Tactical Wheeled Vehicles
“Looking To The Future”

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Director of Force Development, Army G-8
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President’s Budget (PB) 2016 TWV Strategy – *An Overview*

Long Range Investment Requirement Analysis – *Looking Deep To Set Conditions*

TWV Autonomy

Joint Tactical Transportation System (JTTS)

Challenges

Summary
PB16 TWV Modernization Strategy

<table>
<thead>
<tr>
<th>Light Tactical Vehicles</th>
<th>Near (Budget Year FY 2016)</th>
<th>Mid (FY 2017 – FY 2021)</th>
<th>Far (FY 2022 – FY 2031)</th>
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<tr>
<td>JLTV</td>
<td>FY 17</td>
<td>IOC</td>
<td>FOC</td>
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<td>HMMWV RECAP</td>
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<td>JLTV RDT&amp;E</td>
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<th>Medium Tactical Vehicles</th>
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<td>Procurement</td>
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<td>Protection Kit RDT&amp;E</td>
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<td>TWV Protection Kits</td>
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Legend:
- Upgrade
- New Start
- Divestment
- Decision Point
- IOC / FOC
- Transition IPT
- RDTE
- Procure
- Sustain
Long Range Investment Requirement Analysis

**Task:** Examine annually the life-cycle affordability of estimated future materiel requirements, for 30 years, against estimated total obligation authority.

Future Years Defense Program (FYDP) 5 years

- FYDP (POM)
- $ S&T
- RQMTS
- Test

FYDP +10 years

- Extended Planning Period (EPP)
- Conditions Set to allow for Fiscal Resourcing
- to ensure timely Gap mitigation

EPP + 15 years

- Requirements
  - As the process matures, LIRA will enable increasingly better cross-Program Evaluation Group (PEG) synchronization on any issues as Situational Awareness increases moving towards the FYDP

- Resources
  - "Accounted" (e.g., PEO representatives)

- Gap Identified - Allowing Cross-PEG Synchronization

Purpose: Enable better integration of S&T initiatives, materiel requirements & testing efforts, and synchronization of cross-PEG actions, necessary to (1) ensure fielding of timely, affordable material solutions that mitigate or eliminate anticipated future capability gaps, and (2) support Senior Leader interactions with OSD and the Congress.

**Key emerging TWV capabilities:** Autonomy & Commonality/Modularity.
**Desired End state**

- **Short Term:** Deliver LF vehicle capability to a Transport Unit (size TBD) by FY 18.
- **Long Term:** Deliver automated vehicle capability to a Sustainment BDE/CSSBs and ABCT BSBs starting in 2025.

**Meets CSA Strategic Guidance:**
- Operational energy
- Logistics Operational Efficiencies
- Robotics Integration
AMERICA'S ARMY: GLOBALLY RESPONSIVE REGIONALLY ENGAGED

Joint Tactical Transportation System (JTTS)

- FMTV / FHTV support both Employment and Theater Sustainment
- JTTS Objective to perform Sustainment Operations more efficiently than current baseline (over 50 unique FMTV / FHTV variants)

Legacy Medium & Heavy Tactical Wheeled Vehicles

- FMTV 2.5T – 10 ton
- HEMTT 11 ton
- PLS 16.5 ton
- 915 FoV 47 ton
- HETS 70 ton
- MTVR 15 ton highway 7 ton off-road
- LVSR 22.5 ton highway 16.5 ton off-road

Joint Tactical Transport System (JTTS)

- 5-ton cargo & 18-ton LHS Payload weight classes
- Maximize Commonality & Modularity
- VICTORY Compliant Electronics
- Operational Energy Improvements (fuel economy, RAM, etc.)
- Autonomous Convoy Operations (ACO) Infrastructure
- Survivability Enhancements
- Condition-Based Maintenance (CBM+)

Joint Tactical Transport System (JTTS) Diagram:

- APOD – Aerial Port of Debarkation
- CSSB – Combat Sustainment Support Battalion
- BSB – Brigade Support Battalion
- FSC – Forward Support Company
- SPOD – Sea Port of Debarkation
- TSC – Theater Sustainment Command
- SUST – Sustainment Brigade
- Theater Base
- Theater Opening
- Throughput
- Point of Employment (Platoon/Squad Level)

Classes of Supply:

<table>
<thead>
<tr>
<th>Class</th>
<th>Description</th>
<th>Symbol</th>
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<tbody>
<tr>
<td>I</td>
<td>Rations</td>
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<tr>
<td>II</td>
<td>Expendables</td>
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<td>III</td>
<td>POL</td>
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<tr>
<td>V</td>
<td>Ammunition</td>
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<tr>
<td>VI</td>
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<tr>
<td>VII</td>
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<tr>
<td>VIII</td>
<td>Medical</td>
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<tr>
<td>IX</td>
<td>Repair parts</td>
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<tr>
<td>X</td>
<td>Munitions to support nonmilitary purposes</td>
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AMERICA’S ARMY: GLOBALLY RESPONSIVE REGIONALLY ENGAGED

Challenges – Where We Need Your Help

Commonality
- Modular Vehicles
- Fuel and Lubricants
- Mission specific sensors

Protection
- Light Weight
- Armor-able to threat
- Under Body Blast
- Hostile Fire Detection / Point of Origin

Durability
- Off road / rugged terrain
- All weather operations
- Built to last: (30 years)
  • Upgradeable

Safety
- Safety Enhancements (cameras / sensors)
  • Degraded driving environments (smoke / weather / light)

Efficiency
- Fuel and Lubricants
- On the Move Diagnostics
  • Electronic Fleet Management
  • Advanced energy storage

Affordability

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Joint Light Tactical Vehicle (JLTV) - the centerpiece of the Army’s TWV modernization strategy.

Key emerging TWV capabilities:
- Leader-Follower (FL)
- Automated Convoy Operations (ACO),
- Joint Tactical Transportation System (JTTS)

Our Partnership With Industry Remains Essential.
Q1: This week the Army will award the JLTV contract. How will JLTV fit into the Light Tactical Vehicle fleet?

Q2: Protection is a key component of the current TWV Strategy. How does the Army intend to address mission demands to mitigate Soldier risk?

Q3: What is the Way Ahead for current investments and the future collaborative process for the TWV fleet?