



Welcome to the CNS Partners in Excellence Workshop

Event Topics: CNS Strategic Infrastructure Vision, Supplier Success Story, Modernization Projects and Procurement Opportunities, and Roundtable Discussion

Note: You are muted when you first join the event and cannot unmute yourself. If you need assistance, please send a message to the Host via Chat.

If your audio is not functioning, please call in using the information below:

Phone Number: US Toll +1(415) 527-5035

Session Number: 2763 663 9533

Session Password: 2EHndXJQJ23 (23463957 for phone connections)

We Will Begin Shortly

General WebEx Information

Important Notes to Remember for All Participants:

- *Attendees are automatically set to Mute upon entering the workshop and cannot Unmute themselves unless given permission by the Host.*
- Keep these numbers accessible in case you loose connection.

Phone Number: US Toll +1(415) 527-5035

Session Number: 2763 663 9533

Session Password: 2EHndXJQJ23 (23463957 for phone connections)

- Communicate to Host, Panelists, an Individual and All Participants using the Chat option. Double check your selection before sending.
- View all attendees/participants by clicking on the menu item below your name.
- During Q&A sessions, questions should be sent to All Panelists. If questions are sent to another individual or group in the Chat menu, they may not be seen.
- During the Roundtable Discussion please use the “raise hand” feature so the Host can Unmute you to ask your question.
- If you need to communicate with a PIE Coordinator, please send a chat to Host.

Safety is Our Top Priority

Safety Message: October is Cybersecurity Awareness Month

- **Cybersecurity & Infrastructure Security Agency - www.cisa.dhs.gov**
- **“Do Your Part. #BeCyberSmart.”**
- **Some Examples**
 - Identify Theft
 - Child Sexual Abuse Materials
 - Financial Theft
 - Intellectual Property Violations
 - Malware, Ransomware, Bots
 - Malicious Social Engineering
 - Cyber Crime, Theft, Fraud
- **Password Tips**
 - Use different passwords on different systems and accounts
 - Use longest password allowed
 - Use a mix of upper & lower case letters, numbers and symbols
 - Reset password every few months
 - Use a password manager application

Agenda

Time (EDT)	Time (CST)		
2:00 p.m.	1:00 p.m.	Welcome	Greta Ownby, Y-12 Small Business Program Manager
2:05 p.m.	1:05 p.m.	Opening Comments, PIE Purpose, and Review	Cindy Morgan, CNS Director of Supply Chain Management – Business Management
2:10 p.m.	1:10 p.m.	CNS Strategic Infrastructure Vision	Jane Nations, Y-12 Master Planner, Enterprise Strategic Planning
		Question & Answer	Facilitated by Cindy Morgan
2:40 p.m.	1:40 p.m.	Supplier Spotlight: Being Successful in the Federal Contracting Environment	Ryan Overton, Executive Vice President GEM Technologies, Inc.
		Question & Answer	Facilitated by Greta Ownby
2:50 p.m.	1:50 p.m.	Pantex & Y-12 Construction & Design Opportunities	Ryan Atwell, Matt Crookshanks, Frank Keelty, Bret Sullivan, Ken Thompson, and Brian Zieroth CNS Projects & Construction
3:05 p.m.	2:05 p.m.	Procurement Opportunities	Rick Hillert, CNS Director Procurement Operations
		Question & Answer	Facilitated by Randy Crawford, Pantex Small Business Program Manager
3:15 p.m.	2:15 p.m.	Roundtable Discussion	CNS Leadership Jason Eaton, Rick Hillert, Josh McDaniel, Cindy Morgan, Kenny Steward, and Amy Wilson
3:50 p.m.	2:50 p.m.	Closing Comments	Jason Eaton, CNS Senior Director Supply Chain Management



Participant Poll #1

Have you ever attended a Partners in Excellence Workshop or Forum?

Yes or No



Opening Comments, PIE Purpose, and Review

Cindy Morgan

Cynthia.Morgan@cns.doe.gov

Director, Supply Chain Management – Business Management



Partners in Excellence (PIE)

Purpose

- **Supplier Outreach**
- **Support Infrastructure Modernization Goals**
- **Encourage Teaming/Partnering Amongst Contractors**

History

- **Started in 2018**
 - In-Person Events Conducted at Pantex and Y-12
 - Quarterly
 - Transitioned to Virtual in 2020 and Combined Pantex & Y-12
 - Every other Month

Topics and Networking

Topics Covered

- Quality Requirements
- Safety Requirements
- Foreign Ownership (FOCI) Process
- COVID Protocols
- Doing Business with CNS
- Construction & Design Opportunities
- Procurement Process
- Defense Priorities and Allocations System
- Supply Chain Challenges
- Information Protection
- ES&H Requirements
- Cyber Security
- Partnering
- Communicating with Buyers

Break Out Sessions, Panels, Round Tables = Networking

PIE Impact

- **8 In-Person PIE Workshops/Forums Conducted**
- **11 Virtual Workshops/Forums Conducted**
 - Schedule
- **More Than 2,000 Participants**

PIE Participants are TWICE as Likely to Receive an RFP



Strategic Infrastructure Vision 2021

Building on the Past. Adapting to the Present. Delivering for the Future.

Jane Nations

Jane.Nations@cns.doe.gov

Y-12 Master Planner, Enterprise Strategic Planning



Pantex Site



Y-12 Site



Our Vision — Strategic Infrastructure

For more than 75 years, Pantex and Y-12 have consistently demonstrated the ability to adapt to emerging needs and deliver for the nation. To continue this legacy of excellence and provide enduring value to the nation, we are committed to modernizing our infrastructure in support of the two aspirational goals outlined in the Pantex and Y-12 Strategic Vision:

1. By 2040, we will have the capability to reliably fabricate any component, build any weapon, and qualify any system on any day.
2. We will execute a progressive digital transformation strategy that enables smart, real-time, data-driven operations.

STRATEGIC

TACTICAL

NNSA Strategic Vision/Roadmap



Identifies as Mission Priority #5 the modernization of the national security infrastructure

Pantex and Y-12 Vision/Strategic Plan



Identifies infrastructure investments to meet mission priorities

Pantex and Y-12 Master Site Plans



Identifies infrastructure investments that support site level mission priorities

Pantex and Y-12 Business Operating /Area Plans



Identifies annual manageable infrastructure plans by site/organization

Objectives and Strategies

Our long-term infrastructure objectives and strategies align with our five Centers of Excellence, as well as the cross-cutting facilities that support and enable them. This vision, and the detailed objectives outlined in the Pantex Master Site Plan and Y-12 Master Site Plan, will ensure Pantex and Y-12 have the smart, agile, and efficient facilities to deliver whatever the nation needs for the next 75 years.



Uranium Processing and Applications

We provide depleted and enriched uranium materials, components, and expertise for the U.S. nuclear stockpile, U.S. nuclear Navy, strategic partners, and various global security efforts.



High Explosives Manufacturing

We produce, qualify, and surveillance test all high explosive main charge and booster pellets for every nuclear weapon in the U.S. stockpile.



Weapons Assembly/Disassembly

We safely assemble and disassemble nuclear weapons, and their components, for all stockpile refurbishment, surveillance, and dismantlement programs.



Lithium Processing and Applications

We recover, recycle, and produce lithium materials and components, an essential element in every U.S. thermonuclear weapon.




Special Nuclear Material Security

We track, monitor, and safeguard valuable and hazardous strategic materials—in operating environments, in storage, and in transit between facilities—and share our expertise and technologies with agencies around the world to reduce global nuclear threats.

Our Approach — Infrastructure Excellence

The majority of our operations are conducted in buildings built during—and designed for—World War II and the ensuing Cold War. As a result, our infrastructure is not well-equipped to provide the responsive capabilities necessary to address emerging needs in today's dynamic geopolitical landscape. Moreover, the conditions of many of our essential facilities pose significant risk to continued mission delivery.



Ultimately, we must have a smaller, more efficient footprint that enables reliable and responsive operations within each of our Centers of Excellence.

Strategy: Build, Sustain, Reduce

Our balanced infrastructure transformation strategy is built around three major elements:



Pantex and Y-12 are currently executing the largest number of line item and capital construction projects since our inception. The new buildings will provide state-of-the-art capabilities and technologies, including built-in equipment-maintainability and -condition monitoring. To deliver this impressive set of new facilities, we are implementing enhanced project management capabilities and deploying a variety of standard and innovative acquisition strategies.



As we transition much of our vital operations to new facilities, we continue to stabilize and improve existing infrastructure through risk-informed prioritization of investments, targeted upgrades, and proactive maintenance. These efforts will also provide a capability bridge that sustains reliable, uninterrupted operations in aging facilities until new facilities are built or acquired.





More than 2.5M square feet of infrastructure—about 10% of the buildings at Pantex and 33% at Y-12—are considered excess to current and anticipated needs. Within the next decade, our sites will contain more than 240 excess facilities. Demolishing these legacy facilities will reduce risks and maintenance costs while repurposing space for new construction.

Uranium Processing & Applications Infrastructure

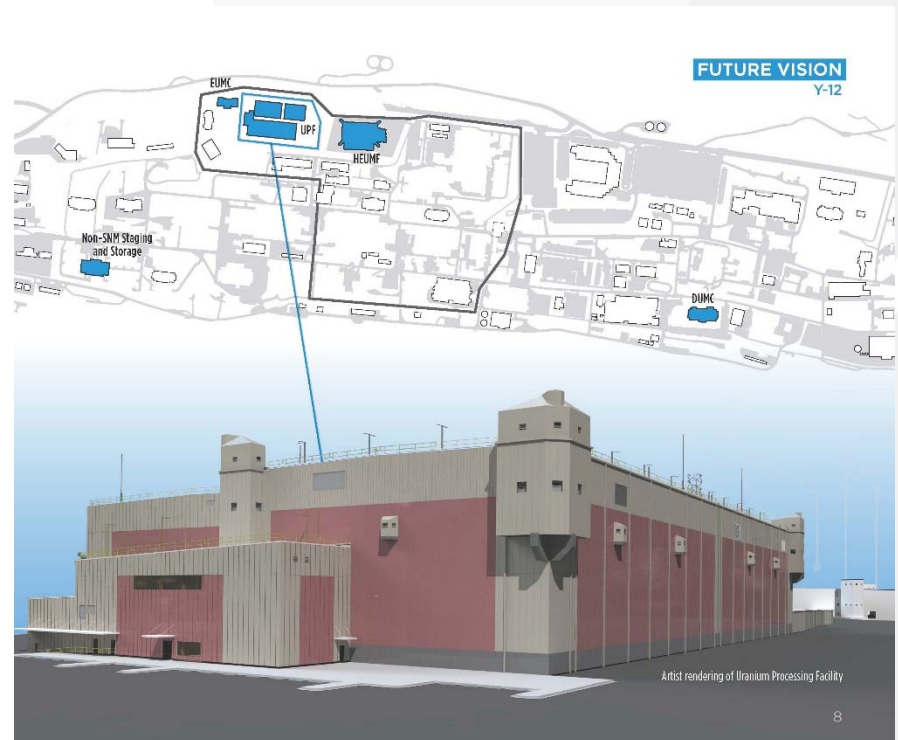


Y-12's uranium infrastructure has served the nation since 1943, producing uranium components for every weapon in the U.S. stockpile; supplying material to fuel the U.S. Navy's nuclear fleet; and supporting the world's commercial, research, and isotope-production reactors.

 UPF, Enriched Uranium Manufacturing Center (EUMC), and Depleted Uranium Manufacturing Capability (DUMC)

 Enduring and bridging facilities, including Buildings 9215, 9204-2E, and 9995

 Building 9212 Complex



High Explosives Manufacturing Infrastructure

Currently operates in 24 critical facilities to deliver production, qualification, and surveillance testing of all high explosive main charge and booster pellets for every nuclear weapon in the U.S. stockpile.



Build new facilities to consolidate and modernize operations



Sustain and revitalize enduring facilities, process equipment, and utilities.



Increase machining capacity, efficiency, and agility to support demand



Reduce legacy risk by demolishing multiple facilities that will become excess when HESE and HESFP are operational



Weapons Assembly/Disassembly Infrastructure

The Pantex bays and cells are the only places in the nation authorized for the full assembly and disassembly of nuclear weapons, and Y-12's Building 9204-2E provides the only capability for the assembly, disassembly, and quality evaluation of nuclear weapons' canned subassemblies. Aging facilities again threatens both sites.



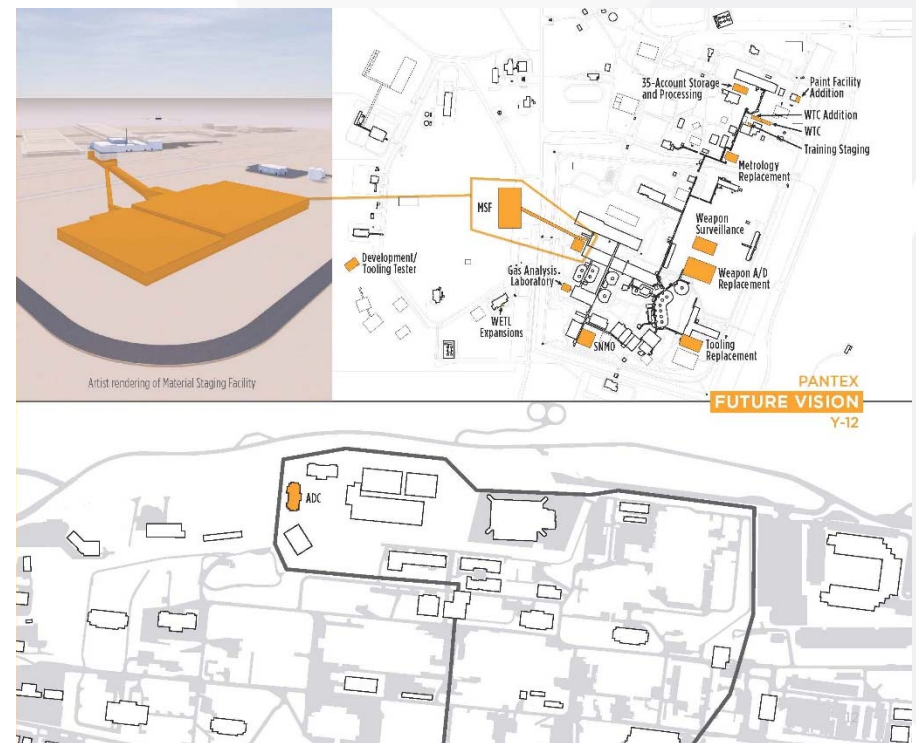
Build several new facilities at Pantex and Y-12 to provide greater flexibility and agility, including developing new bays and cells and modernizing existing ones



Extend the life of Y-12 Building 9204-2E



Demolish Pantex Zone 4 MAA buildings, Building 12-021, and multiple facilities replaced by out-year construction projects



Lithium Processing and Applications Infrastructure



Without the Lithium Center of Excellence, the United States cannot maintain nuclear deterrent. Current lithium operations are conducted in a significantly decaying facility built in 1943, using partially operable equipment and processes.



Lithium Processing Facility (LPF) to sustain advanced and agile lithium capabilities



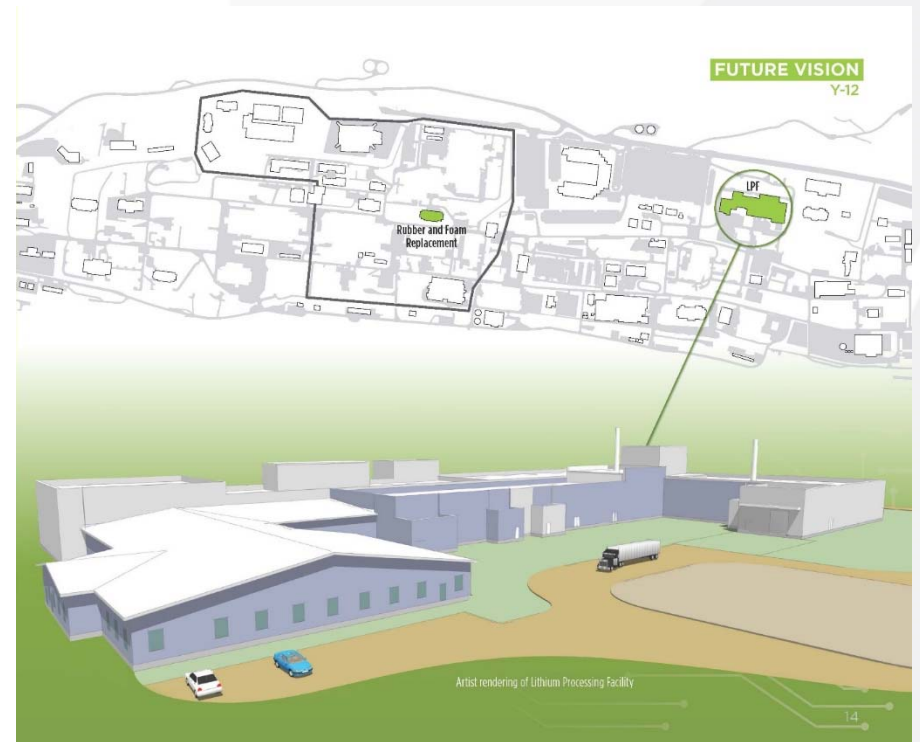
Current lithium infrastructure through equipment replacements, utility upgrades, and other infrastructure investments



Demolish the Biology Complex to create available footprint for LPF



Building 9204-02 facility after LPF construction



SNM Security Infrastructure

Pantex and Y-12 can only deliver our missions under the effective, reliable protections afforded by the SNM Security Center of Excellence. We must execute the Security Infrastructure Revitalization Program



Build enhanced training facilities and replace aging security systems inside the Protected and Material Access Areas (Interior Intrusion Detection Systems)

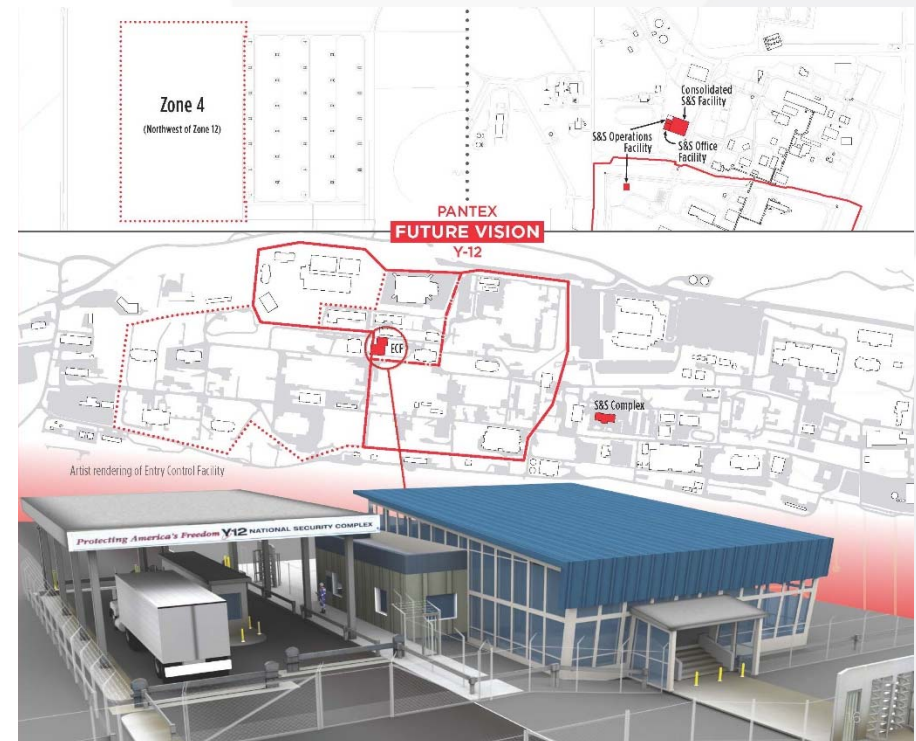


Perform life-cycle replacement of the Pantex Zone 4 and Zone 12 and the Y-12 Perimeter Intrusion Detection and Assessment Systems (PIDAS)



High-security footprint, increase security operations efficiency, and reduce legacy facility decontamination and decommissioning costs:

- Complete the Y-12 West End Protected Area Reduction project
- Remove Pantex Zone 4 PIDAS after construction of the Material Staging Facility



Cross-Cutting Infrastructure

Delivering the capabilities that comprise our five centers of excellence requires support from mission-enabling functions and facilities across our enterprise.



Build and acquire new facilities for laboratories, offices, maintenance shops, storage, parking, and emergency response functions



Implement digital transformation technology to provide enhanced networking, modeling and simulation capability, and virtualized delivery of all elements of IT infrastructure



Enduring infrastructure through office renovations, targeted utility upgrades, and extended life programs for enduring facilities



Legacy risk by demolishing excess facilities, constructing new maintenance and waste management facilities, and facilitating legacy risk reduction via the Mercury



Treatment Facility (MTF) and Environmental Management Disposal Facility (EMDF)



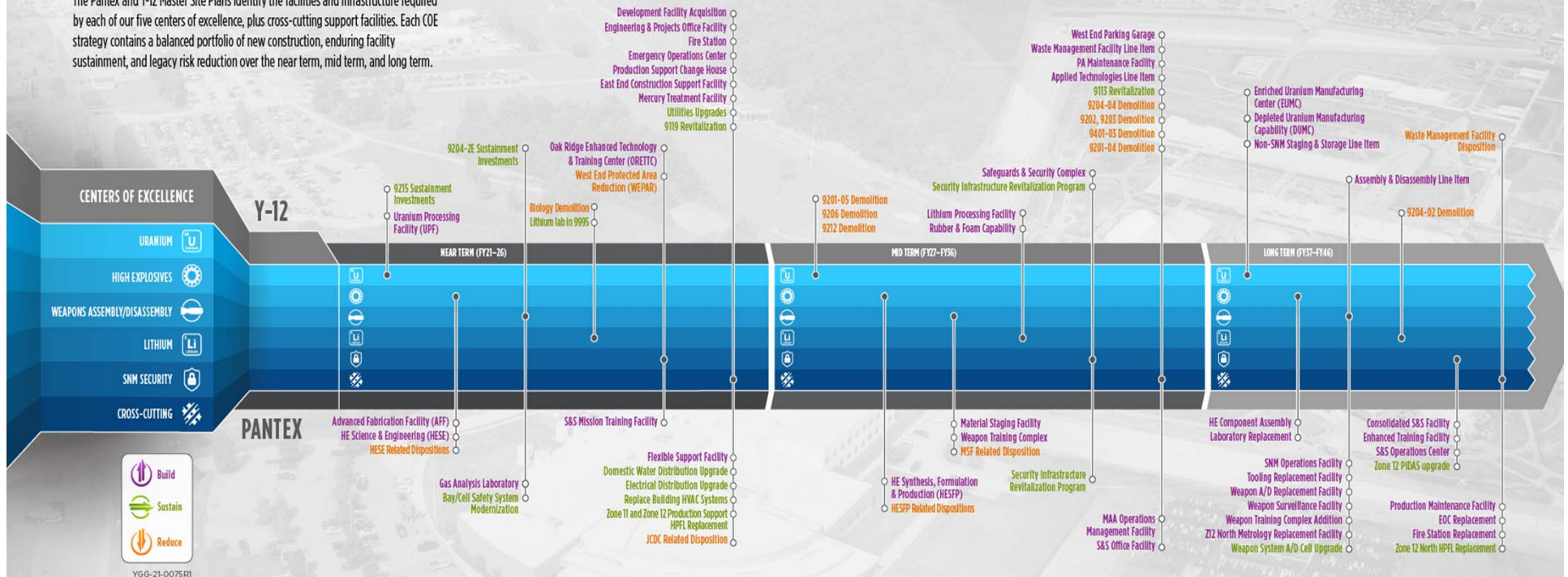
Pantex and Y-12 in 2050

- Newly constructed, state-of-the-art facilities support efficient, adaptable high explosives, uranium, and lithium missions
- Modernized Pantex bays and cells and a life-extended Y-12 Building 9204-2E provide a safe capability bridge as long-term weapon assembly/disassembly facilities are constructed
- Re-established and expanded material capabilities provide greater mission agility and resiliency
- Recapitalized and transformed footprint delivers improved security posture
- Demolition of more than 3 million gross square feet of excess facilities clears the way for new construction and allows for remediation of legacy environmental threats
- Reliability-centered and condition-based maintenance models provide real-time data on equipment and processes, enabling better decision making and fewer unplanned outages
- Contemporary, technologically enhanced office environments and flexible workplace opportunities engage and accommodate the workforce of the future
- Modern IT infrastructure delivers enhanced and virtualized networking, storage, central processing, and security capabilities in a digitally transformed environment

Roadmap — Centers of Excellence (COEs) Infrastructure

To achieve our vision, we will execute a balanced infrastructure transformation strategy built around three major elements:

The Pantex and Y-12 Master Site Plans identify the facilities and infrastructure required by each of our five centers of excellence, plus cross-cutting support facilities. Each COE strategy contains a balanced portfolio of new construction, enduring facility sustainment, and legacy risk reduction over the near term, mid term, and long term.





Question & Answer



Best Practices for Subcontractors Supporting CNS Operations at Pantex & Y-12 National Security Complex



Ryan Overton
Executive Vice President
ROverton@GEMTechnologiesInc.com
(865) 399-4229

About GEM Technologies



- ▶ 20 years of performance history supporting Y-12 National Security Complex and 7 years supporting the Pantex Plant
- ▶ 300+ employees executing over \$40M annually in support of DOE/NNSA missions
- ▶ \$50M total aggregate bonding capacity
- ▶ 5 offices nationwide including Amarillo, TX and Knoxville, TN
- ▶ Currently providing Environmental, Construction, Infrastructure Support, and Technical & Engineering Services to Consolidated Nuclear Security

Photos used courtesy of Consolidated Nuclear Security and DOE



Key Business Service Lines



Technical Services



Construction & Demolition



Facilities & Infrastructure



Environmental Services



Photos used courtesy of Consolidated Nuclear Security and DOE-EM



What has GEM done to be successful?



- We measure success in terms of safety, quality of work, and responsiveness to plant needs
- We have slowly expanded our corporate resources over time
- We team in areas that we'd like to expand

Photo used courtesy of Consolidated Nuclear Security



What has GEM found are the most effective and efficient methods for finding contracts to bid on?



- Attend forums like this!
- Get to know the site's Small Business Program Managers
- Research the major players at each site
- Ensure your organization is on the bid list



Tips for Networking in a Virtual Environment



- Request debriefs after every proposal submission
- Look for opportunities to establish personal relationships via email
- Turn on your camera!

Questions?



2018 Small Business of the Year Award

GEM
TECHNOLOGIES, INC.

Ryan Overton
Executive Vice President
ROverton@GEMTechnologiesInc.com
(865) 399-4229

Susanna Waters
Director of Business
Development
SWaters@GEMTechnologiesInc.com
(865) 805-6526



Question & Answer



Participant Poll #2

Has your business received a Request for Proposal, Bid for Products/Supplies or Request for Qualifications in the last 12 months?

Yes or No



CNS Construction & Design Opportunities

Ryan Atwell

Ryan.Atwell@cns.doe.gov

Bret Sullivan

Bret.Sullivan@cns.doe.gov

Matt Crookshanks

Matthew.D.Crookshanks@cns.doe.gov

Ken Thompson

Clyde.Thompson@cns.doe.gov

Frank Keelty

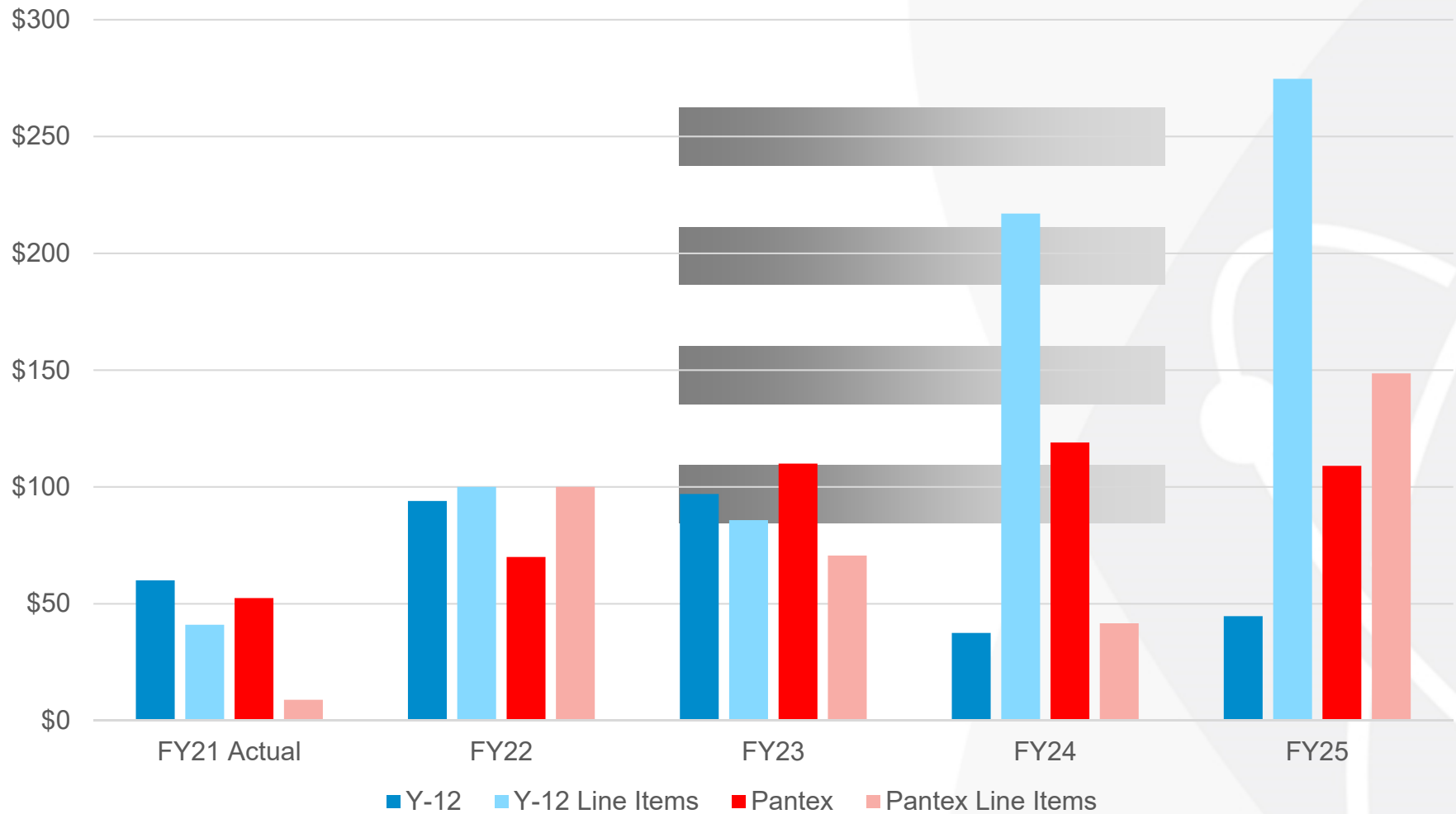
Frank.Keelty@cns.doe.gov

Brian Zieroth

Brian.Zieroth@cns.doe.gov

FY21 through FY25 Pantex & Y-12 Projections

Forecasted Expenditures for Design & Construction (\$M)



Pantex Opportunities FY22-26

➤ High Explosives Manufacturing Infrastructure

- High Explosive Science & Engineering (HESE) (CY – 2025)
 - Replace multiple facilities with an HE lab, HE staging facility, and technology development and deployment lab to support critical HE production.
- HESE Related Dispositions (2025 – 2027)
 - Demolishment of approximately 23 facilities made excess by the construction of the HESE
- HE Synthesis, Formulation, and Production [Facility] (HESFP) (CY – 2027)
 - Replace multiple facilities to support HE synthesis, formulation, and blending.

➤ Fire Protection

- High Pressure Fire Loop (HPFL) Replacements / New Installations (2023 – 2027)
 - Approximately 7-10 projects planned to replace HPFLs / install new runs
- Several other projects related to fire protection (2022-2027)
 - Replacement of hydrants, dampers, sprinkler systems, etc.
 - New Fire Water Tank and Pump House (2025)

Pantex Opportunities FY22-26

➤ SNM Security Infrastructure

- Security Infrastructure Revitalization Program (SIRP) (CY – 2030)
 - Perform life-cycle replacements of legacy Perimeter Intrusion Detection and Assessment Systems (PIDAS). Includes sensors, electronics, cabling, fencing, lighting, camera towers, and other associated components.
 - Several projects (starting in mid/late 2022) to take place related to PIDAS fence, security gates, other security features.
 - Zone 4 PIDAS
 - Zone 12 PIDAS

➤ Infrastructure

- Electrical Distribution Upgrade (CY – 2027)
 - Multiple projects that involve electrical distribution system designs, new installations, and replacements for underground cabling, overhead distribution lines, capacitor banks and controllers generators, light poles, light fixtures, switchgears, equipment housing, and other associated gear.
- Facility HVAC System Replacements (CY – 2027)
 - Approximately 10 design/build projects that range from HVAC system replacement/upgrades to Chiller replacements.
- Domestic Water Distribution Upgrade (CY – 2028)
 - Several projects to update the domestic water system throughout the facility
 - Improvement to drainage systems and waste water systems
- New facilities being designed and constructed (2022 – 2027)
 - Maintenance facility, flexible project support facility, storage facility/warehouse, change house/laundry facility, fire response training station, emergency response vehicle storage facility, etc.

Y-12 Opportunities FY22-26

➤ Uranium Processing & Applications Infrastructure

- Uranium Processing Facility (UPF) (CY – 2025)
 - Construction of a multi-facility complex to support enriched uranium processing operations.
- 9215, 9204-2E, and 9995 Sustainment Projects (CY – 2026)
 - Repair, upgrade, and replace type projects to support continued operations and meeting current code and safety requirements.
 - 9215 – Wall repairs, ductwork, sprinkler systems, u/g cable replacement, fire & water service laterals.
 - 9204-2E –sprinkler systems, airlock & hood replacement.
 - 9995 – Fan replacement.

➤ Lithium Processing and Applications Infrastructure

- Lithium Processing Facility (LPF) (CY – 3031)
 - Construction of a new manufacturing facility to relocate lithium operations and processes from current building to ensure safe and reliable operation.

➤ SNM Security Infrastructure

- West End Protected Area Reduction (WEPAR) (2021 – 2023)
 - Perimeter Intrusion Detection and Assessment Systems (PIDAS) installation, installation of new entry control facility with vehicle portal, removal of legacy PIDAS, and security upgrades to 5 building areas.



Procurement Opportunities

Rick Hillert

Ricky.Hillert@cns.doe.gov

CNS Director Procurement Operations



Procurement Opportunities (Pantex) FY22

Project	Comp Type	Est Price	Est Date	Comment
Project Design Services	Full & Open	\$1 - \$10 M	Q1 FY22	Architect & Engineering.
Lightning Protection System Repair 10MAA Facilities	Small Business Set-aside	\$1 - \$10 M	Q1 FY22	Construction
Zone 12 CAS/SAS Revitalization	TBD	\$1 - \$10 M	Q1 FY22	Construction/Architect/Engineering
12-108 & 4-147 Fuel Storage Tank Replacement	Full & Open	\$1 - \$10 M	Q1 FY22	Construction
PREP Feeder to North Main Substation	Full & Open	\$1 - \$10 M	Q1 FY22	Construction
Environmental Chambers & Equip Skids	Small Business Set-aside	\$250K - \$1M	Q3 FY22	Construction

Procurement Opportunities (Y-12) FY22

Project	Comp Type	Est Price	Est Date	Comment
Lithium Processing Facility CMAR	Full and Open	\$500M - \$1B	Q1 FY22	Construction Management
Lithium Processing Facility Glovebox Doors	TBD	TBD	Q1 FY22	Fabricated Equipment
Lithium Processing Facility Glovebox HMG Furnace	TBD	TBD	Q1 FY22	Fabricated Equipment
Concrete	Full & Open	\$250K - \$1M	Q2 FY22	Building Materials

Additional Forecast Details

CNS Procurement provides the forecast of subcontracting opportunities for FY 2021 and FY2022. Keep in mind that these requirements may be revised or cancelled, depending on program budget funding or departmental needs.

If you have questions or would like to express an interest in any of the opportunities listed in the previous slides, contact procurement@pantex.com (Pantex) or procurement@y12.doe.gov (Y-12).

System for Award Management

All Offerors must be registered with The System for Award Management (SAM). To obtain registration forms, call the System for Award Management Registration Assistance Office at (866) 606-8220. Offerors may also register on line via the internet on the SAM website (<http://www.sam.gov>). Offerors not registered will be ineligible for award.

CNS Forecast Site

<https://www.y12.doe.gov/suppliers/procurement/subcontracting/subcontracting-forecasts/cns-forecast>



Question & Answer



Roundtable Discussion with CNS Leadership

To ask a question, use the Raise Hand feature.

Questions will be answered first come, first served basis.



Closing Comments

Jason Eaton

Jason.Eaton@cns.doe.gov

Senior Director CNS Supply Chain Management





Copyright Notice

This document has been authored by Consolidated Nuclear Security, LLC, a contractor of the U.S. Government under contract DE-NA0001942, or a subcontractor thereof. Accordingly, the U.S. Government retains a paid-up, nonexclusive, irrevocable, worldwide license to publish or reproduce the published form of this contribution, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, or allow others to do so, for U. S. Government purposes.

Disclaimer

This work of authorship and those incorporated herein were prepared by Consolidated Nuclear Security, LLC (CNS) as accounts of work sponsored by an agency of the United States Government under Contract DE-NA0001942. Neither the United States Government nor any agency thereof, nor CNS, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility to any non-governmental recipient hereof for the accuracy, completeness, use made, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency or contractor thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency or contractor (other than the authors) thereof