



# Naval Shipbuilding & Advanced Manufacturing Center

To date, NSAM project efforts have led to over **\$500M** in total savings, measured as “per hull” cost reductions across several U.S. Navy platforms.

## Payoff:

VCS: \$230K; CVN: \$691K  
 CVN: \$3.08M  
 VCS: \$274K; CLB \$2.7M  
 DDG-51: \$3.3M; LHA: \$2.3M  
 DDG-51: \$849K; LHA: \$557K; LPD: \$421K; NSC: \$113K  
 DDG-51: \$731K; LHA: \$2.98M; LPD: \$1.99M; NSC: \$575K  
 DDG-51: \$270K; LHA: \$675K; LPD: \$900K; NSC: \$157K  
 VCS: \$318K; CLB: \$476K  
 LHA: \$780K  
 DDG-51: \$2.8M  
 DDG-51: \$4.2M; LHA: \$2.3M; NSC: \$200K  
 DDG-51: \$125K  
 CLB: \$2.1M  
 DDG-51: \$675K  
 \$1.01M per year  
 \$1.3M per year  
 VCS: \$860K; CLB: \$860K  
 VCS: \$1.3M; CLB: \$1.3M  
 DDG-51: \$534K  
 \$1.8M per CVN event  
 CVN: \$1.5M  
 LCS (FREEDOM): \$213K  
 VCS: \$330K  
 VCS: \$2.5M  
 DDG-51: \$2.86M  
 DDG-51: \$2.82M  
 VCS: \$730K  
 VCS: \$200K  
 VCS: \$5.4M  
 VCS: \$3.65M  
 VCS: \$2.54M  
 VCS: \$2M  
 VCS: \$1.86M  
 VCS: \$1.4M  
 \$1.34 per year  
 VCS: \$1.3M  
 VCS: \$925K  
 DDG-1000: \$778K  
 VCS: \$683K  
 VCS: \$530K  
 DDG-1000: \$500K  
 VCS: \$475K  
 VCS: \$400K  
 DDG-1000: \$300K

## Projects:

Non Contact Metrology  
 Synch Mat’l Logistics with CVN Pier & Dry Dock Build Strategy  
 Improved Cable Lay & Sequencing Tool  
 Dynamic Change Awareness  
 Resource Availability  
 Enhanced Trades Assignment Progressing  
 Automated Part Detail Extraction  
 Advanced UT Methods of NDT of Hull Welds  
 Temporary Services-Improve Plans and Equipment  
 Machine Readable Material Transactions  
 Modular Outfitting/ Packaged Units  
 Mobile Yard Inspector  
 CAD/CAM Interface for Steel Shape Processing  
 DDG Digital Storyboarding  
 Work Flow Tracking System  
 Capacity Planning Automation  
 Trade Friendly Locating Dimensional Techniques  
 Robotic Welding of VCS Interim Products  
 Structural Fairing Process Improvement  
 CVN Reality Capture  
 Digital Radiography Transition for Inspection  
 LCS Producability Optimization Handbook  
 Lead Installation Process Improvement  
 Improved Welder Productivity  
 Improved Stud Fixturing Processes  
 Technical Requirements for Mobile Supervisor  
 VCS Outfitting Tools and Processes  
 Measurement Technology System  
 VCS Material Management System  
 Design for Production Initiatives  
 VCS Supply Chain Technology Review  
 Outfitting Process Improvements  
 VCS Shipyard Material Flow Processes & Technology  
 Pipe Shop Process Engineering  
 Nested Material Manufacturing Improvement  
 Sequencing & Scheduling (Outfitting Process)  
 Product Centric Facility Design  
 Smart Manufacturing Methods for Composites  
 Improved Production Engineering Management Tools  
 Laser Image Projection  
 Hull Fairness & Accuracy Control  
 Metrology Tools for Automated Hull Layout  
 Small Weldments Optimized Cell  
 Technical Training & Data Collection

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