

Cost-Based Analysis on using DOD Civilian Workforce to Perform Ordnance Support in Pearl Harbor



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Abstract

This study conducts a cost-based analysis to determine the feasibility of insourcing the ordnance handling at Navy Munitions Command Pacific East Asia Division Detachment Pearl Harbor (NMCPAC EAD DET PH). Contractors have provided the service for over 30 years, after an Office of Management and Budget A-76 study in the 1980s determined it was more economical for the private sector to do the work previously done by military service members. This study examines whether using the government civilian workforce to perform ordnance handling generates cost savings when compared with contracting. Using a cost-based analysis, this study reviews all the associated costs of converting to a government civilian workforce and compares them with the cost of contracting out these services. Based on the methodology and data used in this study, the findings show savings from using government civilian workforce over contracting starting with year seven. The recommendation is for NMCPAC EAD DET PH to revert to insourcing the labor and purchasing/leasing the material for ordnance handling operations in order to provide the service in-house instead of continuing to contract out. This can generate monetary savings and other intangible benefits, such as better command and control.



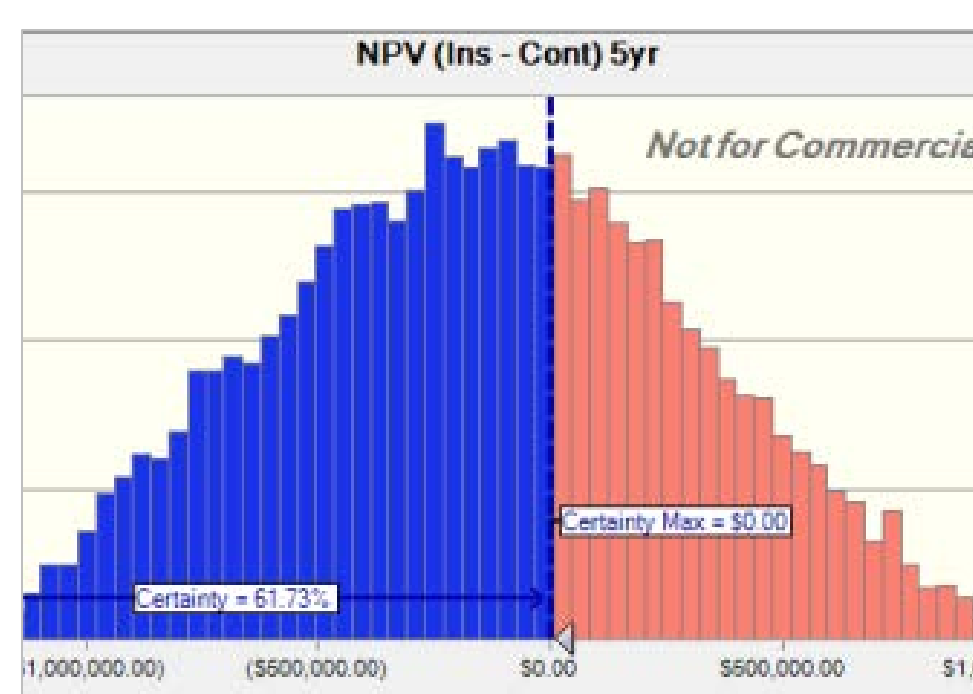
Sample of the many ammunition magazines as part of the inventory for NMCPAC EAD DET PH located in Lualualei.

Methods

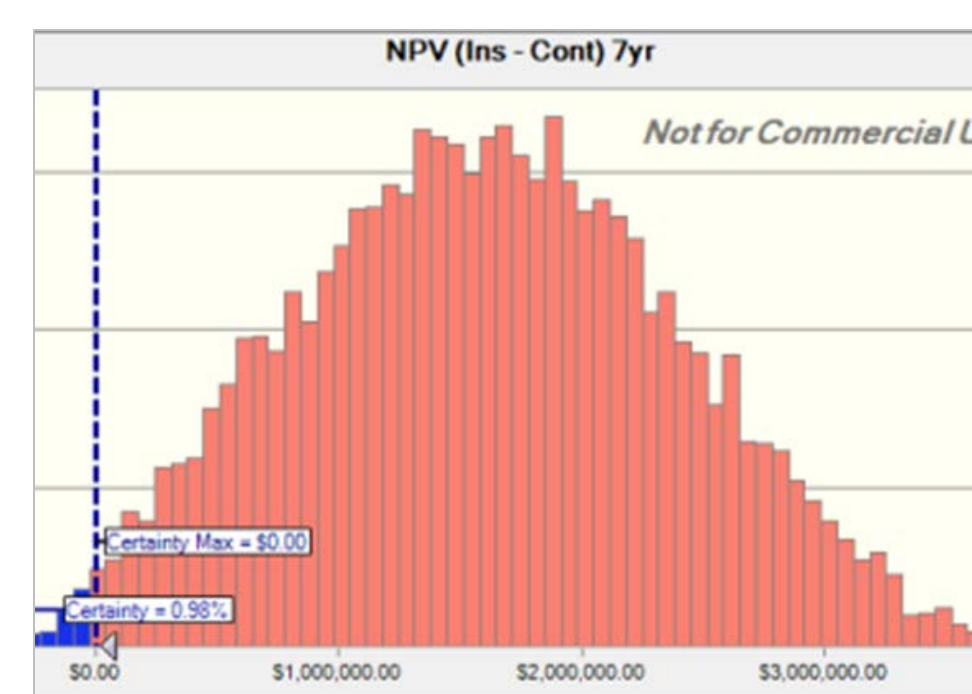
- Specify the Set of Alternative Projects
 - COA 1: Continue providing the services through contracting.
 - COA 2: Hire a DOD civilian workforce and procure all the necessary material and equipment to handle ordnance and munitions in-house.
- Decide Whose Benefits and Costs Count
 - NMCPAC EAD DET PH
- Discount benefits and costs to obtain present values
- Compute the net present value (NPV) of each alternative
- Perform sensitivity analysis
 - 10,000 trial simulations using Crystal Ball
- Make a recommendation

Results

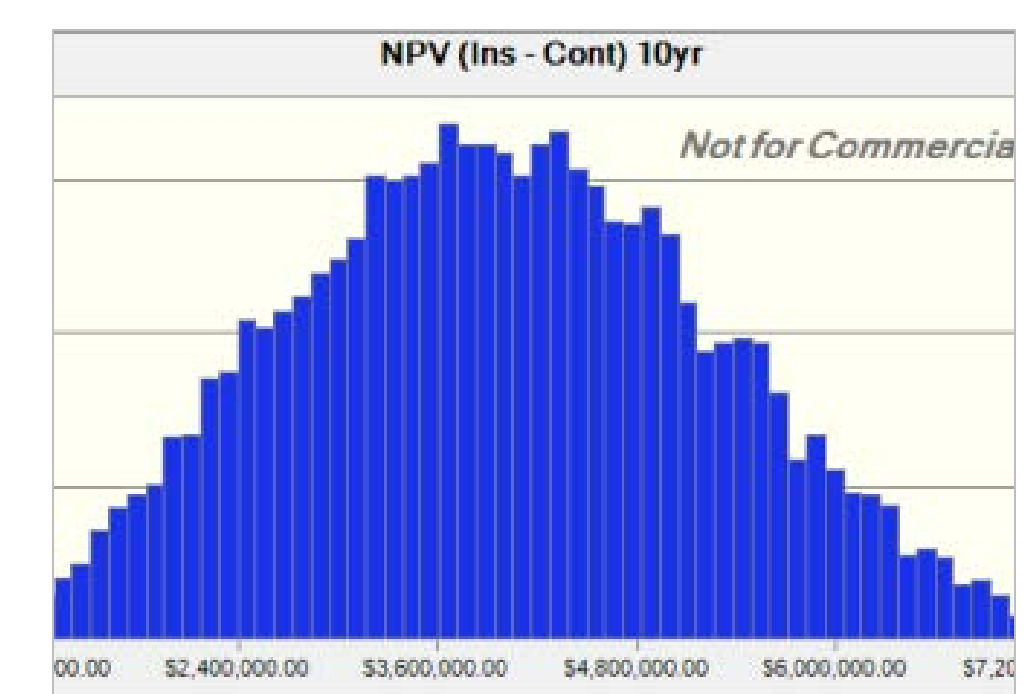
- Over five years (length of a standard contract plus options), the NPV favors COA 1 (contracting), with a 61.73% likelihood of COA 2 (insourcing) being more costly.
- Year seven is the most likely break even point when COA 1 and COA 2 NPV will be equal.
- At the 10-year point, overall savings could be between \$800k and \$8M NPV for the insourcing option over contracting.
- Recommendation is to acquire the workforce and materiel and provide the services in-house instead of contracting out.



NPV Sensitivity Analysis of the Difference Between Insourcing and Outsourcing Over Five Years.



NPV Sensitivity Analysis of the Difference Between Insourcing and Outsourcing Over Seven Years.



NPV Sensitivity Analysis of the Difference Between Insourcing and Outsourcing Over Ten Years.