



# Tyndall Airforce Base Redevelopment Bechtel National, Inc.

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# MOBILIZATION, WORKFORCE HOUSING, AND GLOBAL SUPPLY CHAINS





# Planning Ahead

- In coordination with key stakeholders, the mobilization team must plan, develop, and coordinate critical areas such as:
  - Infrastructure readiness
  - Construction areas and access
  - Safety standards and preparedness
  - Workforce and equipment productivity
  - Ongoing mission operations
  - Security
  - Impacts to local community





# Mobilization

- The Tyndall redevelopment will require the rapid but organized mobilization of a large workforce
- Initial mobilization tasks will include:
  - Recruiting manual and non-manual workforce
  - Targeting local and national areas
  - Implementing on-boarding process
  - Establishing housing, workspaces, and support services
  - Developing site-specific training, including safety and quality expectations
  - Deploying personnel and equipment to the site
  - Continue recruitment and development





# Housing of the Workforce



- Assess site conditions, space availability, size of labor force & customer requirements
- Select optimal locations for high performance
- Determine best housing for workforce, such as:
  - Full-service camps
  - Temporary Housing Units (THUs)
  - Local community and development programs
  - Transportation hubs
  - Remote / alternate work locations
- Work with local authorities to manage change of conditions to the area





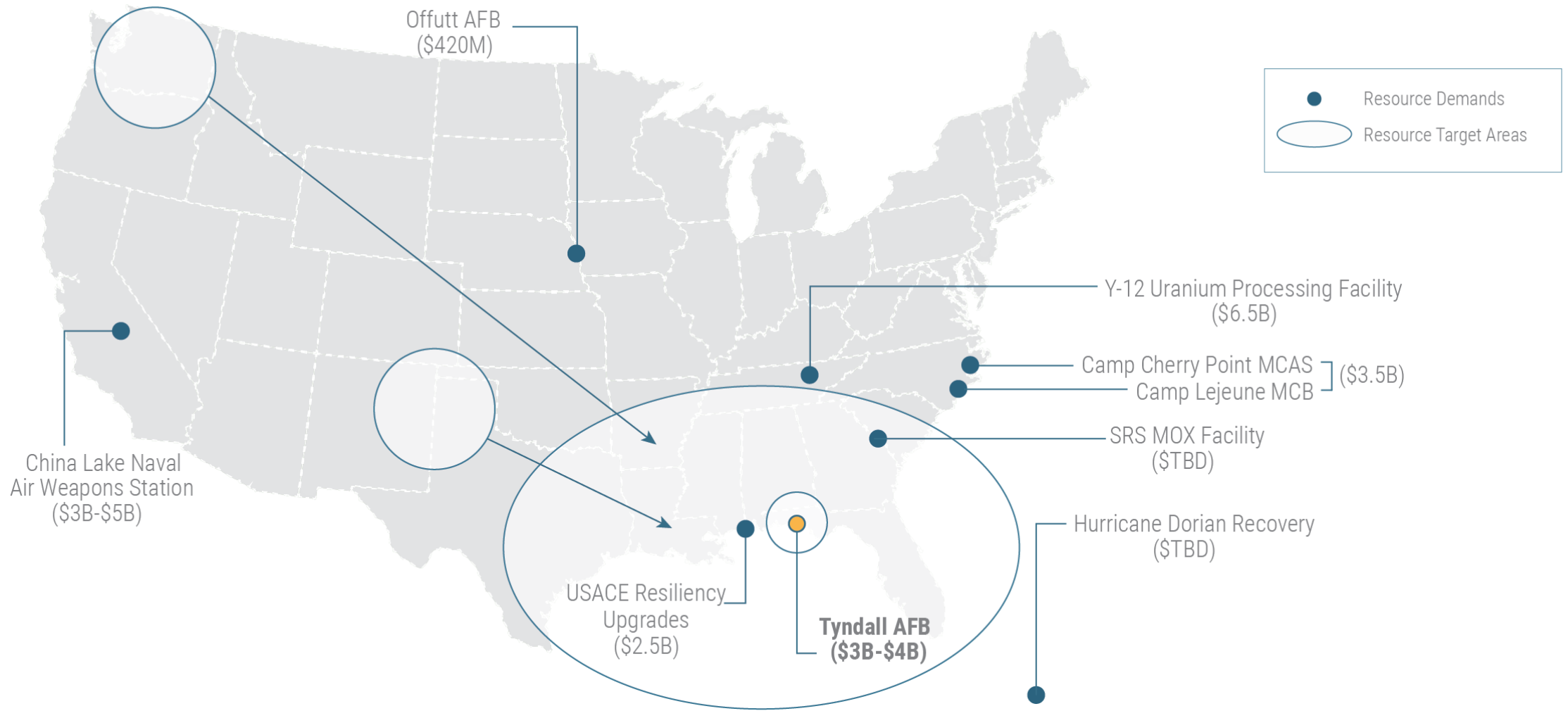
# Resourcing

- Perform labor availability studies and recruit from:
  - Local workforce
  - Mobilization from other jobsites in region (e.g. Vogtle)
  - Expansion of the recruitment radius as needed
- Ensure qualifications and skills
- Compete for qualified resources, which will require:
  - Desire to work at Tyndall
  - Optimal living conditions and services
  - Safe work environment
  - Ongoing training and development
  - Competitive compensation





# Craft Resourcing Options and Challenges





# Global Supply Chain

- Global supply chain capabilities should include:
  - Coordination with prequalified selected suppliers
  - Negotiation of material contrast early in the process
  - Regional in-shop inspectors to reduce fabrication errors and manage fabrication quality and delivery schedules
  - Shop storage and just-in-time delivery
  - Maximization of Prefab delivery
  - Well-planned site logistics and execution
    - » Optimization of materials laydown
    - » Use of radio frequency identification and tagging
  - Onsite and independently operated batch plants and other services



rigging services



traffic & logistics



construction equipment



shop surveillance





# Supply Chain Management

## Digital Supply Chain System (DSCS)

- Provides real-time information from suppliers to the project team
- Consists of supply chain modules that facilitate:
  - » Requisitioning
  - » Sourcing
  - » Purchasing/contracts
  - » Expediting
  - » Receiving
  - » Inventory management
  - » Issuance to construction
- Identifies strategic sources based on historical data
- Creates supplier risk profiles based on past performance
- Benchmarks cost, quality & lead time data





# Offsite Fabrication and Modularization

- Leverage offsite modularization assembly facilities to meet aggressive schedule
- Multiple work fronts improve efficiency
- A good modularization program:
  - Creates a less congested worksite
  - Reduces site construction manual workforce
  - Improves quality by moving work to a more controlled environment
  - Reduces testing and startup time
  - Reduces the need to house as many workers locally





# Transportation of Materials to Site



- Transportation of large construction elements via:
  - Rail
  - Barges
  - Trucks
- Support modularization and offsite fabrication
- Maximize bulk material delivery
- Further reduction of onsite congestion
- Photos depict material transport via:
  - Trucking for the Ground-Based Midcourse Deterrent (GMD) Program
  - Rail for the SS-24 ICBM Silo Dismantlement
  - Barge for Gladstone LNG





# Unified Safety and Quality Programs

## Establish site-wide programs, such as:

- Safety protocols across the site
- Quality Control and material accountability
- Contract management
- Change control and root cause analysis
- Risk management and mitigation strategies
- Performance monitoring and reporting

