

IN FOCUS

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The Army's Mobile Protected Firepower (MPF) System

What Is the Mobile Protected Firepower (MPF) System?

The Army's MPF system is intended to address an operational shortfall:

Currently the Army's Infantry Brigade Combat Teams (IBCT) do not have a combat vehicle assigned that is capable of providing mobile, protected, direct, offensive fire capability.... The MPF solution is an integration of existing mature technologies and components that avoids development which would lengthen the program schedule.

Operationally, the Army wants the MPF to be able to

Neutralize enemy prepared positions and bunkers and defeat heavy machine guns and armored vehicle threats during offensive operations or when conducting defensive operations against attacking enemies.

In terms of the Army's overall procurement plans for MPF,

The Army Acquisition Objective (AAO) for MPF is 504 vehicles, with 14 MPFs per IBCT. The targeted fielding for the First Unit Equipped (FUE) is Fiscal Year (FY) 2025.

MPF Acquisition Strategy

In November 2017, the Army issued a Request for Proposal (RFP) for the Engineering and Manufacturing Development (EMD) phase and, in order to maximize competition, planned to award up to two Middle Tier Acquisition (MTA) contracts for the EMD phase in early FY2019.

Middle Tier Acquisition (MTA) according to the Defense Acquisition University, is a rapid acquisition approach that focuses on delivering capability in a period of 2 to 5 years. The authority to use MTA was granted by Congress in Section 804 of the FY2016 National Defense Authorization Act (NDAA) (P.L. 114-92). Programs using MTA are not subject to the Joint Capabilities Integration Development System (JCIDS) and provisions of DOD Directive 5000.01 "Defense Acquisition System." MTA consists of utilizing two acquisition pathways: (1) Rapid Prototyping, which is to streamline the testing and development of prototypes, and (2) Rapid Fielding, which is to upgrade existing systems with already proven technologies.

On December 17, 2018, the Army awarded two Section 804 Middle Tier Acquisition (MTA) Rapid Prototyping contracts for MPF. The two companies awarded contracts were General Dynamic Land Systems (GDLS), Inc. (Sterling Heights, MI) and BAE Systems Land and Armaments, LP (Sterling Heights, MI). Each MTA Rapid Prototyping contract was not to exceed \$376 million. The MTA Rapid Prototyping contracts required delivery of 12 pre-production vehicles (from each vendor) for developmental and operational testing, and a Soldier Vehicle Assessment (SVA).

Reportedly, BAE delivered its prototypes (**Figure 1**) to the Army in March 2021 after production difficulties and supplier issues related to COVID-19. Reportedly, GDLS was able to deliver all of its prototypes (**Figure 2**) in December 2020. The SVA reportedly began in January 2021 at Fort Bragg, NC—without the BAE prototypes with testing running through June 2021. While BAE was unable to provide prototypes at the beginning of testing, prototypes were eventually provided to the Army for testing. During the assessment, soldiers evaluated GDLS and BAE MPF prototypes in a variety of operational scenarios.

According to May 10, 2022, Army testimony to the Senate Armed Services Subcommittee on Airland, the MPF is to begin low-rate production in 2022, with the first fielding of MPF vehicles planned for FY2025.

Figure I. BAE MPF Prototype



Source: https://www.baesystems.com/en-us/article/bae-systemsawarded-development-contract-for-mobile-protected-firepower, accessed June 14, 2021.

Figure 2. GDLS MPF Prototype



Source: https://www.gdls.com/news/news-interior.html, accessed June 14, 2021.

Budgetary Information

Table I. FY2023 MPF Budget Request

		Total
	Total Request	Request
Funding Category	(\$M)	(Qty)
Procurement	\$357	28

Source: Assistant Secretary of the Army (Financial Management and Comptroller), FY2023 President's Budget Highlights, April 2022, p. 26 and p. 30..

Notes: \$M = U.S. Dollars in Millions; **Qty** = FY2023 Procurement Quantities.

Potential Issue for Congress

Creating MPF Battalions

Reportedly, the Army is planning to create a MPF battalion at division level. From this battalion, MPF companies would then be allocated to IBCTs. In terms of personnel, each MPF company requires 64 armor crewmen and 24 armor maintenance soldiers to maintain MPF systems. Given current recruiting challenges, the Army might have difficulties in meeting the demand for MPF crew and maintenance soldiers for new units. Another concern is a limited quantity of on hand, serviceable 105 mm ammunition for MPF training and operational use. As such, there could be a requirement to procure additional 105 mm ammunition and there might also be industrial baseassociated ammunition production challenges as well. There are additional concerns about suitable storage and maintenance facilities and training ranges for MPF units assigned to infantry posts that are not structured to accommodate armored fighting vehicles. Additionally, there might be environmental concerns about stationing MPF units at bases in Hawaii and Alaska, for example. One potential solution might be to station MPF units at bases better suited to support armor units, but the Army reportedly would like to keep MPF units within at least a six-hour drive from the division they are assigned to. Another issue is that there might be additional challenges in creating MPF units in the Army National Guard (ARNG). Given these MPF unit-related considerations, Congress might also monitor the Army's progress in addressing the aforementioned challenges in creating new MPF units.

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