

HIGH MOBILITY MULTI-PURPOSE WHEELED VEHICLE



Program Background

The High Mobility Multi-purpose Wheeled Vehicle (HMMWV), commonly known as the Humvee, is a four-wheel drive military automobile produced by AM General. The Marine Corps' most recent variant of the HMMWV is the Expanded Capacity Vehicle (ECV), which is the 4th generation design of the HMMWV. The Marine Corps plan is for a reduction of the HMMWV fleet from 24,000 vehicles down to approximately 18,500, with 5,500 of those vehicles subsequently replaced by the JLTV. The remaining Marine Corps HMMWV fleet of approximately 13,000 vehicles will require sustainment through

2030. The HMMWV SMI proposes to leverage mature and production ready designs/technologies that will help restore the existing expanded capacity variant of the HMMWV to pre-armoring levels in terms of safety, performance, and reliability.

Program Status

The current armoring necessary to secure occupants' survivability for operations in Operation Enduring Freedom has resulted in the HMMWV ECV being burdened with 1000's of pounds above its gross vehicle weight. This extra weight has created reductions in driver control, stability, mobility, and

reliability.

The Program Manager Light Tactical Vehicles (PM LTV) conducted technology/concept evaluations at the Nevada Automotive Test Center (NATC) in FY13 to explore technological possibilities surrounding HMMWV fleet sustainment and upgrades. The results of these evaluations were then utilized to inform and update the HMMWV Operational Requirements Document (ORD). A Government Request for Proposal (RFP) and performance specification will be generated from the updated ORD in FY14. PM LTV intends to award to two industry vendors answering the Government RFP (based on the updated ORD) that will compete in full and open competition, with performance, reliability, and operational assessments scheduled for late FY14.

HMMWV'S Top Three Program Technology Issues:

1. Performance

As a result of the armoring levels required to meet the demands of Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF), the HMMWV fleet's performance has been significantly degraded. Technologies are needed that increase safety, mobility, and payload that and restore performance.

2. Energy Consumption

As a result of the armoring levels required to meet the demands of OIF and OEF, the HMMWV energy efficiency (fuel efficiency) has experienced a severe negative impact. Technologies are needed to restore HMMWV energy efficiency.

3. Reliability/Durability

Technologies are needed that increase the reliability and durability of the HMMWV across the spectrum of its mission profiles.



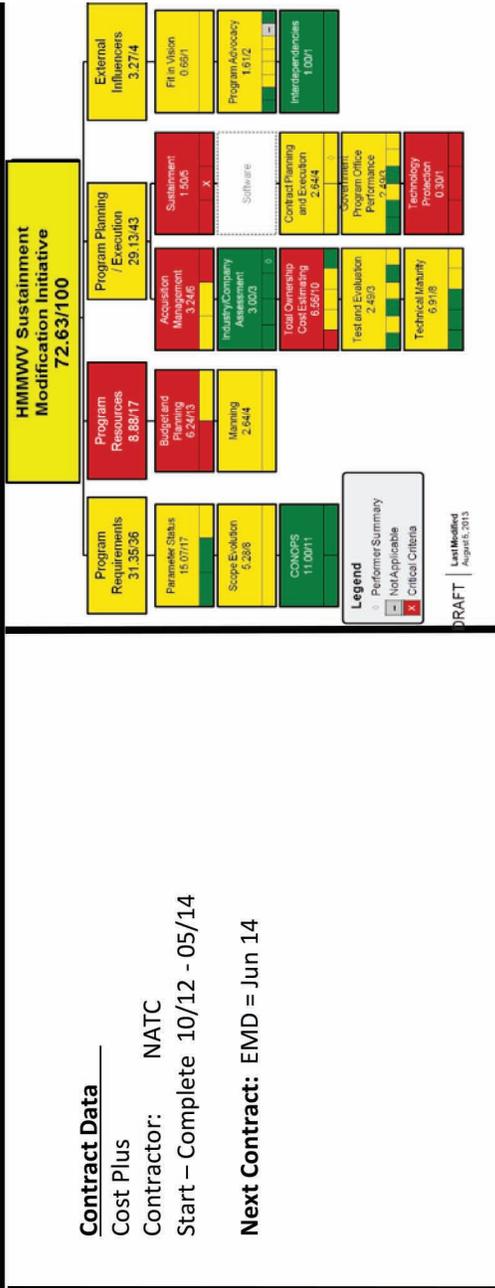
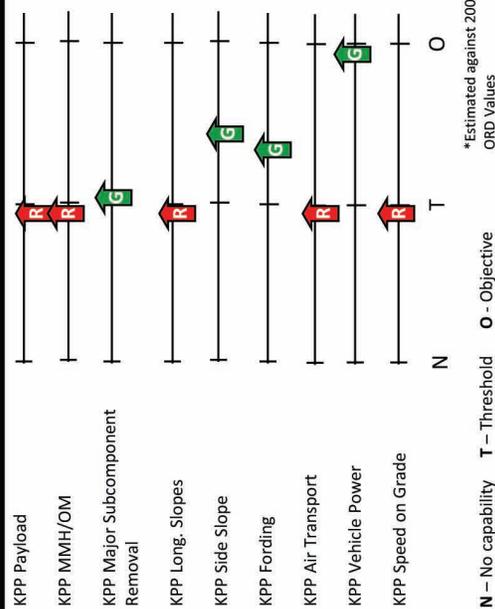


HMMWV SMI

ACAT III (pre-decisional assessment)

MS B = Apr 14 (O)/Oct 14 (T) **AAO** = 6,851
IOC = TBD **FOC** = TBD

Description: The HMMWV Sustainment Modification Initiative (SMI) will improve the safety, reliability, durability, and mobility of the HMMWV ECV, and will extend the service life of the fleet to 2030. SMI will selectively insert combinations of commercially available automotive technologies on the ECV platform in order to provide the highest levels of capability/utility, based upon incremental increases in performance corresponding to increases in estimated production, integration, and installation costs.



PROGRAM	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Milestones & Phases				DP1		Cost IPR	ILA MS B	ILA MS C	ILA	MS C	FRP					
SETR Reviews							TRR 1	TRR 2	PDR CDR	OTRR	PCA					
Test Events						Perf/Ram Testing	Drive Off	OA	FVT	OT						
Contract Events				Phases 0-1 Award		RFP	KI Awards	LRIP DS								
Qtys				0		0	12	500	1000	130	132					

N - No capability T - Threshold O - Objective
 *Estimated against 2004 ORD Values

DRAFT | Last Modified August 6, 2013



HMMWV Technical Issue #1 Performance

