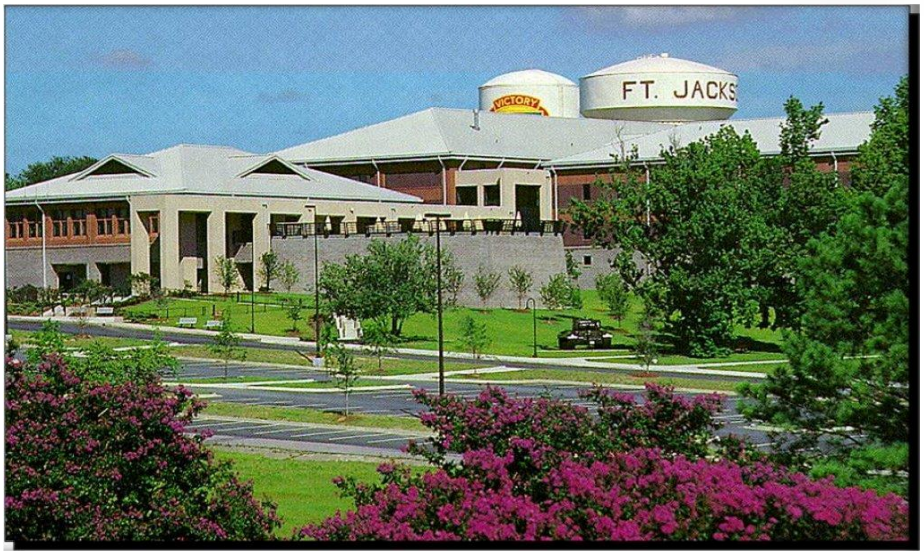
Role of Tactical Wheeled Vehicles

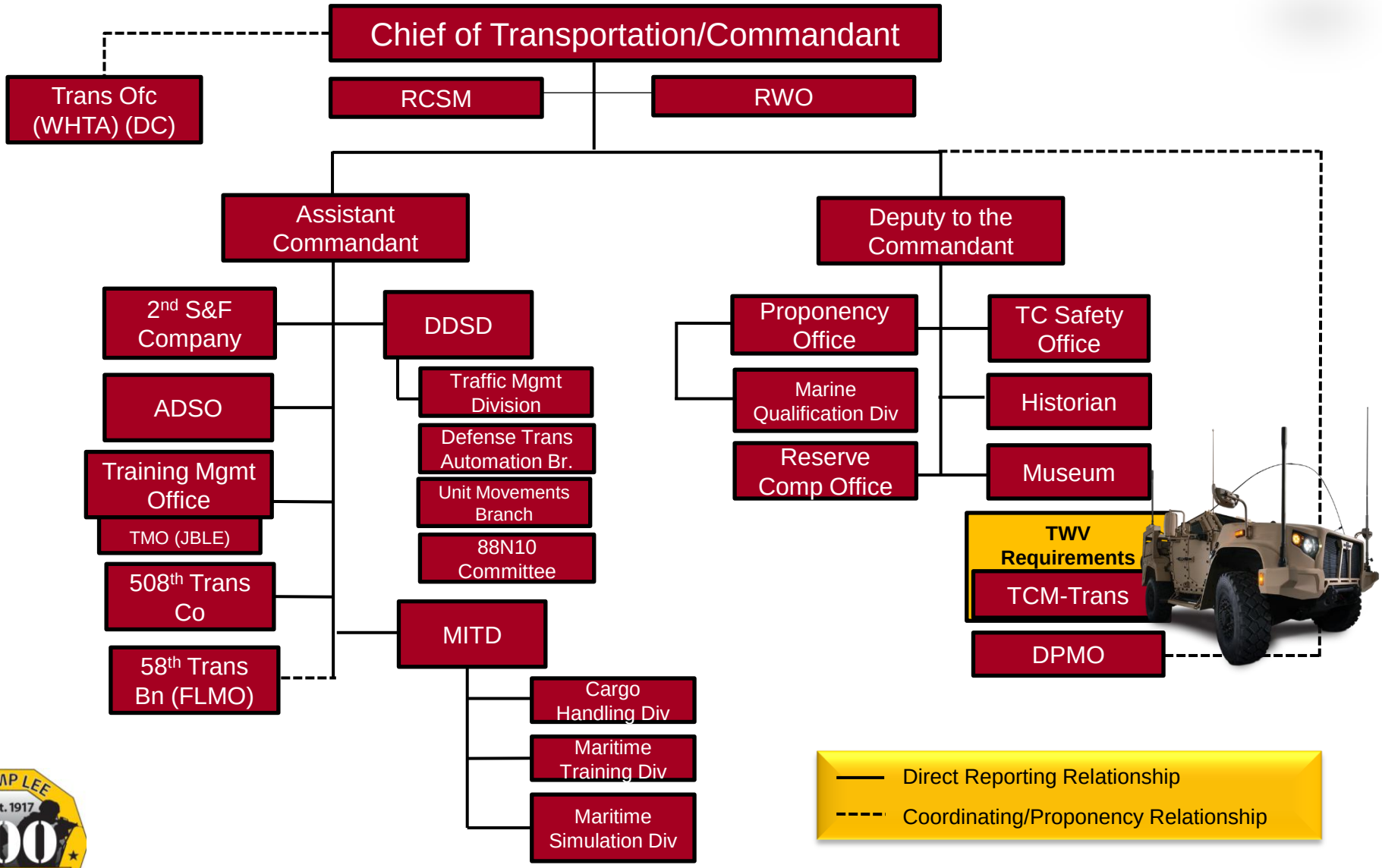
17 May 2017



Home of the Army's Sustainment Think Tank!
Combined Arms Support Command and the
Sustainment Center of Excellence
Fort Lee, Virginia and Fort Jackson, South Carolina

Support Starts Here!

Transportation School



Transportation Corps Capabilities Throughout Unified Land Operations In a Multi-Domain Battle

Unified Land Operations:

Seize, retain, and exploit the initiative throughout the range of military operations to gain and maintain a position of relative advantage in sustained land operations.

Maneuver, Tactical Mobility and Distribution Operations:

- Over 350,000 tactical wheeled vehicles and trailers conduction, supporting and sustaining maneuver

Heavy Equipment Transporter System:

- Support mobility of the ABCT supporting movement and recovery of tracked vehicles

PLS/HEMTT:

- Support tactical mobility and distribution of all classes of supply from the port to the foxhole

Line Haul/Low Bed:

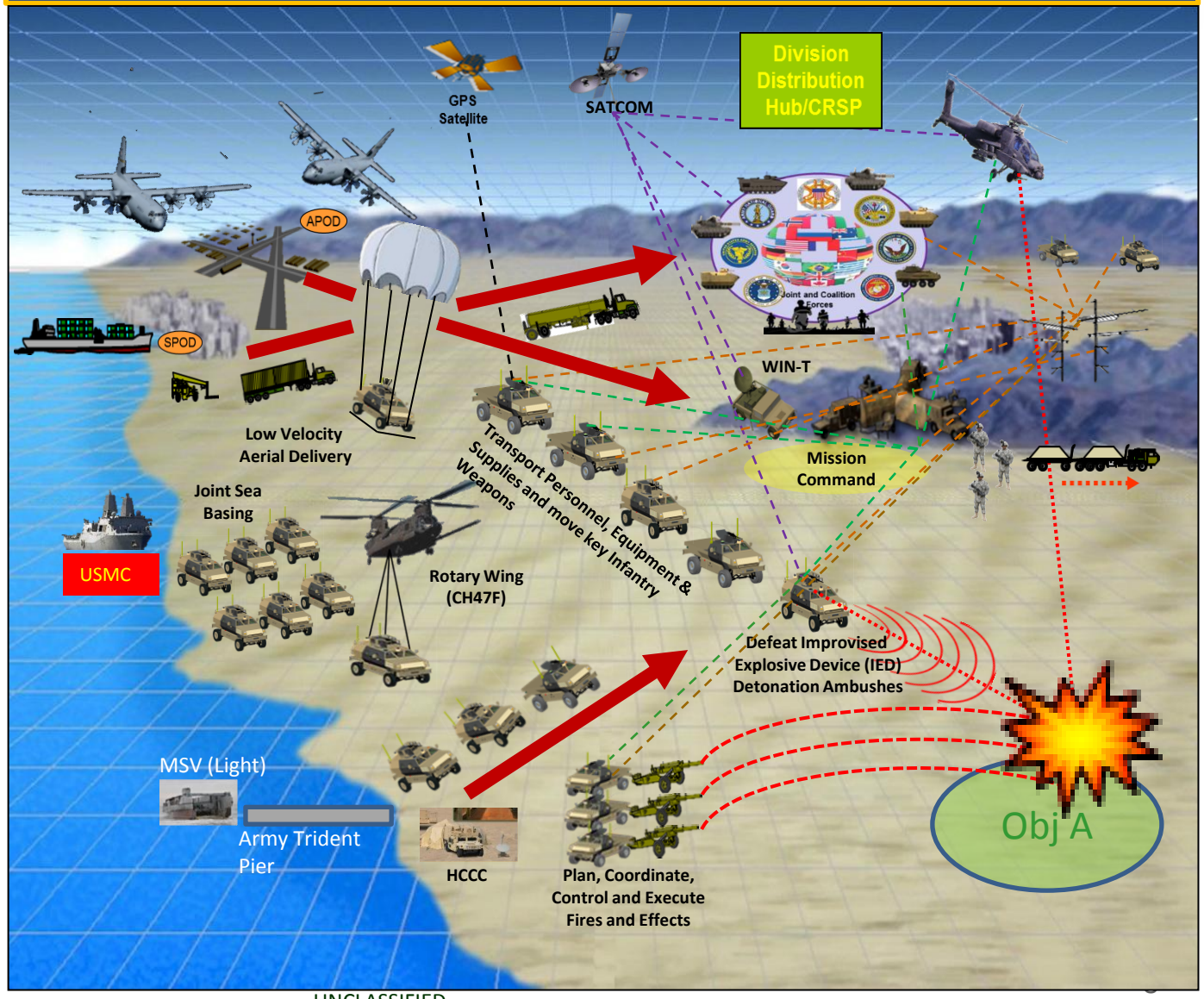
- Tractor/Trailers support port clearance, distribution, tactical mobility and retrograde of containerized, breakbulk and unit equipment

Family of Medium Tactical Vehicles:

- Fulfills multiple mission roles in nearly every organization in the Army.

Light Tactical Vehicles:

- JLTTV/HMMWV conduct mission roles in nearly every organization in the Army.



Shaping the future Army and Reducing Army Demand

- **Globally Responsive Sustainment**
  - ✓ The requirement to rapidly project relevant and unmatched military power throughout the globe affects all Multi-Domain Battles
  - ✓ Agile, flexible, integrated, protected, trained and affordable are key to the success of a Globally Responsive Sustainment system

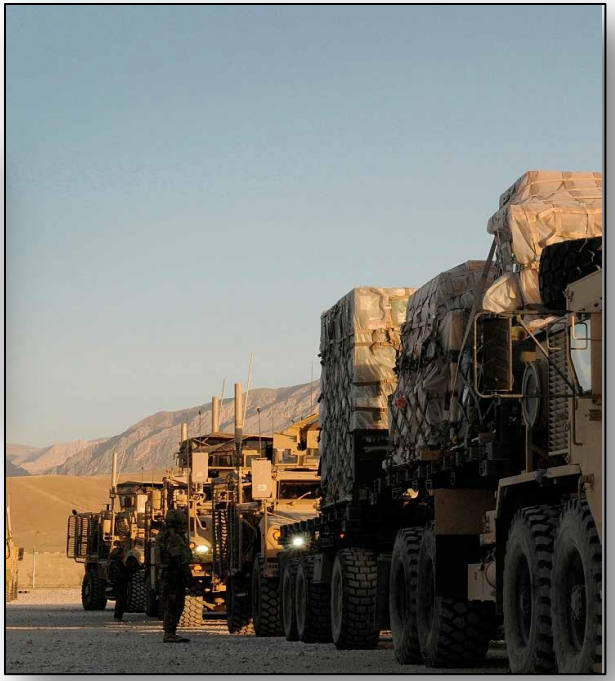
- **Deployment**
  - ✓ The Brigade Combat Team (BCT) of the future will be more deployable; more effective over a range of mission
  - ✓ More lethal over greater distances and less tethered to a large logistics network

- **Sustainment**
  - ✓Sustainment community is leading the effort to:
    - ➢ Develop more efficient technologies and processes
    - ➢ Develop organizations and systems that will provide effective and responsive sustainment support from a smaller footprint
    - ➢ Sustainment force structure, both current and future is shaped by the demand generated at the point of need

Shaping the Future Army and Reducing Army Demand

- **Army Crossroads**
  - ✓ Three factors from the national guidance are driving capability developers to assess technologies and concepts
    - ➢ Overmatch: Capabilities greater than potential adversaries
    - ➢ Leaner: Reduced force structure; a scalable, modular force
    - ➢ Expeditionary: Rapidly deploy, operating in austere environments

CL III bulk and bulk water account for roughly 70% of the total tonnage used to support division operations

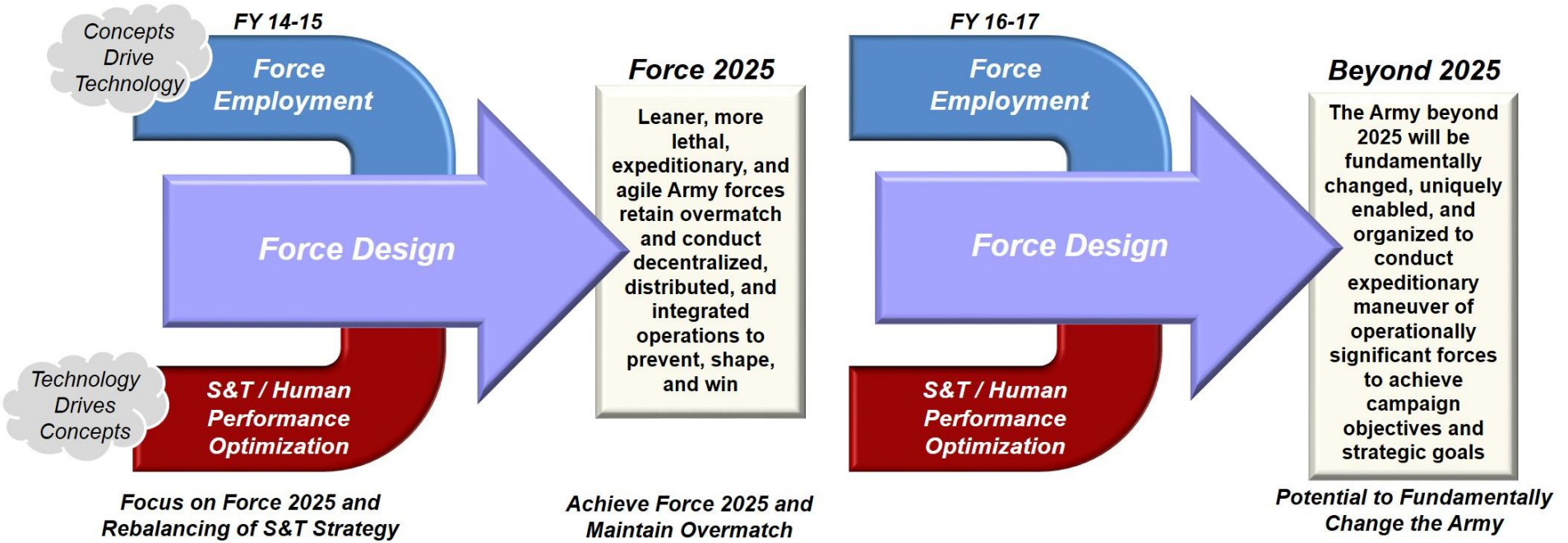


CL IX is impacted by both RAM (Reliability, Availability, Maintainability) and enemy activity

Components of the Solution

- Army has taken one of two routes in determining the way to optimize the force
  - Concepts driven technological research and development
  - Technology drives the way the Army fights conceptually.

- To maximize the benefits of both approaches in designing the force for 2025, a balanced approach is required to find the right ideas, the right technologies, and combine them in the force design so that overmatch is maintained.



Transportation Capability Modernization

Near Term: FY18-25 | **Mid Term: FY26-35** | **Far Term: FY36-50**

Sustain	Improve	Develop	Replace/RECAP
- TWVs: PLS, HEMTT, HETS, FMTV, HMMWV, Line Haul	- Operational & Tactical Mobility - Enhanced Heavy Equipment Transportation System (EHETS)	- Automated Convoy Operations (ACO) - Modernize Medium and Heavy Fleets	- HMMWV

Tactical Wheeled Vehicle (TWV) Fleets: PLS, HEMTT, HETS, FMTV, HMMWV, Line Haul

Field Joint Light Tactical Vehicle (JLTV)

Develop Leader-follower (L-F) Technologies

Automated Convoy Operations

Modernize TWV and Trailer Fleets

S&T, RDT&E Initiatives

Mid and Far Terms

- **Leader/Follower Technology**
- **Fully Automated Ground & Air Logistics**

Demand Reduction Initiatives

- **Leader-Follower Technologies**
- **Automated Convoy Operations**
- **JTAARS**

321,000 Tactical Wheeled Vehicle and Trailer Requirements in FY24

Efficiency and Demand Reduction

- **Policy changes**
  - ✓ Making efficiency or demand reduction a Key Performance Parameter (KPP) for future systems acquisitions

- **Meeting demand at the point of need**
  - ✓ Find ways for the consumer to meet the requirements as far forward as possible

- **Automating Soldier tasks**
  - ✓ Robotics are poised to impact the routine tactical and technical tasks
    - ➢ Semi autonomous vehicles
    - ➢ Autonomous vehicles
  - ✓ Automating our delivery platforms will improve fighter management, increase asset utilization and better protect the Soldier

Bottom Line

- ✓ As the Army transitions to a more responsive expeditionary force this will require us to operate differently, enable forces differently, and organize differently than in the past.

- ✓ Combat formations will be required to deploy with greater ease and speed, and a reduced sustainment burden.

- ✓ From the mid to far-term and beyond our aim is to change how demand is created from point of need at the tactical level by developing innovate ways to apply technological advancements throughout Unified Land Operations in a Multi-Domain Battle space

SPEARHEAD OF LOGISTICS

US Army Transportation Corps – Spearhead of Logistics!