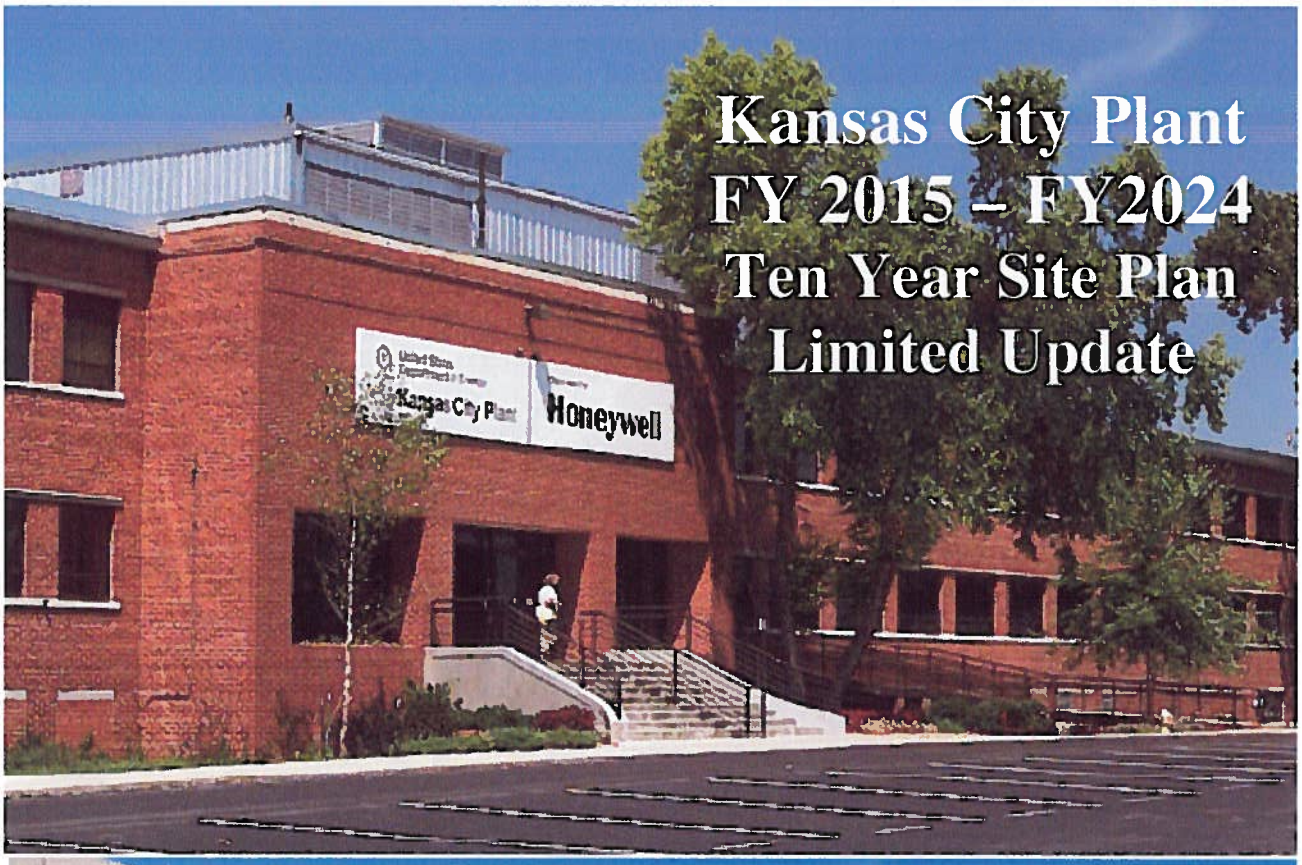
Kansas City Plant
FY 2015 – FY2024
Ten Year Site Plan
Limited Update



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FY 2015 – FY 2024
Kansas City Plant
Ten Year Site Plan

Prepared by
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June, 2014

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POINTS OF CONTACT **5**

LIST OF ABBREVIATIONS **7**

1.0 EXECUTIVE SUMMARY **10**

Facility Infrastructure Projects *10*
Deferred Maintenance (DM) *10*
Site Footprint Management *11*
Future Space Needs *11*
Mission Transfers and Program Workload *11*
Capability and Capacity *11*
Maintenance *12*
Disposition of Equipment and Property *12*
Long Term Stewardship (LTS) *12*
Expected Future State *13*

2.0 SITE OVERVIEW AND SNAPSHOT **14**

Site Overview: *14*
Kirtland Operations (KO) *14*

3.0 ASSUMPTIONS **16**

4.0 CHANGES FROM PRIOR YEAR TYSP **18**

5.0 FUTURE VISION AND CORE CAPABILITIES **19**

Kirtland Operations (KO) *22*
Mission and Program Requirements *22*
Non-Nuclear Capability Evolution *25*

6.0 REAL PROPERTY ASSET MANAGEMENT **26**

Footprint Management and Gross Square Feet Reduction *26*

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Preface

This Ten Year Site Plan (TYSP) for the Kansas City Plant (KCP) has been prepared in accordance with the Ten Year Site Plan (TYSP) Narrative Guidance, issued March 27, 2014. 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 significant changes to the plans and strategies since the last submission 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 5 of this document.

List of Abbreviations

ADAPT	–	Advanced Design and Production Technologies
AF&F	–	Arming, Fusing, and Firing
ATECC	–	Alternate Transportation Emergency Control Center
ATTC	–	Albuquerque Transportation & Technology Center
BFC	–	Bannister Federal Complex
BMP	–	Best Management Practices
BTA	–	Building Technology Associates, Inc.
BTU	–	British Thermal Unit
CBDPP	–	Chronic Beryllium Disease Prevention Program
CD	–	Critical Decision
CMD	--	Component Maturation and Development
CME	–	Component and Material Evaluation
CMMS	–	Computerized Maintenance Management System
COTS	–	Commercial-Off-The-Shelf
CRADA	–	Cooperative Research and Development Agreement
CUP	-	Central Utility Plant
DDC	–	Direct Digital Controls
DM	–	Deferred Maintenance
DMSMS	–	Diminishing Manufacturing Sources & Material Shortages
DoD	–	Department of Defense
DSA	–	Detonator Sensing Assembly
DSW	–	Directed Stockpile Work
DTRA	–	Defense Threat Reduction Agency
EA	–	Environmental Assessment
EIS	–	Environmental Impact Statement
EMP	–	Energy Management Plan
ENS	–	Emergency Notification System
EPH	–	East Powerhouse
ES	–	Enhanced Surveillance
ESC	–	Enhanced Surveillance Campaigns
ESN	–	Enterprise Secure Network
FBI	–	Federal Bureau of Investigation
FEMP	–	Federal Energy Management Program
FIMS	–	Facilities Information Management System
FIRP	–	Facilities Infrastructure Recapitalization Program
FM&T	–	Federal Manufacturing & Technologies
FONSI	–	Finding of No Significant Impact
FPU	–	First Production Unit
FYNSP	–	Future Years Nuclear Security Program
GPP	–	General Plant Projects
GSA	–	General Services Administration
GTS	–	Gas Transfer Systems
GWOT	–	Global War on Terror

List of Abbreviations (Cont.)

HS&E	-	Health, Safety & Environment
HVPS	–	High Voltage Power Supplies
IPSS	–	Integrated Programmatic Scheduling System
ISS	–	Institutional Site Support
ISSM	-	Integrated Safeguards and Security Management
IT	–	Information Technology
ITT	–	Integrated Telemetry Transmitter
IWPF	–	Industrial Wastewater Pretreatment Facility
JSOC	–	Joint Special Operations Command
JTA	–	Joint Test Assembly
KAFB	–	Kirtland Air Force Base
KCP	–	Kansas City Plant
KCP&L	–	Kansas City Power and Light
KCRIMS	–	Kansas City Responsive Infrastructure Manufacturing & Sourcing
KO	–	Kirtland Operations
KV	–	Kilovolt
LAC	–	Lightning Arrestor Connector
LANL	–	Los Alamos National Laboratory
LEED	–	Leadership in Energy and Environmental Design
LEP	–	Life Extension Program
LI	–	Line Item
LLNL	–	Lawrence Livermore National Laboratory
LTS	–	Long Term Stewardship (Environmental)
M&O	–	Management and Operating (Contractors)
M&S	–	Maintenance & Surveillance
MDNR	–	Missouri Department of Natural Resources
MEL	–	Master Equipment List
MEMF	–	Mobile Electronic Maintenance Facility
MSAD	–	Mechanical Safing and Arming Device
MSOP	–	Missouri State Operating Permit
MTE	–	Major Technical Element
NEP	–	Nuclear Explosive Package
NEPA	–	National Environmental Policy Act
NNR	–	Non-Nuclear Readiness
NNSA	–	National Nuclear Security Administration
NSC	-	National Security Campus
NSE	-	Nuclear Security Enterprise
NSMC	–	National Secure Manufacturing Center
NSSE	–	Network of Senior Scientists and Engineers
NWSP	–	Nuclear Weapons Stockpile Plan
OCONUS	–	Outside the Continental United States
OMB	–	Office of Management and Budget
OPC	–	Other Project Costs

List of Abbreviations (Cont.)

OST	–	Office of Secure Transportation
P&PD	–	Production and Planning Directive
PCB	–	Polychlorinated Biphenyl
PdM	–	Predictive Maintenance
PDRD	–	Plant-Directed Research and Development
POR	–	Program of Requirements
RAMP	–	Roof Asset Management Program
RCRA	–	Resource Conservation and Recovery Act
RFIC	–	Radio Frequency Integrated Circuit Value
RPV	–	Replacement Plant Value
RSF	–	Rentable Square Feet
RTBF	–	Readiness in Technical Base and Facilities
SCMC	–	Supply Chain Management Center
SGT	–	Safeguards Transporter
SNL	–	Sandia National Laboratories
SPEC	–	Scientific/Process Equipment and Capabilities
SPFPA	–	Security Police and Fire Protection Association (Union)
SPMD	–	Semi-Permeable Membrane Device
TD	–	Transformation Disposition
TECC	–	Transportation Emergency Control Center
TRALOC	–	Training Logistics Command
TSRD	–	Top Secret Restricted Data
TYSP	–	Ten Year Site Plan
UMP	–	Utilities Management Plan
VR	–	Virtual Reality
WFO	–	Work For Others
WPH	–	West Powerhouse
WR	–	War Reserve

FY 2015

Kansas City Plant

Ten Year Site Plan

1.0 Executive Summary

The Kansas City Plant (KCP) is currently executing and nearing completion of one of the largest moves in North America. This eighteen month relocation from a more than sixty year old facility on Bannister Road into a newly built leased space called the National Security Campus, which is eight miles south of the existing facility, began in January of 2013. The internal name for this project is "Kansas City Responsive Infrastructure Manufacturing and Sourcing" or KCRIMS. KCRIMS is more than a physical relocation of the people and capabilities of the KCP; it also consisted of a business change that utilizes three interrelated thrust areas for change: strategic sourcing, strategic sizing, and business excellence facilitated by revised operating requirements. The most visible component of KCRIMS was the new, modern, flexible manufacturing facility called the National Security Campus (NSC). While the Bannister facility has served the mission well for the last six decades, the costs to maintain and reconfigure the facility in a responsive manner have become excessive relative to the costs of the primary production mission. The NSC meets the future NNSA mission and offers advantages towards flexibility and efficiency not currently available in the old facility.

Facility Infrastructure Projects

The key component of the project, including funding and project planning, is based on sustaining the existing building infrastructure until KCP operations are relocated to the NSC. As a result of this posture, the KCP will be relying primarily on the Readiness in Technical Base and Facilities (RTBF) funding to sustain operations through the move to the NSC located at 150 Hwy and Botts Road in Kansas City, MO. The KCRIMS move is scheduled to complete in August of 2014; the current Bannister Federal Complex (BFC) will continue to support the NNSA mission during the move until full production support transitions to the NSC. Upon completion of the relocation of NNSA operations to the NSC, the focus at the former site will shift to activities necessary to disposition the surplus real and personal property at the BFC. These activities will include actions to dispose or reuse personal property, deactivate and stabilize utility systems no longer required for production operations, and decommission utility systems and facilities to prepare the property for transfer, sale, or safe long-term maintenance and surveillance of the property pending transfer. It is recognized that federal excess property regulations and processes must be followed during the disposition process and that environmental requirements for long term stewardship must continue to be satisfied.

Deferred Maintenance (DM)

The BFC is roughly a 60 year old asset and requires considerable maintenance to maintain plant operations. Another key component to the KCRIMS move and RTBF funding required the implementation of the "PAUSE Plan" at the Bannister facility. This plan minimized

maintenance and repair activities to those that were only necessary to support environmental safety, security or production needs. As a result, RTBF funding is targeted on sustaining plant operations and allowing Deferred Maintenance to grow. This approach is consistent with Defense Programs strategy to reduce investment in facilities planned for disposition. At the end of FY 2014, with the completion of relocation, items previously considered deferred at the BFC will no longer be required.

Site Footprint Management

No new production facilities for the support of any future mission assignments are being considered for the Bannister facility. Planning will instead focus on the National Security Campus facility. Projects will only be executed to ensure that the BFC infrastructure is adequately maintained through FY 2014. KCP transformation is expected to reduce the KCP footprint from the existing 2,925,516 gross square feet floor space to 1,509,950 rented square feet (including the NSMC building). The NSC consists of five leased buildings on the campus, including the NSMC building. Building #1 is considered the office space, building #2 is the production factory at the site, building #3 is the special products production space, building #4 is the NSMC facility supporting a host of Work for Others activities, and building #5 is the Central Utilities Plant (CUP) for the campus. The current footprint of the KCP is not expected to change prior to relocating to the NSC.

Future Space Needs

The KCP transition to the NSC will be complete by the end of August, 2014. Requirements for the NSC include 300,000 rented square feet for other National Security missions, 704,000 rented square feet of manufacturing space, and approximately 274,000 rented square feet of office, administration, multi-purpose and production support. The NSC also includes an additional 207,000 rented square feet of common space that support the facility, such as restrooms, mechanical and electrical rooms, corridors which are required for fire egress, lobbies and other similar needs.

Mission Transfers and Program Workload

At this time, no new mission assignments have been identified for the KCP. The infrastructure is currently in place, and no new modifications are necessary to accommodate workload through FY 2014 when relocation to the NSC will be complete. Emerging Life Extension Program (LEP) workload may require the fit out of white space in the NSC. Planning for the fit out of additional space is expected to begin design in FY 2015 with the work completed in FY 2016.

Capability and Capacity

The core mission of the KCP is to satisfy Directed Stockpile Work (DSW) requirements. Preparations and planning to accommodate the transition from the BFC to the NSC are being met while satisfying DSW requirements. The available capacity in the BFC allows for build-ahead or requalification capabilities during the transition through KCRIMS.

Maintenance

Transitioning to the new facility requires an alternate strategy for maintaining the existing facility and equipment while maintaining the new facility during the transition years and beyond. The KCP plans to provide full maintenance support of LEP production requirements and facility stewardship in the BFC to meet safety and code compliance and central plant reliability throughout the transition to the NSC. Consistent with the KCRIMS model document, non-critical equipment and systems will be evaluated, and support levels will be adjusted to enable equipment life through LEP production at the BFC through FY 2014. After FY 2014, maintenance support will shift to a "warm shutdown" state in the Bannister facility.

Disposition of Equipment and Property

Planning for Bannister site facility disposition is in development. The NNSA published a Notice of Availability in October 2011, inviting the real estate development community to submit proposals for the transfer and reuse of the Bannister site. From the proposals received, a preferred proposal and development planning partner was identified, and work began on defining a real property transfer agreement. On May 1, 2013, the Environmental Assessment for the transfer of the Kansas City Plant was published, along with the Finding of No Significant Impact. With the NEPA action complete, the NNSA began negotiations with the preferred development partner. These discussions are ongoing. Manufacturing operations at the current location will cease in late FY 2014. Maintenance and surveillance activities necessary to maintain and prepare the vacated facilities for transfer will continue through FY 2015, during which time excess equipment removal and facility preparations will be completed. It is envisioned that the DOE's authority for transfer of property pursuant to the National Defense Authorization Act of 2013, Section 3143, will be used to transfer the real property to a nonfederal entity for redevelopment. Based on discussions with the preferred redevelopment planning partner, it is likely the new owner will carry out demolition and site remediation activities to allow for future development of the site. If a real property transfer agreement cannot be reached between the parties, it is envisioned that the normal asset disposition processes and studies used by the General Services Administration (GSA) may be employed to transfer the property to a new federal or non-federal entity.

Disposition of NNSA property on the NC-135 Site in Albuquerque, NM is currently waiting on funding for disposition design and execution. The equipment and personnel have been relocated from the NC-135 site and the utility connections are being stabilized currently.

Long Term Stewardship (LTS)

Long term stewardship includes those activities necessary to protect public health and the environment from site hazards. These activities include monitoring, maintenance, institutional and engineering controls, information management and other activities to ensure that implemented clean-up remedies remain effective over time. Environmental clean-up activities at the BFC have been, and continue to be, mandated by the Resource Conservation and Recovery Act (RCRA). The permit was modified in 2012 to add the General Services Administration (GSA) as a Permittee and to modify the area addressed by the Permit to include the entire BFC. Additional work beyond that contemplated under Long Term Stewardship will be performed at

the BFC through 2018 pursuant to the RCRA Corrective Action provisions mandated in the permit administered and overseen by the Missouri Department of Natural Resources (MDNR) and the Environmental Protection Agency (EPA). NNSA currently forecasts $2 million average cost per year for LTS activities, such as groundwater monitoring and treatment, and is anticipated to be ongoing after the Bannister Road facility disposition. Additional corrective action activities mandated by the modified permit will range from $1.4M to $5.5M in the FY 2014 to 2018 timeframe.

Expected Future State

The new facility will offer more operational efficiency and provide the flexibility necessary to quickly meet changing production requirements. It will support the design requirements of the LEPs and other future weapons programs without the burden of maintaining excess capacity and obsolete capabilities. Capabilities that are commercially available will be outsourced where possible, and the remaining in-house capabilities will be properly sized for the anticipated production rates of future weapon programs. The KCP Work for Others (WFO) program will continue to be part of the overall KCP business model because of the critical need for secure engineering and manufacturing services that the KCP provides.

2.0 Site Overview and Snapshot

Location: Kansas City, Missouri

Type: Multi-Program Site

Web site: www.kcp.com

Contract Operator: Honeywell FM&T

Responsible Field Office: Kansas City Field Office

Site Manager: Mark L. Holecek

Site Overview:

For more than 60 years, the National Nuclear Security Administration's Kansas City Plant 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 to ensure the safety, reliability and security of our national defense systems.

The primary core capabilities the KCP contributes to the Nuclear Security Enterprise (NSE) are Non-Nuclear component production and testing and facilities infrastructure support.

The KCP is currently involved in the relocation activities associated with moving operations from the Bannister Facility to a newly constructed leased space at the National Security Campus.

The KCP Bannister Facility Complex (BFC) resides on 122 NNSA-owned acres on a 136 acre site in Kansas City, Missouri. The 3 million sq. ft. facility, along with operations in New Mexico and Arkansas, serves the NNSA, DOE, National Laboratories, DoD, other government agencies, United Kingdom and industry partners. The NSC consists of five leased buildings on the campus. Building #1 is considered the office space, building #2 is the production factory at the site, building #3 is the special products production space, building #4 is the NSMC facility supporting a host of Work for Other's activities, and building #5 is the Central Utilities Plant (CUP) for the campus. The KCP is recognized for its innovation, quality and safety performance. The KCP supports 40 technically demanding product families, including arming devices, microcircuits, polymers, plastics, and radars. The KCP engages in 90 advanced technologies, including forgings, concurrent engineering environments, laminates and optics.

The KCP personnel have unique expertise that extends beyond the nuclear security enterprise to benefit national security, enhance the global competitiveness of U.S. businesses, and promote nonproliferation. The WFO program alone helps others develop new processes and products, while defraying NNSA costs.

Kirtland Operations (KO)

KO is located on 18.2 acres of KAFB permitted property (NC-135 Site) and on leased properties (Air Park and Craddock) in Albuquerque, New Mexico. KO operations support OST secure transportation mission, NA-40 emergency response activities and various work for other activity. There are additional locations where KO provides programmatic support but whose facilities are not managed by KO. The NC-135 Site must close by the end of FY 2015, and $4.0 million has been estimated for disposition in FY 2014 and FY 2015. With NNSA approvals, KO has acquired 29,560 gross square feet of leased space at Craddock to satisfy the pressing SGT

refurbishment production schedule. Additional leased space was acquired at the Alamo building and Cradock to relocate the KO activities at the NC-135. The relocation is planned to complete by the end of FY 2014. The disposition of the NC-135 Site will occur in FY 2015 with site closure and return to KAFB completed by end of FY 2015.

Real Property:

BFC:

- 136.1 Acres (Permitted / Owned)
- 38 Buildings Owned
    - 2,925,366 gsf Active & Operational
    - 150 gsf Non-Operational
    - 231,233 gsf GSA Assigned & 186 gsf leased
- Replacement Plant Value: $1,484,667,811 (owned)
- Deferred maintenance: $225,009,560 (owned)
- Facility Condition Index
    - Mission Critical: 14.11%
    - Mission Dependent: 35.01%
- Asset Utilization Index (Overall): 58.24%

NSC:

- **N/A** Acres
- 5 Buildings GSA Assigned
    - 1,509,950 gsf GSA Assigned
- Replacement Plant Value: N/A
- Deferred Maintenance: N/A
- Facility Condition Index: N/A
- Asset Utilization Index (Overall): 100%

3.0 Assumptions

The plans and data provided in this TYSP are consistent with the references identified in the TYSP Guidance provided by the NNSA. Any deviations from these references are cited in the text.

- Site Boundaries: NNSA owned property at the BFC (2,925,516 gross square feet floor space on 136.1 acres) will be commercially sold or transferred under the NNSA's real property disposal authorities through GSA's federal real-property management process. In either case the transfer of the surplus NNSA property is currently anticipated for late FY 2016.

- Replacement Plant Value: RPV for NNSA owned property at the BFC will be maintained as currently specified in FIMS until disposition is complete. RPV for NNSA owned property at the NC-135 Site will be maintained as currently specified in FIMS until disposition is complete.

- Deferred Maintenance: The BFC recapitalization projects have been deferred indefinitely during the KCRIMS project execution. DM for NNSA owned property at the BFC will continue to increase until KCP relocation to the new KCRIMS facility is complete in late FY 2014.

- Facility Maintenance: The current facility / operations maintenance and repair model for the Bannister facility has KCP personnel maintain the building, grounds, equipment and production equipment as part of the Facility Operation budget in RTBF. The transition to the National Security Campus will change that model in the new facility, where the landlord will support the building and grounds maintenance and repair, and KCP will continue to support equipment maintenance.

- Facility Funding: The current RTBF funding in the Future Years Nuclear Security Program (FYNSP) for the KCP based on the 2014 Presidential Budget is adequate to meet the immediate operational needs of the KCP through FY 2020. Assuming the budget profile is unchanged, the KCP can maintain operations and execute the KCRIMS Building Acquisition and Relocation Project. This includes the additional operational costs of two facilities during the planned transition to the Botts Road Facility in FY 2013 and FY 2014. It also includes $65M annually to support lease payments to the GSA for the five buildings that comprise the NSC. It also includes the operating costs to maintain the new NSC facilities through contracts with GSA for building and grounds maintenance and repair activities expected to cost $8.0M annually for the campus. The KCRIMS project transitions the plant to a new, modern, energy-efficient factory and allows the KCP to shed the high operating costs and deferred maintenance tied to the WWII era Bannister Facility. Not funded in the plan is the project to dispose of the current Bannister Federal Complex site. This project, estimated at approximately $200M, includes the activities to dispose of the equipment and mitigate environmental hazards necessary to dispose of the site.

Funding in support of the relocation of the Kirtland Facilities has been identified in the FYNSP. Funding for this project is currently being worked as part of the FY 2014 FYNSP process.

- Budget Constraints: The NNSA Facilities and Infrastructure Cost Projections adhere to the budget targets established in the FYNSP with exceptions noted.

- Transformation Planning: The DP portion of the new National Security Campus was turned over to the NNSA in November, 2012. The National Security missions' part of the National Security Campus was completed and turned over to NNSA in May, 2013. Relocation activities to the NSC began in January, 2013 and will be completed in August, 2014. The infrastructure and operations in the BFC will only be sustained for production through 2014. The BFC will be maintained in a capable state through 2016, after which the property will be excessed.

- Disposition Planning: Manufacturing operations at the BFC location will cease in late FY 2014. If the DOE's economic development process does not result in transferring the property, it is envisioned that normal asset disposition processes and studies used by the General Services Administration (GSA) and NNSA may be employed.

- Security: Remaining at a Security Protection Level 4 designation, the KCP security program, which is tailored like an industrial security program based upon the KCP Site Security Standard, will be returning to DOE Order based compliance.

- Directed Stockpile Work:
  - Support ongoing production (W76-1 LEP, various telemetry programs, LLCE and maintenance activities)
  - Support emerging needs (B61 LEP, B83 ALT353 (LLCE), W87 ALT360 (LLCE), W88 ALT370, W88 GTS LLCE, W87 AFA (Mk 21 Fuze), W78/W88-1 LEP (IW1), Cruise Missile Warhead (LRSO))
  - Relocation and occupancy of the new National Security Campus by August 2014
  - National Laboratories will be sufficiently funded to support requalification needs due to relocation
  - Support increasing surveillance requirements

- Environmental Long Term Stewardship (LTS): The Environmental LTS program is the responsibility of NNSA's office of Infrastructure and Operations (NA-00). Fiscal Year 2014 funding includes $180,000 of support for the Agreement in Principle (AIP) with the State of Missouri. Total funding at KCP is $3,519,005 for FY 2014.

4.0 Changes from Prior Year TYSP

The KCRIMS project is now in transformation/execution mode. The relocation, all facilities and infrastructure related Line Item and General Plant Projects have been deferred or postponed indefinitely. After GSA signed the lease for the new KCRIMS facility, Facilities and Infrastructure projects at Bannister were canceled. As a result of this posture, the KCP will be relying primarily on RTBF funding to sustain operations; as no projects requiring Line Item or GPP funding are planned. Beginning in FY 2013 KCP is required to support $4.25M monthly for the lease of buildings 1, 2, 3 and 5 at the NSC. Building 4 requires $1.15M per month for its lease. This totals to almost $65.0M per year to support the lease at the National Security Campus. Basic maintenance and repair operations for the NSC will be supported through the building owner and GSA, which are anticipated to cost $8.5M per year for the entire National Security Campus and are part of the RTBF operations budget for KCP beginning in FY 2014.

Figure 1: National Security Campus

5.0 Future Vision and Core Capabilities

The NSC is the visible cornerstone of the KCRIMS transformation program. While the BFC 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 move to a new, smaller leased facility is expected to result in significant savings in maintenance and security as well as other support areas.

The NSC is located at MO-150 and Botts Road on a 183 acre green field site, which is approximately 8 miles south of the existing BFC as shown in Figure 2. The new site will consist of a 5 building campus also shown in Figure 2 below. Building 1 represents the main office building. Building 2 represents the main manufacturing building. Building 3 houses the polymer production facility and the high energy test facilities. Building 4 is the NSMC building. Building 5 is the central utilities plant.

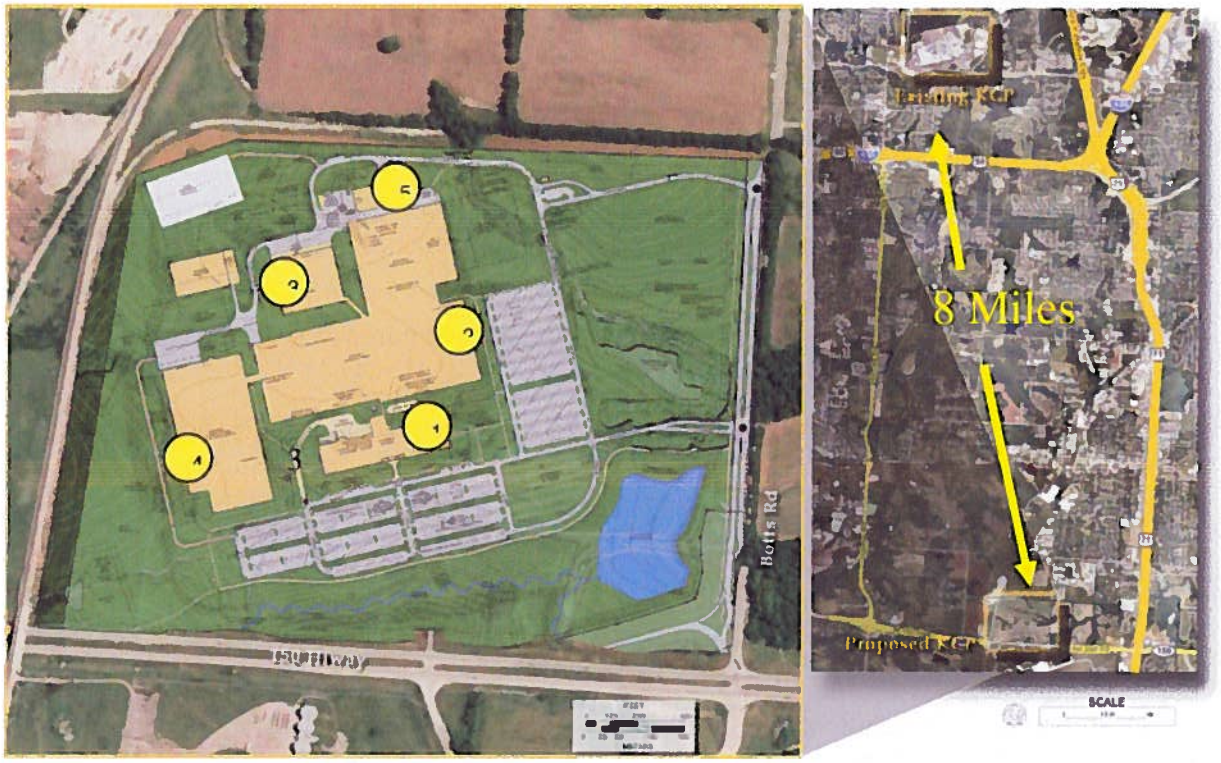


Figure 2: Location and Layout of the NSC

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 – 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 equipment in support of the mission. Area includes mechanical & electrical maintenance supplies, janitorial closets, and maintenance shops.
- Packaging and Shipping – manufactures cardboard boxes and purchases wooden crates to package and ship large and small parts.
- Paint and Heat Treat – Paint and Heat Treat involves the preparation of parts for powder coating. Powder coating requires special temperature and humidity requirements as well as powder coat application stations. 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.
- 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.
- 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.
- 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.

The design of the Central Utility Plant (CUP) is the responsibility of the developer. The Central Utility Plant will be operated and maintained by the developer.

The Gantt chart in Figure 3 represents the high level schedule for the KCRIMS transformation project. The transition into the new facility is approximately 3/4 complete.

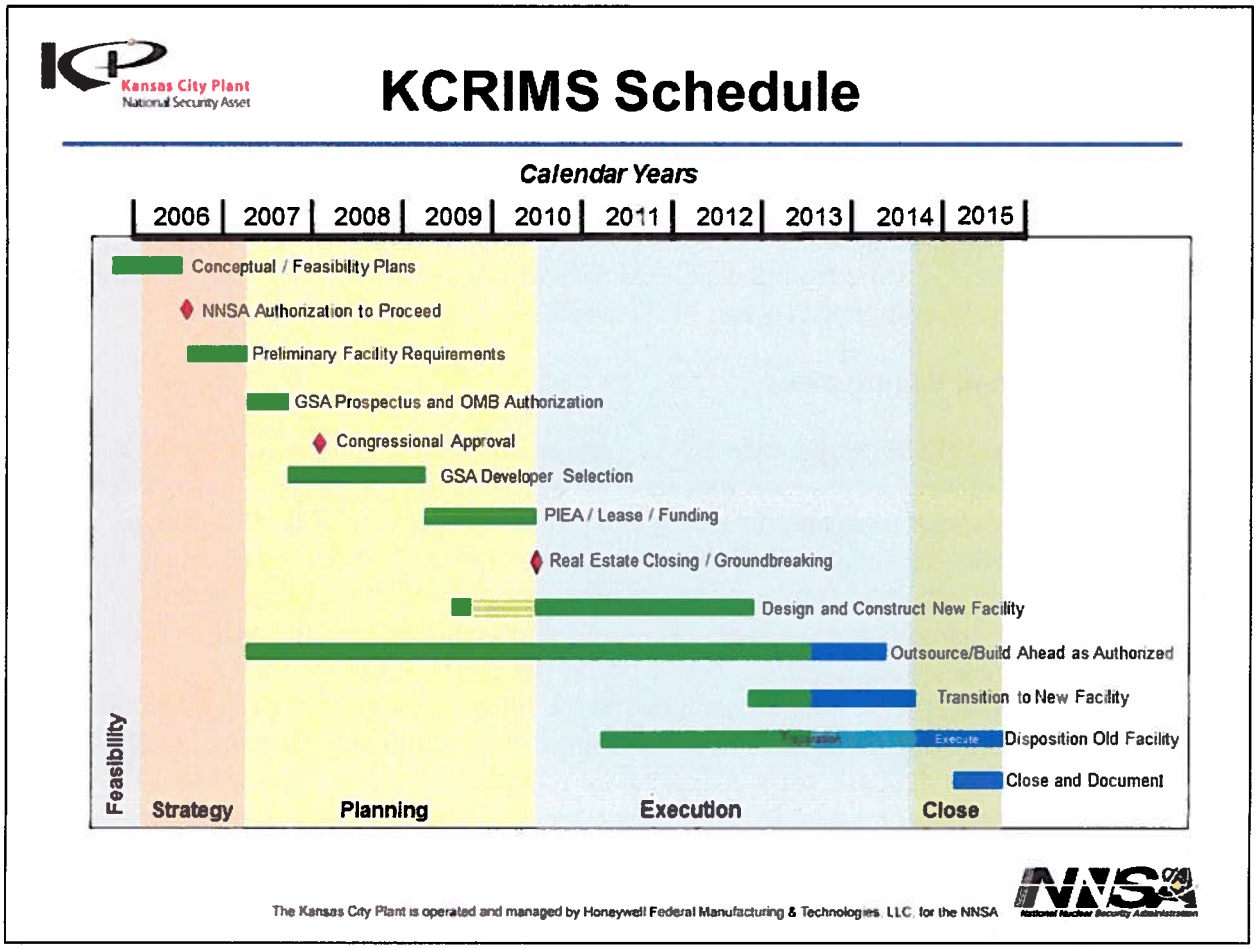


Figure 3: KCRIMS Schedule

The second major component of the KCRIMS transition initiative is the relocation of operations to the NSC. Relocation of manpower and equipment from the BFC is expected to take a little

over eighteen months and began in January, 2013. This relocation activity is being managed to ensure no interruption to KCP weapons delivery schedules. Build-ahead requirements have been identified and have been incorporated into current production schedules. Over 3000 pieces of large equipment and 35,000-40,000 crates comprising over 3,000 truckloads of material will be moved during this eighteen month period.

Kirtland Operations (KO)

KO is located on 18.2 acres of KAFB permitted property (NC-135 Site) and on leased properties (Air Park and Craddock) in Albuquerque, New Mexico. Operations support OST secure transportation mission, NA-40 emergency response activities and various work for other activity. There are additional locations where KO provides programmatic support but whose facilities are not managed by KO.
The NC-135 Site is permitted to NNSA by KAFB. The NC-135 Site has been directed to move off of the Kirkland Air Force Base by the end of FY 2015. To accommodate this directive, KO will retain and manage 48,622 gross square feet of leased space (Craddock and Air Park), and with NNSA approvals, KO has acquired 47,570 additional gross square feet of leased space to support the KO activities moving from NC-135. This transition is scheduled to complete in FY 2014. The NC-135 permit will be modified to remove approximately 2-acres for NA-40 dedicated use. A separate permit with KAFB has been prepared for the 2-acre area. This area includes 5 buildings totaling 10,468 gross square feet allocated for NA-40 and forms the NA-40 campus for its deployment activities. The NC-135 Site currently contains 60,008 gross square feet consisting of NNSA-owned and managed floor space (49,540 gross square feet used by Honeywell and 10,468 gross square feet allocated to NA-40). See KO Attachment E for additional detail. The departure from the NC-135 Site will occur in FY 2015. Site closure and return to KAFB must be completed by end of FY 2015.

Mission and Program Requirements

The Kansas City Plant (KCP) is the main NNSA production site for non-nuclear products. 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 and procures many of the NNSA's most intricate and technically demanding products including radars, mechanisms, programmers, reservoirs, joint test assemblies, engineered materials and mechanical cases. These products comprise approximately 85% of the components that constitute a nuclear weapon. Current issues of the Production Control Documents for each weapon system are included in the Integrated Programmatic Scheduling System (IPSS) in accordance with the Nuclear Weapons Production and Planning Directive (P&PD). They establish the basis for workload assumptions.

The core mission of the KCP is to satisfy Directed Stockpile Work (DSW) requirements, which include non-nuclear products and services to support stockpile maintenance, refurbishment, stockpile evaluation, maintenance and logistics, and dismantlement. DSW ship performance in FY 2013 was 99.98% on over 115,000 pieces.

The currently approved mission and programs continue reliance on maintaining the stockpile through planned refurbishment programs including Limited Life Component Exchanges

(LLCEs) and Life Extension Programs (LEPs). Stockpile maintenance and evaluation are key supporting elements, but are underfunded in the current Future Years Nuclear Security Program (FYNSP) period. Production for the W76 Mod 1 LEP is a significant portion of the KCP's future workload through 2018 based on current direction. Development activities for future programs, such as B61-12 LEP, W88 ALT370, and W87 AFA (Mk21 Fuze), will increase work on the production floor as the W76-1 work tapers off. KCP anticipates funding below requirements in FY 2014 & FY 2015 to support development activities on the B61-12 LEP. Funding shortfalls in the early years of the program will limit KCP engagement and early process development, increasing cost and schedule risks. W88 ALT370 funding is expected to support requirements over the FYNSP period. However, the W88 Alt is dependent upon Navy funding in order to be successful. If there is funding shortfalls in the early years of the program, it will limit KCP engagement and early process development, increasing cost & schedule risk. Both programs are highly reliant on MTP, Production Support, RTBF and Campaign funding to support areas such as equipment needs and technology maturation. FPU dates for these programs, originally expected in FY 2019, are not stable and are being evaluated for potential slippage of 6 months to 2 years due to funding delays, sequestration and budget challenges.

KCP is engaging with SNL to support studies on future programs, including the W78/W88-1 LEP (Interoperable Warhead 1) and a Cruise Missile Warhead LEP. These programs are currently targeted for FPU in the FY 2024-FY 2025 time frame.

The KCP leads the Supply Chain Management Center (SCMC) that has provided significant savings by leading strategic sourcing and e-procurement methods across the nuclear security enterprise to leverage procurement spending for the participating sites. Initial efforts focused primarily on system integration and on acquisition efficiency for non-weapon cost elements of NNSA, such as staffing, plant operational costs, equipment, and services. Future efforts will be increasingly focused on also driving down production material spending where appropriate.

There are no direct infrastructure requirements driven by planned and potential program workload for the current facility. In light of the KCRIMS initiative, the primary objective is to maintain the current infrastructure in support of production scheduled that is planned to be complete to accommodate workload scheduled through FY 2014, when relocation to the new facility is complete. That infrastructure is currently in place, and no new modifications are necessary to accommodate workload through FY 2014, when relocation to the new facility is planned for completion. Workload for build-ahead and requalification quantities required for relocation to the new facility are scheduled and included in KCRIMS budget forecasts.

Overall, the buildings, structures, and systems at the KCP are performing as intended and sufficient to meet current mission capacity needs. KCRIMS will alleviate $240 million of Deferred Maintenance (DM) for the old facility in 2014.

In the past, Campaigns Program funded four major technology activities that are critical to DSW support: Advanced Design and Production Technologies (ADAPT), Non-nuclear Readiness (NNR), Pit Manufacturing, and Enhanced Surveillance (ES). Starting in FY 2014 ADAPT, Pit Manufacturing, and NNR have been replaced with a new program, component manufacturing and development (CMD), carrying all the technology maturation requirements for the near term LEPs and Alts. KCP appears to be underfunded through the FYNSP, which will increase risk to

the B61 LEP and W88Alt. Both the B61 LEP and W88 Alt are relying on CMD to complete the technology maturation for a successful FPU of each program. Plant-Directed Research and Development (PDRD) is managed under the campaign program and is essential to supporting future DSW applications by researching and developing higher risk manufacturing processes.

The Readiness Campaign assures that materials are available, processes are designed and established and manufacturing capabilities are available to meet nuclear weapon alteration, refurbishment, and other stockpile stewardship activities. Through CMD, technologies are developed, matured, and demonstrated to provide turn-key insertion into DSW requirements.

The NNSA's pit manufacturing capability, now part of CMD, is at LANL, and KCP provides non-nuclear parts, tools and gages to support LANL's pit production capability and quantity production. KCP also supports LLNL with dies for experiments.

Enhanced Surveillance (ES) protects the health of the U.S. nuclear weapons stockpile through an integrated process that predicts, detects, and assesses aging effects that may impact performance, safety, or reliability. Enhanced Surveillance will continue to provide technologies to nondestructively diagnose the health of the stockpile in the next ten years. Primary focuses will be on Component and Material Evaluations (CMEs) and embedded evaluations in support of future systems and LEPs.

A growing workload segment is the support of DoD equipment maintenance and spare parts inventory management, including trainer refurbishments, test gear recertification, handling gear reprocessing, Base and Military Spares, and other production, repair and reprocessing efforts directed by the DoD.

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

Emergency Response Support - Organizations in this support category consist of the NNSA Office of Emergency Management (NA-40), NNSA Office of Defense Nuclear Security (NA-70), the Defense Threat Reduction Agency (DTRA), the Federal Bureau of Investigation (FBI), and the Joint Special Operations Command (JSOC). KO's support includes engineering, procurement, technical and security specialists, small-scale production, logistics support, field support, and technical documentation.

A number of other non-NNSA programs are not dependent on NNSA to fund incremental needs. While facilities infrastructure capabilities are vital to perform work for customers other than NNSA, the non-NNSA customers directly fund any additive costs. The non-NNSA reimbursable work exercises 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.

Special Technologies is the work not pertaining to any of the previously described categories. It includes work for other DOE/NNSA organizations (e.g., Defense Nuclear Nonproliferation, Office of Health, Safety and Security), other government agencies (e.g., Department of Homeland Security, Department of Transportation, United States Department of Agriculture, Department of Defense, Canadian Nuclear Safety Commission), 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).

The Kansas City Plant has a growth strategy around supporting the DoD's Diminishing Manufacturing Sources & Material Shortages (DMSMS) and urgent technology sustainment needs. It also benefits the NNSA by offsetting a portion of the site's overhead cost.

KO provides engineering, technical support, information technology, training, field support, and small-scale production services to the NNSA, the national laboratories, other NNSA contractors, the Department of Defense, other government agencies, and non-DOE agencies that complement the NNSA missions. Approximately 60% of the KO work is in support of the Office of Secure Transportation (OST). In FY 2010, limited Safeguards Transporter (SGT) refurbishment started at the leased Craddock Facility to prepare that facility for full SGT refurbishment production capability in FY 2011. KO support to Emergency Response organizations continues to grow. Due to evolving NNSA Office of Emergency Response (NA-40) mission needs, five KO facilities at the NC-135 Site, totaling approximately 11,000 square feet, have been allocated for their use.

Non-Nuclear Capability Evolution

The NSC is designed for flexible manufacturing to meet the changing customer's demands. This capability will meet the NNSA's mission goals for non-nuclear production as established in the RODs, in terms of both types and levels of production to meet deliverables for the stockpile. KCP will continue as the NSE's primary piece-part production plant for non-nuclear components.

Due to the fact that the systems in today's stockpile are routinely sustained beyond their original design lifetimes, life extension programs have been implemented to extend the useful life of these systems. These life extension programs depend on a robust non-nuclear R&D program to identify areas in which material compatibility and aging issues may impact reliability. This R&D also includes continuous development of new technologies that will lead to more cost-effective designs with improved safety and security features in the future weapons stockpile.

The accompanying timeline graph illustrates Kansas City's collaborative efforts with other sites to achieve the future ideal. KCRIMS will equip the KCP with a modern reconfigurable infrastructure at low fixed costs. With robust NSE integration in the supply chain and program management, life cycle support is assured through a unified supply base, baseline change control, integrated schedules, cost control and shared resources.

6.0 Real Property Asset Management

Footprint Management and Gross Square Feet Reduction

Kansas City Plant (KCP)

The KCP is situated on approximately 136.1 acres of the approximately 300-acre Bannister Federal Complex (BFC), located 12 miles south of downtown, within the city limits of Kansas City, Missouri. The plant shares the site with other federal agencies. 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.

The KCP portion of the BFC consists of three primary buildings in generally good condition. The 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 GSA share the 2.6 million square foot Manufacturing Building, of which the NNSA owns 1,755,593 square feet, and occupies an additional 231,233 square feet of GSA assigned space. There are approximately 1.1 million square feet of space within the additional NNSA owned buildings, for an approximate total of 3.1 million gross square feet of space at the BFC under NNSA control (2,925,516 total square feet owned).

KCRIMS is expected to reduce the KCP footprint from the existing 3.1 million gross square feet floor space to 1,509,950 rented square feet (including the NSMC building). No new facilities for the support of any future mission assignments are being considered for the current facility. Planning will instead focus on the new facility, and projects at the BFC will only be executed to ensure that the existing plant infrastructure is adequately maintained through FY 2014. All other recapitalization projects and non-essential maintenance activities have been suspended.

The primary and overriding requirement for the new KCRIMS facility was that it be designed and constructed for flexibility that will enable rapid, economical reconfiguration to meet changing production requirements. This requirement took precedence over optimizing the operational profile for the current set of production, laboratory, warehouse, and office space requirements, and remains key to the transformation of the Kansas City Plant. The new KCRIMS facility was designed to meet the LEED Gold Standard.

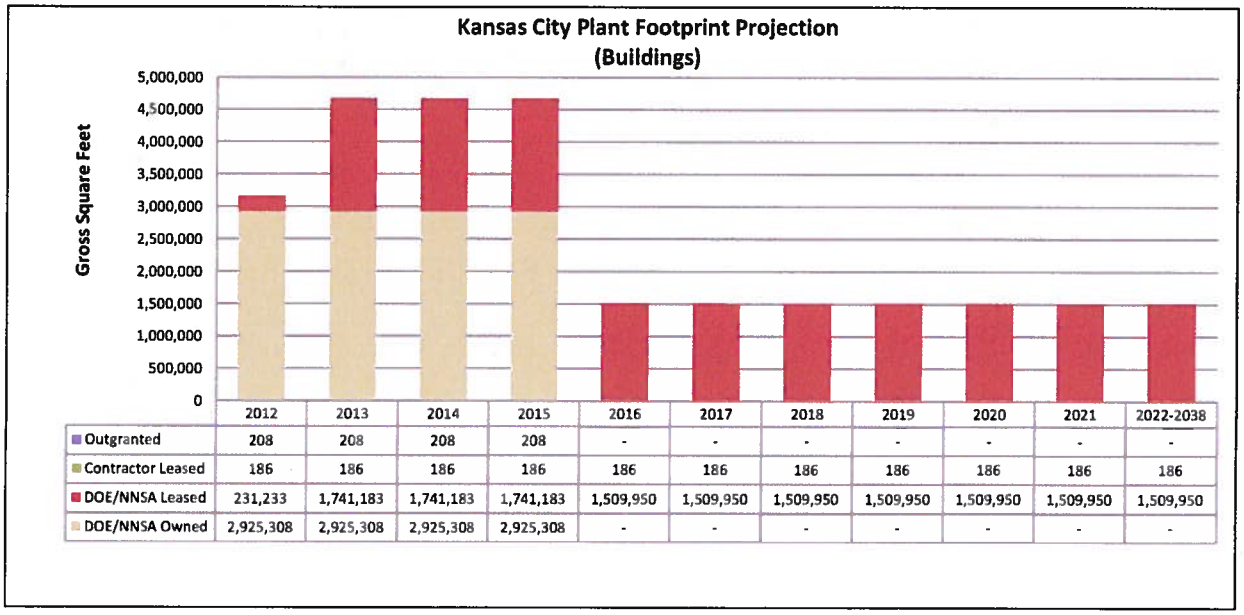
The default facility requirements are those typical of a commercial manufacturing environment. The requirements included items such as total space, clear height, major operational demarcations, and plant environments. In most areas, and in total, the teams were able to fit the retained capabilities in approximately the same space that was estimated. The space planning also has allowed for up to 100,000 square feet of "white space" that has portions interspersed in critical operational areas and large areas that are unassigned for any currently known use. This will allow the new facility to have considerable flexibility and be responsive to the changing needs of the complex from the very beginning, including the ability to add entirely new product lines that cannot be foreseen at this time.

The current footprint of the KCP is not expected to change prior to relocating to the new facility, and the footprint for the new facility has been planned to meet the known needs of the KCP for the next 20 years. The asset management profile for the Kansas City Site is shown in Figure 4. A plant footprint projection for the site is shown in Figure 5. The asset management profile for Kirtland Operations is shown in Figure 6. KO's plant footprint projection is shown in Fig. 7.

Replacement Plant Value (RPV)	$1,484.67	Million	
Total Deferred Maintenance (DM)	$225.01	Million	
Site Wide Facility Condition Index (FCI)	15.16%		

		Facility Condition Index (FCI)	Asset Utilization Index (AUI)	# of Assets	Gross Square Feet (GSF) Buildings & Trailers (000s)
Mission Dependency	Mission Critical	14.11%	52.11%	10	2,201.651
	Mission Dependent	35.01%	82.61%	13	375.485
	Not Mission Dependent	6.90%	70.71%	15	348.380
Facility Use	Office	22.41%	80.00%	1	240.717
	Warehouse	41.90%	75.84%	4	57.499
	All Other	14.69%	55.86%	32	2,627.150

Figure 4: KCP Asset Management Profile; Kansas City Plant



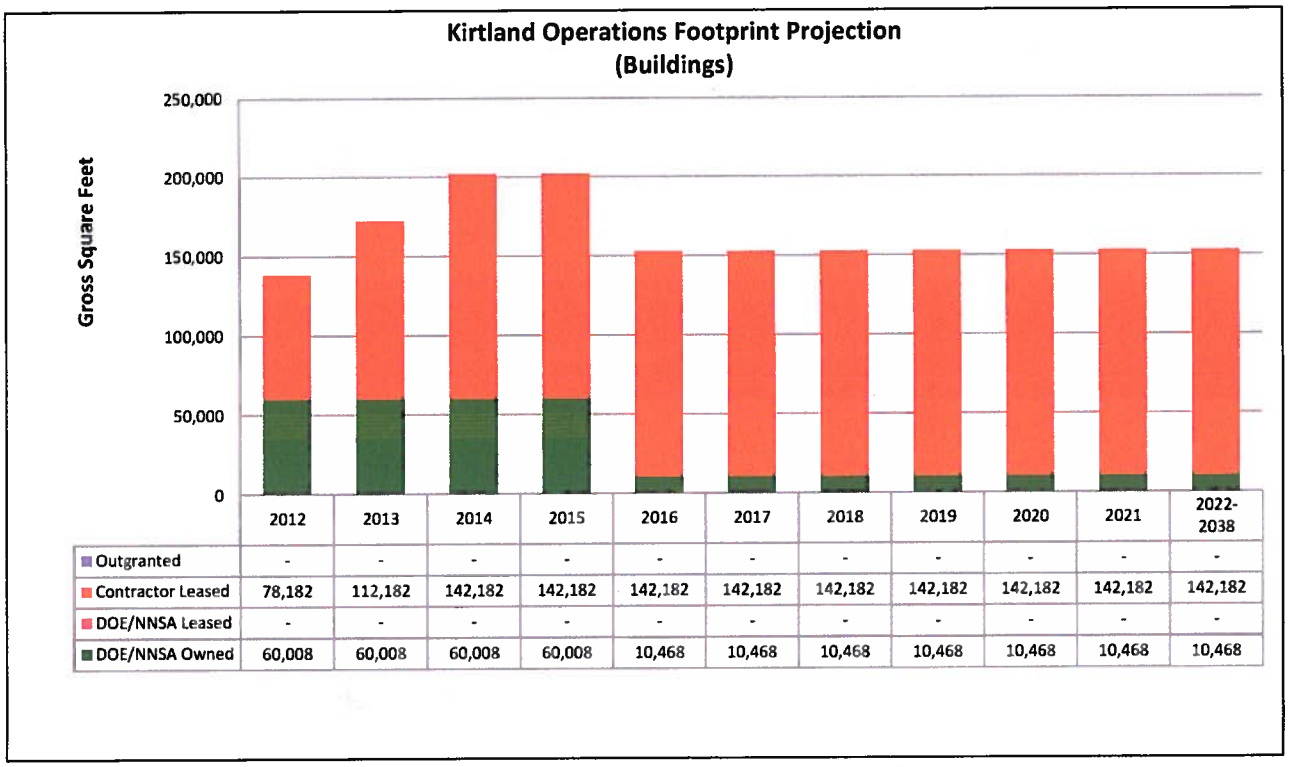
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022-2038
Outgranted	208	208	208	208	-	-	-	-	-	-	-
Contractor Leased	186	186	186	186	186	186	186	186	186	186	186
DOE/NNSA Leased	231,233	1,741,183	1,741,183	1,741,183	1,509,950	1,509,950	1,509,950	1,509,950	1,509,950	1,509,950	1,509,950
DOE/NNSA Owned	2,925,308	2,925,308	2,925,308	2,925,308	-	-	-	-	-	-	-

Figure 5: Footprint Projection; Kansas City Site

Replacement Plant Value (RPV)	$14.296	Million
Total Deferred Maintenance (DM)	$0	Million
Site Wide Facility Condition Index (FCI)	0	

		Facility Condition Index (FCI)	Asset Utilization Index (AUI)	# of Assets	Gross Square Feet (GSF) Buildings & Trailers (000s)
Mission Dependency	Mission Critical	0	97.00%	1	5.448
	Mission Dependent	0	84.07%	26	54.560
	Not Mission Dependent	0	0	0	0
Facility Use	Office	0	93.53%	13	22.133
	Warehouse	0	98.14%	5	15.922
	Laboratory	0	92.28%	4	9.514
	All Other Categories	0	86.06%	5	12.439

Figure 6: KO Asset Management Profile



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022-2038
Outgranted	-	-	-	-	-	-	-	-	-	-	-
Contractor Leased	78,182	112,182	142,182	142,182	142,182	142,182	142,182	142,182	142,182	142,182	142,182
DOE/NNSA Leased	-	-	-	-	-	-	-	-	-	-	-
DOE/NNSA Owned	60,008	60,008	60,008	60,008	10,468	10,468	10,468	10,468	10,468	10,468	10,468

Figure 7: Footprint Projection; Kirtland Operations