

A Case for Covered Motorpool Parking

by CPT(P) David Blanton

The U.S. Army invested more than \$20 billion in new ground-combat systems (GCS) acquisition in Fiscal Year 2020.¹ Notably absent from the investment was an analysis of preventive measures to increase the service life of these systems – for example, overhead covered parking shelters designed to protect high-cost GCS from the environment. The shelters are similar to open-air aircraft hangers already used by other military services.

Issue and background

The Army directs considerable resources toward analyzing maintenance processes while striving for cost savings and efficiencies.² Absent, however, is assessment of physical structures to increase efficiency and service life. In contrast to Army motorpools, some local government sectors report anticipated 50-year cost savings in excess of \$20 million for fleets of only 60 vehicles by incorporating overhead parking shelters.³ Notably, these local government fleets are far less expensive than most Army GCS. A similar initiative by the Army could represent huge preventative maintenance cost savings during a GCS lifecycle.

Critics might argue that high-cost Army GCS are designed for operation in any environment, making overhead shelters an unnecessary investment. Assuredly, the Army has resilient equipment capable of operating in all environments. However, alternatives may exist that could make even the initial investment cost-neutral. For example, solar-energy investment and solar parking shelters are already common across many military installations. Instead of covering post-exchange and public-parking areas with solar shelters, future solar shelters could be built in motorpools.⁴

In addition to GCS lifecycle cost savings, covered parking structures will increase operator safety and increase preventative-maintenance productivity. Protection from the elements is a prudent investment to enabling Soldiers to properly care for equipment. This issue warrants further consideration and analysis for cost savings and implementation.



Figure 1. Soldiers conduct preventive-maintenance checks on newly acquired M1A2 Abrams main battle tanks at Fort Bliss, TX, Aug. 22, 2019. (U.S. Army photo by SSG Kris Bonet)



Figure 2. The U.S. Army needs covered storage in its motorpools, similar to that shown over this Royal Australian Air Force jet and its crew at Luke Air Force Base, AZ. (U.S. Air Force photo by A1C Leala Marquez)

Stakeholders

Any policy implementation must account for the following key stakeholders:

- **Army** – may stand to gain significant maintenance readiness goals and cost savings by conducting this study;
- **American taxpayers** – if maintenance costs can be decreased and lifecycles extended for high-cost Army GCS, it would be responsible management of resources; and
- **Soldiers** – reduced non-productive labor hours due to storms or high temperatures and covered shelters may also increase overall safety and productivity when conducting preventative maintenance and training.

Policy alternatives

- **Do nothing** (status quo). The Army and Department of Defense can choose to do nothing and not commission a study. While there may be marginal cost savings respective to the study itself, an intentional analysis that truly informs policymakers would not be conducted. Therefore high-cost Army GCS will remain uncovered in large outdoor parking pads.
- **Conduct an internal Army assessment.** The Army commissions a study related to system lifecycle and maintenance cost savings associated with covered parking shelters. The study should also account for factors like safety and productivity increases. An internal Army study would likely be cheaper, but it would take longer to complete.
- **Contract an external assessment.** The Army authorizes an outside agency, or contractor, to conduct a cost-benefit and feasibility study using the same criteria as listed in Alternative 2. An external assessment would likely be the costliest overall, but this method is faster, and the cost would be a fraction of the project's anticipated positive impact.

Weights	Study cost	Schedule	Anticipated overall performance	Total score
	1	1	3	
Option 1: Do nothing (status quo)	3 (3)	3 (3)	1 (3)	7 (9)
Option 2: Internal Army assessment	2 (2)	1 (1)	2 (6)	5 (9)
Option 3: External contracted assessment	1 (1)	2 (2)	3 (9)	6 (12) <input checked="" type="checkbox"/>

Table 1. Policy option comparison: Army parking shelter cost-benefit study.

Recommendations and implementation

Of the three alternatives cited, the external-assessment option would be the most effective. Once compiled, the assessment should be forwarded for consideration and resource-sourcing solutions. Even if adoption is not recommended for every GCS in the force, recommendations should still be made for partial adoption based on end-item acquisition cost, geographic location, environmental factors, equipment size and the stage of GCS lifecycle. Integrating these variables may direct specific and maximized cost expenditures commensurate with capital construction investment.

To maximize future cost savings, it is critical that the Army act now to further investigate a service-life cost-benefit study analyzing future construction of overhead covered parking shelters. This initiative can save the Army critical money for reinvestment in other programs. The study is fiscally responsible and in the best interests of American taxpayers. Most importantly, it is also prudent for Soldiers to maximize maintenance efficiency, safety and overall readiness.

CPT(P) David Blanton is currently assigned to the Joint Staff, Washington, DC. His previous assignments include assignment officer, Armor Branch, Army Human Resources Command, Fort Knox, KY; commander, Company D, 1st Battalion, 21st Infantry Regiment (Light), 25th Infantry Division, Schofield Barracks, Hawaii; commander, Troop E, 2nd Squadron, 14th Cavalry Regiment (Stryker), 25th Infantry Division, Schofield Barracks; commander, Company B, 1st Battalion, 68th Armor Regiment, 4th Infantry Division (Mechanized), Fort Carson, CO; and platoon leader, Company D, 1-68 Armor, 4th Infantry Division (Mechanized). CPT Blanton's military schools include the Armor Officer Basic Course, Maneuver Captain's Career Course, Cavalry Leader's Course and Stryker Leader's Course. He has bachelor's of science and bachelor's of arts degrees in international business/German from Ohio State University. CPT Blanton also has a master's degree in public administration (nonprofit management) from Indiana University and a master's degree in policy management from Georgetown University.

Notes

¹ Comptroller, Office of Undersecretary of Defense, "FY 2020 program acquisition costs by weapon system," Washington, DC, Department of Defense, 2019. Retrieved from https://comptroller.defense.gov/Portals/45/Documents/defbudget/fy2020/fy2020_Weapons.pdf.

² C.R. Harz, "Problems in Army vehicle maintenance: Results of a questionnaire survey," RAND, Washington, DC, 1981. Retrieved from <https://www.rand.org/content/dam/rand/pubs/reports/2006/R2487.pdf>.

³ R. Thompson, "Alternative fleet storage options: A case for covered storage," *Government Fleet*, 2012. Retrieved from <https://www.government-fleet.com/148322/alternative-fleet-storage-options-a-case-for-covered-storage>.

⁴ U.S. Army Corps of Engineers, "Solar photovoltaic CXS," 2020. Retrieved from <https://www.usace.army.mil/Missions/Sustainability/Expertise-in-Sustainability/Solar-Photovoltaic/>.

Acronym Quick-Scan

GCS – ground-combat systems