



Homeland  
Security

# CG Yard

## “Service to the Fleet”

United States  
Coast Guard



### **Yard Workforce: 679 Total**

→ 12 Trade Shops

~ 415 Production Craftsmen

~ 120 Mgrs, Engineers & Support

**Yard Working Capital Fund: \$115M**

**Full Service Industrial Facility**

### **Top 5 Yard Functions:**

1. Renovation Projects (ISVS)
2. Recurring & Emergency Availabilities
3. Remanufacturing & Repairables
4. Detailed Design & Engineering
5. Base Support for 14 Tenant Units



Homeland Security

# 124 Years of Service to Our Nation

United States Coast Guard



Assistant Commandant for Engineering and Logistics (CG-4)



# CG Yard Major Business Lines



- In Service Vessel Sustainment Project** – Perform Service Life Extension Projects (SLEP) and Major Maintenance Availabilities (MMA) on select cutter classes

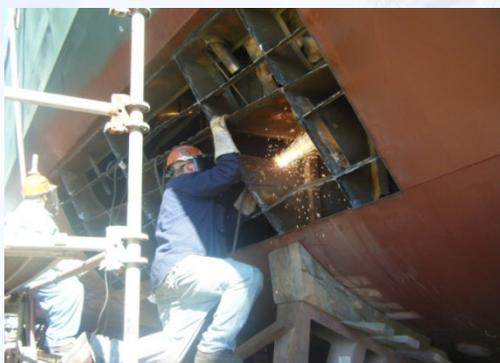




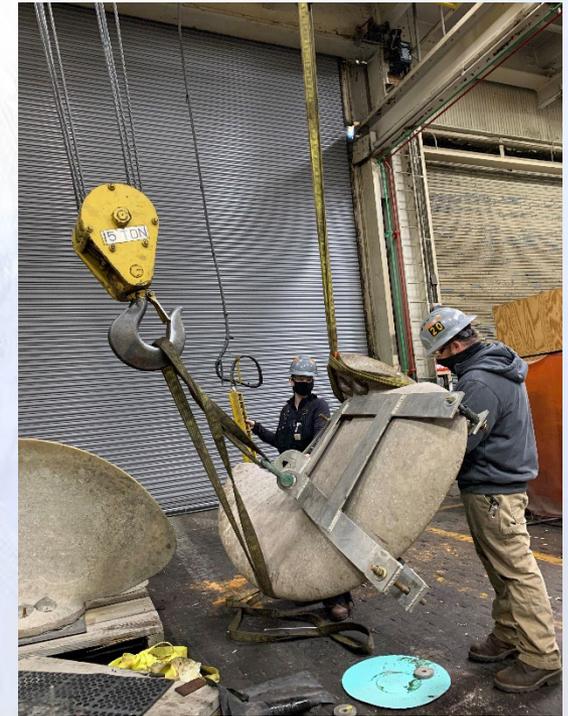
# CG Yard Major Business Lines



- **Patrol Boat Recurring Depot Availability Program** – Perform recurring drydock availabilities on East Coast 87-foot patrol boats, including crew rotation – saving >\$2M/year & improving operational readiness



- CG component overhaul & repairs – In Shop and On-the-Road: Manufacture and repair CG-unique parts for CG cutters and boats; overhaul gun weapons systems, electronics & other cutter systems



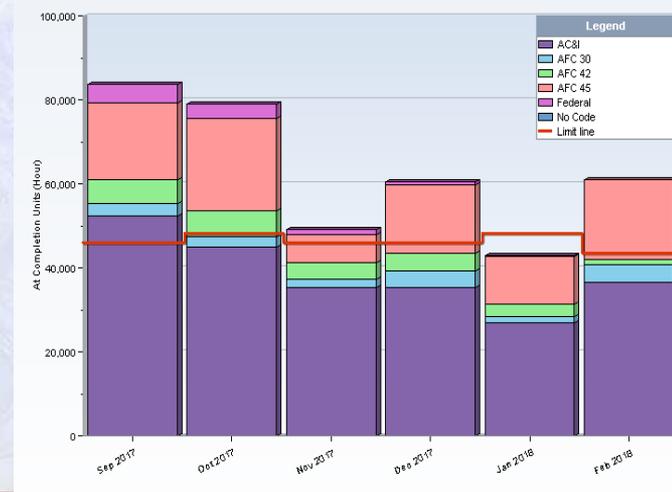


- **Other Government Agency Work** – Perform service life extensions & recurring maintenance availabilities for U.S. Navy & other partners





- **Working Capital Fund (Title 14 U. S. Code, Section 939)**
  - Expenses are covered by revenue generated by work
  - CG Yard functions as a “not for profit” business
- **Competitive Edge**
  - Fourth and fifth generation employees
  - Deep organic Technical Expertise with extensive knowledge
  - Co-location with \$863M inventory at Inventory Control Point
  - Co-location with SFLC leadership
  - Contracting timelines
- **Planning Yard Engineering**
  - Detail design & Updated Drawings
- **Work Load Forecasting**
  - Surge capacity to meet CG / DHS / OGA needs
  - Out-year planning 14 years into future





- **Ship Lift Capacity & Environmental Improvements - COMPLETE**
  - T. Roland Lewis Shiplift Expansion Project
  - Stormwater treatment system
- **MTU Central Engine Overhaul Facility – IOC (supply chain)**
  - Capacity for up to 12 overhauls per year
- **Depot Management System (DPOMS) – IOC (interfaces)**
  - Web-based enterprise management of work portfolio
  - Real time, CFO compliant, detailed cost accounting
- **154' WPC Recurring Depot Availability Program (RDAP) – Awarded**
- **Major Cutter Ship Handling Capability – CG Authorization Act**
  - Floating Dry Dock & Shipyard Infrastructure Optimization Plan (SIOP)
- **Workforce Recruiting & Talent Management - Ongoing**
  - Community Outreach, Internships & OPM Pathways Program
- **Technology Integration - Ongoing**





# Recent/In-Progress Infrastructure Improvements at CG Yard

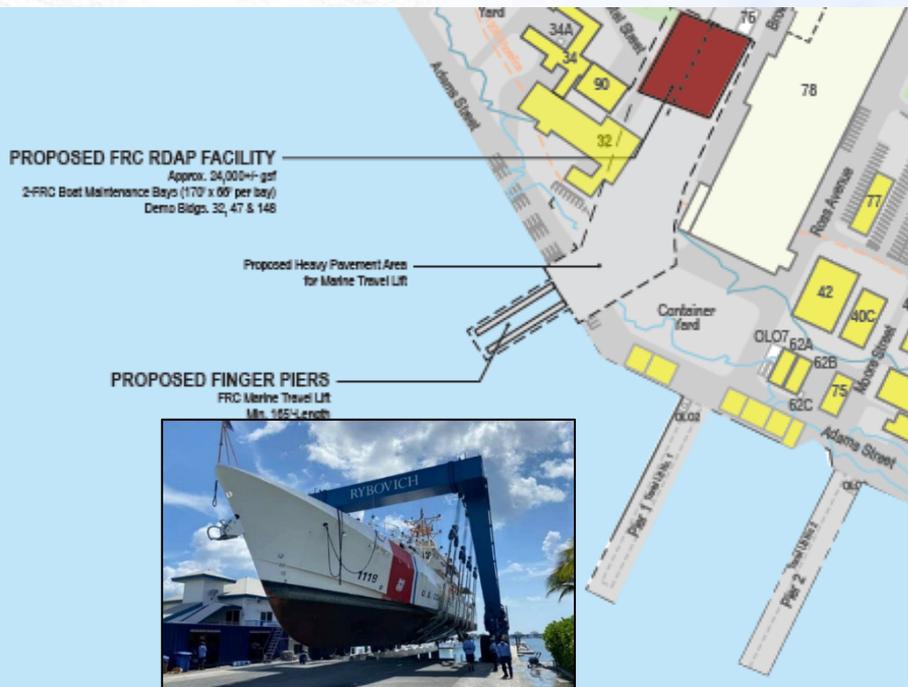


## T. Roland Lewis Shiplift Expansion



- \$26 million **FY16** appropriation
- Fills gap left by decom of ex-USS OAKRIDGE
- Adds 355 foot 3<sup>rd</sup> rail & advanced enviro filters
- Unable to lift 360' OPCs or 418' WMSLs

## 154' WPC Recurring Depot Availability Program (RDAP) Facility

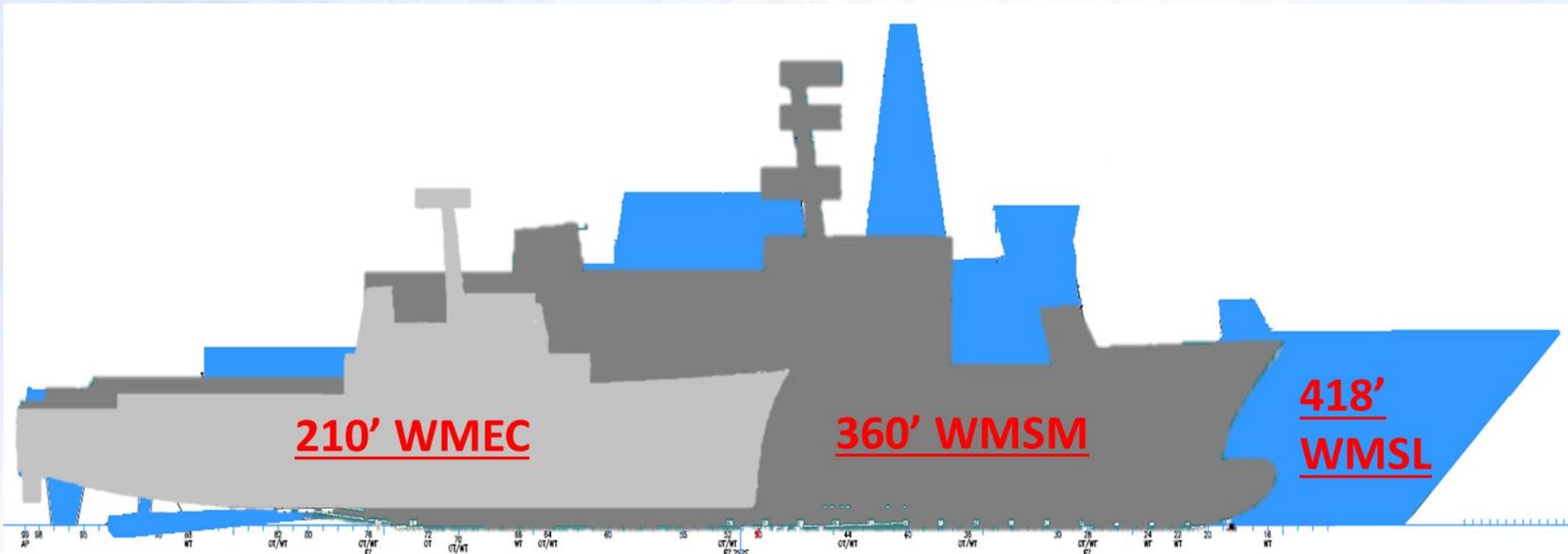


- \$22.5 million **FY19** appropriation
- RFP is currently being solicited by CG FDCC
- Commissioning by 4<sup>th</sup> Qtr FY24





# Major Cutter Comparison





## Declining Commercial Shipyard Industry

- DoD and Jones Act support is finite
- 16 companies with **29 total dry docks** constitute the entire US commercial ship repair industry that can service our anticipated 37 WMSL/OPC fleet

## Increasing Competition

- Expanding U.S. Navy fleet size
  - *Currently 19 cruisers, 57 destroyers, 22 LCSs in Navy Fleet competing for same dry dock space*
- Smaller ship repair yards are not making large capital investments for future CG fleet

## Future Service Need Grows

- Dry docking capacity for 360' OPC & 418' WMSL
- Emergency dry docking capacity
- 418' WMSL MMA starting by 2030
  - *Most important resources = Skilled Workforce + Robust Knowledge Base + Dry Dock Capacity*

## US Commercial Dry Dock Capacity

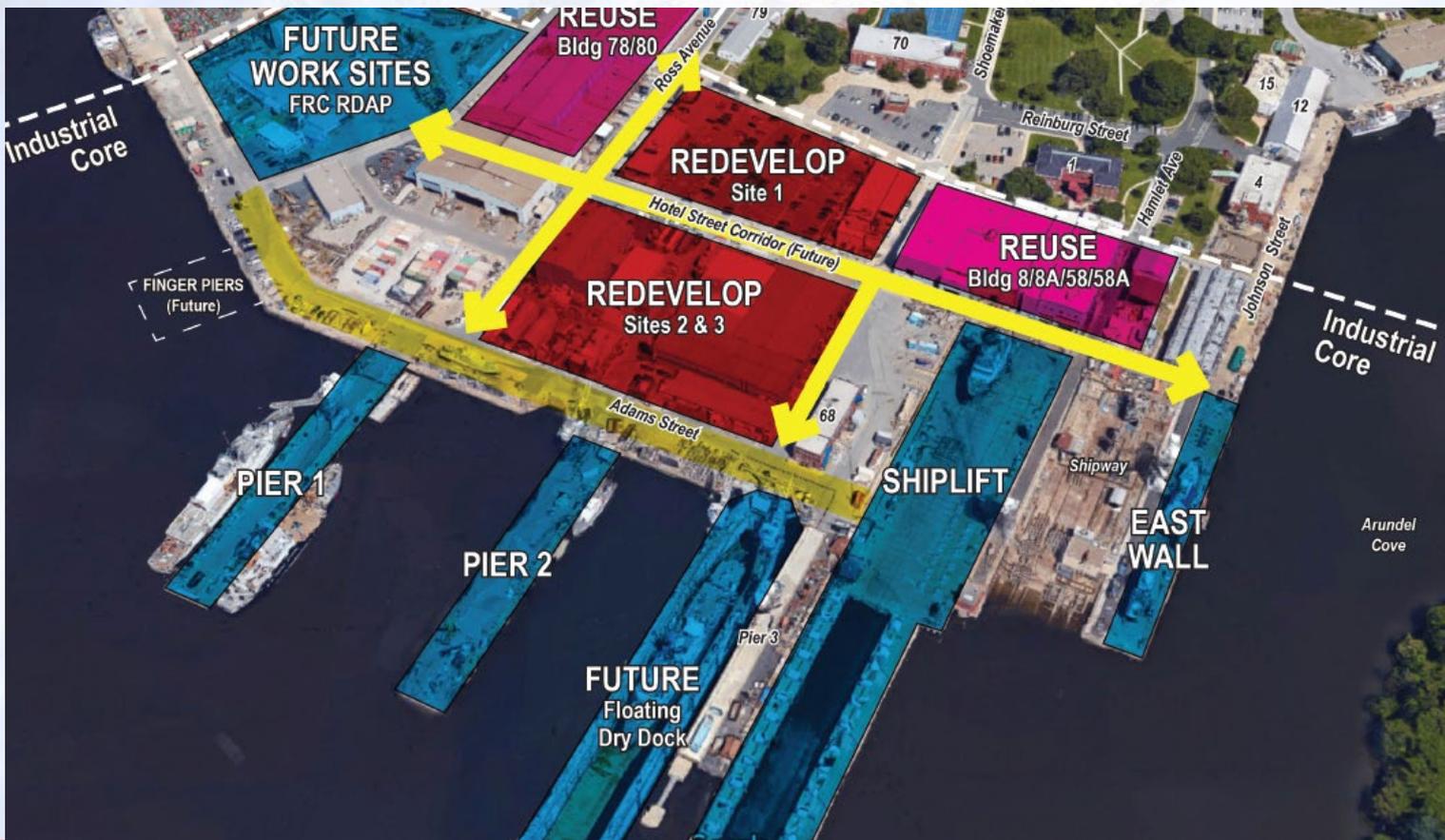
	WMEC Capable	WMSL/OPC Capable	Change
East Coast	30	16	-14
West Coast	21	13	-8
Total	51	29	-22

*Source: Data from SFLC's dry dock certification list and majority of included dry docks certifications are expired.*

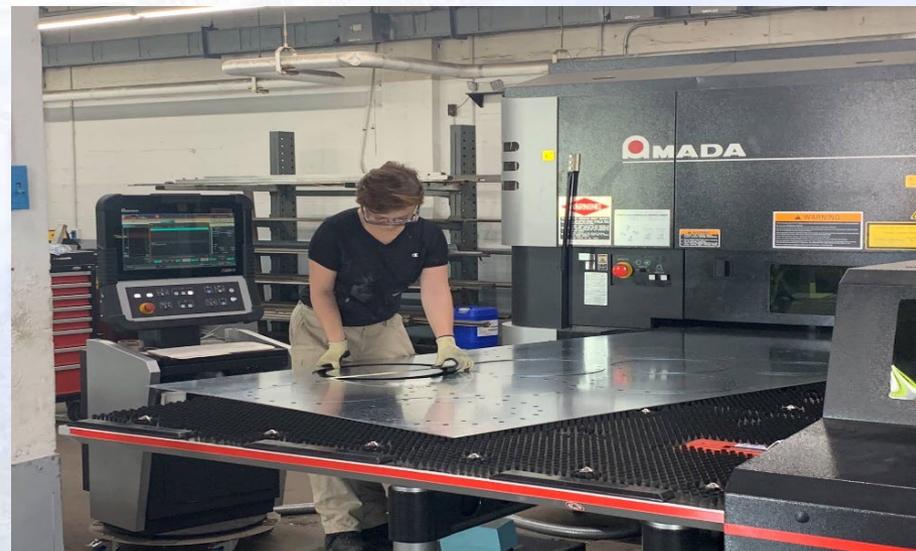




## Major Cutter Shiphandling Capability (MCSC) & Shipyard Infrastructure Optimization Plan (SIOP)



- **Workforce unsustainable** – Insufficient pipeline of tradespeople
- **Past hiring practices** – Dominated by hiring experienced workers from local shipyards – no longer viable
- **Hiring entry level engineers** – Salaries not competitive with industry for hiring naval architects and mechanical, electrical, and structural engineers
- **Overall Intent** – Develop and retain a diverse and capable workforce through innovative use of internship and apprenticeship programs
- **Partnerships with local community** – Establish WG and GS positions for students attending regional accredited vocational-technical schools or colleges



**Laser Cutting Machine**



# Current Programs



- **City of Baltimore – New Era Academy (NEA) → Digital harbor High School**
  - Mentor up to 12 interns each summer for 5 to 8 weeks
  - Digital Harbor is in an underprivileged community of Baltimore City
  - Funding comes from Port Covington and YouthWorks via City of Baltimore
  - 5-year Memorandum of Understanding in place with Baltimore City Public Schools
- **Anne Arundel Workforce Development Corporation (AAWDC)**
  - Mentor 3-4 young adults and high school students
  - Time period varies based on students and funding
  - Funding provided by Live Casino revenue via Anne Arundel County
  - 5 year Memorandum of Understanding in place with Anne Arundel County Public Schools
- **OPM Pathways Program**
  - Using Internship and Recent Graduate programs
  - Designated up to 24 positions for interns





- **City of Baltimore – New Era Academy (NEA)**
  - 4 summers, 30 interns, 23 completed program
  - 9 summer interns hired into Pathways, 3 converted to permanent employees
- **Pathways**
  - 29 hired into program, 11 converted, & 1 hired competitively as permanent employee
  - 12 currently in program + 7 recently selected
- **Anne Arundel Workforce Development Corporation (AAWDC)**
  - 6 interns, 3 completed program, 2 hired open competition
- **Current Status**
  - 13 Interns hired - 5 WG-01s, 4 WG-03s, 3 WG-05, 1 resignation
  - 4 Recent Graduates hired - anticipate 1 conversion in 2020





# Internship Challenges



- **Transportation**

- Public transportation to the Yard, often prohibitive for eligible students

- **USA Jobs Applications**

- Students challenged with applying through USA Jobs system
- Only one 2018 summer intern made cert for 2019 Pathways hiring

- **Mentor Time**

- Balancing work requirements with mentoring

- **Work Ethic**

- Cultural change for many students, ex. phone use
- Maintaining enthusiasm





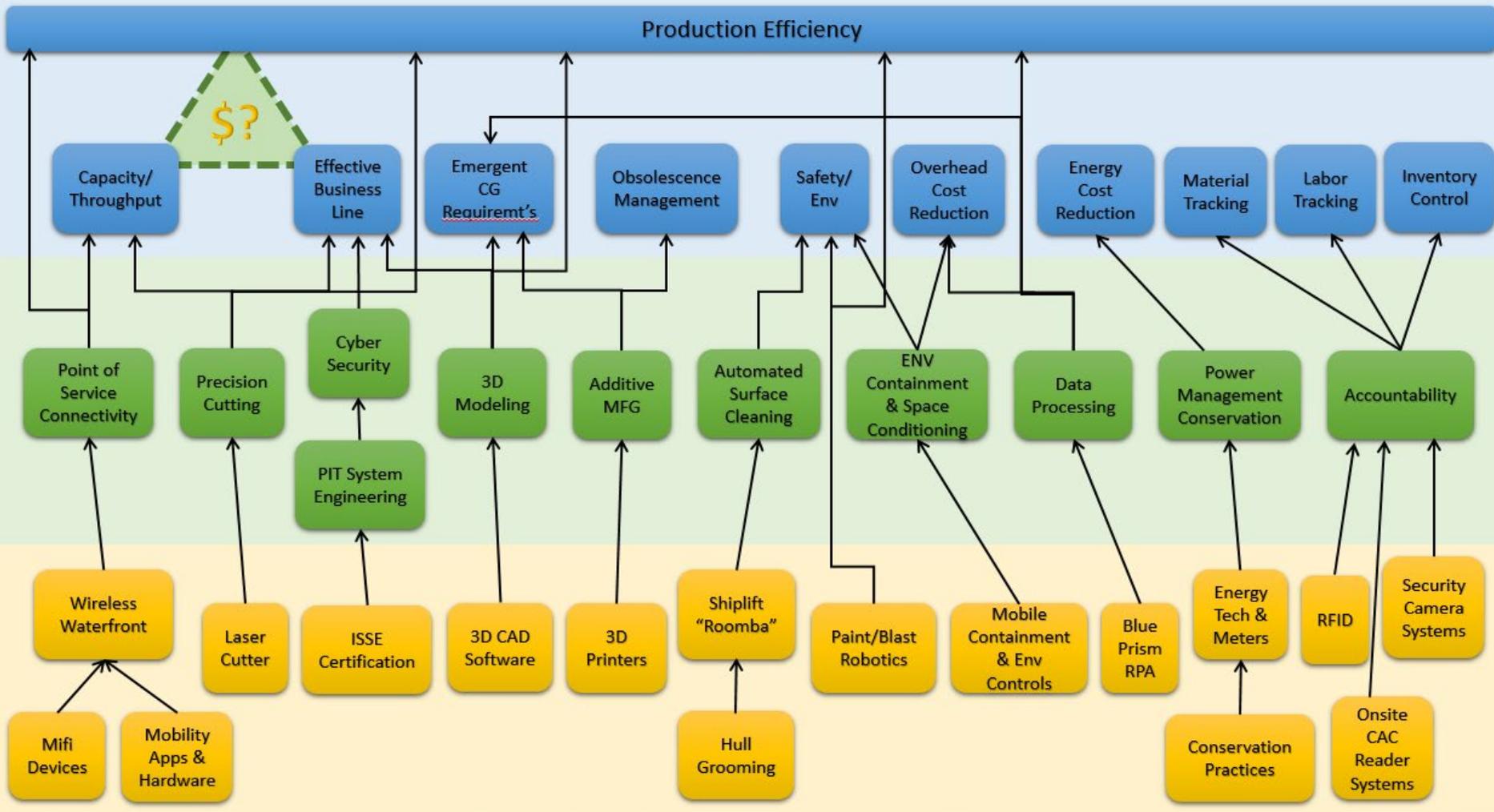
# Draft Technology Roadmap



BUSINESS GOAL

CAPABILITY

TECHNOLOGY





# Questions



<https://www.dvidshub.net/video/866676/cg-yard-ship-lift-movement-oct-2022>



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