA side of the Bannister Federal Complex.

D. All new construction on a to-be-determined green field site.

E. Demolition of existing GSA structures and all new construction on the GSA side of the Bannister Federal Complex.

All of these options were deemed viable for the future NNSA mission and all were analyzed with the intent of making them as equivalent as possible from an operational standpoint. At this point in the study, Option D would appear to be the most cost effective option that meets the required delivery schedule. This option is being used for planning while awaiting the preliminary decision through the CD-1 process. More detailed planning for the new building is included in Section 4.1.1, Facilities and Infrastructure Overview.

In summary, implementation of these responsive infrastructure strategies has a major impact on the TYSP, including overall operational, RTBF, FIRP, and construction Line Item budgets. The assumption that KCRIMS transformation will be implemented is pervasive throughout this document and the FY2009-2013 KCP budget submittal.

3.4 Future Non-NNSA Mission, Programs, Workload, and Impacts

There are a number of other non-NNSA programs that are not dependent on NNSA to fund incremental needs. While facilities infrastructure capabilities are vital to perform the work for other than NNSA customers, the non-NNSA customer directly funds any additive costs.

The KCP anticipates becoming a major manufacturer/provider of NA42 specialized equipment. This is expected to begin in FY2008 (about $10 million per year), and can be accommodated with existing facilities/infrastructure at KO. However, negotiations must be held with the Air Force to retain the property, beyond FY2009, to support these programs. If these negotiations are unsuccessful, this new work could be potentially supported in leased facilities.

One other mission that is under consideration is for the Office of Civilian Radioactive Waste Management transportation support. This work involves the fabrication of railroad cars and is comparable to the trailer work that the KCP currently does for the OST. While some facility and infrastructure modification, or construction, would be necessary to support this new mission, they would be stand-alone facilities and have no impact on current NNSA-mission facilities.

3.5 Impacts of Non-NNSA Programs on Weapons Activities Mission Accomplishment

The KCP has had a successful WFO program for several years extending its capabilities and capacities to various government agencies outside of the Department of Energy. It is clear from the success of this program that there is a critical need for secure manufacturing and engineering services to support National Security and the Global War on Terror (GWOT).

Based on the NNSA's Complex 2030 vision of a more responsive infrastructure to support a modern nuclear weapon stockpile, the Kansas City Plant transformation will require new facilities for a smaller, more commercial infrastructure. In tandem, the KCP's National Secure Manufacturing Center (NSMC) has developed a Strategy to become semi-autonomous with a business model that is fully supported from WFO funding. This strategy allows focus on assisting other Federal agencies in accomplishing goals that may otherwise be unattainable in support of National Security missions. This focus and business model supports the NNSA's Complex 2030 vision through reduced (or eliminated) encumbrances of the nuclear weapon infrastructure, yet continue its symbiotic relationship with the KCP for complementary WFO, share best commercial practices and supply excess manufacturing and engineering capacity should the need arise.

To that end, the KCRIMS WFO strategy proposes the following:

1.) Define and establish a clear mission assignment from NNSA, IN, S&T or other DOE entity that does not tie the NSMC to nuclear weapon manufacturing (i.e. not a mission of NNSA Defense Programs).
2.) Capture a federal sponsor outside the NNSA, preferably within the DOE. This would maintain similar WFO contract mechanisms yet not be supported by nuclear weapon funding nor restricted by various other nuclear weapon requirements. However, should DOE choose to keep any division of NNSA as the sponsor, a new business model will be established in order to more definitively separate and reduce the liability of the operation.

3.) Move to the new KCP National Security Campus in a separate new building to be constructed on the same campus with the KCRIMS project. This new building may follow a similar acquisition process as the main KCRIMS project.
4.) If an acceptable sponsor cannot be secured, WFO including the NSMC work will be discontinued at the current site by the end of FY2013 and reduced to the level that could be accommodated with excess KCP capabilities and capacities in the new facility.

The new WFO building will be a leased facility for a term of at least 10 years. The current customers have repeatedly said they require infrastructure for the long term and are willing to support such a business. The leasing costs will be incrementally higher than the main KCRIMS facility due to security and some special facility requirements however, the facility and business will be financially self-supporting. NSMC will continue to grow the revenue at the current KCP location in order to achieve a sufficient financial basis for relocation and self support upon occupancy at the new KCRIMS site.

The planned building size is 300,000 square feet which will allow for all existing NSMC operations as well as future expansion to the level of full capacity by the move-in date. The target revenue at that time will be $100 million in today's dollars.

Cost Recovery

Reimbursable work at the KCP is performed on a full cost recovery basis and is consistent with the KCP Technology Plan and NNSA Technology Roadmap.

Reimbursable work at KCP is all other work that is not included in the Weapons Activities portion of the KCP laboratory table from the NNSA's budget documents. In FY2006 approximately 60% of the reimbursable dollars supported NNSA activities including Office of Secure Transportation, paid work from the laboratories and plants, Emergency Operations, and other NNSA activities. WFO (customers outside of DOE/NNSA) generated approximately 40% of the reimbursable work. This includes work for other government agencies, Department of Defense, FBI and commercial entities.

This reimbursable work is on a full cost recovery basis and overhead recovery assumptions are incorporated into the KCP Defense Programs budget. KCP recovered $53 million in overhead on $143 million of reimbursable work in FY2006 ($24 million of the $53 million in recovery was from non-NNSA sources). The KCP pricing rate methodology applies a site support overhead rate to labor work to recover facilities, maintenance, and other infrastructure type activities from reimbursable work. For every dollar of reimbursable labor work, NNSA collects approximately $1 in overhead, 23 cents of which is applicable to facility infrastructure type site support. In FY2006, KCP reports that total reimbursable work recovered $11 million ($3.5 million from non-NNSA sources) in support of facility and infrastructure (RTBF) type activities. The $11 million represents approximately 10% ($3.5 million from non-NNSA WFO sources equates to 3%) of $113 million in facilities, infrastructure, and ES&H activities.

3.6 Facilities and Infrastructure Impact in Support of Information Technology

The Information Technology (IT) organization continues to play an increasingly important role at the KCP and is highly regarded within the NWC's IT community. A mixture of IT assets and facilities are required to enable and sustain KCP's business environment. As KCP is transformed, enabling IT infrastructure, assets, and facilities must also be transformed.

The Consolidate and Renovate Computing Facilities Line Item would have provided a new data center capable of supporting future server and computing needs. However, that project has been delayed as part of the Pause Plan and will not be executed if the new KCP facility is established.

IT has undergone significant change in the last 10 years, migrating away from its home-grown business systems, to off-the-shelf solutions for its major business functions. Throughout the 1990s, a complex IT environment emerged as mainframe systems gave way to client-server and web-enabled environments. A robust unclassified environment was designed and implemented throughout KCP and a complementary classified environment is now being implemented. IT facility and infrastructure design efforts are now focused on space, facility, utility, and other infrastructure needs for the targeted KCRIMS building while maintaining acceptable service levels within the existing site. IT will lean its processes, applications, infrastructure, and services to provide the right services more cost effectively in the future.

To this end, an effort is underway to define needed service levels to align investments and solutions with business needs. These defined service levels and KCP transformation business decisions will drive significant IT changes. Other IT transformation efforts are targeted at simplifying and reducing the size and cost of application and infrastructure elements. Transformation efforts are driving business decisions related to facility and infrastructure for both the existing KCP site and possible future sites. As a result, past plans to consolidate and renovate existing computing facilities, and efforts to continue the growth of unclassified networking have been halted. Further, technology refresh will only be applied to most critical core elements. All investments must be strategically staged within the context of the existing and possible future sites.

It is expected that within the KCRIMS building, a single data center will be required and off-site electronic media storage will be implemented for redundancy. It is estimated that the data center will require 16,000 square feet of floor space and will include modernized electrical, HVAC, and fire suppression systems to support today's and future computing technologies. Since a single data center is planned, it is critical that adequate and redundant utilities are provided. Additionally, an emergency generator is being considered as a source of emergency power. Existing facilities will continue to be leveraged until the relocation to the new building. There is a potential for up to a $3 million investment, currently planned in FY2009, required for data center equipment, facilities, and alternate power sources. No other significant facility or utility investment is planned for the existing site. Existing facilities include:

Facility	Constructed	Area (Square Feet)	Floor space Usage	HVAC Usage	HVAC Condition	Electrical Usage	Electrical Condition	DC to DC Connect (3)	Estimated Decomm. Date(1)(2)
CCF#1	Early 1970's	10,000	70%	85%	Good	80%	Fair	Poor	2015
MCF	Early 1980's	1,000	80%	100%	Poor	95%	Good	Fair	2010
SEL	Mid 1970's	750	100%	95%	Good	100%	Fair	Poor	2008
EDSV	Early 1990's	2,200	80%	75%	Good	85%	Good	Fair	2012
MCS	Mid 1970's	2,100	60%	70%	Poor	60%	Good	Good	2013
FES	Late 1980's	600	50%	60%	Good	60%	Good	Poor	2009

(1) Based upon KCRIMS realization date of 2012
(2) Consolidation effort in 2007 to prepare for transformation to the KCRIMS facility could enable early decommissioning of some of the computer facilities
(3) Relative availability of Data Center to Data Center fiber connections

Today, research (PDRD funded) projects are assessing the feasibility of having a single network for both classified and unclassified transmission and the possibility of leveraging wireless network technologies is also being assessed. Technical decisions in these areas will directly impact facility needs at the new site. Existing plans will be augmented to account for discoveries made through current research efforts.

In support of NWC initiatives, KCP IT has been awarded additional assignments. These include: NNSA portal development and hosting, classified application development, Integrated Cyber Security Initiative (ISCI) leadership and procurement assignments, Supply Chain Management Center, and OST web application development and hosting. These functions will be provisioned within existing and future site and utility needs.

3.7 Roof (RAMP)

The Roof Asset Management Program (RAMP) is a Nuclear Weapons Complex-wide program to manage roofing repairs and replacements at multiple sites under one contract. Partners in this program include the Kansas City Plant, Pantex, Y-12, Los Alamos National Laboratory, Lawrence Livermore National Laboratory, and Nevada Test Site. The RAMP utilizes centralized planning techniques to effectively manage roofing assets across multiple sites and multiple structures. Prior to implementation of this program, sites had the responsibility of justifying roofing needs independently, with each site competing for the same limited funding. With this program, NNSA/HQ allocates limited funding to the highest priority roofing needs, regardless of which site owns the roof. The program manages over 16 million square feet and 4,600 separate roof areas among the six sites. The strength of the program is not only the replacement of critical roof areas, but the ability to make sound decisions to optimize and extend roof life across the complex.

The Kansas City Plant holds the contract with the roofing management contractor, Building Technology Associates, Inc. (BTA) in Detroit, Michigan. The Kansas City Plant provides not only contracting services but program management and project control services for this unique initiative. A team consisting of NNSA site office and contractor representatives from each of the six partners manages the program. The team works closely with BTA to award subcontracts at each of the partner sites and execute design/construction.

NNSA/HQ originally committed $50 million to this program over the first 5 years and considers this approach a model for other activities within the NWC. Due to the success of the program, NNSA/HQ recently announced they would continue to support the program through FY2013. Since the inception of the program in FY2004, the following funding amounts have been received:

FY2004 – $ 5.4 million
FY2005 – $15 million
FY2006 – $ 6 million
FY2007 – $10 million
FY2008 – FY2013 – Anticipate a minimum of $10 million per year

4.0 The Plan

4.1 Planning Process

Site planning at the KCP is the responsibility of an integrated team with members from the Finance, Facilities Management Services, and Program Management divisions and the KCSO.

The Finance division oversees the operating budget, capital and construction budgeting, management of funds, and long-range planning. Program Management and Facilities Management Services provide guidance for the prioritization of those projects identified.

The Facilities Engineering Program Management organization coordinates and prepares the TYSP. Facility Management Services estimate, design, and manage all construction projects and utility systems. They also maintain the plant model, identify and plan all space requirements, and maintain plant data in the Facilities and Information Management System (FIMS) database. Both the KCP and KO track, assign, and maintain space requirements for their individual sites. During construction, Facility Management Services also provides assurance that all applicable laws, regulations and negotiated agreements are followed, and that applicable safeguards and security, and integrated safety management requirements and policies are followed.

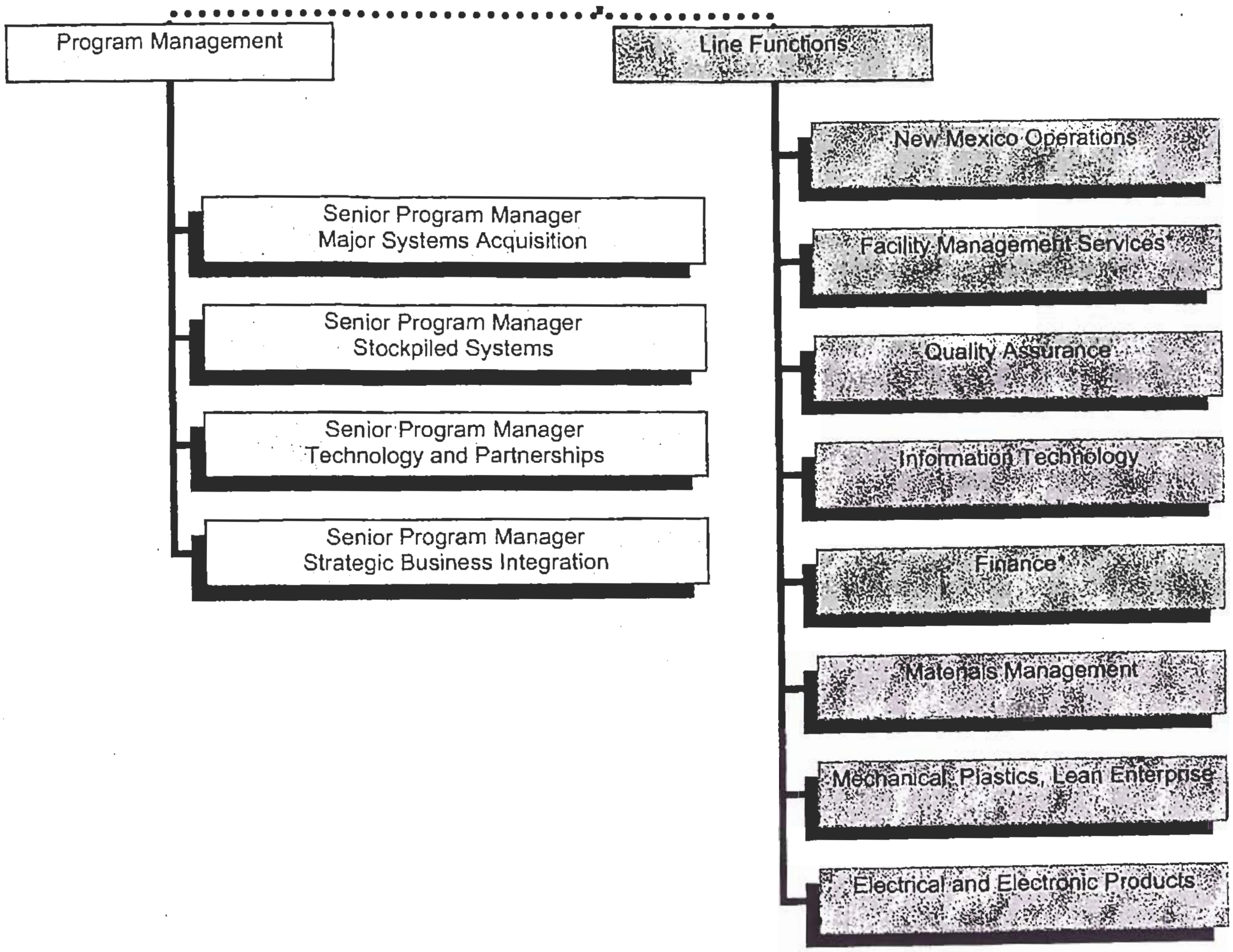
The Program Management division provides programmatic coordination for site planning purposes and for campaign workload.

KCSO oversees the planning process and provides input that addresses NNSA's initiatives and goals. The final list of projects in this TYSP was reviewed and approved by the site office. This process provides a unified direction that reflects the long-term planning for the site.

To enhance effectiveness and communication, a matrix organizational structure operates within Program Management. A senior program manager is assigned for each of the following areas: Major System Acquisitions (LEPs and RRW), Stockpile Systems, Technology & Partnerships (Campaigns), and Strategic Business Integration. Program managers are then assigned to specific tasks within each area. This organizational approach is shown in Figure 11 below. The KCP organization chart shown in Figure 13 identifies all functional divisions and the associate responsible for each division. The KCSO Senior Staff organizational chart with associated responsibilities is shown in Figure 12.

The advantages of this structure are the application of enterprise-wide processes to conduct planning, monitoring, and controlling as required to complete program needs. The outcome is better integration and balance of resources from the wide range of activities and projects throughout the plant.

Each senior program manager, in conjunction with the program manager assigned to each specific task, coordinates and guides all reviews and inquiries by the NNSA and the responsible Design Agencies. The program management team is pivotal to program success, given that almost every weapon program upgrade employs a wide array of technologies and infrastructure investments. Each senior program manager, with inputs from the assigned program manager, reviews and approves annual budgets, updates the NNSA on the status of program progress, and negotiates conflicts arising over design demands that are incompatible with plant limitations in funding or capabilities.



*Indicates Facilities and Infrastructure (F&I) Responsibility

Figure 11 – Program Management Matrix Structure

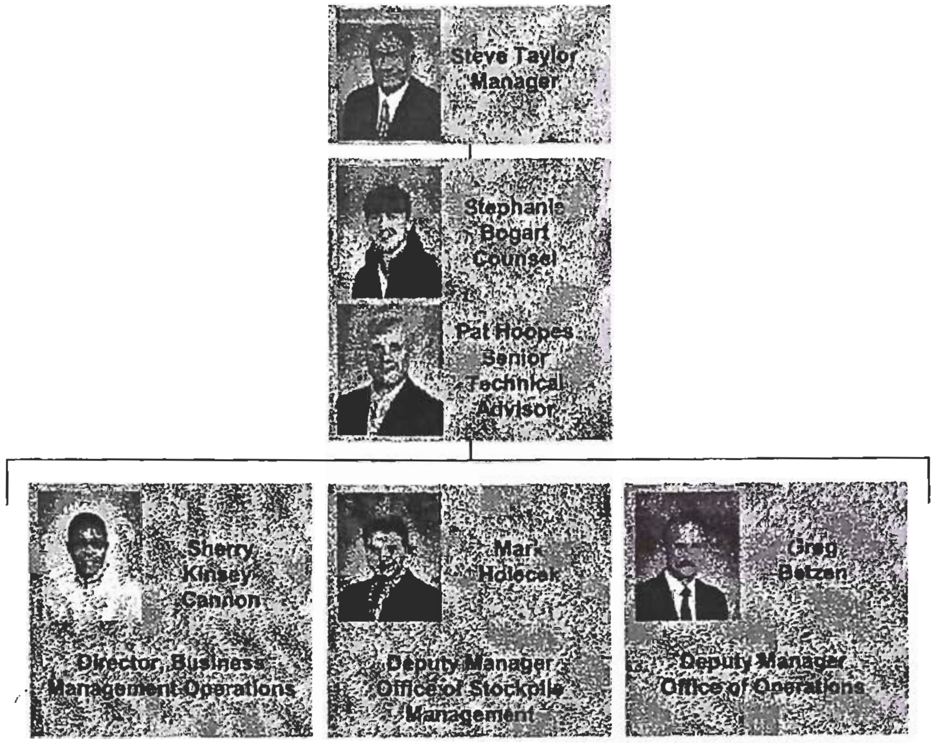


Figure 12 – KCSO Organizational Structure

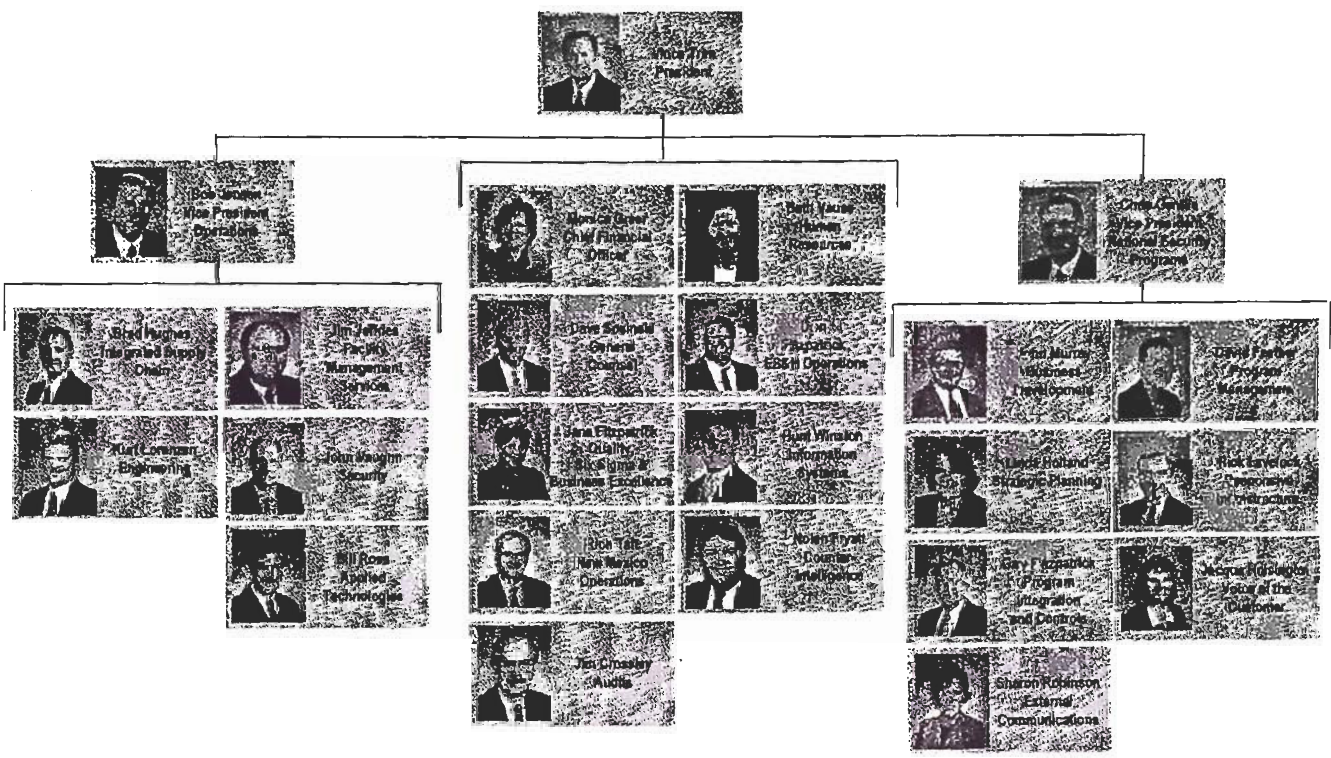


Figure 13 – KCP Organizational Structure

4.1.1 Facilities and Infrastructure Overview

The KCP has operations in 38 buildings or building areas in the Bannister Federal Complex. Of the 3.1 million gross square feet, 2.9 million square feet is owned with the balance leased. The leased space is contiguous with the owned space located in the main manufacturing building (Building 1). Mission Critical buildings (11) contain 2.2 million gross square feet, Mission Dependent, Not Critical buildings (13) contain 0.4 million gross square feet and Not Mission Dependent buildings (14) contain 0.3 million gross square feet. Details can be found in the FIMS 092 report, Attachment G. The KCP buildings on site are served by centralized or trunk utility systems managed and maintained by the KCP. Most of the facilities and utilities are considered adequate for the plant mission as discussed in section 4.1.2.1, Condition.

The RTBF budget has proven to be insufficient to recapitalize facilities and utilities at the KCP. Long term under-funding created a critical backlog of infrastructure needs for the KCP, as discussed in section 4.1.4, Deferred Maintenance Reduction/Facility Condition Index. FIRP funding has been used successfully to address much of the FY2003 DM Baseline, but a backlog of infrastructure needs continues to grow. In FY2006, KCP FIRP funding was cut and $4.4 million was returned. To maintain the existing facilities, the KCP requires, on average, an additional $20 million per year in recapitalization funding for plant infrastructure maintenance. This unfunded need continues to add to the current backlog.

The KCRIMS proposal is to relocate KCP operations to new modern manufacturing facilities by 2012. During the interim, the existing operations must be maintained to support the ongoing mission, primarily LEP production. The focus is now on executing facilities and infrastructure projects that address code compliance issues, safety issues, preserving the central infrastructure systems, or that maintain the integrity of the building envelope. During the transformation phase, emphasis has shifted from proactive and long-term infrastructure sustainment to a more reactive short-term response as driven by an immediate need to keep essential departments operational. Mission-critical facilities will be maintained as needed for mission support and be allowed to decline otherwise until those facilities/areas are vacated. Safety and security issues will be given priority and remedied in a timely fashion.

4.1.1.1 New Building Planning

The single largest task of the facility transformation is to establish a comprehensive set of operating requirements for the new facility. These "program requirements" as they are often referred to in the construction industry have been named "functional and operating requirements" in the KCRIMS program to avoid confusion with weapons program requirements. The primary and overriding requirement for the new nonnuclear production facility is that it is designed and constructed for flexibility that will enable rapid, economical reconfiguration to meet changing production requirements. This requirement must take precedence over optimizing the operational profile for the current set of production capabilities and is the key in transforming to a truly responsive infrastructure.

Development of functional and operating requirements occurs in phases and is somewhat of an iterative process between space providers and space customers. The facility transformation team is formulating those requirements with the use of a database to capture critical parameters on capital equipment and operating requirements for the facility. Initial high level requirements such as total space, clear height, major operational demarcations, and plant environments have been established for several months but continue to be refined daily. The facility transformation team is committed to substantially completing the functional and operating requirements by May 2007.

One major achievement of the manufacturing transformation teams over the past several months was validation of the sourcing decisions by determining if retained capabilities would fit in the proposed new facility envelope. In many cases this was an iterative process between the disposition of capital equipment and conceptual layouts. Each team completed a high level conceptual layout of their process area. Integration of these separate layouts for cohesive flow and practical adjacencies has been initiated.

The space planning also has the added virtue of both 23,000 square feet of "white space" that is interspersed in critical operational areas and nearly 68,000 square feet of general undistributed "white space". This will allow the new facility to have considerable flexibility and be responsive to the changing needs of the complex from the very beginning.

Proposed manufacturing space allocations are indicated in Figure 14.

Manufacturing Space	Area	Useable Square Feet	White Space allocation	Total Useable Square Feet
Plating	General factory	0	5,000	5,000
Refurbishment & Dismantlement	General factory	10,000	2,000	12,000
Rubber & Plastics	General factory	34,400	4,000	38,400
Paint & Heat Treat	General factory	10,000	0	10,000
Machining	GTS & Sam	91,500	6,000	97,500
Machining	Plastics Machining	5,000	0	5,000
Assembly & Electrical Fabrication	General factory	86,000	0	86,000
Assembly & Electrical Fabrication	Class 100	5,000	0	5,000
Assembly & Electrical Fabrication	Class 10,000	7,300	0	7,300
Assembly & Electrical Fabrication	Class 100,000	18,700	2,000	20,700
Labs & Engr Labs	K- Lab	2,750	0	2,750
Labs & Engr Labs	Labs & Engr Labs	75,850	0	75,850
TE, Gauge, Metrology	General factory	29,100	0	29,100
Trailers	General factory	29,000	2,000	31,000
Purchased & other Inspection	General factory	36,000	0	36,000
Special Material Production	General factory	20,300	2,000	22,300
Packaging & Shipping	General factory	20,400	0	20,400
Stores	General factory	60,000	0	60,000
Stores	Stores Trailers	6,000	0	6,000
Stores	Chemical Stores	12,000	0	12,000
White Space	General factory		67,700	67,700
TOTAL MANUFACTURING SPACE		559,300	90,700	650,000

Figure 14 – KCRIMS Manufacturing Space Allocations

In addition to the facility manufacturing space, planning has also been performed for the administrative spaces as shown in Figure 15:

Non Manufacturing Space	Area	Useable Square Feet	White Space allocation	Total Useable Square Feet
Office Space	Office Space	201,000		201,000
IT	Common Support Space	40,000		40,000
Maintenance	Common Support Space	38,000		38,000
Break Rooms	Common Support Space	12,000		12,000
Other	Common Support Space	47,800		47,800
White Space	White Space	11,200		11,200
TOTAL NON MANUFACTURING SPACE		350,000		350,000

Figure 15 – KCRIMS Administrative Space Allocations

These estimates are preliminary and subject to change as more detailed analysis of the areas are performed.

The overall facility acquisition schedule is shown in Figure 16 below.

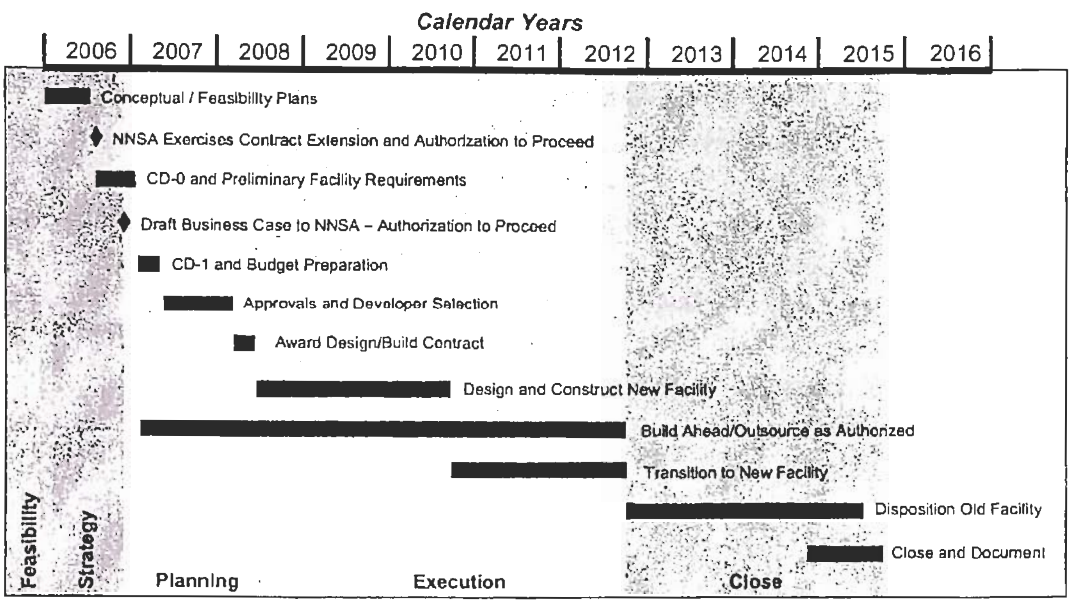


Figure 16 – KCRIMS Project Schedule

4.1.2 Real Property Asset Management

The KCP has a centralized Facilities and Space Planning Organization. Most of the site floor space is within three interconnected buildings, which greatly simplifies the challenge of site-wide integration. Facility and infrastructure requirements are identified by the operating departments and submitted to the Finance Division as part of the annual construction budget call for construction Line Items, General Plant Projects, and other infrastructure projects.

Departments requesting changes in space or in configuration submit a request for feasibility and cost study. These requests are generally submitted with a preliminary space requirement (size, configuration and process flow) and justification. Requests are analyzed by the Facilities

Engineering Program Management group (consulting with the weapons Program Management organization, as needed) to assess the need, timing, location, and establish project priority. This process to manage floor space results in minimal increases to operating departments.

Depending on the scope of work to be performed and the cost, projects are submitted as either expense funded projects, General Plant Projects, or Line Items. However, due to the Pause Plan philosophy, the majority of future projects have been placed on hold, pending the Transformation Plan decision regarding a new facility for the KCP.

There are no major facilities being constructed at the KCP requiring start-up. Most projects at the KCP are rearrangements of existing space and operations and the start-up becomes a simple process conducted as facilities are completed.

4.1.2.1 Condition

Condition of real property assets is discussed by site beginning with the Kansas City site and concluding with the Kirtland Operations site.

4.1.2.1.1 Kansas City Plant (KCP) Condition

KCP facilities and infrastructure are currently suitable for the NNSA assigned mission and have been maintained to support long-term continual operation at the site. The main manufacturing building, containing roughly 65% of the KCP floor space was completed in 1943 to manufacture aircraft engines for World War II and has gone through continuous modifications to accommodate tenant needs. The Atomic Energy Commission (AEC), now the NNSA, has occupied this site since 1949. Plans are being developed to transform the KCP from the existing sixty-plus year old facilities to new modern manufacturing facilities consistent with Complex 2030. During transformation, existing KCP floor space will continue to be used primarily for manufacturing, storage and office activities in support of the NNSA assigned mission.

In FY2003, the KCP implemented an expanded site condition assessment process. The process separates KCP facilities, site utilities, site services, and process equipment into their own assessment categories. In FY2006, the KCP completed assessment of site utilities and the facilities assessment of the main plant mezzanine consisting of approximately 260,000 square feet of floor space. During the same time period, the strategy for transforming the KCP into a smaller more efficient manufacturing facility, as envisioned for Complex 2030, was in development.

Consistent with Complex 2030 transformation, the KCRIMS program is proposing to relocate the KCP to a new modern manufacturing facility by 2012, thus vacating the existing World War II era facilities. In agreement with the Kansas City Site Office, the KCP has eliminated the KCP developed facilities condition assessment process since it will provide minimal benefit during the transformation period of 2007-2012. Facilities and infrastructure related Line Item and general plant projects have been deferred or postponed indefinitely. The KCP infrastructure sustainment management process has been modified appropriately to provide for management of KCP assets during the transformation period. Condition of mission critical facilities is currently adequate for LEP completion and mission critical facilities will be maintained as needed for mission support and allowed to decline otherwise until those facilities are vacated. Safety and security issues will be given priority and remedied in a timely fashion.

Condition assessment will continue to be performed by Utilities Engineering and Maintenance on central utility systems with an end result documenting priority component repair and replacement as recapitalization funding is eliminated. Assessments will focus on sustaining Powerhouse central systems, roofing systems, environmental remediation systems, structural/seismic systems and safety/code compliance systems with a run-to-failure approach balanced by LEP program completion requirements for the remaining plant equipment/systems. Upon completion of relocation in 2012, all condition surveys of utilities systems for the vacated facilities will cease.

Process Description

The KCP site condition assessment process was developed to provide a performance based assessment of the KCP real property infrastructure, buildings, systems and equipment. A description of the KCP site condition assessment process including the method of tracking deficiencies, frequency of inspections and status of implementation can be found in the FY2004, FY2005 and FY2006 TYSP submittals. With elimination of the KCP condition assessment program, the condition of KCP facilities is being reported by condition category, defined in terms of facility condition index (FCI) as computed within FIMS. FCI is the metric used by NNSA to report the condition of real property assets. FCI is Deferred Maintenance (DM) divided by Replacement Plant Value (RPV). Within FIMS, floor space is categorized into one of the condition categories per the following FCI condition table.

FIMS Condition Category	FIMS Condition Criteria
Excellent	DM is less than 2% of RPV
Good	DM is 2% to less than 5% of RPV
Adequate	DM is 5% to less than 10% of RPV
Fair	DM is 10% to less than 25% of RPV
Poor	DM is 25% to less than 60% of RPV
Fail	DM is greater than 59% of RPV

Current Condition

The KCP utilizes owned and leased floor space. Of the total 3.1 million square feet of KCP floor space, the owned floor space of 2.9 million square feet, as categorized in FIMS by FCI, is as follows. For all buildings including all mission dependency categories, 20% of the gross floor space is considered excellent, just under one percent is good, 61% is adequate, 11% is fair, six percent is poor and less than one percent is fail. Eighty six percent of the owned floor space is categorized as industrial/production/process. This floor space is rated as 19% excellent, 61% adequate, and 6% poor. Looking at mission critical assets alone, 12% of the gross floor space is excellent, 80% is adequate, and 8% is poor. A summary of the current condition of NNSA owned floor space by condition and use category is presented in Figure 17. The condition of floor space by building is reported in the FIMS 092 report shown in Attachment G. It must be noted that the KCP forecasts and tracks DM for major facility and infrastructure components only. Buildings shown as "Excellent" for condition in Attachment G do not have any major facility DM and therefore, FIMS computes the condition of these buildings as "Excellent" (Condition = DM / RPV). The actual condition of these buildings is fair to adequate based on a condition assessment that takes into account all aspects of the building.

Summary of Current Facility Condition

Percentage of Gross Sqft in Excellent, Good, Adequate, Fair, Poor, Fail, or Not Applicable Condition

Use Category	Excellent	Good	Adequate	Fair	Poor	Fail	Not Applicable	Totals
Administration (Office)	0.00%	0.00%	0.00%	8.37%	0.00%	0.00%	0.00%	**8.37%**
Storage	0.22%	0.00%	0.00%	0.81%	0.00%	0.90%	0.01%	**1.94%**
Industrial/Production/Process	18.55%	0.00%	61.00%	0.00%	6.33%	0.00%	0.00%	**85.88%**
Service Buildings	1.13%	0.75%	0.00%	1.77%	0.00%	0.00%	0.00%	**3.65%**
Other	0.15%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	**0.15%**
Totals	**20.05%**	**0.75%**	**61.00%**	**10.95%**	**6.33%**	**0.90%**	**0.01%**	

Total NNSA Owned KCP Gross Square Footage **2,871,817**

Figure 17 – Summary of Current Condition (From FIMS 027 Report)

Future Condition

Per the "DOE Three Year Rolling Timeline; Implementing the Goals and Objectives of DOE's Asset Management Plan", the DOE stated it will be moving to link the new mission dependency categories with specific asset condition targets to ensure those real property assets that are most closely related to mission are properly maintained. As stated earlier, the KCRIMS program will create a new smaller and more responsive facility for nonnuclear production by relocating the KCP to a new modern manufacturing facility by 2012. Until this program is certain, Line Item and GPP facility projects are deferred/postponed for the next several years. In light of this, no new FIRP projects will be started at the KCP and $4.4 million of FIRP funding was returned in FY2006.

Historically, the primary focus around the development of projects has been to keep the production capabilities viable for the long term. Since the onset of FIRP, additional emphasis on reducing deferred maintenance has also influenced which projects were funded. Based on the decisions currently being made, neither the long term viability of the infrastructure systems or DM reductions is sufficient justification for recapitalization projects. Instead, the KCP focus has shifted to executing projects that address code compliance issues, safety issues, preserving the central infrastructure systems, or that maintain the integrity of the building envelope. Projects will be developed to keep critical departments operational but will shift from proactive and long-term in nature to a more reactive short-term response as driven by an immediate need.

Within this context, the condition of the current KCP real property assets will be allowed to decline in a controlled fashion until they are vacated in 2012. The current DM forecast reflects anticipated future growth based on the infrastructure maintenance posture that is in place as a result of the KCRIMS initiative. This forecast will not be updated until the KCP Transformation is complete. At the completion of transformation, DM will be zero on the new facilities and the condition will be categorized as excellent. For a full discussion of this and more information on FCI, refer to Section 4.1.4, Deferred Maintenance Reduction/Facility Condition Index.

Utility Condition

Many of the KCP utility systems are centralized and therefore must be maintained viable to support those mission critical areas required to build out the LEPs prior to plant relocation. KCP utility systems condition information is contained in the Utilities Management Plan (UMP). This plan provides the base definition of KCP utilities and contains detailed physical descriptions of each utility or system. It also provides details of expected operation, condition statements, and deficiency listings that are the foundation for both long-range and short-term planning processes. The age, current condition, reliability of existing equipment, risk of system failure and the impact of deficiencies on the system are tabulated. This provides justification and specification for future planning and serves as the basis for the formal budget planning process. The UMP provides the basis for managing component and system risks by eliminating deficiencies and ensuring those systems remain as reliable and efficient as necessary to complete mission assignments until no longer needed.

CAS, CAIS and FIMS

The KCP is committed to the use of FIMS. KCP real property asset information is entered, maintained and verified in FIMS to meet the FIMS criteria. The DOE Condition Assessment Survey (CAS) and the Condition Assessment Information System (CAIS) are not employed at the KCP and KO. A KCP developed condition assessment process has been used to assess the condition of KCP real property assets for the last three years. The KCP site condition assessment (SCA) process was developed to more accurately gage the condition of the main plant building where most of the KCP floor space is located. The FCI algorithm that determines facility condition based on the RPV and DM data provides a representation with limited usefulness for the main plant building. For this reason, asset condition information entered into FIMS has been based on the data collected and analyzed in the KCP site condition assessment process which has now been terminated through the transformation period until after 2012.

4.1.2.1.2 Kirtland Operations (KO) Condition

KO facilities and infrastructure are suitable for the NNSA assigned mission and will continue to be used primarily for manufacturing, storage and office activities in support of that mission. KO real property asset information is entered, maintained and verified in FIMS to meet the FIMS criteria. However, the FIMS summary condition category for KO assets is not useful, because DM has been entered as zero for each KO facility, thus resulting in the summary condition for each property displayed as excellent on the FIMS 092 report. KO resides in permitted and leased facilities and therefore does not track DM. However, facilities are surveyed and maintained by KO personnel to assure their condition is suitable for ongoing mission support. The current condition of all KO facility space is adequate, or in the case of the new facilities, excellent. In addition, the future condition of KO facilities in Albuquerque will become excellent through their consolidation as part of the ATTC acquisition. Should the NC-135 Site be retained in part or in whole, condition assessments, which were placed on hold in anticipation of the ATTC acquisition and total closeout of the site, will be performed.

4.1.2.2 Utilization

Kansas City Plant

In accordance with transformation planning, the goal for the KCP is to maintain the facilities production and support operations through the 2012 timeframe. Thus, the KCP footprint will remain at approximately 3.1 million square feet. Efforts to vacate space for return or exchange with GSA have been abandoned. No future capital investment in the existing buildings will be made to further vacate this space as no favorable cost-benefit would be realized by returning this space to the GSA. Of the 3.1 million square feet, approximately 250,000 square feet is not currently occupied and is in a "cold shutdown" state. The fact that this space is not utilized is reflected in the percentages shown in Attachment B. With this space reduction, priority is given to reutilization of existing space. Reoccupation of cold shutdown space is only exercised after all other options are exhausted.

In addition, no future investment will be made to further consolidate production operations or other functions in an effort to increase space utilization unless a cost payback can be achieved in less than two years. With only a five-year projected occupancy of the current building, a favorable cost-benefit could not be achieved by the time any consolidation projects could be completed. However, there are ongoing efforts to vacate areas to shut off utilities and meet energy-savings goals as well as reducing maintenance costs. These efforts will continue as long as they can be accomplished at minimal expense.

Kirtland Operations

Facility space, in general, is marginally adequate to support the Kirtland Operations mission. However, the planned consolidation of Kirtland Operations' activities located in Albuquerque into one facility, the NNSA ATTC, will alleviate current space issues. The ATTC is discussed in more detail in section 4.1.3.1, Future Space Needs. Current space utilization is discussed in the following paragraphs.

Space at the NC-135 Site for offices, fabrication operations and laboratories is at capacity. The core facilities at this primary site are adaptable to meet known programmatic needs pending the move to the ATTC. The NC-135 was originally planned to be vacated with the ATTC, however, NNSA is now pursuing retention of this site with Kirtland Air Force Base (KAFB) due to new mission requirements, including one requiring access to the runway. This site remains highly desirable to the Air Force. KAFB approval is required to extend or obtain a new land use permit.

The Craddock Facility marginally satisfies the space need of current programs. An outside fenced area for storage containers for bulk materials and equipment, and space management efficiencies have relieved overcrowding. However, despite these measures, space remains tight. Albuquerque International Sunport expansion plans, including continuing Airport Authority acquisitions of surrounding properties, threaten this facility in the long term. This property will be vacated with the move to the ATTC.

The Air Park Facility and Los Alamos Office are adequate for current programs. The Air Park Facility will be vacated with the move to the ATTC. Actions are underway to relocate the Los Alamos Office due to the lease expiring in June 2007 coupled with the property owner's plan to construct a new facility on the property.

Attachments B (KCP) and B (KO), Asset Utilization Index show the summary of facility utilization for both the KCP and KO sites.

4.1.2.3 Land-Use Planning

Kansas City Plant

The future of the KCP is based on maintaining the mission of nonnuclear manufacturing. The Bannister Federal Complex/Kansas City Plant will continue to be used for manufacturing, storage and office. These uses will remain similar regardless of Agency ownership or occupancy. This land use option was developed through public meetings and published in the Future Use Report dated August 1995.

As a result, future land use for the KCP is expected to remain relatively constant through 2015. Options are currently being studied to determine the use of the land beyond that; whether the current building is to be demolished or if it will be occupied by another tenant.

Kirtland Operations

The land currently permitted from KAFB is to be leased until 2009, upon relocation to the ATTC. With the recent decision to pursue the retention of the NC-135 Site for new mission requirements, KO will be reviewing the space needs of that location. Recommendations to alter the site's current footprint may result from this review. Regardless of the outcome, there will not be any changes to the site's current footprint until the status of retaining the site is known.

4.1.2.3.1 Disposition Planning

The KCP has an ongoing mission to provide non-nuclear manufacturing capability to support the NNSA weapons programs. At present, no plans for facility disposition have been developed or approved. However, in light of the proposal for KCRIMS as described in section 4.1.1.1 of this plan, facility disposition planning may be initiated in the near term. In that event, it is envisioned that normal asset disposition processes and studies used by the General Services Administration (GSA) will be employed.

The initial step in the GSA process is to conduct a Targeted Asset Review (TAR) of the DOE-owned portion of the Bannister Federal Complex. This process provides a link of asset data, regulatory compliance and decision support information to serve as an asset management tool. Information in the TAR will then be used as a resource for other studies routinely conducted by GSA, such as asset reutilization/disposal and market assessment studies. The end result of these studies will be the identification of possible alternative uses of the assets as well as a recommendation for highest and best use of the facilities and property.

As part of the early business planning effort associated with KCRIMS, the NNSA published a review and rough cost estimate of three legacy planning scenarios in December 2006. These scenarios included facility deactivation, partial demolition and/or reuse of the facility, and demolition of the entire KCP facility. Recommendations made in the report for further study of alternatives and market analysis align well with the GSA asset review and study processes described above.

4.1.2.3.2 Environmental Long Term Stewardship (LTS) Program

The KCP completed formal environmental remediation activities funded by the DOE Office of Environmental Management in FY2006 and formally transitioned program sponsorship to NNSA as a part of site Long Term Stewardship (LTS) activities. Long term stewardship includes those activities necessary to protect public health and the environment from site hazards including monitoring, maintenance, institutional controls, information management (including records maintenance) and other activities to ensure that implemented clean up remedies remain effective.

The remediation strategy at the KCP under the EM program was to remove easily accessible (shallow) areas of chlorinated solvent and/or polychlorinated biphenyl (PCB) soil contamination while other contaminated areas of soil adjacent to and under buildings were allowed to remain. Contaminated groundwater at the site is contained by a series of pumping wells that capture groundwater and transport it to a common point for treatment and disposal. Numerous other groundwater collection points are also captured for treatment. These include building footing tile drains, non storm event flows in stormwater outfall 002 and an area of groundwater seepage along a railroad embankment northeast of the facility. Stormwater conveyance systems are required to be structurally maintained and monitored to assure that permitted discharge limits are met. Monitoring of groundwater from numerous monitoring wells within the Bannister Federal complex as well as monitoring of stormwater discharges, surface water and sediments from three water bodies that surround the facility are also performed. A series of institutional and engineering controls have been implemented throughout the Bannister Federal Complex to limit exposure to remaining contamination sites and to protect individuals from exposure to these areas.

All environmental clean up activities at the site, have and continue to be mandated by the Resource Conservation and Recovery Act (RCRA). The KCP has a RCRA "Part B" permit administered and overseen by the Missouri Department of Natural Resources and the U.S EPA Region VII. The permit mandates the components of the LTS program described above.

Costs for LTS remain relatively constant throughout the program with additions in specific outyears for cyclical activities. The FY2007 budget funded as a weapons Line Item by NNSA NA-56 (Office of Environmental Projects and Operations) totals $1.7 million.

LTS Issues:

Storm Water Outfall 001

The KCP's NPDES Permit (see Section 4.1.2.3.3.2) requires monitoring of stormwater discharges for a number of parameters including volatile organic compounds (VOCs). MDNR added monitoring of VOCs to the current (November 1999) NPDES permit to assess the need for VOC limits in future versions of the permit. Given the ongoing routine detection of VOCs in stormwater discharges, future versions of the NPDES permit will likely contain limits for VOCs. These VOCs are associated with historic contaminant releases which have contaminated groundwater and soils at various locations on the KCP site. In addition, PCBs are periodically detected in the discharge and are also associated with historic releases. Although PCBs are rarely detected in stormwater discharges from Outfall 001 bioaccumulation monitoring continues to detect an upward PCB trend in biotic and abiotic sampling in the Outfall 001 receiving stream. Sampling within the 001 system using semi-permeable membrane devices (SPMDs), an abiotic means of mimicking bioaccumulation, detect PCBs in stormwater. PCB concentrations in stormwater remain below detection limits, however, a sufficient PCB mass is present in the discharge to contribute PCBs to the receiving stream and resident biota.

Concrete Pipe – An investigation to assess the condition of several thousand feet of piping in the 001 system has been completed. Video surveys and sampling to identify VOC and PCB infiltration points were conducted to characterize the condition of the piping system. Several areas of VOC and PCB infiltration were identified through sampling and analysis. Video inspection identified several areas of structurally compromised piping that allow sediment infiltration and accelerated groundwater / vadose zone rain water infiltration migration into the storm sewer system. A design to facilitate pipe lining to mitigate the infiltration of VOCs and PCBs was completed during 2006.

Open Channel – An open channel portion of the Outfall 001 storm sewer system had previously been identified as allowing groundwater infiltration into the open channel. A groundwater collection system (Outfall 001 Interceptor System) was installed during 1993 in this area to prevent migration of VOC contaminated groundwater into the 001 system. During 2005 an investigation was conducted that identified additional areas of VOC contaminated groundwater infiltration into this segment of Outfall 001. A design was completed during FY2006 to address the additional area of VOC contaminated groundwater infiltration into the open channel portion of the Outfall 001 system.

Construction funding for installation of the piping liner system and construction of the additional groundwater interceptor system does not exist. A capital improvement forecast has been submitted to address the occurrence of VOCs and PCBs in Outfall 001 (See Attachment A-5).

Storm Water Outfall 002

The daily maximum PCB discharge limit in the KCP's NPDES Permit (see Section 4.1.2.3.3.2) was lowered from 1.0 µg/L to 0.5 µg/L effective November 2002. The permit authority bases the PCB discharge limit on the recognized analytical quantification limit. Weekly sampling for PCBs is required at the four regulated outfalls. Stormwater discharges from Outfall 002 periodically exceed the 0.5 µg/L limit (34 times since the limit was lowered in November, 2002).

The PCB contamination in Outfall 002 is associated with Environmental Restoration Sites addressed under the KCP's RCRA Part B Post Closure Permit. To reach the 0.5 µg/L PCB discharge limit, investigation and corrective action is required. The KCP is currently negotiating a Consent Judgement with MDNR that addresses PCBs in stormwater discharges. The Consent Judgement requires several administrative actions that may revise the PCB discharge standard. In addition, completion of 'fate and transport' and bioaccumulation studies, operation and maintenance of the Outfall 002 reroute system, maintenance of the 002 access restriction (barrier over the open concrete raceway to prevent recreational receptor exposure to PCBs in sediments and stormwater in the raceway), notification sign maintenance and continued operation of the Outfall 002 reroute system are required by the Consent Judgement.

All of the above actions are NA-56 funded. Additional corrective actions may be required to address the infiltration of PCBs into the Outfall 002 system. A capital improvement project forecast has been submitted to cover anticipated additional work to address the occurrence of PCBs in storm water outfall 002 (See Attachment A-5).

Storm Water Outfall 004

The KCP's NPDES Permit (see Section 4.1.2.3.3.2) requires monitoring of the discharge for VOCs. MDNR added monitoring of VOCs to the current NPDES permit (November 1999) to assess the need for VOC limits in future versions of the permit. Given the ongoing routine detection of VOCs in stormwater discharges, future versions of the NPDES permit will likely contain limits for VOCs. These VOCs are associated with historic contaminant releases which have contaminated groundwater and soils at various locations on the KCP site. An investigation to assess the condition of piping in the 004 system has been completed. Video surveys and sampling to identify VOC infiltration points was conducted and a design to facilitate pipe lining was completed. However, funding to cover this level of action does not exist. A capital improvement forecast has been submitted to address the occurrence of VOCs in Outfall 004 (See Attachment A-5).

Terms and Conditions negotiated between EM and NA-56 as a part of the CD-4 transition package define programmatic roles and responsibilities (including funding responsibilities) to address unexpected releases to the environment from newly found contamination or failure of existing site clean up remedies

4.1.2.3.3 Environmental Compliance

Several permits with regulating agencies govern the conduct of environmental activities. These permits provide over-arching requirements for air, water (both surface and groundwater), soil, and waste. Following is a list of these permits and a brief explanation of the media they cover:

4.1.2.3.3.1 Title V Air Operating Permit

The KCP is in the process of obtaining a Title V Air Operating Permit. The facility has the potential to be a major source of emissions (>250 tons/year). The Title V Air Operating Permit could potentially be issued in FY2007. The facility is operating four newly-installed boilers with low NOx (nitrogen oxides) burners with a flue gas recovery system. This project reduced total annual emissions of NOx and CO by 30 tons/year.

4.1.2.3.3.2 Missouri State Operating Permit - National Pollutant Discharge Elimination System (NPDES) Permit

The MDNR regulates stormwater discharges from four regulated storm sewer outfalls at the KCP through the enforcement of Missouri State Operating Permit (MSOP) MO – 0004863. This permit only allows the discharge of uncontaminated HVAC condensate and uncontaminated rain event discharges. Periodic monitoring and reporting is required.

4.1.2.3.3.3 Resource Conservation and Recovery Act (RCRA) Part B Post Closure Permit

The RCRA Part B Post Closure Permit requires post-closure care of three RCRA hazardous waste management units: North Lagoon, South Lagoon, and Underground Tank Farm. It also addresses the continuing implementation of RCRA corrective action requirements, including site-wide groundwater monitoring, and remediation to address releases from other Solid Waste Management Units and Areas of Concern. This permit is the driver for LTS activities at the site.

4.1.2.3.3.4 NEPA Documents

The KCP currently has the following support and/or NEPA documents as related to this facility.

- **Site Safety Assessment for the Kansas City Plant**, dated: September 1995, per DOE Order 4700.1. This report documents the facts and assessments to support the assertion that the KCP can be operated in a safe, reliable manner, with no undue hazards to employees or the general public and with no significant impact on the environment.
- **Final Programmatic Environmental Impact Statement for Stockpile Stewardship and Management**, dated: September 1996, DOE/EIS-0236.
- KO utilizes the **Final Site-Wide Environmental Impact Statement for Sandia National Laboratories/New Mexico**, dated: October 1999, DOE/EIS-0281.
- There are also several other NEPA documents which pertain to specific activities (Flood Protection, Waste Management, Nonnuclear Consolidation, etc.). These documents generally discuss operational activities (mission), waste management, safety and health, and/or impacts to the surrounding environment (including the public).

4.1.2.3.3.5 EA/EIS Potential Projects

None identified.

4.1.2.3.4 Environmental Issues

Following are environmental issues that require annual expenditures to maintain compliance in those specific areas.

4.1.2.3.4.1 Beryllium Program

In January 2000, the DOE's Chronic Beryllium Disease Prevention Program (CBDPP) Final Rule, 10 CFR Part 850 became effective. Since that time, the KCP has spent $7.06 million to implement this Rule. Currently, the equivalent of three full-time personnel is assigned to this task. The plant's effective and integrated approach to all aspects of beryllium use at the plant has resulted in full implementation of all elements of this Rule. DOE/NNSA has validated KCP compliance through several audits including the Office of Inspector General, NNSA/KCSO program assessment, and the DOE-HQ's office of Independent Assessments (OA-30).

While most of the KCP's beryllium-contaminated areas were successfully cleaned and released for safe work operations, three areas above eight feet are identified as beryllium-contaminated above DOE's housekeeping limit. A hazard assessment has been made and administrative controls are in place to minimize potential associate exposure in these areas until such time that they can be cleaned. Elsewhere in the plant, ES&H personnel continue to re-characterize areas and equipment where beryllium-related processes exist. After the beryllium process has been completed, KCP Maintenance cleans equipment and areas as necessary. Once the housekeeping goals, limits, or both are met, the Beryllium Designated Area is deactivated.

The KCP continues to offer a comprehensive beryllium medical surveillance program to current associates consistent with DOE guidelines. Former associates and subcontractors can participate in the program through the Oak Ridge Institute for Science and Education.

4.1.2.3.4.2 Asbestos Abatement

Abatement activities range in size from single glove bag encapsulation and removal, to major asbestos abatement activities requiring negative air enclosures. The KCP uses fixed price contracting through a General Contractor for removal and cleanup activities for asbestos abatement activities associated with Line Items, GPP, FIRP, and General Expense Projects. KCP contracts abatement services on an as needed basis to support on-going asbestos abatement activities within the maintenance operation. While the KCP has expended between $1.2 million and $2.5 million per year since FY2001, that is expected to decline since facilities and infrastructure related Line Item and General Plant Projects have been deferred or postponed indefinitely as KCP transformation begins.

4.1.3 Site Footprint Management

<u>Kansas City Plant</u>

Facility modifications required to support the current LEP workload have already been completed, or should be minimal in the future. In addition, no new facilities for the support of any future mission assignments are being considered for the current building. Planning will instead focus on the new facility. Projects will only be executed to ensure that existing plant infrastructure is adequately maintained through 2012. The current footprint of the KCP is not expected to change prior to relocating to a new facility as per the KCRIMS proposal.

<u>Kirtland Operations (KO)</u>

KO will be reviewing the space needs of the NC-135 Site in light of NNSA's recent decision to pursue the site's retention with KAFB to support changing mission requirements. New critical missions have been identified with a need for runway access, which is a unique feature of the NC-135 Site. This access would also have to be compatible with KAFB land-use requirements. These new missions and the relocation of KO activities to the ATTC in 2009 may necessitate changes to the site's current footprint. Regardless, there will not be any changes to the site until its status is known, and only with NNSA approval.

4.1.3.1 Future Space Needs

<u>Kansas City Plant</u>

The KCRIMS planning has determined that a new facility of approximately one million useable square feet is required to more efficiently support the KCP future mission. It is anticipated that this building will be secured through a GSA-negotiated lease, however a final determination will be made through the CD-1 process.

Functional & Operating Requirements (F&OR's) are in development to define the facility attributes required to meet the mission need. F&OR's are being developed by a team of facilities experts familiar with commercial industry practices and the current operations at KCP, as well as the desired future state for the new facility. The process entails data collection and validation as well as development of conceptual site and building layouts.

Functional and Operating considerations include:

- Codes and Standards
- Utility System Requirements
- Capital Equipment Needs
- Facility Relationship Lay-outs
- Conceptual Department Lay-outs
- Product Requirements
- DOE Orders and Requirements
- Occupancy logistics requirements

Requirements for the new KCP building include approximately 650,000 square feet of manufacturing space and approximately 350,000 square feet of office, administration, multi-purpose, and production support. The total net useable floorspace is 1,000,000 square feet. The useable square footage is equal to any space that houses the tenant's furniture, fixtures, and equipment. An additional 15% or 150,000 square feet is added on to the useable square feet amount to arrive at the rentable square footage. The rentable square footage area includes all of the common spaces that support the facility such as restrooms, mechanical and electrical rooms, corridors required for fire egress, lobbies, etc.

Facility sizing has been determined based upon the identification of critical spaces and associated square footages for each.

Critical functional spaces include the following areas:

- Administration and Support
- Assembly & Electrical Fabrication
- Excess & Reclamation
- Labs & Engineering Labs
- Manufacturing & Gas Transfer Systems
- Maintenance
- Packaging
- Paint & Heat Treat
- Purchases & Other Inspection
- Refurbishment & Dismantlement
- Rubber & Plastics
- Special Material Production
- Stores
- Test Equipment, Gage, & Metrology
- Trailers

Operations and Types of Spaces identified in each of the options are generally described as follows:

- Administration and Support – includes offices, conference rooms, restrooms, fitness center, data center, patrol headquarters/command center, cafeteria and vending, break rooms, waste management, industrial waste pretreatment facility, reverse osmosis facility, medical and printer/file/storage rooms.

- Assembly & Electrical Fabrication – includes electronic manufacturing and assembly areas along with inspection and testing of small and medium sized electrical components. Class 100, Class 10,000 and Class 100,000 Clean Rooms are also included in the area.
- Excess & Reclamation – contains shredding, grinding, milling machines and furnaces to process materials for reclamation and excess.
- Labs & Engineering Labs – Includes lab furniture, fume hoods, ovens, and testing equipment for chemical, mechanical, vibration and shock testing.
- Machining and Gas Transfer Services – includes heavy machining, welding and other material production operations. Temperature and humidity controlled modular rooms are required for inspection areas.
- Maintenance – supports operations for the entire complex, maintaining and reconstructing facilities and equipment in support of the mission. Area includes battery dock, mechanical & electrical cribs, janitorial closets, and maintenance shops.
- Packaging and Shipping – manufactures cardboard boxes and wooden crates to package and ship large and small parts.
- Paint and Heat Treat – Paint and Heat Treat involves the preparation of parts for painting. Paint requires special temperature and humidity requirements for several paint booths. Heat Treat requires media blast booths with dust collectors, heat treat and quenching operations.
- Purchase and Other Inspection – accepts incoming and in-process production material, parts and equipment. The area requires modular rooms with special temperature and humidity requirements, a leak test and x-ray area. A bulk inspection area will have small amounts of explosives and precious materials that will require a higher security.
- Refurbishment and Dismantlement – includes bench top disassembly areas along with inspection and testing of small and medium sized electrical components.
- Rubber & Plastics – includes injection molding, presses, ovens and autoclaves to produce parts.
- Special Materials Production – includes chemical labs, material processing areas, oven rooms, foam processing, and raw and finished material storage areas. Some areas will have a high hazard classification that will also require a deluge system for fire protection and spill containment within the area.
- Stores – includes the inventory and storage management including pallet racking and automated storage retrieval system. Stores will also manage an ancillary outdoor covered storage facility used to contain large materials stored on site. Chemical stores will require several bunkers/rooms with different temperature and humidity requirements for the storage of various chemicals.
- Test Equipment, Gage, and Metrology – includes test equipment prove-in, maintenance and equipment Calibration. Rooms are required for prototyping, encapsulation, engraving, coordinate measuring machine labs, main gage lab, dimensional lab, laser and optics, and shaker areas.

- Trailers – includes a large modular paint booth with special air filtration, a generator room, door room, welding room, foam room, machining room and a storage room.
- White Space (Office) – this space is available for expansion of the office and support areas.
- White Space (Manufacturing) – this space is available for expansion of the manufacturing departments or for new operations.

See Section 4.1.1.1, New Building Planning for additional information.

Kirtland Operations (KO)

By late 2009 the Kirtland Operations activities in Albuquerque will be consolidated along with OST within the Albuquerque Transportation & Technology Center (ATTC). OST will be the lead federal host at the ATTC and will sign an Occupancy Agreement for a twenty-year arrangement with GSA who will hold the lease with the developer.

The Craddock and Air Park leased facilities will be vacated as a result of the ATTC. In a change from previous planning, NNSA is now seeking to retain all or part of the NC-135 Site for new and expanded WFO and other support tasking. This work includes support to NNSA emergency response operations requiring runway access. This must be negotiated since it is KAFB's desire to have the NC-135 Site available for use by activities with airfield missions.

Kirtland Operations' known space needs will be satisfied with the ATTC and the retention of the NC-135 Site. The ATTC, however, does not have room for growth. Should the NC-135 Site land use permit not be renewed by KAFB, alternative solutions will be considered, including retaining or acquiring new leased facilities.

4.1.3.2 Leased Space

Kansas City Plant

The KCP will continue to lease approximately 235,000 square feet from the GSA as long as it occupies the current facility. As previously discussed (Section 4.1.2.2, Utilization), no future attempt will be made to vacate and return this space to the GSA.

Kirtland Operations (KO)

With the consolidation of Kirtland Operations activities located in Albuquerque, New Mexico, at the new ATTC in 2009, the Craddock and Air Park leased facilities will be vacated. The Los Alamos Office lease expires in June 2007. That facility will no longer be available due to plans for a new commercial building at that location. Actions are underway to lease a replacement facility.

4.1.4 Deferred Maintenance Reduction/Facility Condition Index (FCI)

Consistent with Complex 2030 transformation, the KCRIMS program is proposing to relocate the KCP to a new modern manufacturing facility by 2012, thus vacating the existing World War II era facilities. In light of the current proposal to vacate the existing facility and in agreement with the Kansas City Site Office, the KCP has suspended DM tracking and forecasting, except for the FY2003 DM baseline. Upon completion of the KCRIMS transformation, DM will be zero and tracking and forecasting of DM will resume for the new facility.

Historically, the primary focus around the development of projects has been to keep the production capabilities viable for the long term. Since the onset of FIRP, additional emphasis on reducing deferred maintenance has also influenced which projects were funded. Based on the decisions currently being made in light of the KCRIMS program, neither the long term viability of the infrastructure systems or DM reductions is sufficient justification for recapitalization projects. Instead, the KCP focus has shifted to executing projects that address code compliance issues, safety issues, preserving the central infrastructure systems, or that maintain the integrity of the building envelope. Projects will be developed to keep critical departments operational but will shift from proactive and long-term in nature to a more reactive short-term response as driven by an immediate need. Mission critical facilities will be maintained as needed for mission support and allowed to decline otherwise until those facilities are vacated. Safety and security issues will be given priority and remedied in a timely fashion.

With the planned relocation, all facilities and infrastructure related Line Item, proposed Line Item, and General Plant Projects have been deferred/postponed indefinitely. In light of this, no new FIRP projects will be started at the KCP and $4.4 million of FIRP funding was returned in FY2006. The KCP infrastructure sustainment management process has been modified appropriately to provide for management of KCP assets during the transformation period. DM will be allowed to rise as the plant enters a run-to-failure mode.

Figure 18 shows the relationship between the various components of the revised infrastructure sustainment management process.

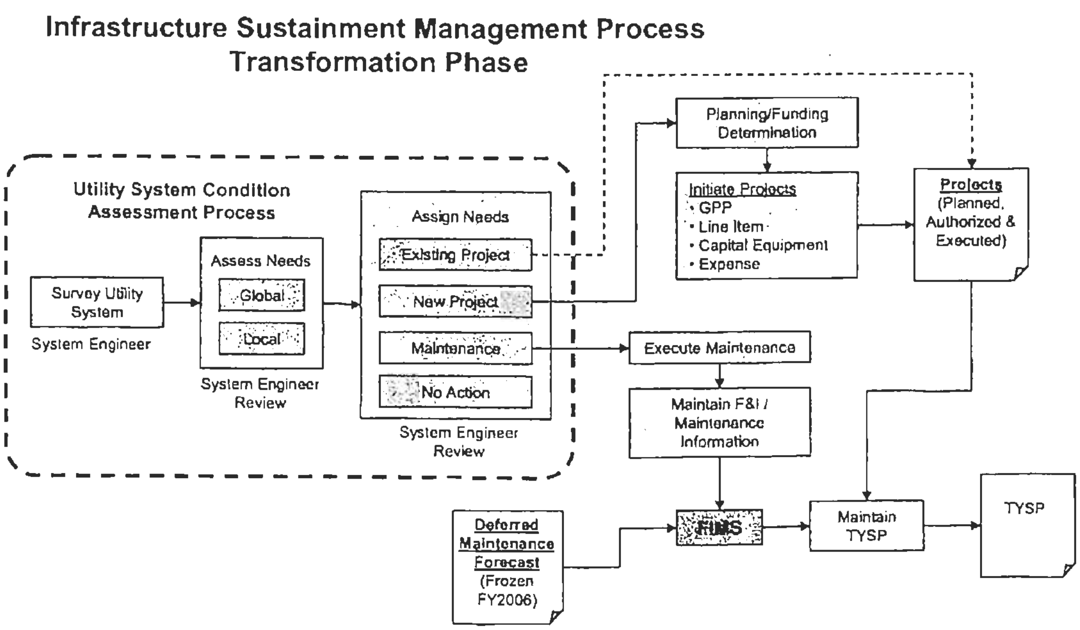


Figure 18 – Infrastructure Sustainment Management Process

Infrastructure requirements identified as part of the utilities condition assessment process will be evaluated and prioritized against the current management philosophy. A focus will be maintained on mission critical systems.

The KCP established a FY2003 DM Baseline of $89.5 million. The KCP focused resources on DM reduction, and primarily through the FIRP program was able to reduce the DM baseline backlog and stabilize DM. The shift in focus, as a result of the KCRIMS program, will result in the steady rise of DM in the existing facility. The DM forecast has been updated to reflect the end of FY2006 status including projections for out-year DM based on the revised infrastructure management approach.

The KCRIMS program will greatly impact DM. The current program schedule includes relocation to the new facility by the end of FY2012. Once the relocation is complete, maintenance requirements for the new facility will be minimal and items previously considered deferred will no longer be required, thus $230 million of DM will be satisfied. The DM will be $0 for FY2013 and beyond for the existing KCP facility.

4.1.4.1 Replacement Plant Value (RPV)

The severity of the DM position at a facility is measured as a percentage of the RPV for that facility. The RPV is defined as the "expected cost" to build a replacement structure using "today's" construction materials, techniques, and applicable codes. This is best represented by the Total Estimated Cost (TEC), less the cost of any personal property and programmatic capital equipment required to provide a complete and useable facility. Also, the estimated value of the land and the value to demolish or decontaminate a building are not included.

The RPV of the KCP was recently reviewed. The result was a reduction of approximately $300 million. This was the result of changing the FIMS model for Building 1 to better reflect its function and replacement cost, changing the site factor to be more indicative of project costs at this site, and a reduced footprint of approximately 200,000 square feet in a "cold shutdown" state.

An RPV value is not shown in Attachment F-2 for FY2016 or FY2017 since the current planning is for the new facility to be leased through the GSA.

4.1.4.2 Maintenance

KCP maintenance personnel are responsible for maintaining KCP facilities and infrastructure as well as the equipment supporting manufacturing, development and administrative work. During transformation, as the KCP is relocated from the existing to the new KCRIMS facilities, there will be a period during which maintenance at both sites will be performed concurrently. Traditional maintenance at the existing plant and planning for concurrent maintenance during the transition are both discussed in the following sections.

4.1.4.3 Maintenance Overview

The KCP maintenance organization provides three-shift, 24-hour service. This organization maintains and repairs more than 35,000 pieces of production and non-production equipment. It is responsible for corrective, preventive, and predictive actions on piping and electrical

ISO 9001 formality drives the process description and work instruction structure at the KCP. ISO 14001 formality drives all safety processes at the plant. Command Media, accessed through a plant-wide intranet portal, contains the process descriptions and work instructions used by the maintenance organization.

The maintenance organization utilizes a Computerized Maintenance Management System (CMMS), MAXIMO, to receive, classify, identify, estimate, approve, schedule, track accounts and report all work throughout the facility maintenance process. MAXIMO is comprised of tools, techniques, checks, management controls and documentation needed for effectively managing the workflow with an automated system. The current version of this program is undergoing considerable upgrades to a next-generation work management suite (MXES). This upgrade will provide enhanced work flow, data collection and improved interface with other plant enterprise systems. Metric management and reports will also be revised to reflect business needs.

Work generation is the process of determining the maintenance workload in the maintenance management system. A part of work generation is documenting the workload in the CMMS. Maintenance work is comprised of recurring and nonrecurring maintenance work. Recurring work includes PM, Predictive Maintenance (PdM), building maintenance and housekeeping, and central utility plant operation and maintenance. The recurring maintenance programs, customer needs and facilities and equipment failures generate nonrecurring maintenance work in most cases.

MAXIMO resides on KCP network computing systems and is accessed through the plant's intranet portal. All plant employees have access and may submit maintenance requests, as needed.

Preventive maintenance and other recurring maintenance activity is generated at prescribed frequency through MAXIMO. Preventive maintenance activity may consist of route-based tasks involving numerous pieces of equipment or may be performed on a single piece of equipment. Consolidation of equipment into groupings or routes is made to create efficiencies in labor use.

Approximately 35,000 pieces of equipment are contained in the master equipment list (MEL), of which approximately 14,000 pieces are included in the PM program.

Non-system generated work requests made to MAXIMO which are not identified as part of the maintenance PM program are categorized into specific groupings and assigned for work. Work requests received in MAXIMO are routed to maintenance work centers. These are located throughout the facility and are in most cases geographically situated near customer departments.

Priorities for maintenance work requests are determined through use of the maintenance priority schedule which is used at the time of work order input, and is accessible through the MAXIMO application. The maintenance priority schedule was developed based on a cross-functional needs process with regard to production operations, ES&H considerations, security requirements as well as general facility stewardship as the criteria for any prioritization.

Improvements to the maintenance management program are ongoing. The KCP has implemented an aggressive Six Sigma program across the site, with numerous teams addressing process improvements for maintenance activities. Internal and external assessments are also distribution systems, chillers, boiler and steam systems, cooling towers, and the fire alarm system. Maintenance is also responsible for general plant upkeep including lawn care, furniture and equipment relocations, snow removal, and any other activity required to support stewardship of the facility.

The breakdown of activities within maintenance; general maintenance, maintenance management, corrective, predictive and preventive maintenance are expected to remain relatively stable for the immediate future. Any increases to the production facility needs or in-plant mission requirements will mean a corresponding adjustment to the maintenance resource mix to address these requirement changes.

The KCP utilizes an integrated approach to identify and prioritize infrastructure projects. As part of this process, an integrated team including members of Program Management, Operations, Finance, and Facilities Engineering reviews the current requirements and considers the characteristics of each project to determine its priority. Prioritized projects are aligned with the funding profiles to establish projected execution dates. If a project is not executed by its need date, that project becomes deferred. The oldest facilities at the KCP were constructed beginning in 1942 with the majority of the manufacturing areas being more than 25 years old. Therefore, the age of the infrastructure contributes to growing plant maintenance needs.

Of primary focus to the facilities maintenance organization is the service provided to internal and external customers. Facility stewardship, rapid response to emerging customer requirements, and maintaining a safe, secure facility are essential to supporting the KCP as it operates in a rapidly changing cost-centered environment. The maintenance organization's strategies address performance and productivity tactics that ensure it will remain competitive, address the need to continue to upgrade skills, technologies and processes; retain experienced employees; and motivate a new generation of workers in a changing environment.

The KCP maintenance business model is structured around the Site Specific Maintenance Standard. The Standard incorporates objectives which reflect the best practices and standards of world class maintenance organizations. The Standard addresses seven maintenance program elements:

- Organizational Structure & Administration
- Physical Asset Inventory and Condition Assessment
- Identification and Prioritization of Maintenance Work
- Work Execution
- Preventive / Predictive / Corrective Maintenance
- Control of Maintenance Data
- Performance Measurement & Continuous Improvement

These elements provide the guidance for the maintenance of facilities, structures, components, installed equipment, programmatic equipment and systems such as utilities, fire protection and security systems.

The maintenance management program has adopted the Integrated Safety Management System and has made it a central feature of maintenance work performance for both employees and sub-contractors.

ongoing and issues which are identified are evaluated, actions are taken and tracked to a successful conclusion.

The Maintenance continuous improvement strategy involves the vertical integration of performance metrics and improvements to the planning process for work orders. An optimum mix of reactive, time- or interval-based, condition-based, proactive maintenance and run-to-fail practices are applied in an integrated fashion to take advantage of their respective strengths in order to maximize facility and equipment reliability while minimizing life-cycle costs.

Maintenance relies on numerous performance indicators to monitor overall maintenance performance, and as the basis for measuring productivity improvements and managing costs:

- Backlog
- Service Cycle Time
- Preventive Maintenance Efficiency
- Maintenance Cost/Total Operating Cost
- Corrective Maintenance Cycle Time
- Preventive Maintenance Completed on Time
- Production Equipment Uptime
- Preventive Maintenance Scheduled
- Cancelled Work Orders
- Customer Satisfaction

These interrelated metrics present a baseline for future measurement and for documentation. For example, efficient planning, including the ability to accurately estimate jobs, is crucial to establishing a credible backlog. To improve operating efficiencies, however, additional data are needed to track on-going maintenance activities as well as anticipate future maintenance issues. In addition to better accounting methodologies, all improvement initiatives continue to apply Six Sigma techniques to improve maintenance efficiencies and accomplish more for the same cost.

Maintenance backlog is the day-to-day workload of the maintenance organization and does not include the RIK infrastructure recapitalization projects. It does include customer and system-generated work that has been requested but not started and work that is in progress but not completed at the time backlog is measured. All activity in the maintenance backlog is assumed to be valid work that will be completed unless cancelled or modified by the original requestor of the work. The six-year KCP annual maintenance performance for classical backlog is as follows:

	FY01	FY02	FY03	FY04	FY05	FY06
Backlog in ($000)	637.9	727.5	543.5	523.4	520.5	520.1
Past-Due Maintenance Backlog	NA	NA	59.6	91.5	19.2	30.5

The KCP maintenance organization is closely monitoring the corrective maintenance backlog and performance against preventive and predictive maintenance activity. Particular focus was placed on management of the past-due portion of the maintenance backlog. Overall maintenance backlog is also tracked at the individual crew and department levels. It is monitored monthly as total backlog and as a ratio of high priority backlog to total backlog, with specific emphasis to reduce the amount of past-due backlog. The current level of maintenance backlog hours is appropriate for the current level of staffing, and provides the right balance between the daily work and the number and skill level of staff to do the work.

4.1.4.4 Maintenance Transitional Planning

The KCP is currently proposing a plan to move to a new, smaller and more efficient facility as part of Transformation planning. Specific to the Maintenance/Operations organization, a transition to a new facility requires an alternate strategy for maintaining the existing facility and equipment as well as maintaining the new facility, in the transition years and beyond. The Maintenance/Operations organization will continue to provide full support of LEP production requirements and facility stewardship, in the existing facility, to meet safety/code compliance and central plant reliability throughout the transition to a new facility. Other non critical equipment/systems will be evaluated and Maintenance/Operations support levels will be adjusted to enable equipment life through LEP production at the existing facility. It is anticipated that preventive maintenance activities will be reduced by 15% – 25% and corrective maintenance activities will increase as the run-to-failure philosophy is adopted. During the 2012-2015 timeframe, the Maintenance/Operations organization support will shift to a "cold shutdown" state in the existing facility and full support of production in the new facility as outlined in further detail below. In the new facility, central systems and equipment needed to support future NNSA missions will be maintained for life cycle management, much as they are today.

Each of the elements of maintenance will be uniquely impacted by this transition model as described below:

<u>Utility Operations</u>

The KCP operates two central utility plants on site with three-shift, 24-hour service. The West Powerhouse (WPH) produces steam, compressed air and chilled water for environmental and process control in support of the plant mission. The East Powerhouse (EPH) produces chilled water and is the primary location for monitoring/operation of the KCP air handling systems. These utilities are delivered throughout the Bannister Federal Complex (BFC) to the various tenants who share the main building. In addition to providing heating and cooling capabilities, utility services for the Federal Complex, except for the IRS Building, are operated and managed by the KCP.

From 2006 through 2012, the KCP central plant systems and key infrastructure distribution components will be maintained under the current stewardship philosophy. Current stewardship includes reliability and efficiency considerations, as well as the recognized need for providing GSA and other BFC tenant's utility services. This will preserve these critical assets in a condition to provide services to the BFC beyond 2015.

Operation and maintenance programs will be maintained at current levels for these systems. The remainder of the KCP utility systems such as air handling systems will be maintained and operated to achieve LEP program completion, but not for long term stewardship. It is expected that minimal operational changes will be experienced through the LEP production period ; however, the focus will change from eliminating deferred maintenance to repair and replacement of components necessary to maintain operating conditions through completion of the LEP's.

Following 2012, KCP operations will shift to a "cold shutdown" state as LEP production activities cease. Powerhouse operations will be consolidated to the West Powerhouse at appropriate levels to provide BFC tenant's utility service while maintaining the KCP in a cold shutdown state. Also, the East Powerhouse will be taken out of service as the West Powerhouse has sufficient capacity to meet the requirements of those tenants remaining at the BFC. After 2015, powerhouse operations will no longer be staffed, managed or maintained by the KCP as a part of the production mission.

Production Equipment Maintenance

Between now and 2012, maintenance of equipment supporting LEP production will continue as is. As excess capacity is identified, equipment will be placed in a "cold-shutdown" state and the preventive maintenance ceased. As equipment is identified for relocation to the new building it will continue to be maintained for long term stewardship. Other production equipment used for development or research will be handled on a case-by-case basis with 'run to failure' being the default mode. Maintenance will also continue to provide engineering and craft support for any new equipment installations (that's needed to support LEP deliverables) in the current building. During the transition years, 2010 through 2012, Maintenance will provide support for equipment relocations with a focus on populating information in the MAXIMO system for equipment to be relocated.

After 2012, Maintenance will only provide engineering and craft support for production equipment in the new building. It will no longer be necessary to support any production equipment left in the current building since LEP production will have concluded. This remaining equipment will be put in a shutdown state and no longer maintained.

Infrastructure Maintenance

Buildings and Grounds

From now through 2012, Housekeeping services will continue to perform to the same service standards that are in place today. Grounds maintenance, snow removal, and pest control will continue with the same level of service as today. The sealing of epoxy floors and outside concrete walks by laborers will be completed as needed to ensure safety of personnel and to avoid damage that could be caused by the application of deicing compounds. The cleaning of areas for beryllium contamination will be performed only to support those machines and processes that are required for LEP deliverables or cleaning for excessing of equipment. Laborers will continue to be assigned to ensure 24/7 support.

Beyond 2012, Housekeeping services and pest control will only be provided in areas of the plant that are occupied or to mitigate safety or health concerns. Grounds maintenance will be limited to grass mowing, trimming of trees and landscaping, and weed control. Snow removal will be limited to those areas of the lots that are in use or as needed for safety and security purposes. Cafeteria will not be in service, so cleaning will not be required. Laborers will be assigned only as needed as 24/7 coverage will no longer be provided.

Infrastructure Systems

From now through 2012, maintenance of the high voltage electrical system, plant security systems and radios, and emergency and life safety will continue as is. Support of requests for the installation of new cabling and security systems will be reviewed on a case-by-case basis to ensure this work is required to support the LEP workload and to maintain plant security systems to applicable standards and requirements.

Preventive maintenance for plant piping systems will be reduced to levels providing short-term energy paybacks and that necessary to maintain system integrity through 2012. Painting will be completed on a limited basis to ensure a positive impression of the facility in high visibility areas. Requests for pipe fitter and millwright support will be reviewed and performed if needed for safety or support of LEP requirements. All other work requests will be approved on a case-by-case basis. Systems and equipment that are not safety or security related, do not directly support the LEP workload, or require regulatory driven periodic testing and inspection, will be reviewed on a case-by-case basis and either removed from service or run-to-failure. Pipe fitters and electricians will continue to provide 24/7 coverage.

In-plant vehicle needs will to be supported as required for safety, security, or support of LEP workload. All others will be evaluated on a case-by-case basis and removed from service if deemed to be in the best interest of the plant.

After 2012, maintenance of the plant security systems and radios will cease with the exception of the perimeter or department security systems that may still be required. The plant two-way radio system will be removed from service and an "unsecured" commercial system will be used for any personnel remaining in the plant.

The maintenance of the high voltage electrical system, plant life safety, and emergency systems and equipment will be supported as required only for remaining operations. Systems will be removed from service when possible. The plant flood control systems will not be supported by the KCP if this site is not selected for the new building. It will instead be turned over to GSA.

While the KCP itself will not be responsible for any maintenance on the current facility beyond 2015, it is anticipated that NNSA will continue to have this responsibility during property disposition. Funding for this will have to be identified for the NNSA to transition the existing facility to another use and support the continued stewardship of those assets.

4.1.5 Identification of Replacement-In-Kind Requirements

A key component of DM forecasting is the annual infrastructure sustainment requirements of a facility. Infrastructure requirements identify annual facility and infrastructure needs required to sustain the investment in the facility and minimize future deferred maintenance. The sustainment requirements are a beginning of fiscal year snapshot representing the work required during that year to sustain the investment in the facility. Infrastructure funding in excess of that year's requirements reduces the deferred maintenance backlog. Infrastructure funding below the requirements yields deferred maintenance growth.

Infrastructure requirements are documented in the KCP Utility Management Plan (UMP). The UMP provides information about each of the KCP's utility systems. The Utilities Engineering organization identifies deficiencies and projects needed for each utility system in order to sustain/improve current conditions at the plant. Planning and condition assessment is utilized to proactively identify needs and develop projects for system repairs and replacements.

Yearly infrastructure requirements including both maintenance projects and RIK projects must be met in order to avoid the creation of additional DM. Previous forecasts for the KCP annual infrastructure requirements needed to sustain investment totaled approximately $20 million per year, including $18 million of RIK projects and $2 million of maintenance expense projects. The current DM forecast reflects anticipated future growth based on the infrastructure maintenance posture that is in place as a result of the KCRIMS initiative. This forecast will not be updated until the KCP Transformation is complete. Based on historical data and the volume of infrastructure that must be maintained at the KCP, it is unlikely that previous forecasts would significantly change even if updated. RIK requirements are shown in Attachment F-5 through FY2012. The KCRIMS program schedule shows relocation to the new facility to be complete by the end of FY2012. Therefore, the KCP does not have any RIK requirements beyond FY2012. Upon completion of the KCRIMS transformation, identification of RIK requirements will be renewed for the new facility.

4.1.6 Utilities

The KCP operates two powerhouses on site. The West Powerhouse (WPH) produces steam, compressed air and chilled water for environmental and process control in support of the plant mission. The East Powerhouse (EPH) produces chilled water. These utilities are distributed throughout the Bannister Federal Complex to the various tenants with the exception of the IRS Building. In addition to providing heating and cooling capabilities, utility services for the Federal Complex are operated and managed by the KCP.

The KCP has two primary energy needs: electricity and boiler fuel (natural gas and fuel oil). The Kansas City Power and Light Company provides electricity. Natural gas is the primary fuel and is purchased through a DoD nationwide contract. It is then delivered to the KCP through local pipelines. Fuel oil, drawn from on-site storage tanks is used as a backup boiler fuel for periods when natural gas is not available. Various commercial suppliers provide fuel oil when needed and on a competitive bid basis. Water and sanitary sewer service are supplied by the city of Kansas City, Missouri.

In FY2006, to address the Complex 2030 vision, the KCP developed the KCRIMS program. This program proposes to relocate the KCP to a new smaller more efficient manufacturing facility, thus vacating the existing World War II era facilities. With the planned relocation, all facilities and infrastructure related Line Item, proposed Line Item, and General Plant Projects have been deferred/postponed indefinitely. Future utility sustainment projects, as stated in each utility service below, have been identified in the Utility Infrastructure Forecast. These projects will not be executed during KCP transformation unless required to support a critical mission need. Increased risk of failure to maintain utility service or environmental conditions is incurred with continued operation of older equipment that has been identified for replacement. The KCP infrastructure sustainment management process has been modified appropriately to minimize this risk and provide for management of KCP assets during the transformation period.

Utility systems at the KCP include purchased utilities (electricity, natural gas, process gases and water), as well as support systems and equipment for production requirements that are managed and maintained. The KCP manages 23 utility systems and the energy management plan. These are described in detail in the KCP Utility Management Plan. All systems have adequate capacity to serve the current plant demands, although utility distribution systems are modified to meet new project requirements.

4.1.6.1 Electrical Power

The KCP purchases electricity from the Kansas City Power and Light Company (KCP&L) to power production machinery, water chillers, pumps, compressors, fans, lights and general office equipment. Power is supplied to the Bannister Federal Complex by two 161 kilovolt (KV) overhead transmission lines from the KCP&L Southtown and Tomahawk substations. Two KCP&L owned on-site transformers step the voltage down to 13.8 KV that is delivered to two main busses for distribution at the main switchgear. The main switchgear distributes this power to multiple substations serving GSA, IRS and NNSA controlled areas. KCP&L electricity is reliable, high quality, and adequate to serve the plant loads. High overall system reliability is maintained through system upgrades, maintenance, redundancy and installation of reserve capacity.

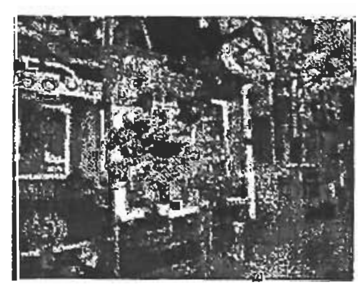
The main switchgear exceeded its 30-year life expectancy in 1999. In addition, several substations have also exceeded their 30-year life expectancy. These replacement needs have been identified in the Utility Infrastructure Forecast. Other individual pieces of equipment that increase the efficiency of the electrical system and various pieces that have reached the end of their useful life have also been identified for replacement. These include 20+-year old substation breaker sensors for which manufacturer's parts are no longer available and power factor capacitors that have a high failure rate due to increased harmonic loads.

Critical security, life safety and utility loads are equipped with diesel stand-by generator back-ups. FIRP replaced the security generator in FY2006. Replacement components for the other units are no longer available from the manufacturer and must be acquired from other sources. Given this problem, new emergency generators have been added to the Utility Infrastructure Forecast for replacement.


New Security Systems Backup Generator

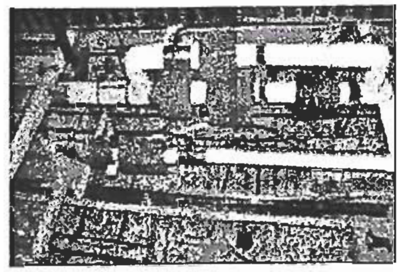
4.1.6.2 Central Steam System

Steam is generated in the WPH with four 80,000 pounds per hour dual natural gas and fuel oil boilers and the associated boiler feed pumps, deaerator, water treatment equipment and controls. The steam production system was replaced by the Replace Boilers and Controls Line Item. Steam condensate is collected in the plant in multiple steam-ejector type condensate-return units that return it to the WPH where it is mixed with makeup water and fed back to the boilers. The steam system is currently very reliable and will continue being reliable due to the recent installation of the new boilers and related equipment. The system has sufficient capacity and redundancy to provide continuous service during extreme weather conditions and high plant demand.


New West Powerhouse Boilers

The critical elements of the condensate return system are the many steam traps and liquid movers that require continual maintenance to assure efficient return of the condensate to the boilers. Some of the piping in the plant is original (1943). Steam and condensate piping deteriorates due to age and the corrosive nature of condensate.

A small percentage of distribution and return system piping was replaced on the Steam and Condensate Piping FIRP project. The Replace Steam System Components FIRP project replaced several pressure reducing stations, removed deteriorated steam and condensate piping to outbuildings from a utility trench and relocated to an overhead pipe rack and replaced the heating hot water system in the EPH. Additional projects have been identified in the Utility Infrastructure Forecast to replace piping and liquid movers to assure reliability of the systems.

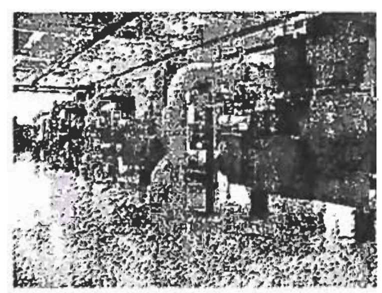


Steam Pressure Reducing Station

4.1.6.3 Central Chilled Water Facilities

Chilled water is produced in both the WPH and the EPH and supplied to KCP facilities, through a common distribution system. Approximately 10,500 tons of water chilling capacity is installed in the WPH and 7,500 tons of capacity is installed in the EPH. Chilled water is used for temperature and humidity control for personnel comfort and production requirements, and for process cooling applications. The system is reliable and has sufficient capacity and redundancy to provide continuous service during extreme weather conditions and high plant loads.

A series of FIRP projects began in FY2002 and replaced the last 14 of 20 water chillers with ten new, high efficiency units that use an environmentally friendly refrigerant, thus eliminating the use of CFC refrigerants. Chillers were purchased on a life-cycle cost basis and feature variable speed drives. The distribution and chiller loop pumps are equipped with variable speed drives to pump only the water needed to satisfy the plant loads. Some chilled water piping is original (1943). The effects of age and corrosion require periodic replacement of deteriorating pipes. Water treatment of the system has helped the situation, but not cured it. The Replace Chilled Water Piping FIRP project addressed a small percentage of this deteriorated piping. Additional chilled water piping replacement projects have been identified in the Utility Infrastructure Forecast to increase reliability of the system.



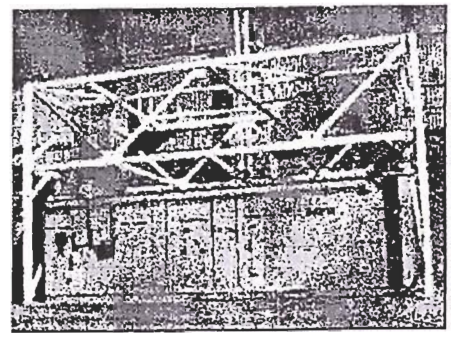
New Chillers

4.1.6.4 Water Supply System

Domestic water is purchased from the city of Kansas City, Missouri Water Services Department. Three independent mains feed the KCP on the south, northwest and northeast sides of the complex providing redundancy. Each feed is capable of meeting the KCP plant demand individually. However, due to numerous breaks in the Water Service Department's main on the south side of the complex, the main has been isolated and this feed is currently out of service.

Domestic water is used as make-up for the steam, chilled water, condenser water, and fire protection systems and for sanitary applications (toilets, sinks, eyewashes, showers, drinking fountains and cafeteria). Potable uses are protected from industrial uses by an isolation cross-

Over 500 individual air-handling systems supply the NNSA portion of the Bannister Federal Complex. Age, deterioration, and changing area requirements drive the need for replacements. Systems range in age from new to over 45 years old. The average unit age is approximately 20 years old, with approximately one-third of these units already exceeding their 25-year life expectancy. FIRP projects have replaced approximately 30 inadequate air-handling units. AHU replacement projects are identified in the Utility Infrastructure Forecast.


New Make-up Air-Handling Unit

4.1.6.9 Utilities Monitoring and Control System (UMCS)

The building monitoring and controls system, including the application of Direct Digital Controls (DDC) to most of the air handling systems, provides state-of-the-art control of temperature, humidity and pressure to support the needs of process areas and personnel comfort. Flexible programming capabilities of the system allow for adjustment to parameters and setpoints depending on outside and inside conditions to satisfy the area's environmental requirements with minimum energy usage. The programming also allows scheduled start and stop of air-handling units; the use of a freeze protection system for units and piping exposed to the elements; utility equipment operation; and monitoring of critical alarms for utility equipment and material storage cold boxes. Approximately 95% of the KCP's air-handling systems have current generation DDC controllers serving them. Nearly all of these systems communicate using the fiber optic based facilities network.

The UMCS is monitored and controlled from control rooms in the EPH and WPH. These control rooms are staffed at all times.

Some air-handling systems are served by outdated, obsolete DDC systems that are no longer supported by the manufacturers. Other systems are served by old pneumatic control systems. Replacement of these control systems has been identified in the Utility Infrastructure Forecast to convert them to the current generation DDC system.

Since March of 2006, a dedicated Energy programmer has been instituting updated programs for all air handling units. The new program gives operations a more flexible method of operating the system in the most energy efficient manner. Some of the concepts involved are Optimal Start, Night Setback, Heating/Cooling setpoints, and Occupied/Unoccupied modes.

4.1.6.10 Plant Safety

The Fire Alarm System and Emergency Notification System (ENS) are critical to plant safety. Both the Fire Alarm System and ENS are proprietary, protective-signaling systems. Each is controlled from or reports alarms to the KCP Patrol Headquarters which is staffed at all times. Both systems have additional capacity for any necessary expansion.

The ENS and Fire Alarm systems are in relatively good condition. FIRP project Replace Fire Alarm System was completed in FY2006. This project replaced the obsolete central fire alarm equipment with a new system. However, this project did not replace the existing high voltage (220 VDC) fire alarm panels. These panels are obsolete and replacement parts are no longer available from the manufacturer. The need to replace or reconfigure these panels has been included in the Utility Infrastructure Forecast.

4.1.6.11 Fire Suppression

The fire suppression system is comprised of two water supplies providing water through an underground and interior fire main grid to 144 individual sprinkler systems. The west side water supply is a dual-use reservoir with the cooling tower basin. It provides water to two electric-driven pumps. The east side supply is an on-grade tank supplying water to two diesel-driven pumps. Both sides supply water to the 10-inch underground fire main grid with 10-inch interior mains. These fire mains feed the non-NNSA part of the Bannister Federal Complex in addition to the 144 individual KCP risers.

The overall condition of the system is good and provides good reliability with redundancy. A few components are rated as fair. These include the fire pumps, east side storage tank, some of the underground ductile iron pipe, and the old-style sprinkler heads that remain.

Recent major improvements include new fire pump controllers installed in the WPH and the cleaning and inspection of the east side water storage tank. Expense funded projects have also addressed firewall deficiencies and corrected hundreds of sprinkler deficiencies that affected life safety.
The main issues related to the sprinkler systems are corrosion and pump performance. There is a certain amount of underground ductile iron pipe that was installed before the plant standard required polyethylene wrapping for corrosion protection. This pipe will deteriorate and result in corrosion failures. The east side storage tank is 28 years old and has experienced a certain degree of corrosion. The fire storage tank was recently inspected. Minor follow-up repairs will be made to extend the useful life through 2015. Interior sprinkler pipe occasionally has pin-hole leaks due to corrosion but this has not become a major problem to date. This issue requires further study to determine the degree of corrosion potential and the need for Code-required water treatment. The fire pumps have declined from their original performance and an analysis is under way to determine if the highest demands can still be met at the current level of performance. Some bolt-on parts for the fire pump diesel drives are not available and must be rebuilt when they fail.

4.1.6.12 Other Utility Systems and Services

Compressed air is produced by the four compressors, dryers, and associated equipment in the WPH. The compressed air system is a vital utility that supplies clean, dry compressed air to the Bannister Federal Complex (except the IRS building) for production uses and control of temperature and humidity control devices. The air compressors are of various sizes to allow matching to the plant loads. A new refrigerated air dryer was installed in FY2006 to improve the quality of the compressed air. The system is very reliable and additional capacity is available for new loads. However, the receivers and after-coolers are original building equipment (1943) and the closed loop cooling system has deteriorated. These components are identified in the Utility Infrastructure Forecast and must be replaced to provide more efficient operations.

Both liquid and gaseous nitrogen are distributed to the plant. The nitrogen supplier also provides the storage tanks and distribution equipment. NNSA owns the end-use equipment and associated distribution piping. Piping for the liquid nitrogen is vacuum jacketed for insulation. As the piping deteriorates with age, leaks develop that cause vaporization of liquid nitrogen. The deteriorating main plant header was replaced by FIRP in FY2005 and upsized to meet the growing plant demand.

Other managed utility systems include argon, carbon dioxide, cranes, elevators, exhaust, hydrotherm (mold heating and cooling), reverse osmosis water and building structural loading. Each system is generally adequate for the requirements and is upgraded as required to satisfy plant demand. The structural loading of the building is checked each time a load is added or removed from the building. The process gas systems (argon, carbon dioxide and nitrogen) are upgraded as loads are added or usage increases. The elevators and cranes are replaced or upgraded as condition and changing requirements dictate. Single-bottom elevator jacks were replaced in FY2006 with double-walled hydraulic cylinders to meet the elevator code. Many cranes in the plant have exposed conductor bars that can be a safety hazard. This hazard is being controlled administratively until the open conductor bars are replaced with enclosed conductor bars.

4.1.6.13 Energy Management

The KCP has an Energy Management Plan that complies with federal regulations and executive orders regarding energy conservation. It supports the NNSA requirement for an overall federal Energy Management Plan for conserving fuel and energy in all its operations as required by Executive Order 12902 of March 8, 1994, Executive Order 13123 of June 3, 1999, Energy Policy Act 2005 (EPAct 2005), and NNSA policies for energy efficiency, renewable energy and water conservation.

In accordance with Executive Order 13123, the Industrial and Laboratory goal is a 20% reduction by FY2005 and 25% reduction by FY2010 compared to a FY1990 baseline. The KCP met the FY2005 goal and has exceeded the FY2010 goal by reducing its energy consumption per square foot by 33.2%. The EPAct 2005 energy reduction goal is to reduce energy usage 2% annually from FY2006 to FY2015 compared to the FY2003 baseline. The KCP is well ahead of the EPAct 2005 energy reduction goals. The KCP has reduced its energy consumption per square foot by 19.4%. In addition, NNSA established a stretch goal of 10% energy reduction by the end of FY2006 relative to the FY2004 energy usage due to the President's Directive on Energy and Fuel Conservation at DOE Facilities driven by hurricanes Katrina and Rita. The KCP implemented an aggressive energy reduction plan and reduced its consumption per square foot by 14.39% far exceeding the 10% stretch goal.

Figure 19 shows the KCP's consumption of electricity and natural gas and fuel oil as well as the total consumption of energy in number of BTUs per square foot floor space per year. The percentage reduction shown is the commodity reduction based on the 1990 baseline.

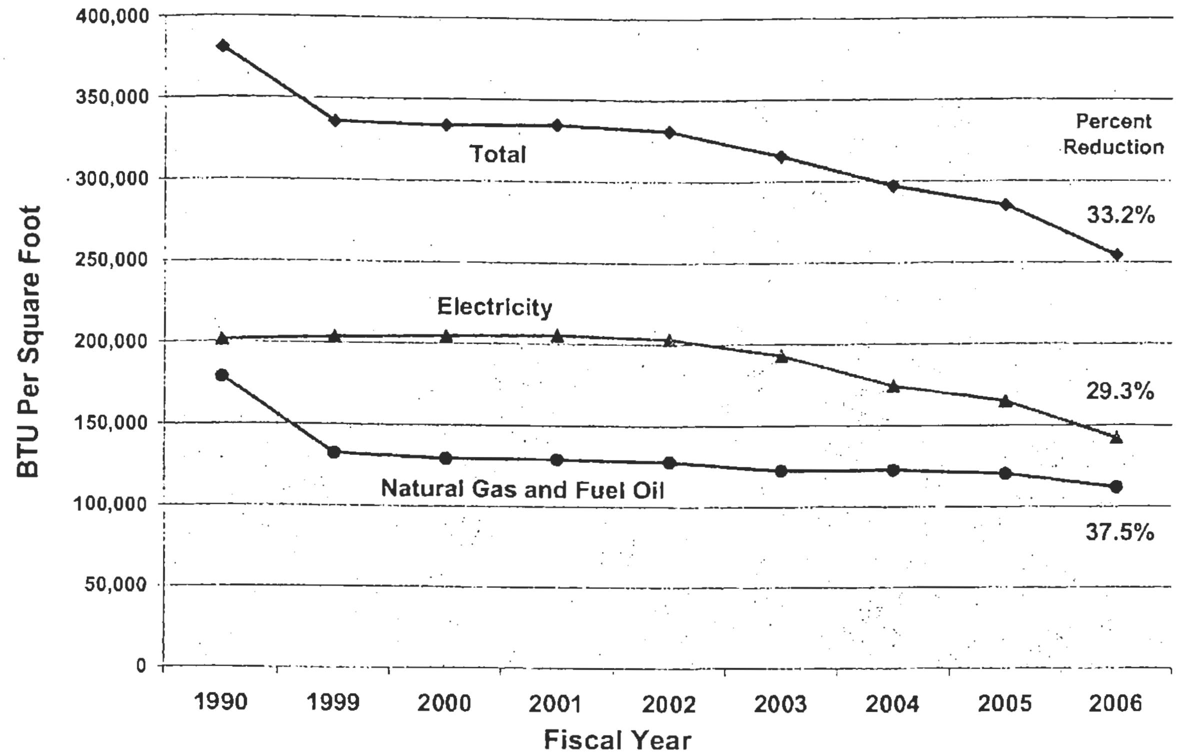


Figure 19 – Energy Consumption

The KCP established a water management plan in September 2003 with the assistance of the Federal Energy Management Program (FEMP). The plan meets the requirement for water conservation prescribed in Executive Order 13123. Four best management practices (BMP) from the water management plan have been implemented. The four BMPs implemented are toilets and urinals, faucets and showerheads, boiler/steam system, and cooling tower management. Since this plan has been in effect, the KCP has reduced water consumption by 32% compared to FY2002.

4.2 Security

The KCP Security program utilizes a graded approach, which offers a system that meets customer needs in a cost effective and efficient manner. The security responsibilities are divided into program planning and management, personnel security, information security, physical security, technical security, and cyber security. Security program planning and management is responsible for asset and threat identification, risk assessments, security plans, performance assurance and evaluation, communications, resources, incident investigations, and self assessments. The Personnel Security organization provides access authorizations, security education and awareness, foreign visits and assignments, and oversight of official and unofficial foreign travel. The Information Security organization provides classification, classified matter protection and control, operations security, and classified vendor program management. Physical Security handles around-the-clock protection utilizing armed and unarmed personnel. The Technical Security organization handles physical security systems, technical surveillance countermeasures, and communications security. The Cyber Security organization is responsible for classified and unclassified cyber security. KO security provides similar services in New Mexico and Arkansas.

The Safeguards and Security budget is split into two major funding categories, Physical Security and Cyber Security. Each of these major categories is "fenced" (i.e. funds cannot be switched between these two categories without NNSA approval). Physical Security budget areas include the following topical categories: Protective Force, Physical Security Systems, Information Security (excluding Cyber Security), Personnel Security, and Program Management. Cyber Security is divided into 10 separate funding categories aligned with its work breakdown structure. Placing Safeguards and Security in its own funding category provides a more detailed approach to the budgeting process, thus enabling a clearly defined security program and mission.

The security budgeting process includes both short- and long-term program initiatives to increase the security protection of the KCP. The KCP Site Security Plan documents the security planning process. The site plan and its funding requirements are coordinated with site federal security staff and approved by the federal site manager.

The adequacy of the Physical Security program funding targets to manage a safe, secure facility through FY2013, as shown in Figure 20, is uncertain at this time. One operational impact is the potential loss through attrition of experienced staff and replacement costs for backfilling those positions. Another impact is that the current high level planning for the new facility and related transition activities lack concrete, specific operating detail. Supplemental security funding may become necessary to achieve the transition. Funding level and staffing issues will continue to be addressed during periodic reviews, with other emerging issues, and as new facility plans become clearer. The new KCSO oversight plan, the KCP Site Security Standard along with new variances, supplemental workforce, and redirected existing resources are some of the tools which will be used to minimize the funding constraints.

($000)	FY07	FY08	FY09	FY10	FY11	FY12	FY13
Physical	$11,294	$10,748	$11,508	$11,916	$12,514	$14,276	$14,941
Escalation		-4.8%	7.1%	3.5%	5.0%	14.1%	4.7%

Figure 20 – Security Budget

Integrated business plans are developed from discussions among facilities, safety, labor relations, human relations, Information Technologies, manufacturing, engineering, and security. As a result, several major security initiatives raise the security protection effectiveness level, address life cycle equipment replacement, or cover normal operating functions. These initiatives are submitted within the security budget:

- Upgrade Central Alarm System (CAS): The Kansas City Plant's Central Alarm System, installed by Matrix in 1987, serves both as an intrusion detection system and an access control system. Badge readers and turnstiles are managed by the CAS. The KCP received $1.5 million towards the upgrade of the current system or to replace it with a commercial-off-the-shelf (COTS) Central Alarm and Access Control System. An outside consultant was utilized to develop system specification and identified potential vendors which met requirements of the specification. Visits were made to five vendor sites for evaluation of their systems. After evaluating the COTS systems against upgrading existing system, a determination was made it would be more cost effective to upgrade the existing Matrix system. FM&T is currently working with Matrix to finalize details and develop a timeline for implementing the upgrade.

- HSPD 12 Homeland Security Presidential Directive Common Identification Standard for Federal Employees and Contractors: OMB required implementation of HSPD-12 by October 2005. The current access control system is not capable of utilizing smart access cards for access. A new CAS would need to be in place before smart card access control can be implemented. No action is planned to make the current access control system HSPD-12 compliant since no specific requirements have been communicated to-date. However, the access control system planned for the new KCP site in FY2010 is expected to be HSPD-12 compliant.

- Security Police and Fire Protection Association (SPFPA) Union Contract Renewal: The contract between Honeywell FM&T and the SPFPA expires in 2010; therefore, negotiations of the new union contract are planned for FY2010. Funding for strike contingency planning is required in FY2010 and is currently listed as over-target.

The Cyber Security program continues to focus on enhancing the existing layered security model of the unclassified network by reducing system vulnerabilities, investigating host based protection, and maintaining the centralized system logging capability. Additionally, the number of classified information systems that can produce classified removable electronic media is being reduced by increasing the utilization of diskless systems. The Cyber Security program is integrating with the Physical Security programs as is the current trend in industry for "convergence." Near term goals for the classified and unclassified Cyber Security programs are to increase the use of two-factor authentication with the intent of it becoming the standard.

The KCP has begun a major transformation effort in order to significantly reduce annual operating costs and improve responsiveness to NNSA's supply of nonnuclear components. One element of that transformation is relocating the Kansas City facility to include equipment, manufacturing capabilities, and personnel to privately designed and built building(s) at a new location. The relocation of the KCP will require security personnel at two sites simultaneously. The security staff must provide security oversight of the new construction; security monitoring and assistance in the planning and transferring of equipment, information, and other property; and security for the new site. The current plan is to allocate the existing security staff in alignment with work scope between the two facilities and augment with a contingent work force, funded within the current FYNSP guidance for FY2010 through FY2013. Current high-level plans rely on stable FYNSP targets. Some funds within the target levels have been identified to fund KCRIMS risk mitigations; however, since current planning is at a very high level, it is unknown at this time if the program funding will be sufficient to provide the security services at two sites and support the transition activities. More detail planning may reveal specific needs for additional funding. As project details are clarified, security plans will be modified.

Security is being integrated into key KCRIMS business decisions and assessments as demonstrated by the recent security risk assessment completed on draft conceptual plans. Security is a key player in the transformation specifically in four areas: new building construction, new building security, property transfers, and continued security at the current location.

- New Building Construction: During the construction of the new building, security oversight is needed to satisfy TSCM (technical surveillance countermeasure) concerns and to performance test and certify the operational aspects of new security systems including the closed circuit television system, intrusion detection system, access control system, lighting, emergency power, emergency phones, central command center, physical barriers, and the large vehicle checkpoint guard station.

- New Building Security: The new facility will be designed and operated in accordance with the KCP Site Security Standard that was recently approved by KCSO. This standard allows KCP to transform to a state of commercial-like security operations with minimal compartmentalization.

  The security organization transition is primarily enabled by utilizing building design coupled with the deployment of security monitoring and sensing technologies. This concept reduces the reliance on labor without degradation of security status. The replacement of compartmentalized work areas with an open shop floor concept for manufacturing also reduces security support and response cost drivers.

  Specific operational challenges will include the securing of classified production while other equipment is being installed in the same manufacturing area by numerous uncleared subcontractors.

- Property Transfers: Security will be a member on the teams responsible for the planning and execution of the movement of both classified and unclassified equipment, materials, products, and information from the current site to the new site. Accountability and control of classified matter is critical. During the equipment dismantlement and relocation, it is likely that numerous uncleared subcontractors will be utilized. Moreover, the relocation of manufacturing production or measuring equipment will most likely necessitate the involvement of personnel from the equipments' parent companies located outside of the U.S. Screening foreign nationals from continued classified operations during the dismantlement and reinstallation of surrounding equipment in the area will be a significant challenge for security and operations. Another challenge will be the secure movement of equipment containing classified cyber systems without unloading the operating systems or internal memory for the move.

- Continued Security at Current Location: The current KCP site is expected to remain in operation through FY2012 to support the stockpile life extension program in the completion of the retrofit units. From FY2012 through FY2015, security presence will be necessary to provide minimal property protection and support emergency maintenance activities. When the NNSA facility ownership has been terminated, security support will no longer be required.

By late 2009, Kirtland Operations activities located in Albuquerque will be consolidated in the ATTC with NA-15 Office of Secure Transportation (OST), segments of NA-10 Defense Programs, and NA-42 Office of Emergency Response. The facility will be approximately 350,000 gross square feet on 40 acres of land. KO will occupy approximately 175,000 gross square feet of the facility. OST will have primary responsibility for the site and for the site's physical security with each entity maintaining their own security plan for the protection of their assets. KO is being considered for providing some of the other common site support services, including providing identification badging for all occupants at the ATTC since KO will possess that capability for its employees. KO will vacate the Craddock and Air Park leased properties, but may retain the permitted NC-135 Site on the KAFB for new work. Should the NC-135 Site be retained, as is being pursued, contract security would be maintained there to control access.

Some of the services currently provided by the Albuquerque Service Center are being considered for transfer to KO. Those being considered are:

- Maintaining IT systems to include both unclassified and classified servers and workstations.
- Providing onsite ES&H support for the facility.
- Purchasing
- Shipping and Receiving to include maintaining the warehouse.
- Providing identification badging for occupants at the facility.

OST would maintain the physical security of the facility with each entity maintaining their own security plan as to how protection is conducted for assets by that entity.

Memorandums of Agreement are being drafted and are expected to be completed in mid-2007. KCSO and OST are currently discussing oversight processes and procedures.

Other business opportunities are under consideration at the existing NC-135 Compound, which would require maintaining contract security to control access into the facility. This would be funded by these new entities.

4.2.1 Security Infrastructure

No security infrastructure requirements are identified because of the planned relocation to the new facility currently scheduled to begin in 2010.

5.0 Facilities and Infrastructure Projects/Activities and Cost Profile

5.1 Overview of Site Project Prioritization and Cost Profile

Projects may be identified by any organization and are submitted to the Finance division as part of the annual construction budget call. A preliminary scope of work and budget quality cost estimate is prepared by Facility Management Services. When all projects have been estimated, the Finance division, working in conjunction with Facility Management Services, Program Management, the President, Vice President and the Leadership team as well as the KCSO, integrate the programmatic needs with site facilities and infrastructure requirements, establish priorities, and formulate a budget. The budget formulation process addresses both short and long-range needs and incorporates the annual prioritization guidance provided in the NNSA budget call. The budget includes the identification of projects that fit within plant funding targets and requirements over target. Activities identified as requirements over target are reviewed with the Controller, the President, Vice President and the Leadership team including Program Management. These requirements are then prioritized for the plant, and presented as a budget schedule in the operating budget submission. The result of this process is the annual budget submission for construction Line Items, general plant projects, and other infrastructure projects. The KCP has a distinct advantage in this area because most of the site is within three connected buildings, which simplifies the issue of site-wide integration.

The KCP TYSP is the principal document for establishing short- and long-term planning and ensures that the mission assignment is continually met. The TYSP lists all Line Item, FIRP, and GPP projects that are in the KCP ten-year planning horizon. The scope of these projects ranges from providing new facilities in support of emerging technologies associated with new weapons' programs to improving the plant infrastructure. The Pause Plan, as driven by the KCRIMS initiative, has a significant influence on the project tables. Projects supporting long-term sustainment of facilities and infrastructure have been delayed pending final decision regarding the establishment of a new KCP facility. This is reflected in the Attachment A tables.

5.2 Significant Project Deletions and Additions

Significant project additions and deletions are identified as follows:

- Two Line Items, previously shown in the ICPP and submitted in the FY2007 TYSP, Attachment A-1: "Consolidate and Renovate Computing Facilities" and "Replace Main Switchgear" (Design), have been delayed. This is due to the KCRIMS initiative and the Pause Plan philosophy previously discussed. No new capital investment will be made in existing KCP facilities.

- Three proposed Line Items previously submitted in the FY2007 TYSP, Attachment A-2: "Facilities and Equipment For Responsive Manufacturing", "Specialty Materials Production Facility" and "Replace Main Switchgear" (Construction) have also been delayed due to the KCRIMS initiative.

- A new proposed Line Item, "KCRIMS Facility", is shown in Attachment A-2. This project includes the design and construction (acquisition cost) of a smaller facility to support the KCP mission assignment. Further detail is provided in the Proposed Line Item Construction Project Information Sheet following Attachment A-2. Also this information sheet includes the Occupancy and Disposition costs for the project.

5.3 Facilities and Infrastructure Cost Projections

Facilities and infrastructure cost projection spreadsheets are included in Attachment A following. Those projects highlighted in yellow have been delayed under the Pause Plan philosophy.

Attachment A: Facilities and Infrastructure Cost Projections

A1: Line Item Cost Projections

A2: Proposed Line Item Cost Projections

Proposed Line Item Project Information Sheets

A3: RTBF/Operations of Facilities (excludes Line Items) Cost Projections

A4a: Facilities and Infrastructure Recapitalization Program (FIRP) Cost Projections (excludes Utility Line Items)

A4b: Other Facilities and Infrastructure Recapitalization Program Projects

A5: Other Facilities and Infrastructure Cost Projections

A6: Security Infrastructure Cost Projections

Note: Those projects highlighted in yellow have been delayed under the Pause Plan philosophy.

Attachment A-1
Facilities and Infrastructure Cost Projection Spreadsheet
Line Item Projects for KCP Site
($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 2006 (10)	FY 2007 (11)	FY 2008 FYNSP (12)	FY 2009 FYNSP (13)	FY 2010 FYNSP (14)	FY 2011 FYNSP (15)	FY 2012 FYNSP (16)	FY 2013 (17)	FY 2014 (18)	FY 2015 (19)	FY 2016 (20)	FY 2017 (21)
A. Readiness in Technical Base and Facilities (RTBF) Line Items																						
1	Gas Transfer Capacity Expansion			MC	DSW			OPC	772	608	75	89										
		02-D-10313						PE&D	991	991												
		03-D-12100						LI	15198	15198												
								Total (TPC)	16961	16797	75	89	0	0	0	0	0	0	0	0	0	0
2	* Consolidate and Renovate Computing Facilities			MC	DSW			OPC	1500	144	556	200	300	100	100	100						
		02-D-10313						PE&D	1977			1977										
		03-D-12100						LI	18000					10000	6000	2000						
								Total (TPC)	21477	144	556	2177	300	10100	6100	2100	0	0	0	0	0	0
B. Facilities and Infrastructure Recapitalization Program (FIRP) Line Items																						
1	* Replace Main Switchgear			MD	DSW			OPC	221	181	40											
								PE&D	967		967											
			KC-DM-B-013			5780/4560		LI														
								Total (TPC)	1188	181	1007	0	0	0	0	0	0	0	0	0	0	0
								OPC														
								PE&D														
								LI														
								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))																						
								OPC														
								PE&D														
								LI														
								Total (TPC)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E. Nuclear Nonproliferation (NN) Line Items																						
								OPC														
								PE&D														
								LI														
								Total (TPC)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
								Total Costs for All NNSA Site Line Items									0	0	0	0	0	0
F. Non-NNSA Line Items Program A																						
								OPC														
								PE&D														
								LI														
								Total (TPC)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
								Total Costs for Program A	0	0	0	0	0	0	0	0	0	0	0	0	0	0
G. Non-NNSA Line Items Program B																						
								OPC														
								PE&D														
								LI														
								Total (TPC)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
								Total Costs for Program B	0	0	0	0	0	0	0	0	0	0	0	0	0	0
								Total Site Costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Note: An asterisk indicates projects that have been suspended per the KCP "Pause Plan."

Attachment A-2
Facilities and Infrastructure Cost Projection Spreadsheet
Proposed Line Item Projects for KCP Site
($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)	FY 2007 (11)	FY 2008 (12)	FY 2009 (13)	FY 2010 (14)	FY 2011 (15)	FY 2012 (16)	FY 2013 (17)	FY 2014 (18)	FY 2015 (19)	FY 2016 (20)	FY 2017 (21)
A. Readiness in Technical Base and Facilities (RTBF) Line Items																				
1	KCRIMS Facility (1)			MC	DSW			OPC	4900	2700	1000	700	0	100	100	300				
								PE&D	36000	0	0	30000	6000	0	0	0				
								LI	554000	0	0	0	0	500000	54000	0				
								Total	594900	2700	1000	30700	6000	500100	54100	300	0	0	0	0
2	*Facilities and Equipment for Responsive Manufacturing			MC	DSW			OPC	700		150	150	100	100	100	100				
								PE&D	1000			1000								
								LI	24000					10000	14000					
								Total	25700	0	150	1150	100	10100	14100	100	0	0	0	0
3	*Speciality Materials Production Facility			MC	DSW			OPC	800		200	100	50	100	100	100	100	50		
								PE&D	3500			3000				500				
							TBD	LI	51000					12000	15000	5000	19000			
								Total	55300	0	200	3100	50	12100	15100	5600	19100	50	0	0
B. Facilities and Infrastructure Recapitalization Program (FIRP) Line Items																				
1	* Replace Main Switchgear		KC-DM-B-013	MD	DSW	5780/4560		OPC	200		100	30	30	40						
								PE&D		N/A										
								LI	15565			9000	6000	565						
								Total (TPC)	15765	0	100	9030	6030	605	0	0	0	0	0	0
C. Safeguards & Security (S&S) Line Items																				
								OPC												
								PE&D												
								LI												
								Total (TPC)	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))																				
								OPC												
								PE&D												
								LI												
								Total (TPC)	0	0	0	0	0	0	0	0	0	0	0	0
E. Nuclear Nonproliferation (NN) Line Items																				
								OPC												
								PE&D												
								LI												
								Total (TPC)	0	0	0	0	0	0	0	0	0	0	0	0
								Total Costs for All NNSA Site Line Items	594900	2700	1000	30700	6000	500100	54100	300	0	0	0	0
F. Non-NNSA Line Items Program A																				
								OPC												
								PE&D												
								LI												
								Total (TPC)	0	0	0	0	0	0	0	0	0	0	0	0
								Total Costs for Program A	0	0	0	0	0	0	0	0	0	0	0	0
G. Non-NNSA Line Items Program B																				
								OPC												
								PE&D												
								LI												
								Total (TPC)	0	0	0	0	0	0	0	0	0	0	0	0
								Total Costs for Program B	0	0	0	0	0	0	0	0	0	0	0	0
								Total Site Costs	594900	2700	1000	30700	6000	500100	54100	300	0	0	0	0

Notes: An asterisk indicates projects that have been suspended per the KCP "Pause Plan." (1) This cost shown in this table is for facility acquisition only. Occupancy and Disposition costs are shown in the Line Item Information Sheet on the following page.

PROPOSED LINE ITEM CONSTRUCTION PROJECT INFORMATION SHEET

Project Title/Site: *Kansas City Responsive Infrastructure Manufacturing & Sourcing (KCRIMS) Facility*

Federal and Contractor Program Manager(s) or Sponsor(s):

- Mike Roberts (Federal Project Director)
- Rick Lavelock (Contractor Program Manager/Sponsor)

Federal and Contractor Project Manager(s):

- Mike Roberts (Federal Project Director)
- Craig Ham (Contractor Project Manager)

Project Description:

The Kansas City Responsive Infrastructure, Manufacturing, and Sourcing (KCRIMS) project will relocate and consolidate the KCP from the existing 3.1 million square feet of facilities into 1.0 million square feet of new modern manufacturing facilities.

The new facilities would be more flexible and responsive than the current facilities, allowing changes to the capability and capacity quickly and economically. This approach is in strategic alignment with NNSA's Complex 2030 Responsive Infrastructure vision.

In addition to utilizing Line Item funding to execute this project, the CD-1 process is also considering a potential GSA lease as a viable option for this new facility.

Current Proposed/Actual Project Schedule:

	Start	Complete
JMN	09/2006	12/2006
CD-0		12/2006
CDR	01/2007	03/2007
CD-1		04/2007
Title I	01/2009	06/2009
CD-2		09/2009
Title II	09/2009	09/2010
CD-3		12/2010
Construction	03/2011	03/2013
Relocation	04/2013	04/2015
Disposition	05/2015	05/2018
CD-4		11/2018

Project Justification (Program Requirements):

In July 2005, the Secretary of Energy Advisory Board (SEAB)'s NWC infrastructure task force report, *Recommendations for the Nuclear Weapons Complex of the Future*, envisioned a consolidated complex producing a Reliable Replacement Warhead (RRW) largely composed of commercially available nonnuclear components. The report recommended that nonnuclear components be outsourced "to the extent possible." The NNSA prepared a response to the SEAB task force recommendations, *Complex 2030 – An Infrastructure Planning Scenario for the Nuclear Weapons Complex*. In that report, the NNSA recommends "A new, modern and efficient nonnuclear production facility would be in operation by 2012 and sized to produce components and conduct operations that cannot be purchased commercially (e.g. use control components and component final assembly)." The driving force for this schedule is not just to align with potential first production of an RRW, but also to begin realizing substantive savings and providing a more responsive, adaptable infrastructure in the most aggressive schedule possible.

The Kansas City Responsive Infrastructure Manufacturing and Sourcing (KCRIMS) program proposes to transform Kansas City Plant (KCP) operations by significantly reducing annual operating costs and improving responsiveness to the National Nuclear Security Administration's (NNSA) supply of nonnuclear components. The proposed transformation utilizes the following three interrelated strategic thrust areas for change:

- Strategic Sourcing and Sizing
- Business Excellence Enabled by Reduced Operating Requirements
- New Modern Facility Sized for the Future NNSA Mission by 2012

Execution of these plans is expected to reduce the operational footprint of the nonnuclear component production mission from approximately 3 million to 1 million square feet, provides for a responsive infrastructure to meet current needs, and incorporates flexibility to quickly respond to future mission assignments. The transformation is aligned with the NNSA's vision presented in *Complex 2030 – An Infrastructure Planning Scenario of a Nuclear Weapons Complex Able to Meet the Threats of the 21st Century*.

Alternatives Developed/Available to Meet Program Requirements:

A myriad of options were considered in developing the overall KCRIMS transformation strategy. Alternative analysis included factors such as annual operation and maintenance costs, lease costs, construction costs, operational considerations, site development considerations, schedule constraints, life cycle costs, and the strengths, weaknesses, opportunities, and threats associated with each alternative.

The alternative analysis starts at the choice to execute a project or do nothing and proceeds to work through the execution alternatives to reach a recommended path. The highest level alternative is a choice between doing nothing or transformation of nonnuclear production in support of the Complex 2030 goals. The analysis recommends transformation of the KCP and explores the alternatives considered to achieve transformation. Facility transformation is recommended in order to realize the maximum amount of operational savings and to provide a new modern responsive infrastructure. The various facility options considered were:

1. No facility changes
2. Relocate to a contractor provided facility
3. Renovation of the Bannister Complex
    a. NNSA – East side
    b. GSA – West side
4. Construct a new facility on the existing Bannister site
    a. NNSA – East side
    b. GSA – West side
5. Construct a new facility on a green field site in the area

From the above alternatives two primary candidates received the most in depth analysis. The two primary candidates included renovation of the existing GSA facility or construction of a new facility on a green field site. The strengths, weaknesses, opportunities, and threats comparison of the facility options shows that construction of a new facility on a green field site is the recommended alternative for this project. Execution of the green field option meets the transformation vision and provides a new state-of-the-art responsive and flexible facility.

Proposed Funding Profile: ($000)

	Totals	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LI	1,175,200	0	0	0	0	578,800	54,000	108,200	47,200	193,500	100,000	93,500
PE&D	99,700	0	0	30,000	6,000	9,000	4,700	25,000	25,000	0	0	0
OPC	7,400	2,700	1,000	700	0	0	100	500	500	500	1,400	0
Totals	1,282,300	2,700	1,000	30,700	6,000	587,800	58,800	133,700	72,700	194,000	101,400	93,500

Note: This funding profile differs from that shown in Attachment A-2 because Occupancy and Disposition costs are included. The estimate in A-2 is only for the cost of the new facility.

Projected Annual Operating Costs:

Projected annual operating costs will be approximately $300M.

Project Site/Facility Space Utilization:

This project will decrease the KCP floor space from the current 3.1 million square feet to approximately 1.15 million square feet. Disposition of the current facility will be required to achieve the square footage reduction.

Attachment A-3

NNSA Facilities and Infrastructure Cost Projection Spreadsheet

RTBF/Operations of Facilities for KCP Site

($000s)

Priority (1)	Project Name (2)	Project Number (3)	[illegible]	Mission Dep Program	Deferred Maintenance Reduction	GSF Added or Eliminated	Funding Type	Total	Prior Years Funding	FY 2006 (10)	FY 2007 (11)	FY 2008 FYNSP (12)	FY 2009 FYNSP (13)	FY 2010 FYNSP (14)	FY 2011 FYNSP (15)	FY 2012 FYNSP (16)	FY 2013 (17)	FY 2014 (18)	FY 2015 (19)	FY 2016 (20)	FY 2017 (21)
1	Expense Projects		MC,MD	DSW	0/1000 / year	-	E	-		7,400	7,450	4,500	4,500	4,500	4,500	4,500	4,500				
2	Basic Capital Equipment		MC,MD	DSW			E			7,393	3,203	3,000	3,000	3,000	3,000	3,000	3,000				
3	Interim Computing Facility Upgrade		MD	DSW			GPP					500	2,500								
4	*Relocate Packaging Materials & Bulk Metal		NMD	DSW	-	-	GPP	4,947	3,815			1,100									
5	*Utilities Separation		NMD	DSW	-	-	GPP	1,313	1,136												
6	*NNSA-GSA Space Exchange		NMD	DSW	-	(90,000)	GPP	3,246	513			2,700									
7	*EDSV Computing Facility Expansion		MD	DSW	1,250	-	GPP	2,628				960	1,400								
8	Hexavalent Chrome Processing Upgrades		MC	DSW	-	-	GPP	1,427				177	1,250								
9	*Optics Production Facility		MC	DSW	-	-	GPP	4,913					423	2,250	2,240						
10	*Expand Main Plant Argon to MSB		MD	DSW	-	-	GPP	600							600						
11	*Microelectronics Process Cooling Water		MD	DSW	-	-	GPP	660							600						
12	*Replace AHU Aft Assembly		MD	DSW			GPP	150							150						
13	*Replace East Side Fire Protection Reservoir		MD	DSW	-	-	GPP	500								500					
14	*Upgrade IWRO System		MD	DSW	-	-	GPP	450							50	400					
15	*Upgrade D/71 Waste Systems		MD	DSW	-	-	GPP	4,900							300	2,900	1,700				
16	*Emergency Power for Saturn Cabinets		MD	DSW	-	-	GPP	1,700								200	1,500				
17	*Demolition Secom Bldg 1700		NMD	DSW		(1,500)	E	150									150				
18	*Demolition KO NC-135		NMD	DSW		(64,000)	E	1,300									200	1,100			
19	*Renovate Restrooms		NMD	DSW	434		E	950									950				
20	*Replace Process Gas Components		MD	DSW	1,176		GPP	1,650									200	1,450			
21	*Replace West Powerhouse Generator		MD	DSW	2,408		GPP	2,300									300	1,500	500		
22	*Replace Sanitary Sewer Systems		MD	DSW	1,963		GPP	2,500									300	1,000	1,200		
23	*Seal/Repave Parking Lots		NMD	DSW	578		E	2,500										300	2,200		
24	*Replace Natural Gas System Components		MD	DSW	313		GPP	2,500										300	2,200		
25	*Replace City Water Systems		MD	DSW	1,909		GPP	2,300											300	2,000	
26	*Replace Air Compressor Components		MD	DSW	990		GPP	1,500											300	1,200	
27	*Replace Air Handling Systems 405R-02, 405M-1		MD	DSW	1,317		GPP	2,900											400	2,500	
28	*Replace Bldg Management Controls (DCM Controllers)		MD	DSW	2,000		E	2,500												500	2,000
29	*Site Roofing		MD	DSW	1,131		E	1,500												300	1,200
30	*Seal/Repave Parking Lots		NMD	DSW	2,731		E	2,500												500	2,000
31	*Replace Precision Tool HVAC		MD	DSW	920		GPP	2,300												300	2,000
32	*Replace D/73 HEPA Ceiling Grid		MD	DSW	3,375		GPP	-													
33	*Replace Mezzanine Chilled Water Lines		MD	DSW	3,675		GPP	-													
34	*Replace Computer Facility/Offices HVAC		MD	DSW	1,150		GPP	-													
35	*Replace SEAA Office Area HVAC		MD	DSW	1,528		GPP	-													
36	*Replace Stores Environmental Systems		MD	DSW	2,760		GPP	-													
37	*Replace Heating Systems		MD	DSW	1,490		GPP	-													
38	*Replace Building Management Controls		MD	DSW	116		E	-													
39	*Modernize Elevators		NMD	DSW	1,050		E	-													
40	*Site Roofing		MD	DSW	4,670		E	-													
41	*Replace Sanitary Sewer Systems Phase 2		MD	DSW	588		GPP	-													
42	*Replace HVAC PPC and Labor Relations		MD	DSW	2,100		GPP	-													
43	*Replace Sanitary Sewer Systems Phase 3		MD	DSW	1,725		GPP	-													
44	*Replace Fire Protection System Components		MD	DSW	1,292		GPP	-													
45	*Replace Chilled Water Headers		MD	DSW	3,525		GPP	-													
46	*Replace Condensate Return Phase 3		MD	DSW	2,250		GPP	-													
47	*Replace Process Gas Components		MD	DSW	723		GPP	-													
48	*Replace Condensate Return Phase 4		MD	DSW	2,250		GPP	-													
49	*Replace Natural Gas Components		MD	DSW	1,921		GPP	-													
50	*Replace Roof Steam Mains		MD	DSW	2,970		GPP	-													
51	*Replace Chilled Water Pumps		MD	DSW	2,850		GPP	-													
52	*Replace Condensate Return Units Phase 5		MD	DSW	3,675		GPP	-													
53	*Replace Pipe Racks		MD	DSW	1,250		GPP	-													
54	*Replace Steam Mains		MD	DSW	1,125		GPP	-													
55	*Replace Steam System Components		MD	DSW	220		GPP	-													
56	*Replace Steam & Condensate EPH		MD	DSW	1,875		GPP	-													
57	*Replace EPH Condensor VFD's		MD	DSW	1,750		GPP	-													
58	*Replace Condensate Mains		MD	DSW	2,400		GPP	-													
59	*Replace Switchgear & Substations		MD	DSW	2,250		GPP	-													
60	*Replace IWPF Pipe Rack		MD	DSW	2,450		GPP	-													
61	*Replace Condensate Return Units Phase 6		MD	DSW	3,675		GPP	-													
62	*Replace HVAC Systems		MD	DSW	1,000		GPP	-													
63	*Change AHU Freeze Protection		MD	DSW	-	-	GPP	-													
64	*Replace Main CO2 Lines		MD	DSW	-		GPP	-													

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

Priority (1)	Project Name (2)	Project Number (3)	Mission Dependency (4)	Program (4A)	Deferred Maintenance Reduction (5)	BSF Added or Eliminated (6)	Funding Type (7)	Total (8)	Prior Years Funding (9)	FY 2006 (10)	FY 2007 (11)	FY 2008 FYNSP (12)	FY 2009 FYNSP (13)	FY 2010 FYNSP (14)	FY 2011 FYNSP (15)	FY 2012 FYNSP (16)	FY 2013 (17)	FY 2014 (18)	FY 2015 (19)	FY 2016 (20)	FY 2017 (21)
65	*Upgrade WPH Cooling Tower		MD	DSW	-		GPP	-													
66	*Renovate Restrooms		NMD	DSW	-		GPP	-													
67	*Renovate Restrooms		NMD	DSW	-		GPP	-													
68	*Renovate Restrooms		NMD	DSW	-		GPP	-													
69	*Renovate Restrooms		NMD	DSW	-		GPP	-													
70	*Replace Storm Sewer System		MD	DSW	-		E	-													
71	*Replace IWPF Tanks 26 and 27		MD	DSW	-		GPP	-													
72	*Replace Switchgear 8AB		MD	DSW	-		GPP	-													
73	*Replace Substations 17AB and 40AB		MD	DSW	-		GPP	-													
74	*Replace 407R-01/02 Air Handling Units		MD	DSW	-		GPP	-													
75	*Replace MSB LN2 Lines		MD	DSW	-		GPP	-													
76	*Replace Steam and Condensate Pipe		MD	DSW	-		GPP	-													
ETC.																					
TOTAL RTBF/Operations of Facilities (Facilities & Infrastructure reported under this category)		[redacted]						-	-	14,793	10,653	8,177	11,250	7,500	7,500	7,500	7,500	-	-	-	-

Note: An asterisk indicates projects that have been suspended per the KCP "Pause Plan."

Attachment A-4(a)

NNSA Facilities and Infrastructure Cost Projection Spreadsheet

Facilities and Infrastructure Recapitalization Program (FIRP) for KCP Site

($000s)

FIRRB Priority (1)	Project Name (2)	FIRRB Score (2a)	Project Number (3)	Deferred Maintenance Identifier (3a)	Mission Dependency (4)	[illegible]	Deferred Maintenance Reduction (6)	GSF Added or Eliminated (6a)	Funding Type (7)	Total (8)	Prior Years Funding (9)	FY 2006 (10)	FY 2007 (11)	FY 2008 PBR (12)	FY 2009 FYNSP (13)	FY 2010 FYNSP (14)	FY 2011 FYNSP (15)	FY 2012 FYNSP (16)	[illegible]
Prior	Prior Year Project Reallocations									-3091	-2347	-244	-500						
1	Upgrade NNC/Acorn D/25 HVAC	60	KC-R-02-04		MD	DSW	4,850	-	GPP	3845	4039	-194							
2	Trunked Radio Project	50	KC-R-03-06		MD	DSW	-	-	E	6314	6684		-370						
3	Upgrade Chillers - WBH	55	KC-R-02-08		MD	DSW	4,650	-	GPP	1783	1783								
4	NWC Integrated Roofing Project - Assessment	55	KC-P-03-11		MD	DSW	-	-	E	1494	1494								
5	Replace Fire Alarm (MUX)	65	KC-R-05-01	KC-DM-B-003	MD	DSW	4,650	-	GPP	4400	4950	-550							
6	Replace LN2, Mezzanine	55	KC-R-04-02		MD	DSW	1,096	-	GPP	757	762	-5							
7	Replace Steam System Components	55	KC-R-04-05	KC-DM-B-005	MD	DSW	4,660	-	E	4895	4900	-5							
8	FIRP Management Expenses		KC-R-03-08		NMD	DSW	-	-	E	148	83		65						
9	NWC Integrated Roofing Site Support	55	KC-R-04-01		MD	DSW	-	-	E	509	509								
10	NWC Integrated Roofing Site Support	55	KC-R-05-03	KC-DM-B-004	MD	DSW	1,650	-	E	725	725								
11	Roofing Asset Management Program - KCP	55		KC-DM-B-011	MD	DSW	1,533	-	E	1545	1545								
12	Replace Emergency Generators	55	KC-R-05-02	KC-DM-B-002	MD	DSW	1,610	-	GPP	1842	2411	-534	-35						
13	NWC Integrated Roofing Site Support	55		KC-DM-B-011	MD	DSW	592	-	E	650		650							
14	MSB Exhaust and HVAC, Northwest	55	KC-R-05-06	KC-DM-B-008	MD	DSW	4,540	-	GPP	4003	1545	2200	258						
15	*Office Infrastructure Phase 1	55	KC-R-05-04	KC-DM-B-001	MD	DSW	2,440	-	GPP	3810	1550	-990		2429	821				
16	*Replace Air Handling, Cleanrooms (D/78)	55	KC-R-06-02	KC-DM-B-010	MD	DSW	3,010	-	E	3860	385	-125		800	2800				
17	*Replace City Water System	55	KC-P-05-01	KC-DM-B-006	MD	DSW	800	-	E	2045	250	-70		-35	1900				
18	Replace HVAC Bldg 15	55	KC-R-06-04	KC-DM-B-015	MD	DSW	2,250	-	GPP	2486	450	800	1238						
19	Replace Tempered Water Pumps WBH	55	KC-R-05-05	KC-DM-B-009	MD	DSW	460	-	E	410	750	-310	-30						
20	*Replace Basement Chilled Water Piping	55		KC-DM-B-016	MD	DSW	2,110	-	E	2928				250	600	2078			
21	*Replace High Voltage Fire Alarm Panels Loop I & II	65		KC-DM-B-018	MD	DSW	6,143	-	GPP	4800				400	3803	597			
22	*Replace Condensate Surge Tanks WBH	45		KC-DM-B-028	MD	DSW	750	-	GPP	2210				210	2000				
23	*Replace Compressed Air Sys. Components	45		KC-DM-B-020	MD	DSW	500	-	GPP	2500				250		1250	1000		
24	Roofing Asset Management Program - KCP	50		KC-DM-B-011	MD	DSW	593	-	E	830		830							
25	NWC Integrated Roofing Site Support	50		KC-DM-G-103	MD	DSW	-	-	E	600			600						
26	*Office Infrastructure Phase 2	55		KC-DM-B-012	MD	DSW	2,440	-	GPP	4900					500	4000	400		
27	*MSB Exhaust and HVAC, Southwest	55		KC-DM-B-017	MD	DSW	4,300	-	GPP	4900					500	4000	400		
28	*Upgrade BARN Environmental Systems	55		KC-DM-B-024	MD	DSW	1,500	-	GPP	2653					300	2353			
29	*Replace Hot Water System, Poly	55		KC-DM-B-019	MD	DSW	2,110	-	GPP	2650					250		2400		
30	*Replace Building 74 HVAC	55		KC-DM-B-030	MD	DSW	1,870	-	GPP	2500					300		2200		
31	*Replace Condensate Return Units	55		KC-DM-B-032	MD	DSW	710	-	GPP	1200					200			1000	
32	*Replace HVAC Electronics Assembly (305 AHU)	55		KC-DM-B-026	MD	DSW	1,250	-	GPP	4800					400		4400		
33	NWC Integrated Roofing Site Support	50		KC-DM-G-106	MD	DSW	-	-	E	3600				600	600	600	600	600	600
34	*Office Infrastructure Phase 3	55		KC-DM-B-027	MD	DSW	1,000	-	GPP	4900						500	4400		
35	*MSB Exhaust and HVAC, Southeast	55		KC-DM-B-029	MD	DSW	4,080	-	GPP	4500						500		4400	
36	*Replace Condensate Return Units Phase 2	55		KC-DM-B-031	MD	DSW	700	-	GPP	1400						200		1200	
37	*Replace Steam System Components	55		KC-DM-B-033	MD	DSW	1,560	-	GPP	3300						300		2000	1000
38	*Replace Cafeteria Air Handling Units	45		KC-DM-B-025	NMD	DSW	1,500	-	GPP	2317						300		2017	
39	*MSB Exhaust and HVAC, Northeast	55		KC-DM-B-021	MD	DSW	4,190	-	GPP	4500							500	4000	
40	*Replace Plating Building HVAC	65	KC-P-04-01	KC-DM-B-007	MD	DSW	4,840	-	GPP	4425	350	-25							4100
41	*Replace Thermal Fluid Heaters and System	55		KC-DM-B-014	MC	DSW	4,880	-	GPP	3550							500		3050
42	*Replace AHU 302R-02	55		KC-DM-B-023	MD	DSW	1,280	-	GPP	1750							250		1500
43	*Replace VSDs on Chilled Water System	40		KC-DM-G-110	MD	DSW			E	3000							200	2800	
44	*Replace Electrical Devices	50		KC-DM-G-111	MD	DSW			GPP	4400							400	2750	1250
45	*Replace RO Components	50		KC-DM-G-144	MD	DSW	-	-	E	1725							225		1500
46	*Replace Fire Alarm Components	60		KC-DM-G-112	MD	DSW	-	-	E	1150							150		1000
47	*Renovate Restrooms	40		KC-DM-G-114	NMD	DSW	-	-	E	1700							200		1500
48	*Replace Switchgear and Electrical Devices	50		KC-DM-G-117	MD	DSW	-	-	GPP	3468							250		3218
49	*Repl. Building Management Controls (NC's)	40		KC-DM-G-120	MD	DSW	-	-	E	2150							150		2000
50	*Elevator Component Replacement	40		KC-DM-G-108	NMD	DSW	-	-	E	1400							150		1250
51	*Replace MSB Chilled Water Lines	50		KC-DM-G-116	MD	DSW	-	-	GPP										
52	*Replace Emergency Notification Sys. Components	60		KC-DM-G-127	MD	DSW	-	-	GPP										
53	Site Roofing	50		KC-DM-G-105	MD	DSW	-	-	E										
N/A	Roofing Asset Management Program - Recap	55	KC-R-04-04	KC-DM-B-004	MD	DSW			E	102303	20796	10317	11250	10000	10000	10000	10000	10000	10000
	*Replace Main Switchgear Line Item (TPC)									0	0								
									TOTAL FIRP	[illegible]	[illegible]	[illegible]	12474	10000	10000	10000	10000	10000	10000

Note: An asterisk indicates projects that have been suspended per the KCP "Pause Plan."

Attachment A-4(b)
NNSA Facilities and Infrastructure Cost Projection Spreadsheet
Other Facilities and Infrastructure Recapitalization Program (FIRP) Projects for KCP Site
($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 2007 (11)	FY 2008 (12)	FY 2009 (13)	FY 2010 (14)	FY 2011 (15)	FY 2012 (16)	FY 2013 (17)
1																	
2																	
3																	
4																	
4																	
6																	
7																	
ETC.																	
									TOTAL	-	-	-	-	-	-	-	-

Attachment A-5

Other Facilities and Infrastructure Cost Projection Spreadsheet

For KCP Site

($000s)

Priority (1)	Project Name (2)	Project Number (3)	Mission Dependency (4)	Mission Dependency Program (4a)	Deferred Maintenance Reduction (5)	OSF Added or Eliminated (6)	Funding Type (7)	Total (8)	Prior Years Funding (9)	FY 2006 (10)	FY 2007 (11)	FY 2008 FYNSP (12)	FY 2009 FYNSP (13)	FY 2010 FYNSP (14)	FY 2011 FYNSP (15)	FY 2012 FYNSP (16)	FY 2013 (17)	FY 2014 (18)	FY 2015 (19)	FY 2016 (20)	FY 2017 (21)
NNSA Facilities and Infrastructure Cost Projection Spreadsheet (Program A)																					
1	Outfalls 004,002,001 Multiple Improvements		MD	DSW			E	20350		350						10000	10000				
2																					
3																					
4																					
5																					
ETC.																					
	TOTAL Program A (facilities & infrastructure reported under this category)							20350	0	350	0	0	0	0	0	10000	10000	0	0	0	0
NNSA Facilities and Infrastructure Cost Projection Spreadsheet (Program B)																					
1																					
2																					
3																					
4																					
5																					
ETC.																					
	TOTAL Program B (facilities & infrastructure reported under this category)																				
Non-NNSA Facilities and Infrastructure Cost Projection Spreadsheet (Program C)																					
1																					
2																					
3																					
4																					
5																					
ETC.																					
	TOTAL Program C (facilities & infrastructure reported under this category)																				
Non-NNSA Facilities and Infrastructure Cost Projection Spreadsheet (Program D)																					
1																					
2																					
3																					
4																					
5																					
ETC.																					
	TOTAL Program D (facilities & infrastructure reported under this category)																				

Note: The "Outfalls 004,002,001 Multiple Improvements" project is not currently budgeted and there is no current driver. It is being included in Attachment A-5 to provide visibility in the event additional corrective actions become required. If that occurs, funding will initially be requested through NA-56.

Attachment A-6(a) - FY 2007 -- FY 2009
NNSA Facilities and Infrastructure Cost Projection Spreadsheet
Currently Funded Security Infrastructure Projects for KCP Site ($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
	List FY 07 Projects									
ETC.										
	List FY 08 Projects									
1										
2										
3										
4										
ETC.										
	List FY09 Projects									
1										
2										
3										
4										
ETC.										

Attachment A-6(b) - FY08 and FY09 Unfunded
NNSA Facilities and Infrastructure Cost Projection Spreadsheet
Security Infrastructure Projects for KCP Site
($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 other FY08 or FY09 funding	DBT Related? Y or N
1								
2								
3								
4								
5								
6								
7								
ETC.								
TOTAL						$0		

Attachment B: Asset Utilization Index (AUI)

B (KCP): KCP Asset Utilization Index (AUI

B (KO): KO Asset Utilization Index (AUI)

(FIMS 093)

U. S. Department of Energy
Facilities Information Management System
Asset Utilization Index by FRPC Categories

Program Office: NNSA

Site: Kansas City Plant

Site Wide AUI: 82.97% **

Measures	AUI	FRPC Guidelines	OECM Guidelines	Operating Gross Sqft*	Operating No of Bldgs*
Office	75.00%	70 - 95%	95%	240,500	1
Warehouse	78.92%	50 - 85%	89%	55,364	4
All Other Categories	83.70%	N/A	N/A	2,575,595	31
		Kansas City Plant Site Totals*		2,871,459	36
		NNSA Program Totals*		2,871,459	36

* These numbers do not reflect the total gross square footage and number of buildings. They represent operating buildings only.

** Site Wide AUI includes all DOE Owned Building assets

(FIMS 093)

U. S. Department of Energy
Facilities Information Management System
Asset Utilization Index by FRPC Categories

Program Office	NNSA
Site	Kirtland

Site Wide AUI: 100.00% **

Measures	AUI	FRPC Guidelines	OECM Guidelines	Operating Gross Sqft*	Operating No of Bldgs*
Office	100.00%	70 - 95%	95%	25,095	12
Laboratory	100.00%	60 - 85%	90%	5,985	4
Warehouse	100.00%	50 - 85%	89%	5,239	2
All Other Categories	100.00%	N/A	N/A	22,510	8
			Kirtland Site Totals*	58,829	26
			NNSA Program Totals*	58,829	26

* These numbers do not reflect the total gross square footage and number of buildings. They represent operating buildings only.

** Site Wide AUI includes all DOE Owned Building assets

Attachment C: Not Used

Attachment D: Not Used

Attachment E: Facilities Disposition, New Construction, and Leased Space

Kansas City Plant

E1 (KCP): Facilities Disposition Plan

E2 (KCP): New Construction Footprint Added

E3 (KCP): Grandfathered Footprint Added

E4a (KCP): Footprint Tracking Summary (NNSA)

E4b (KCP): Footprint Tracking Summary (Multi-Program) Not Applicable

E5 (KCP): Waiver/Transfer Log (Space Added or Eliminated)

E6 (KCP): FY 2007 Leased Space

Kirtland Operations

E1 (KO): Facilities Disposition Plan

E2 (KO): New Construction Footprint Added

E3 (KO): Grandfathered Footprint Added

E4a (KO): Footprint Tracking Summary (NNSA)

E4b (KO): Footprint Tracking Summary (Multi-Program) Not Applicable

E5 (KO): Waiver/Transfer Log (Space Added or Eliminated)

E6 (KO): FY 2007 Leased Space

Attachment E-1

Kansas City Plant Facilities Disposition Plan

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)	FIMS Excess Indicator (8)	Excess Year (9)	Planned Disposition Year (10)	TEC to Disposition ($000s) (11)	FY2003 (baseline) Deferred Maintenance Reduction (for FIRP Demolition Only) ($000s) (12)	Yearly S&M Costs ($000s) (13)	Candidate for Transfer (14)	Contaminated (Yes or No) (15)	Notes (16)
TBD	01	Manufacturing Bldg	MC	TBD	TBD	1,751,740	None	2013	2015	TBD	N/A	TBD	TBD	TBD	
TBD	01-B	Receiving Dock	NMD	TBD	TBD	3,650	None	2002	2015	TBD	N/A	TBD	TBD	TBD	
TBD	01-C	Main (West) Switchgear *	MD	TBD	TBD	2,400	None	2013	2015	TBD	N/A	TBD	TBD	TBD	
TBD	02	Main Office Building	MD	TBD	TBD	240,500	None	2013	2015	TBD	N/A	TBD	TBD	TBD	
TBD	05	West Boiler House *	MD	TBD	TBD	50,777	None	2013	2015	TBD	N/A	TBD	TBD	TBD	
TBD	09	East Employee Entrance	MD	TBD	TBD	1,889	None	2013	2015	TBD	N/A	TBD	TBD	TBD	
TBD	13	Manufacturing Support Bldg	MC	TBD	TBD	132,545	None	2013	2015	TBD	N/A	TBD	TBD	TBD	
TBD	14	Four Experimental Test Cells	MC	TBD	TBD	39,982	None	2013	2015	TBD	N/A	TBD	TBD	TBD	
TBD	15	Polymer Building	MC	TBD	TBD	17,000	None	2013	2015	TBD	N/A	TBD	TBD	TBD	
TBD	16	Kinematics	MD	TBD	TBD	5,354	None	2013	2015	TBD	N/A	TBD	TBD	TBD	
TBD	31	Air Monitoring Building	NMD	TBD	TBD	208	None	1999	2015	TBD	N/A	TBD	TBD	TBD	
TBD	32	Central Guard Post	MD	TBD	TBD	1,134	None	2013	2015	TBD	N/A	TBD	TBD	TBD	
TBD	46	Unfinished Test Cell	NMD	TBD	TBD	5,870	None	2013	2015	TBD	N/A	TBD	TBD	TBD	
TBD	47	North Employee Entrance	MD	TBD	TBD	1,529	None	2013	2015	TBD	N/A	TBD	TBD	TBD	
TBD	48	East Power House *	MD	TBD	TBD	12,875	None	2013	2015	TBD	N/A	TBD	TBD	TBD	
TBD	54	High Power Lab	MC	TBD	TBD	31,746	None	2013	2015	TBD	N/A	TBD	TBD	TBD	
TBD	59	Waste Management Building	NMD	TBD	TBD	23,135	None	2013	2015	TBD	N/A	TBD	TBD	TBD	
TBD	68	Storage Shed	NMD	TBD	TBD	576	None	2013	2015	TBD	N/A	TBD	TBD	TBD	
TBD	73	Solid Waste Disposal	NMD	TBD	TBD	8,771	None	2013	2015	TBD	N/A	TBD	TBD	TBD	
TBD	74	Production Storage	MD	TBD	TBD	25,783	None	2013	2015	TBD	N/A	TBD	TBD	TBD	
TBD	75	Security Supv Control	MD	TBD	TBD	2,708	None	2013	2015	TBD	N/A	TBD	TBD	TBD	
TBD	76	Explosive Storage Bunker	NMD	TBD	TBD	150	None	2013	2015	TBD	N/A	TBD	TBD	TBD	
TBD	77	Oil Storage	NMD	TBD	TBD	2,389	None	2013	2015	TBD	N/A	TBD	TBD	TBD	
TBD	78	East Guard Post	NMD	TBD	TBD	459	None	2013	2015	TBD	N/A	TBD	TBD	TBD	
TBD	79	West Guard Post	NMD	TBD	TBD	240	None	2013	2015	TBD	N/A	TBD	TBD	TBD	
TBD	80	North Guard Post	NMD	TBD	TBD	516	None	2013	2015	TBD	N/A	TBD	TBD	TBD	
TBD	86	North Wing Lab	MC	TBD	TBD	27,655	None	2013	2015	TBD	N/A	TBD	TBD	TBD	
TBD	87	Test Cells	MC	TBD	TBD	116,319	None	2013	2015	TBD	N/A	TBD	TBD	TBD	
TBD	88	Forge & Casting	MC	TBD	TBD	35,885	None	2013	2015	TBD	N/A	TBD	TBD	TBD	
TBD	89	Fire Protection Pump House	MD	TBD	TBD	1,904	None	2013	2015	TBD	N/A	TBD	TBD	TBD	
TBD	90	Mold Heating & Cooling	MC	TBD	TBD	2,400	None	2013	2015	TBD	N/A	TBD	TBD	TBD	
TBD	91	Plating Building	MC	TBD	TBD	32,307	None	2013	2015	TBD	N/A	TBD	TBD	TBD	
TBD	92	Building 92	NMD	TBD	TBD	258,260	None	2013	2015	TBD	N/A	TBD	TBD	TBD	
TBD	93	Northeast Guard Post	MD	TBD	TBD	191	None	2013	2015	TBD	N/A	TBD	TBD	TBD	
TBD	94	Northwest Guard Post	NMD	TBD	TBD	240	None	2002	2015	TBD	N/A	TBD	TBD	TBD	
TBD	96	Special Process Building	MC	TBD	TBD	12,815	None	2013	2015	TBD	N/A	TBD	TBD	TBD	
TBD	98	Ind Wastewater Pretreatment	MD	TBD	TBD	19,612	None	2013	2015	TBD	N/A	TBD	TBD	TBD	
TBD	99	Rec./Shipping Security Post	MD	TBD	TBD	303	None	2013	2015	TBD	N/A	TBD	TBD	TBD	
Total						2,871,817				0	0	0			

Note: The buildings listed above are part of the Bannister Federal Complex (BFC) and Disposition will be a joint effort between NNSA and GSA.

*** Indicates those buildings that support the BFC and whose disposition may be later than the disposition date of the NNSA buildings.**

Attachment E-2
Kansas City Plant 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)
RTBF	TBD	New Facility	DSW	LI	1,150,000	2012	NNSA Lease from GSA

Attachment E-3
Kansas City Plant GRANDFATHERED 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)
RTBF	99-D-127	Stockpile Management Restructuring Initiative	RTBF	LI	305	2004	Security Entry Bldg.
Total					305		

Attachment E-4(a)

FOOTPRINT TRACKING SUMMARY SPREADSHEET

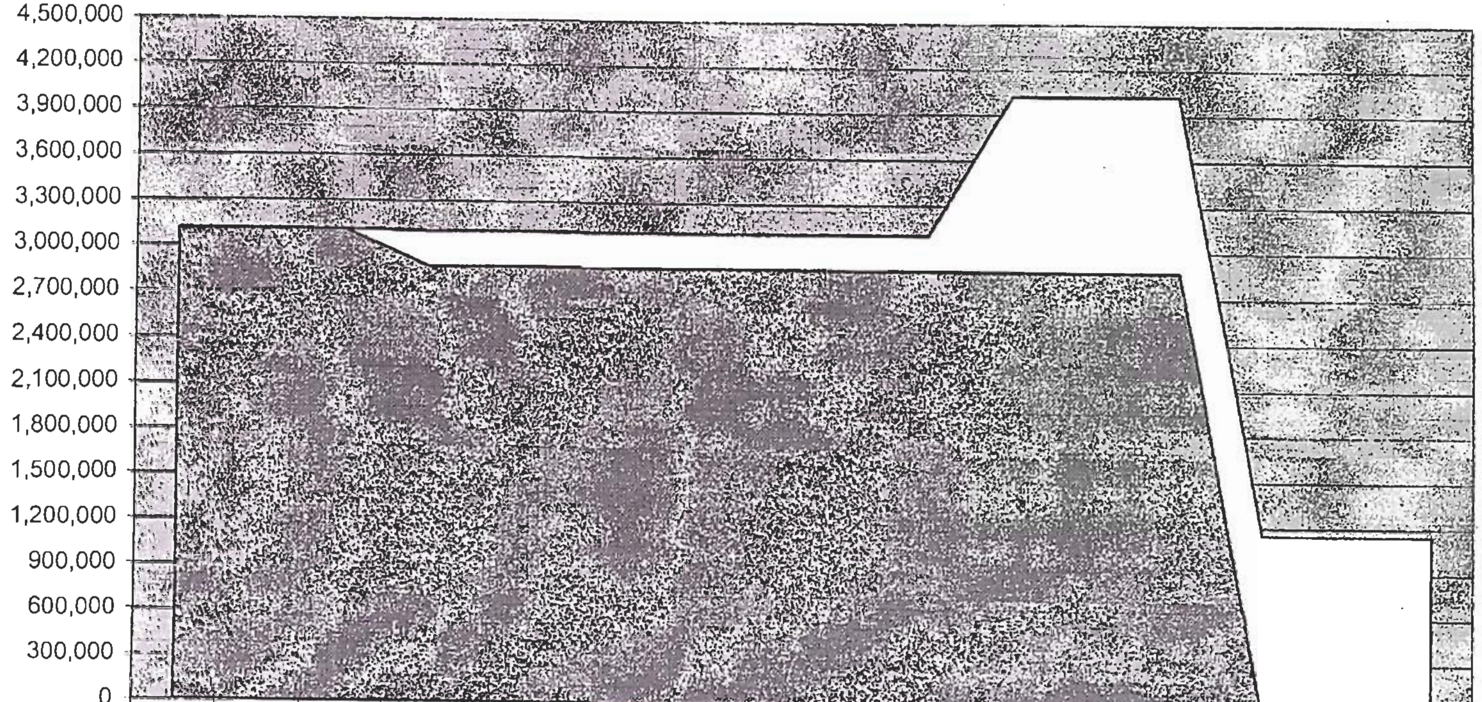
Kansas City Plant Site Footprint Tracking Summary - NNSA

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)
FY 2002 Actual	3,113,114	-369	0	3,112,745	-369		0	0	3,112,745	0
FY 2003 Actual	3,112,745	-208	0	3,112,537	-577		0	0	3,112,537	0
FY 2004 Actual	3,112,537	0	0	3,112,537	-577		305	303	3,112,840	0
FY 2005 Actual*	2,871,817	0	0	2,871,817	-577		0	0	2,871,817	231,392
FY 2006 Actual*	2,871,817	0	0	2,871,817	-577		0	0	2,871,817	231,392
FY 2007	2,871,817	0	0	2,871,817	-577		0	0	2,871,817	231,419
FY 2008	2,871,817	0	0	2,871,817	-577		0	0	2,871,817	231,419
FY 2009	2,871,817	0	0	2,871,817	-577		0	0	2,871,817	231,419
FY 2010	2,871,817	0	0	2,871,817	-577		0	0	2,871,817	231,233
FY 2011	2,871,817	0	0	2,871,817	-577		0	0	2,871,817	231,233
FY 2012	2,871,817	0	0	2,871,817	-577		0	0	2,871,817	1,150,000
FY 2013	2,871,817	0	0	2,871,817	-577		0	0	2,871,817	1,150,000
FY 2014	2,871,817	-2,871,817	0	0	-2,872,394		0	0	0	1,150,000
FY 2015	0	0	0	0	-2,872,394		0	0	0	1,150,000
FY 2016	0	0	0	0	-2,872,394		0	0	0	1,150,000
FY 2017	0	0	0	0	-2,872,394		0	0	0	1,150,000

In FY2012, KCP will have aquired by Lease, through GSA, a new operations facility (The Transformation Project). Existing GSA Assigned space will be relinquished and the new gsf (at approximately 1,150,000) will exist. In the FY2015 time frame all NNSA operations will cease at the KCP and at that time the buildings will be transfered to GSA for disposal.

FY2005 and FY2006 figures (marked by an *) in the Column Titled "Beginning Site Footprint" had included "Leased and/or GSA Assigned Space" in all past TYCSPs; however, now that figure represents only DOE-NNSA owned gsf.

ATTACHMENT E-4(a)
Kansas City Plant Site Space Tracking Summary - NNSA

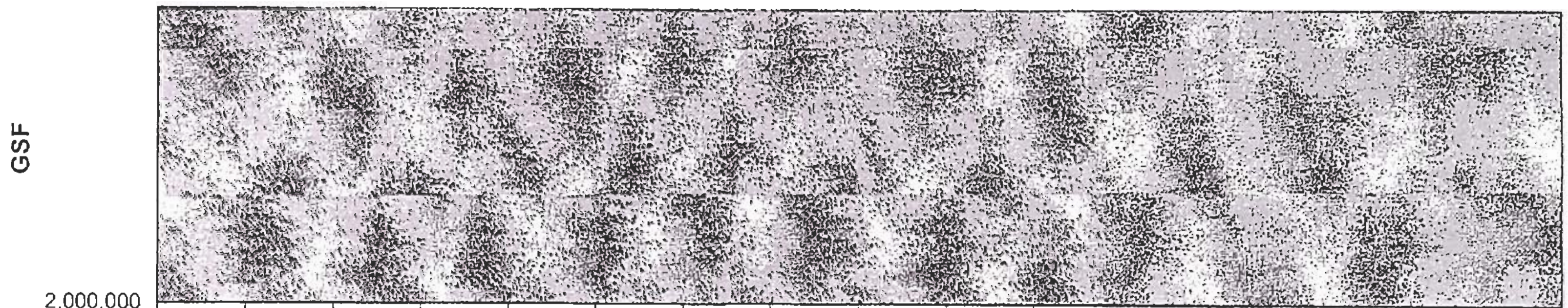


	FY 2002 Actual	FY 2003 Actual	FY 2004 Actual	FY 2005 Actual*	FY 2006 Actual*	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
NNSA Leased Space (10)	0	0	0	231,392	231,392	231,419	231,419	231,419	231,233	231,233	1,150,000	1,150,000	1,150,000	1,150,000	1,150,000	1,150,000
Cumulative "Grandfathered" Footprint Added (gsf) (8a)	0	0	303	0	0	0	0	0	0	0	0	0	0	0	0	0
Beginning Site Footprint (gsf) (2)	3,113,114	3,112,745	3,112,537	2,871,817	2,871,817	2,871,817	2,871,817	2,871,817	2,871,817	2,871,817	2,871,817	2,871,817	2,871,817	0	0	0

Attachment E-4 (b) NOT APPLICABLE
Kansas City Plant 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										
FY 2003 Actual										
FY 2004 Actual										
FY 2005 Actual										
FY 2006 Actual										
FY 2007										
FY 2008										
FY 2009										
FY 2010										
FY 2011										
FY 2012										
FY 2013										
FY2014										
FY2015										
FY 2016										
FY 2017										

ATTACHMENT E-4(b)
NOT APPLICABLE
Kansas City Plant Site Wide Footprint Tracking Summary - SITE WIDE (Multi-Program)



	FY 2002 Actual	FY 2003 Actual	FY 2004 Actual	FY 2005 Actual	FY 2006 Actual	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY2014	FY2015	FY 2016	FY 2017
☐ Leased Space (10)																
■ Cumulative Grandfathered Footprint Added (gsf) (8a)																
☐ Beginning Site Footprint (gsf) (2)																

Attachment E-5 NOT APPLICABLE
Kansas City Plant Waiver/Transfer Log (Space Added or Eliminated)

Site or Program Donor (1)	Site or Program Receiver (2)	Waiver Banked (gsf) (3)	Transfer Banked (gsf) (4)	Request Submitted (Yes/No) (5)	Request Approved (Yes/No) (6)	Comments (7)

Attachment E-6
FY 2007 Leased Space
Kansas City Plant Site

#	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	MO0017731	Fed. Bldg. No. 1	DSW	MC	34	231,233	0.27	$75,936	none	None	10/1/2012	Y
2	R50 Office	HSTI Office	OTHER	NMD	1	189	37	$6,960.00	full	1	Jan-08	2

Attachment E-1

Kirtland Operations Facilities Disposition Plan - NOT APPLICABLE

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)	FIMS Excess Indicator (8)	Excess Year (9)	Planned Disposition Year (10)	TEC to Disposition ($000s) (11)	FY2003 (baseline) Deferred Maintenance Reduction (for FIRP Demolition Only) ($000s) (12)	Yearly S&M Costs ($000s) (13)	Candidate for Transfer (14)	Contaminated (Yes or No) (15)	Notes (16)
Total						0				0	0	0			

Attachment E-2

Kirtland Operations - New Construction Footprint Added - NOT APPLICABLE

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)

Attachment E-3
Kirtland Operations GRANDFATHERED 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)
RTBF	GPPGPD12100	Quality Services	STA	GPP	1665	2002	Displacement KAFB Fire/Rescue
RTBF	GPPGPD12100	Technical Media	STA	GPP	2122	2002	Displacement KAFB Fire/Rescue
RTBF	GPPGPD12100	Powder Coating	STA	GPP	1858	2004	New on Site Capability
RTBF	GPPGPD12100	Painting Facility	STA	GPP	3980	2004	New on Site Capability

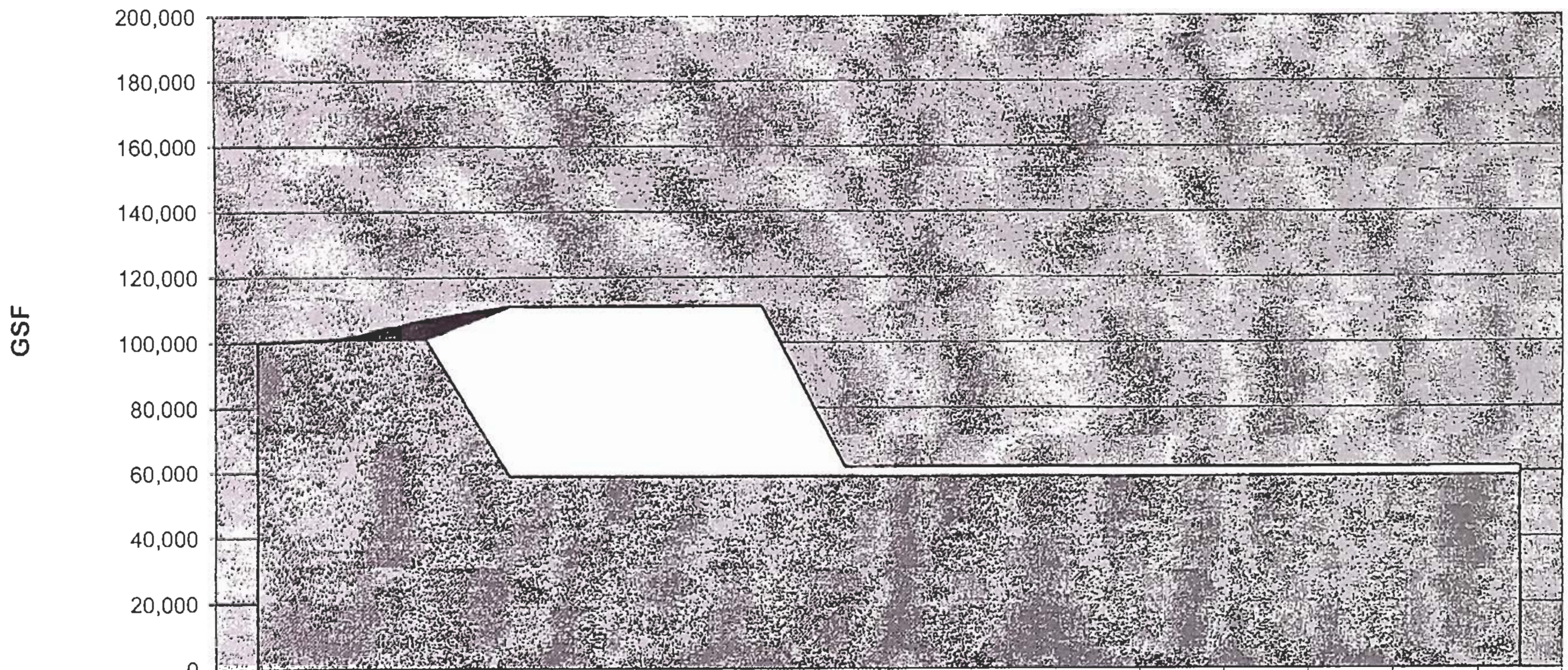
Attachment E-4(a)
FOOTPRINT TRACKING SUMMARY SPREADSHEET
Kirtland Operations Site Footprint Tracking Summary - NNSA

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)
FY 2002 Actual	100,041	-2,660	3,787	101,168	1,127		0	0	101,168	0
FY 2003 Actual	101,168	0	0	101,168	1,127		0	0	101,168	0
FY 2004 Actual*	101,168	0	0	101,168	1,127		5,838	5,838	107,006	0
FY 2005 Actual*	58,829	0	0	58,829	1,127		0	0	58,829	52,265
FY 2006 Actual*	58,829	0	0	58,829	1,127		0	0	58,829	52,265
FY 2007	58,829	0	0	58,829	1,127		0	0	58,829	52,265
FY 2008	58,829	0	0	58,829	1,127		0	0	58,829	52,265
FY 2009	58,829	0	0	58,829	1,127		0	0	58,829	2,772
FY 2010	58,829	0	0	58,829	1,127		0	0	58,829	2,772
FY 2011	58,829	0	0	58,829	1,127		0	0	58,829	2,772
FY 2012	58,829	0	0	58,829	1,127		0	0	58,829	2,772
FY 2013	58,829	0	0	58,829	1,127		0	0	58,829	2,772
FY 2014	58,829	0	0	58,829	1,127		0	0	58,829	2,772
FY 2015	58,829	0	0	58,829	1,127		0	0	58,829	2,772
FY 2016	58,829	0	0	58,829	1,127		0	0	58,829	2,772
FY 2017	58,829	0	0	58,829	1,127		0	0	58,829	2,772

In FY 2009 KO will move to the NNSA Albuquerque Transportation & Technology Center (ATTC) with NNSA NA-15 (Office of Secure Transportation). OST will report in its TYSP total ATTC leased space, estimated at 350,000 gsf, of which KO will occupy approximately 175,000 gsf. KO will vacate the Craddock and Air Park leased properties, but may retain the permitted NC-135 property on Kirtland Air Force Base (KAFB) to support anticipated NNSA workload. In addition, potential NNSA emergency response and other support tasking may require the retention of all or a portion of the NC-135 Site due to its proximity to the KAFB runway. Three data entry fields were adjusted to reflect this fact. Another data field was changed involving New Construction in the FY2004 row. * Denotes these adjustments in the "Fiscal Year" rows.

Figures in the Column Titled "Beginning Site Footprint" have included "Leased and/or GSA Assigned Space" in all past TYCSPs; however, now that figure represents only DOE-NNSA owned gsf.

ATTACHMENT E-4(a)
Kirtland Operations Site Space Tracking Summary - NNSA

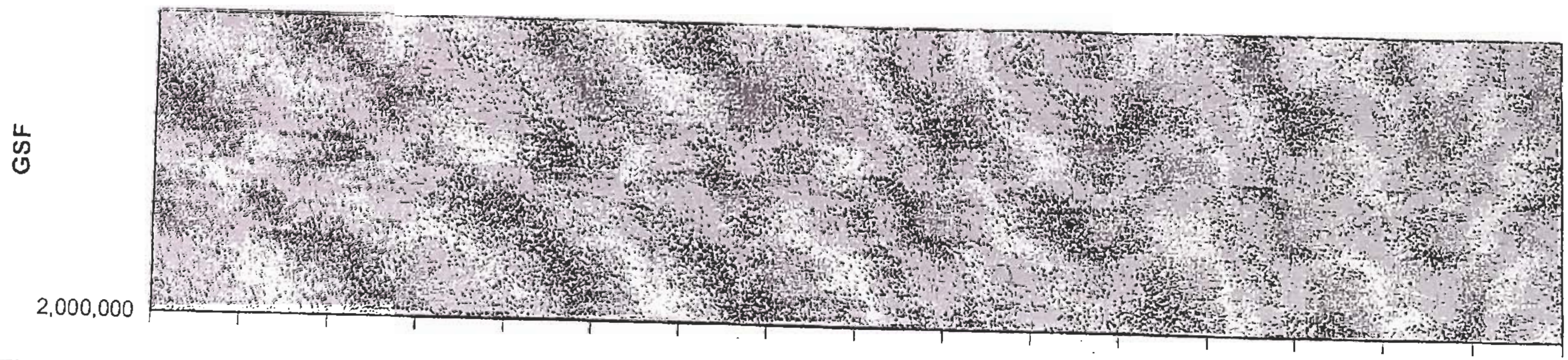


	FY 2002 Actual	FY 2003 Actual	FY 2004 Actual*	FY 2005 Actual*	FY 2006 Actual*	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
■ Cumulative "Grandfathered" Footprint Added (gsf) (8a)	0	0	5,838	0	0	0	0	0	0	0	0	0	0	0	0	0
□ NNSA Leased Space (10)	0	0	0	52,265	52,265	52,265	52,265	2,772	2,772	2,772	2,772	2,772	2,772	2,772	2,772	2,772
□ Beginning Site Footprint (gsf) (2)	100,041	101,168	101,168	58,829	58,829	58,829	58,829	58,829	58,829	58,829	58,829	58,829	58,829	58,829	58,829	58,829

Attachment E-4 (b)
Kirtland Operations Footprint Tracking Summary - SITE WIDE (Multi-Program) - NOT APPLICABLE

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)

ATTACHMENT E-4(b)
Kirtland Operations Footprint Tracking Summary - SITE WIDE (Multi-Program) - NOT APPLICABLE



□ Leased Space (10)																
■ Cumulative Grandfathered Footprint Added (gsf) (8a)																
□ Beginning Site Footprint (gsf) (2)																

Attachment E-5
Kirtland Operations
Waiver/Transfer Log (Space Added or Eliminated)
NOT APPLICABLE

Site or Program Donor (1)	Site or Program Receiver (2)	Waiver Banked (gsf) (3)	Transfer Banked (gsf) (4)	Request Submitted (Yes/No) (5)	Request Approved (Yes/No) (6)	Comments (7)

Attachment E-6
FY 2007 Leased Space
Kirtland Operations

#	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	KO-1	Craddock Building	STA	MC	49	38,260	$6	$240,494.00	Partial	1	Jan-08	Y
2	KO-2	Air Park Building	STA	MD-NC	35	11,501	$13.51	$139,990.62	Full	1	Aug-07	Y
3	LANL-01	Trinity Office	NWIR	MD-NC	8	2,772	$17.33	$48,038.76	Full	1	Jul-07	N

Attachment F: Deferred Maintenance Baseline, Projected Deferred Maintenance Reduction, Total NNSA Deferred Maintenance, Facility Condition Index (FCI), and Replace-In-Kind Projects (KCP Only)

F1: KCP FIRP FY 2003 Deferred Maintenance Baseline and Projected Deferred Maintenance Reduction from Baseline

F2: KCP NNSA Total Deferred Maintenance and Projected Deferred Maintenance Reduction

F3: KCP Deferred Maintenance Profile for NNSA Facilities and Infrastructure

F4: KCP Facility Condition Index (FCI) for NNSA Facilities and Infrastructure

F5: KCP Replacement-In-Kind Projects Over $500K

Note: FY2006 Replacement Plant Value (RPV) was used in preparation of this TYSP.

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	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	(Note 1) FY 2013	(Note 1) FY 2014	(Note 1) FY 2015	(Note 1) FY 2015	(No FY
1 FIRP DEFERRED MAINTENANCE (DM) BASELINE (Excludes Programmatic Real Property or Equipment)	89,505	81,974	66,218	80,579	59,229	59,229	59,229	59,229	59,229	59,229	-	-	-	-	
2 DEFERRED MAINTENANCE BASELINE (DM) REDUCTION TOTAL		7,531	15,756	5,639	1,350	-	-	-	-	-	-	-		-	
A. Reduction in DM Baseline (total due to FIRP ONLY) for all F&I		7,531	15,756	5,399	1,350										
i Reduction in DM for Mission-Critical F&I (due to FIRP ONLY)				5,399	1,350	-	-	-	-	-	-				
ii Reduction in DM for Mission Dependent, Not Critical F&I (due to FIRP ONLY)				-	-	-	-	-	-	-	-				
iii Reduction in DM for Not Mission Dependent F&I (due to FIRP ONLY)				-	-	-	-	-	-	-	-				
3. REPLACEMENT PLANT VALUE (RPV) FOR NNSA FACILITIES & INFRASTRUCTURE	1,738,027														

Note: 1. KCRIMS Program includes relocation to new facility complete by the end of FY12.

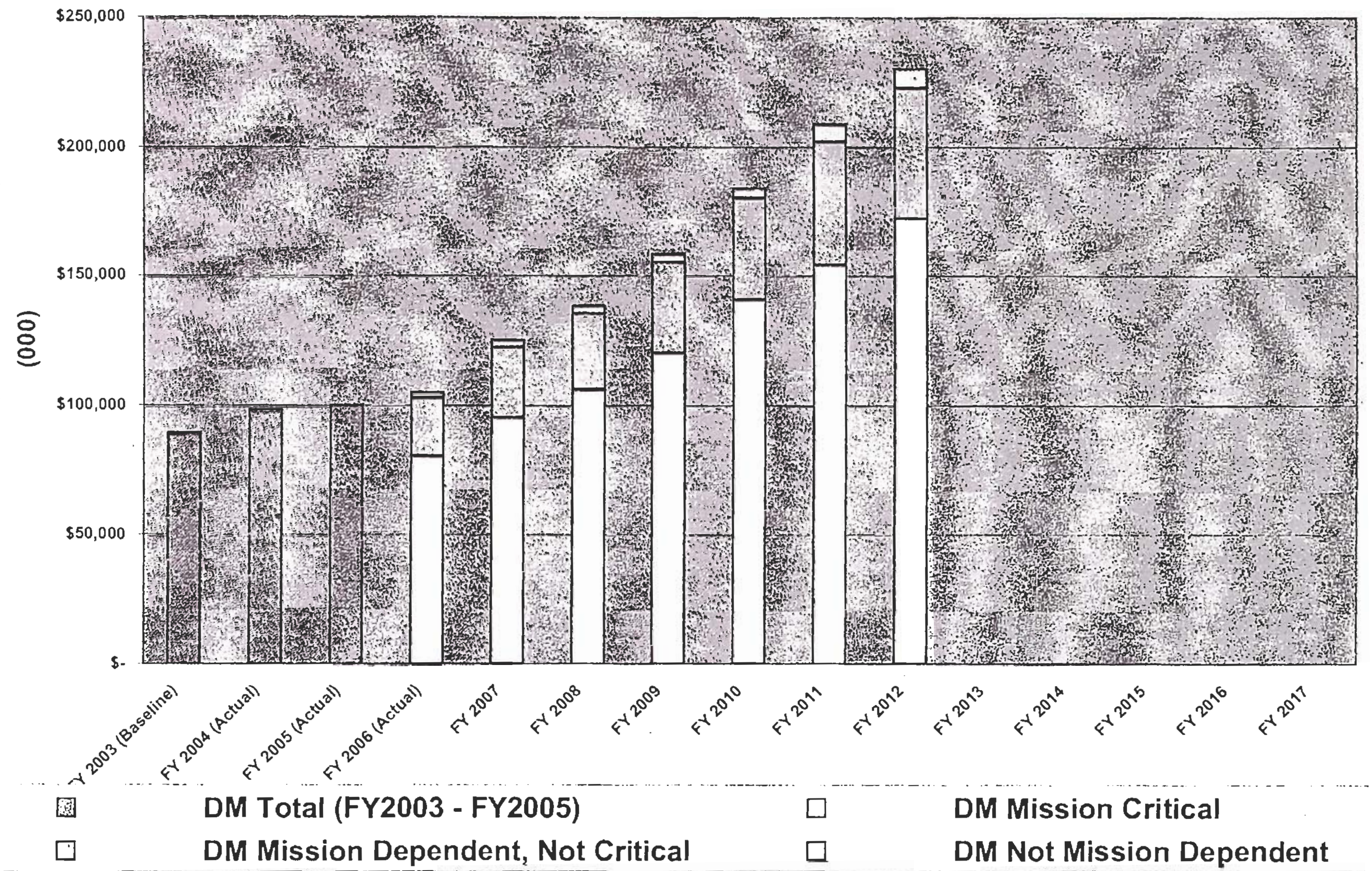
Attachment F-2
NNSA Total Deferred Maintenance and Projected Deferred Maintenance Reduction
NNSA
($000s)

Category of Maintenance	FY 2002 (Baseline)	FY 2004 (Actual)	FY 2005 (Actual)	FY 2006 (Actual)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
1. NNSA ANNUAL REQUIRED MAINTENANCE	22,147	38,224	53,496	37,594	50,814	42,351	48,226	53,108	52,978	47,859	30,242	31,301	32,396	20,714
1A. NNSA ANNUAL REQUIRED REPLACEMENT-IN-KIND		20,675	19,912	8,036	24,001	13,697	18,755	22,917	22,920	19,509	-	-	-	-
2. NNSA ANNUAL PLANNED MAINTENANCE TOTAL	21,094	27,608	33,958	31,803	30,361	31,120	31,898	32,696	33,513	34,351	30,242	31,301	32,396	20,714
a. Direct	21,094	27,608	24,646	23,345	21,253	21,784	22,329	22,887	23,459	24,045	21,169	21,911	22,677	14,500
b. Indirect	-	-	9,312	8,458	9,108	9,336	9,569	9,809	10,054	10,305	9,073	9,390	9,719	6,214
2A. NNSA ANNUAL PLANNED REPLACEMENT-IN-KIND		4,491	2,465	840	-	-	-	-	-	-	-	-	-	-
3. NNSA DEFERRED MAINTENANCE (DM) TOTAL (Excludes Programmatic Real Property or Equipment) = Inflation Prior Year DM Total + DM New - Prior Year DM Reduction	89,505	95,472	99,989	105,057	124,209	137,287	157,335	182,777	207,774	229,126				
i. Backlog Inflation Rate (%)		2.3%	2.6%	2.0%	2.2%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%
ii. DM Inflation		2,059	2,560	2,000	2,311	2,857	3,160	3,619	4,204	4,779				
iii. DM NEW		19,091	23,288	10,951	19,629	11,066	16,891	21,823	20,793	16,574	-	-	-	-
A. DM Mission Critical F&I ONLY				80,460	95,356	108,348	120,451	140,917	154,336	172,333	-	-	-	-
B. DM Mission Dependent, Not Critical F&I ONLY				22,623	27,357	29,758	34,007	39,512	47,878	50,888	-	-	-	-
C. DM Not Mission Dependent F&I ONLY				1,074	2,547	2,755	3,077	3,472	6,713	7,083	-	-	-	-
4. DEFERRED MAINTENANCE (DM) REDUCTION TOTAL for NNSA Facilities and Infrastructure (F&I)		12,182	24,332	7,882	2,789	845								
i. Reduction Total attributed to FIRP ONLY		7,715	19,727	6,246	2,631	845								
A. Reduction in DM for Mission Critical F&I				6,095	2,780	845	-	-	-	-	-	-	-	-
1. Reduction attributed to FIRP ONLY				6,135	2,627	845	-	-	-	-	-			
B. Reduction in DM for Mission-Dependent, Not Critical F&I				359	9	-	-	-	-	-	-	-	-	-
1. Reduction attributed to FIRP ONLY				79	9	-	-	-	-	-	-			
C. Reduction in DM for Not Mission Dependent F&I				798	-	-	-	-	-	-	-	-	-	-
1. Reduction attributed to FIRP ONLY				32	-	-	-	-	-	-	-			
5. REPLACEMENT PLANT VALUE (RPV) for NNSA Facilities and Infrastructure (F&I) = Inflation of PY RPV + Increase or Decrease due to other causes	1,738,027	1,778,002	1,741,090	1,499,391	1,532,378	1,567,622	1,603,878	1,640,562	1,678,295	1,716,898	1,756,385	1,796,781	1,838,107	TBD
A. RPV for NNSA Mission Critical F&I ONLY				1,004,097	1,026,187	1,049,789	1,073,935	1,098,635	1,123,904	1,149,753	1,176,198	1,203,250	1,230,925	-
B. RPV for NNSA Mission-Dependent, Not Critical F&I				327,104	334,300	341,989	349,855	357,902	366,133	374,554	383,158	391,982	400,996	-
C. RPV for NNSA Not Mission Dependent F&I				168,190	171,890	175,844	179,888	184,025	188,258	192,588	197,018	201,549	206,185	-
D. RPV Increase from prior year attributed to inflation				-	32,987	35,245	36,065	36,895	37,733	38,601	39,488	40,397	41,330	-
E. RPV Increase / decrease attributed to causes other than inflation (provide separate supporting narrative behind F-2 exhibit)				(241,708)										

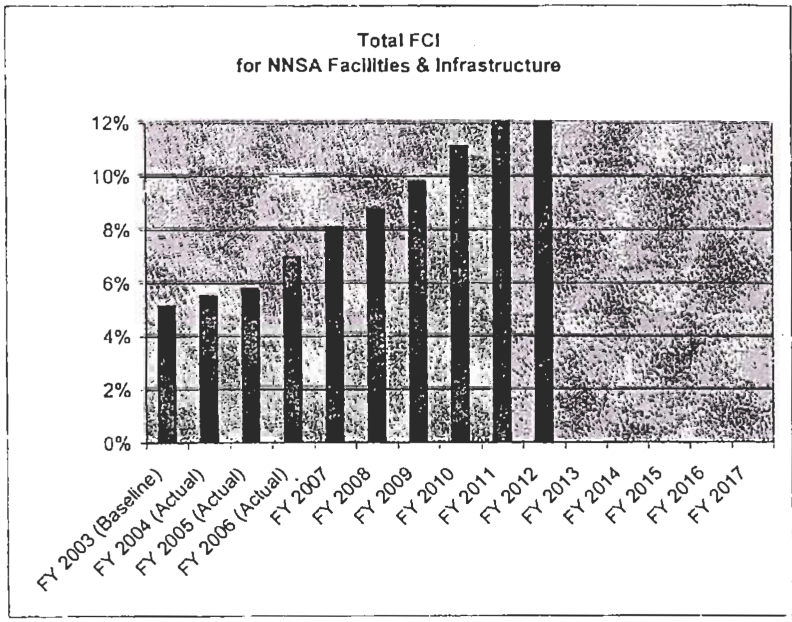
FCI Analysis	FY 2002 (Baseline)	FY 2004 (Actual)	FY 2005 (Actual)	FY 2006 (Actual)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
FCI TOTAL	5.1%	5.5%	5.7%	7.0%	8.1%	8.8%	9.8%	11.1%	12.4%	13.3%	0.0%	0.0%	0.0%	0.0%
FCI Mission Critical				8.0%	9.3%	10.1%	11.2%	12.8%	13.7%	15.0%	0.0%	0.0%	0.0%	0.0%
FCI Mission Dependent, Not Critical				6.9%	8.2%	8.6%	10.0%	11.0%	13.1%	13.6%	0.0%	0.0%	0.0%	0.0%
FCI Not Mission Dependent				1.2%	1.5%	1.6%	1.7%	1.9%	3.6%	3.7%	0.0%	0.0%	0.0%	0.0%

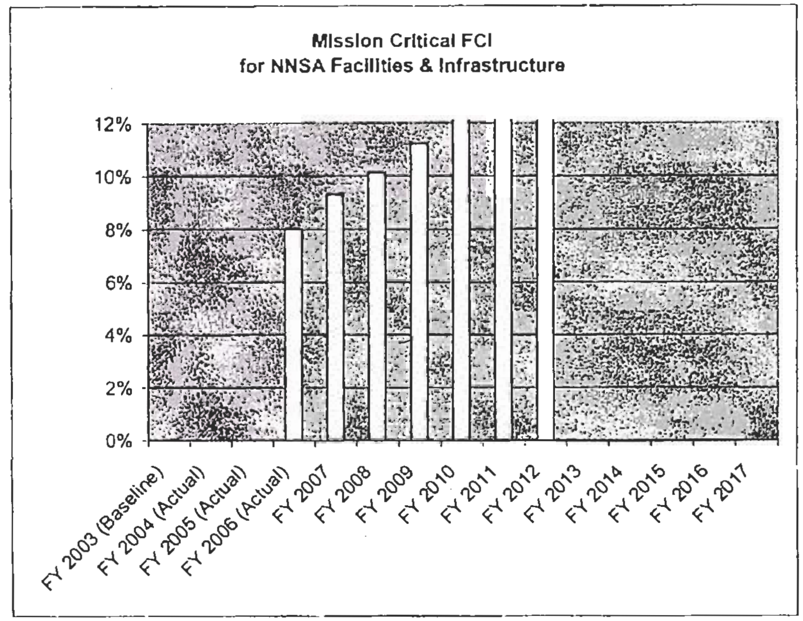
Note: 1. KCRIMS Program includes relocation from existing facility complete by the end of FY12 and closure of the existing facility by the end of FY15.

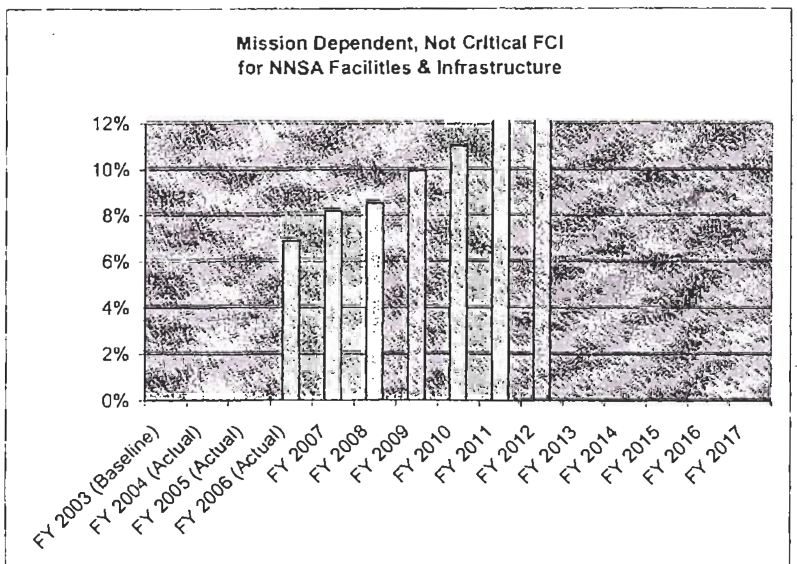
Attachment F-3: KCP's Deferred Maintenance Profile for NNSA F&I

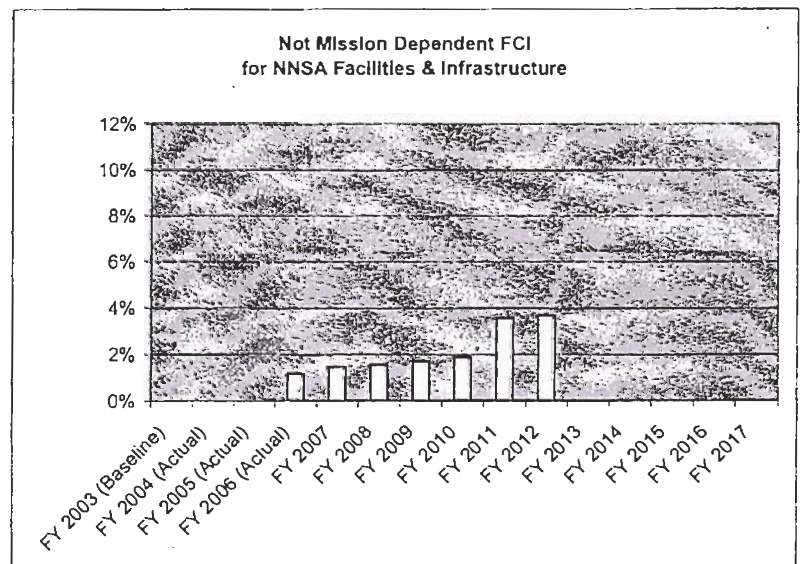


ATTACHMENT F-4: KCP's Facility Condition Index (FCI) for NNSA F&I









Attachment F-5
Replacement-in-Kind Projects Over $500K

Obligated Year for Funding (1)	Project Name (2)	Facility ID (FIMS) (3)	Mission Dependency (4)	Description of Deficient Subsystems for Replacement-in-Kind (5)	Funding Source (6)	Planned Fiscal Year for Funding (7)	Identified in FY 2003 Baseline (Y or N) (8)	Within Current FYNSP Constraints (Y or N) (9)	Projected Cost ($K) (10)
2003	Chilled Water Piping		MD	Replace Chilled Water Piping	FIRP	2003	Y	Y	$2,200
2003	Replace Chillers EPH		MD	Replace Chillers - EPH	FIRP	2003	Y	Y	$4,850
2003	Steam and Condensate Piping		MD	Steam and Condensate Piping	FIRP	2003	Y	Y	$2,250
2003	Upgrade Chillers WBH		MD	Upgrade Chillers WBH - Year 1 Funding	FIRP	2003	Y	Y	$2,100
2003	Upgrade MSB Environmental Labs		MD	Upgrade MSB Environmental Labs	FIRP	2003	Y	Y	$3,900
2003	SMRI - GSA Give Back Roof		NMD	B002(X2)	L-ITM	2003	Y	Y	$800
2003	Replace LN2 Mezzanine		MD	Replace Mezzanine Piping	FIRP	2004	Y	Y	$1,070
2003	Replace Steam System Components		MD	Replace Steam System Components - Utility Trench	FIRP	2004	Y	Y	$1,350
2003	Upgrade Chillers WBH		MD	Upgrade Chillers WBH - Year 2 Funding	FIRP	2004	Y	Y	$2,550
2003	Upgrade NNC Acorn		MD	Replace AHU 350s (ACORN)	FIRP	2004	Y	Y	$4,850
2003	RAMP - FY05		MD	P006(X1)	FIRP	2005	Y	Y	$574
2003	RAMP - FY05		MD	H001(X5)	FIRP	2005	Y	Y	$1,076
2003	Replace Fire Alarm (MUX)		MD	Replace Fire Alarm System	FIRP	2005	Y	Y	$4,650
2003	Replace Emergency Generator		MD	Replace Emergency Generator	FIRP	2005	Y	Y	$1,610
2003	Replace Steam System Components		MD	Replace Steam System Components - Heating Hot Water	FIRP	2005	Y	Y	$1,400
2003	Replace Steam System Components		MD	Replace Steam System Components - Steam	FIRP	2005	Y	Y	$1,910
2003	RAMP - FY06		MD	H001(X3)	FIRP	2006	Y	Y	$1,185
2003	Replace Plating Building HVAC		MD	Replace Plating HVAC	FIRP	2006	Y	Y	$4,540
2003	Upgrade MSB Exhaust and HVAC - NW		MD	Upgrade MSB Exhaust and HVAC - NW	FIRP	2006	Y	Y	$4,540
2003	Replace HVAC - Building 15		MD	Replace HVAC - Building 15	FIRP	2007	Y	Y	$2,250
2003	Office Infrastructure - Phase 1		MD	Replace Electrical Power and HVAC to Bldg 2 - 1	Unfunded		N	N	$4,900
2003	Office Infrastructure - Phase 2		MD	Replace Electrical Power and HVAC to Bldg 2 - 2	Unfunded		N	N	$4,900
2003	Office Infrastructure - Phase 3		MD	Replace Bldg 2 Condensate, Electrical, and HVAC	Unfunded		N	N	$4,900
2003	Replace 302 AHUs		MD	Replace 302 AHUs	Unfunded		N	N	$1,280
2003	Replace Air Handling Cleanrooms - D/78		MD	Upgrade Cleanrooms D-75/78	Unfunded		N	N	$3,010
2003	Replace Air Handling Electronics Assembly		MD	Replace Light Machining	Unfunded		N	N	$4,500
2003	Replace Basement Chilled Water Piping		MD	Replace Basement Chilled Water Lines	Unfunded		N	N	$2,110
2003	Replace Bldg 74 HVAC		MD	Replace Bldg 74 HVAC	Unfunded		N	N	$1,870
2003	Replace Cafeteria Air Handling Units		NMD	Replace Cafeteria AHUs	Unfunded		N	N	$4,500
2003	Replace City Water Systems		MD	Replace City Water Systems	Unfunded		N	N	$600
2003	Replace Compressed Air System Components		MD	Replace Compressed Air Receivers	Unfunded		N	N	$2,000
2003	Replace Condensate / Barn HVAC		MD	Upgrade Barn Environmental Systems	Unfunded		N	N	$4,150
2003	Replace Condensate Surge Tanks		MD	Replace Condensate Surge Tanks	Unfunded		N	N	$2,250
2003	Replace High Voltage Fire Alarm Panels I		MD	Replace High Voltage Fire Alarm Panels I	Unfunded		N	N	$3,150
2003	Replace High Voltage Fire Alarm Panels II		MD	Replace High Voltage Fire Alarm Panels II	Unfunded		N	N	$2,990
2003	Replace Hot Water System, Poly		MD	Replace Poly Hot Water System	Unfunded		N	N	$2,110
2003	Replace Main Switchgear		MD	Replace Main Switchgear (South)	Unfunded		N	N	$2,630
2003	Replace Main Switchgear		MD	Replace Main Switchgear (North)	Unfunded		N	N	$3,150
2003	Replace Therminol System		MC	Replace Therminol Fluid Heaters and System	Unfunded		N	N	$4,880
2003	Upgrade MSB Exhaust and HVAC - NE		MD	Upgrade MSB Exhaust and HVAC - NE	Unfunded		N	N	$4,190
2003	Upgrade MSB Exhaust and HVAC - SE		MD	Upgrade MSB Exhaust and HVAC - SE	Unfunded		N	N	$4,080
2003	Upgrade MSB Exhaust and HVAC - SW		MD	Upgrade MSB Exhaust and HVAC - SW	Unfunded		N	N	$4,300
2003	Replace Condensate Return - 1		MD	Replace Condensate Return - 1	Unfunded		N	N	$710
2003	Replace Condensate Return - 2		MD	Replace Condensate Return - 2	Unfunded		N	N	$700
2003	Steam System Component Replacement		MD	Steam System Component Replacement	Unfunded		N	N	$1,560
2003 Total			MD						$125,075
2004	FY04 Expense - Paving		NMD	Area 6 - Remove and Replace Conc. Island	RTBF	2004	N	Y	$1,250
2004	FY04 Expense - Paving		NMD	Area 8 - Mill and Overlay	RTBF	2004	N	Y	$2,230
2004	RAMP - FY05		MD	P006(X3)	FIRP	2005	N	Y	$593
2004	RAMP - FY05		MD	H001(X1)	FIRP	2005	N	Y	$1,034
2004	RTBF Restroom Expense -MT39 & 2D		NMD	Renovate Restrooms - 1 MT39 2D 35836	RTBF	2005	N	Y	$500
2004	SMRI - GSA Give Back Roof		NMD	J003(X2)	L-ITM	2007	N	Y	$846
2004	SMRI - GSA Give Back Roof		NMD	J002(X2)	L-ITM	2007	N	Y	$2,168
2004	Renovate Restrooms - 1		NMD	Renovate Restrooms - 1	Unfunded		N	N	$800
2004	Replace Condensate Return - 1		MD	Replace Condensate Return - 1 - F2	Unfunded		N	N	$3,040
2004	Replace Condensate Return - 2		MD	Replace Condensate Return - 2 - F2	Unfunded		N	N	$2,960
2004	Replace Electrical Devices - 1		MD	Replace Substations 37, 39, 44 and 45	Unfunded		N	N	$2,000
2004	Replace WBH Sanitary Sewer System		MD	Replace WBH Sanitary Sewer System	Unfunded		N	N	$750
2004	Structural Repair Office		MD	Structural Repair Office	Unfunded		N	N	$1,000
2004	Roof Replacement		MD	H001(X4)	Unfunded		N	N	$1,057
2004	Roof Replacement		MD	H001(X6)	Unfunded		N	N	$898

Attachment F-5
Replacement-in-Kind Projects Over $500K

Optimum Year for Funding (1)	Project Name (2)	Facility ID (FIMS) (3)	Mission Dependency (4)	Description of Deficient Subsystems for Replacement-in-Kind (5)	Funding Source (6)	Planned Fiscal Year for Funding (7)	Identified in FY 2003 Baseline (Y or N) (8)	Within Current FYNSP Constraints (Y or N) (9)	Projected Cost ($K) (10)
2004 Total			MD						$21,126
2005	FY04 Roofing - Expense		MD	D002(X1)	RTBF	2004	N	Y	$886
2005	FY05 Pavement - Expense		NMD	Repave Stores Lot B	RTBF	2005	N	Y	$550
2005	FY05 Roofing Expense		MD	A003	RTBF	2005	N	Y	$851
2005	Refurbish WBH Interior		MD	Replace WBH Windows	RTBF	2005	N	Y	$500
2005	SMRI - GSA Give Back Roof		NMD	H001(X2)	L-ITM	2007	N	Y	$1,076
2005	Pavement - Expense		NMD	Modify Drains & Regrade 2 areas - North Dock Area	Unfunded		N	N	$1,500
2005	Renovate Restrooms - 2		NMD	Renovate Restrooms - 2	Unfunded		N	N	$1,500
2005	Replace MSB Chilled Water Lines		MD	Replace MSB Chilled Water Piping	Unfunded		N	N	$4,600
2005	Replace Switchgear and Electrical Devices		MD	Replace Switchgears 33AB - 35AB	Unfunded		N	N	$750
2005	Replace Condensate Return - 4		MD	Replace Condensate Return - 4	Unfunded		N	N	$3,000
2005	Replace Heating System - 1		MD	Replace Heating Systems - 1	Unfunded		N	N	$2,980
2005	Roof Replacement		MD	D002(X2)	Unfunded		N	N	$1,000
2005 Total			MD						$18,993
2006	Elevator Component Replacement		NMD	Replace Elevator Controls	Unfunded		N	N	$1,000
2006	Area 11 - Replacement of Concrete Pavement		NMD	Area 11 - Replacement of Concrete Pavement	Unfunded		N	N	$1,620
2006	Replace D/73 HEPA Ceiling Grid		MD	Replace D/73 HEPA Grid	Unfunded		N	N	$4,500
2006	Replace HVAC PPC and Labor Rotations		MD	Upgrade PPC HVAC - 1	Unfunded		N	N	$1,250
2006	Replace RO Components		MD	Replace RO Components	Unfunded		N	N	$800
2006	Roof Replacement		MD	J001	Unfunded		N	N	$916
2006	Replace Precision Tool HVAC		MD	Upgrade Precision Tool	Unfunded		N	N	$2,300
2006 Total			MD						$12,386
2007	RAMP - FY07		MD	F001(X3)	FIRP	2007	N	Y	$632
2007	Replace City Water Systems - 2		MD	Replace City WaterSystems	Unfunded		N	N	$2,320
2007	Replace Electrical Devices - 1		MD	Replace Power Factor Capacitors	Unfunded		N	N	$2,300
2007	Replace 405 AHUs		MD	Replace 405 AHUs	Unfunded		N	N	$3,000
2007	Replace Fire Protection Components		MD	Replace Ductile Iron Mains	Unfunded		N	N	$1,400
2007	Replace MSB Liquid Nitrogen Line		MD	Replace MSB Liquid Nitrogen Line	Unfunded		N	N	$500
2007	Roof Replacement		MD	G001	Unfunded		N	N	$2,199
2007	Upgrade Electric Heat Trace		MD	Upgrade Electric Heat Trace	Unfunded		N	N	$500
2007 Total			MD						$12,851
2008	RAMP - FY08		MD	F001(x4)	FIRP	2008	N	Y	$836
2008	Renovate Restrooms - 3		NMD	Renovate Restrooms - 3	Unfunded		N	N	$1,500
2008	Replace Natural Gas Components		MD	Replace Above Grade Natural Gas Piping	Unfunded		N	N	$2,000
2008	Replace VFD's on Chilled Water System		MD	Replace Chilled Water VFDs	Unfunded		N	N	$2,900
2008	Modernize Elevators		NMD	Modernize Elevator 10	Unfunded		N	N	$500
2008	Replace RO System Components		MD	Replace RO System Components	Unfunded		N	N	$1,250
2008	Replace Roof 175# Mains		MD	Replace Roof 175# Mains	Unfunded		N	N	$3,960
2008	Replace Stores Environmental Systems		MD	Upgrade Stores HVAC	Unfunded		N	N	$3,450
2008	Replace Wood Poles and Overhead Lines		MD	Replace Wood Poles and Overhead Lines	Unfunded		N	N	$500
2008	Roof Replacement		MD	F001	Unfunded		N	N	$1,351
2008 Total			MD						$18,247
2009	Replace Main Switchgear		MD	Replace Main Switchgear - HV Cables	Unfunded		N	N	$4,000
2009	Elevator Component Replacement		NMD	Replace Elevator 4 Components	Unfunded		N	N	$500
2009	Replace ENS Components		MD	Replace ENS Components	Unfunded		N	N	$4,000
2009	Replace Sanitary Sewer Sytems - 1		MD	Replace Sanitary Sewer Systems - 1	Unfunded		N	N	$2,500
2009	Replace West Powerhouse Generator		MD	Replace WBH Generator	Unfunded		N	N	$2,300
2009	Replace Computer Facility/Offices HVAC		MD	Upgrade Computer Facility Offices	Unfunded		N	N	$2,300
2009	Roof Replacement		MD	E001	Unfunded		N	N	$3,155
2009 Total			MD						$18,755
2010	Replace Air Compressor Components		MD	Replace Main Air Compressor	Unfunded		N	N	$500
2010	Replace Chilled Water Pumps		MD	Replace Chilled Water Pumps	Unfunded		N	N	$2,850
2010	Replace Condensate Return - 3		MD	Replace Condensate Return - 3	Unfunded		N	N	$3,000
2010	Replace Factory 175# Mains		MD	Replace Factory 175# Mains	Unfunded		N	N	$1,500
2010	Replace Mezzanine Chilled Water Lines		MD	Replace Mezzanine Chilled Water Piping	Unfunded		N	N	$4,900
2010	Replace Steam Heat Exchangers		MD	Replace Steam Heat Exchangers	Unfunded		N	N	$4,000
2010	Roof Replacement		MD	C002	Unfunded		N	N	$3,487
2010	Roof Replacement		MD	D001	Unfunded		N	N	$630
2010 Total			MD						$20,887
2011	Replace EPH Condenser VFDs		MD	Replace EPH Condenser VFDs	Unfunded		N	N	$1,750
2011	Replace Factory 120# Mains		MD	Replace Factory 120# Mains	Unfunded		N	N	$2,800
2011	Replace Pipe Rack from EPH		MD	Replace Pipe Rack from EPH	Unfunded		N	N	$2,500
2011	Replace Sanitary Sewer Systems - 2		MD	Replace Sanitary Sewer Systems - 2	Unfunded		N	N	$3,000
2011	Replace SEAA Office Area HVAC		MD	Upgrade SEAA Office Area	Unfunded		N	N	$2,350
2011	Replace Steam and Condensate - EPH		MD	Replace Steam and Condensate - EPH	Unfunded		N	N	$2,500
2011	Roof Replacement		MD	P014	Unfunded		N	N	$514
2011	Roof Replacement		MD	P015	Unfunded		N	N	$513

Attachment F-5
Replacement-in-Kind Projects Over $500K

Optimum Year for Funding (1)	Project Name (2)	Facility ID (FIMS) (3)	Mission Dependency (4)	Description of Deficient Subsystems for Replacement-in-Kind (5)	Funding Source (6)	Planned Fiscal Year for Funding (7)	Identified in FY 2003 Baseline (Y or N) (8)	Within Current FYNSP Constraints (Y or N) (9)	Projected Cost ($K) (10)
2011	Roof Replacement		MD	P016	Unfunded		N	N	$525
2011	Roof Replacement		MD	P017	Unfunded		N	N	$518
2011 Total			MD						$16,970
2012	Replace Chilled Water Headers		MD	Replace Chilled Water Headers	Unfunded		N	N	$4,700
2012	Replace Condensate Mains		MD	Replace Condensate Mains	Unfunded		N	N	$3,200
2012	Replace Factory 30# Mains		MD	Replace Factory 30# Mains	Unfunded		N	N	$1,600
2012	Replace Pipe Rack from WBH		MD	Replace Pipe Rack from WBH	Unfunded		N	N	$2,000
2012	Roof Replacement		MD	B003	Unfunded		N	N	$666
2012	Roof Replacement		MD	C001	Unfunded		N	N	$947
2012	Roof Replacement		MD	J005	Unfunded		N	N	$646
2012	Upgrade Dehumidification - EDSV		MD	Upgrade Dehumidification - EDSV	Unfunded		N	N	$2,500
2012 Total									$16,259
Grand Total									$281,529

Attachment G: NNSA Facilities and Infrastructure Mission Status

G (KCP): NNSA Facilities and Infrastructure Mission Status

G (KO): NNSA Facilities and Infrastructure Mission Status

(FIMS 092) --- Mission Dependency Report

Program Office: NNSA
Site: Kansas City Plant

Property ID	Property Name	Mission Dependency	Building RPV (2006)	Deferred Maintenance	Summary Condition*	MD Pgm Ofc	Gross Square Ft	Util %
01	Manufacturing Bldg	Mission Critical	$859,328,893	$44,239,260	Adequate	DSW	1,751,740	85%
14	Four Experimental Test Cells	Mission Critical	$15,245,062	$0	**Excellent	DSW	39,982	90%
54	High Power Lab	Mission Critical	$12,104,691	$64,550	**Excellent	STA	31,746	100%
86	North Wing Lab	Mission Critical	$10,544,800	$9,900	**Excellent	DSW	27,655	100%
87	Test Cells	Mission Critical	$15,841,997	$37,400	**Excellent	RTBF	116,319	65%
88	Forge & Casting	Mission Critical	$13,682,884	$27,400	**Excellent	STA	35,885	100%
96	Special Process Building	Mission Critical	$7,682,287	$73,110	**Excellent	DSW	12,815	100%
90	Mold Heating & Cooling	Mission Critical	$326,867	$0	**Excellent	DSW	2,400	100%
13	Manufacturing Support Bldg	Mission Critical	$50,539,162	$21,858,440	Poor	DSW	132,545	90%
15	Polymer Building	Mission Critical	$6,482,068	$3,162,910	Poor	DSW	17,000	73%
91	Plating Building	Mission Critical	$12,318,599	$5,606,090	Poor	DSW	32,307	80%
		Mission Critical 'Sub-Totals':	$1,004,097,310	$75,079,060			2,200,394	
01-A	GSA Assigned Space	Mission Critical	N/A	N/A	Excellent	DSW	231,233	60%
		Mission Critical Totals:	$1,004,097,310	$75,079,060			2,431,627	

*Summary Condition: Excellent (DM <2% of RPV); Good (DM is 2 - <5% of RPV); Adequate (DM is 5 - <10% of RPV); Fair (DM is 10 - < 25%); Poor (DM is 25 - <60% of RPV); Fail (DM is > 59% of RPV); Not Applicable (Bldg falls into one of the following Status Categories: Shutdown Pending Transfer, Shutdown Pending D and D, D and D in Progress, Shutdown Pending Disposal, Deactivation)

**The KCP forecasts and tracks DM for major facility and infrastructure components only. These buildings do not have any major facility DM and therefore, FIMS computes the condition of these buildings as "Excellent" (Condition = DM / RPV). The actual condition of these buildings is fair to adequate based on a condition assessment that takes into account all aspects of the building.

(FIMS 092) — Mission Dependency Report

Program Office: NNSA
Site: Kansas City Plant

Property ID	Property Name	Mission Dependency	Building RPV (2006)	Deferred Maintenance	Summary Condition*	MD Pgm Ofc	Gross Square Ft	Util %
09	East Employee Entrance	Mission Dependent, Not Critical	$493,208	$0	**Excellent	RTBF	1,889	100%
16	Kinematics	Mission Dependent, Not Critical	$2,041,470	$0	**Excellent	RTBF	5,354	50%
32	Central Guard Post	Mission Dependent, Not Critical	$296,082	$0	**Excellent	RTBF	1,134	100%
47	North Employee Entrance	Mission Dependent, Not Critical	$350,274	$0	**Excellent	RTBF	1,529	100%
75	Security Supv Control	Mission Dependent, Not Critical	$707,045	$0	**Excellent	RTBF	2,708	100%
89	Fire Protection Pump House	Mission Dependent, Not Critical	$259,314	$0	**Excellent	RTBF	1,904	100%
93	Northeast Guard Post	Mission Dependent, Not Critical	$49,869	$0	**Excellent	RTBF	191	100%
98	Ind Wastewater Pretreatment	Mission Dependent, Not Critical	$8,130,930	$0	**Excellent	RTBF	19,612	60%
99	Receiving & Shipping Securit	Mission Dependent, Not Critical	$79,112	$0	**Excellent	RTBF	303	100%
01-C(85)	Main (West) Switchgear	Mission Dependent, Not Critical	$326,867	$0	**Excellent	RTBF	2,400	100%
74	Production Storage	Mission Dependent, Not Critical	$3,511,500	$2,169,660	Fail	RTBF	25,783	80%
02	Main Office Building	Mission Dependent, Not Critical	$46,027,576	$9,248,080	Fair	RTBF	240,500	75%
05	West Boiler House	Mission Dependent, Not Critical	$37,942,687	$4,095,230	Fair	RTBF	50,777	100%
48	East Power House	Mission Dependent, Not Critical	$11,115,015	$224,080	Good	RTBF	12,875	100%
		Mission Dependent, Not Critical Totals:	$111,330,949	$15,737,050			366,959	

*Summary Condition: Excellent (DM <2% of RPV); Good (DM is 2 - <5% of RPV); Adequate (DM is 5 - <10% of RPV); Fair (DM is 10 - < 25%); Poor (DM is 25 - <60% of RPV); Fail (DM is > 59% of RPV); Not Applicable (Bldg falls into one of the following Status Categories: Shutdown Pending Transfer, Shutdown Pending D and D, D and D in Progress, Shutdown Pending Disposal, Deactivation)

**The KCP forecasts and tracks DM for major facility and infrastructure components only. These buildings do not have any major facility DM and therefore, FIMS computes the condition of these buildings as "Excellent" (Condition = DM / RPV). The actual condition of these buildings is fair to adequate based on a condition assessment that takes into account all aspects of the building.

(FIMS 092) --- Mission Dependency Report

Program Office: NNSA
Site: Kansas City Plant

Property ID	Property Name	Mission Dependency	Building RPV (2006)	Deferred Maintenance	Summary Condition*	MD Pgm Ofc	Gross Square Ft	Util %
01-B	Receiving Dock	Not Mission Dependent	$1,513,252	$0	**Excellent	RTBF	3,650	0%
46	Unfinished Test Cell	Not Mission Dependent	$799,461	$0	**Excellent	RTBF	5,870	25%
68	Storage Shed	Not Mission Dependent	$78,448	$0	**Excellent	RTBF	576	100%
77	Oil Storage	Not Mission Dependent	$910,921	$0	**Excellent	RTBF	2,389	100%
78	East Guard Post	Not Mission Dependent	$119,843	$0	**Excellent	RTBF	459	100%
79	West Guard Post	Not Mission Dependent	$62,663	$0	**Excellent	RTBF	240	100%
80	North Guard Post	Not Mission Dependent	$134,725	$0	**Excellent	RTBF	516	100%
92	Building 92	Not Mission Dependent	$98,474,058	$268,950	**Excellent	OTHER	258,260	67%
94	Northwest Guard Post	Not Mission Dependent	$62,663	$0	**Excellent	RTBF	240	0%
59	Waste Management Building	Not Mission Dependent	$3,150,858	$494,040	Fair	RTBF	23,135	90%
73	Solid Waste Disposal	Not Mission Dependent	$1,194,561	$40,340	Good	RTBF	8,771	100%
31	Air Monitoring Building	Not Mission Dependent	$17,911	$0	Not Applicable	NA	208	100%
76	Explosive Stg Bunker	Not Mission Dependent	$20,429	$0	Not Applicable	RTBF	150	0%
		Not Mission Dependent Sub-Totals:	$106,539,792	$803,330			304,464	
R50 Office	HSTI Office	Not Mission Dependent	$23,030	$0	Excellent	OTHER	159	100%
		Not Mission Dependent Totals:	$106,562,822	$803,330			304,623	

*Summary Condition: Excellent (DM <2% of RPV); Good (DM is 2 - <5% of RPV); Adequate (DM is 5 - <10% of RPV); Fair (DM is 10 - < 25%); Poor (DM is 25 - <60% of RPV); Fail (DM is > 59% of RPV); Not Applicable (Bldg falls into one of the following Status Categories: Shutdown Pending Transfer, Shutdown Pending D and D, D and D in Progress, Shutdown Pending Disposal, Deactivation)

**The KCP forecasts and tracks DM for major facility and infrastructure components only. These buildings do not have any major facility DM and therefore, FIMS computes the condition of these buildings as "Excellent" (Condition = DM / RPV). The actual condition of these buildings is fair to adequate based on a condition assessment that takes into account all aspects of the building.

(FIMS 092) --- Mission Dependency Report

Program Office: NNSA
Site: Kirtland

Property ID	Property Name	Mission Dependency	Building RPV	Deferred Maintenance	Summary Condition*	MD Pgm Ofc	Gross Square Ft	Util %
135	Powder Coating	Mission Critical	$350,000	$0	Excellent	STA	1,858	100%
136	Painting Facility	Mission Critical	$470,000	$0	Excellent	STA	3,980	100%
T-101	LAN/Computer Services	Mission Critical	$725,418	$0	Excellent	STA	2,580	100%
T-102	Special Projects Facility 102	Mission Critical	$283,566	$0	Excellent	STA	2,287	100%
T-103	Special Projects Facility 103	Mission Critical	$538,416	$0	Excellent	STA	1,680	100%
T-106	Electronics Comm. Depot -	Mission Critical	$1,170,164	$0	Excellent	STA	5,000	100%
T-110	Sciences Lab	Mission Critical	$538,416	$0	Excellent	STA	1,680	100%
T-112	Electronics Fabrication	Mission Critical	$1,506,521	$0	Excellent	STA	7,300	100%
T-129	Insulator Test Facility	Mission Critical	$286,474	$0	Excellent	STA	960	100%
		Mission Critical 'Sub-Totals' :	$5,868,975	$0			27,325	
KO-1	Craddock	Mission Critical	$7,895,823	$0	Excellent	STA	38,260	100%
		Mission Critical Totals :	$13,764,798	$0			65,585	

*Summary Condition: Excellent (DM <2% of RPV); Good (DM is 2 - <5% of RPV); Adequate (DM is 5 - <10% of RPV); Fair (DM is 10 - < 25%); Poor (DM is 25 - <60% of RPV); Fail (DM is > 59% of RPV); Not Applicable (Bldg falls into one of the following Status Categories: Shutdown Pending Transfer, Shutdown Pending D and D, D and D in Progress, Shutdown Pending Disposal, Deactivation)

(FIMS 092) --- Mission Dependency Report

Program Office: NNSA
Site: Kirtland

Property ID	Property Name	Mission Dependency	Building RPV	Deferred Maintenance	Summary Condition*	MD Pgm Ofc	Gross Square Ft	Util %
130	Security Services	Mission Dependent, Not Critical	$25,000	$0	Excellent	STA	896	100%
133	Quality Services	Mission Dependent, Not Critical	$400,000	$0	Excellent	STA	1,665	100%
134	Technical Media	Mission Dependent, Not Critical	$310,000	$0	Excellent	STA	2,122	100%
T-105	Security Forces Operation	Mission Dependent, Not Critical	$595,154	$0	Excellent	STA	4,800	100%
T-108	Engineering	Mission Dependent, Not Critical	$257,900	$0	Excellent	STA	2,080	100%
T-109	Applied Sciences Facility	Mission Dependent, Not Critical	$267,819	$0	Excellent	STA	2,160	100%
T-111	Facilities Services	Mission Dependent, Not Critical	$282,698	$0	Excellent	STA	2,280	100%
T-116	Model Shop	Mission Dependent, Not Critical	$313,253	$0	Excellent	STA	1,400	100%
T-122	Finance	Mission Dependent, Not Critical	$216,983	$0	Excellent	STA	1,750	100%
T-123	Special Projects	Mission Dependent, Not Critical	$208,304	$0	Excellent	STA	1,680	100%
T-124	Human Resources	Mission Dependent, Not Critical	$208,304	$0	Excellent	STA	1,680	100%
T-125	Communications Depot	Mission Dependent, Not Critical	$208,304	$0	Excellent	STA	1,680	100%
T-126	Conference Bldg	Mission Dependent, Not Critical	$158,372	$0	Excellent	STA	896	100%
T-127	Division Office	Mission Dependent, Not Critical	$208,304	$0	Excellent	STA	1,680	100%
T-128	Fac Srvs/Shipping & Receivin	Mission Dependent, Not Critical	$987,322	$0	Excellent	STA	4,400	100%
T-131	Entry Control Station	Mission Dependent, Not Critical	$13,566	$0	Excellent	STA	96	100%
T-132	Storage - 112102	Mission Dependent, Not Critical	$17,618	$0	Excellent	STA	239	100%
		Mission Dependent, Not Critical 'Sub-Totals' :	$4,678,900	$0			31,504	
KO-2	Air Park	Mission Dependent, Not Critical	$1,426,013	$0	Excellent	STA	11,501	100%
LANL-01	Trinity Office	Mission Dependent, Not Critical	$391,454	$0	Excellent	NWIR	2,772	100%
		Mission Dependent, Not Critical Totals :	$6,496,367	$0			45,777	

*Summary Condition: Excellent (DM <2% of RPV); Good (DM is 2 - <5% of RPV); Adequate (DM is 5 - <10% of RPV); Fair (DM is 10 - < 25%); Poor (DM is 25 - <60% of RPV); Fail (DM is > 59% of RPV); Not Applicable (Bldg falls into one of the following Status Categories: Shutdown Pending Transfer, Shutdown Pending D and D, D and D in Progress, Shutdown Pending Disposal, Deactivation)