



PEO AMMUNITION

**NDIA Forum
12 November 2013
Picatinny Arsenal**

**Presented by:
BG McGuiness
PEO Ammunition**





PEO
Ammunition

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Picatinny Arsenal

“DoD Joint Center of Excellence for Guns & Ammunition”

- **Employees 5,955**
 - 1,258 advanced degrees
- **Over \$4.6B annual budget**
- **Acres 6,493**
- **Structures 1,010**
- **Armaments laboratories 64**
- **Over 1 million square feet of research space**
- **Technologies transitioned to the Joint Warfighter:**
 - 59 Full and 95 Urgent Materiel Releases since 2008
 - Enabled fielding of 234 new weapons and equipment since 9/11
- **Partnered with Industry, Academia, and other gov't agencies - 140 Cooperative Research & Development Agreements**

“This is a unique facility with a critically important mission; there really is no other government or industry counterpart to Picatinny.” -Sec Army John McHugh, Sept 2013



Tenants

RESEARCH & DEVELOPMENT

SUSTAINMENT

PROCUREMENT



Army's Development Lab of the Year 2011

David Packard Award for Excellence 2011 & 2012

Research & Development Achievement Award 2012

Shingo Bronze Medallion for Operational Excellence 2012

Army's Greatest Inventions 4 in 2011

ARDEC holds 23% of all Army Patents from FY10 - 12

CMMI Level 5 Certified 2013

Product Manager of the Year 2012



JM&L LCMC



Garrison



ACC-NJ



Network Enterprise Center



DCMA - NE



PEO Soldier - PM Soldier Weapons



PEO GCS - PM GVC



PEO Ammunition



O/EDCA



Marine Corps

7245th IMSU



Directorate of Logistics



Civilian Human Resources Agency



Northern NJ HQ (Company)

NJ Safety Achievement Award from Commissioner of Labor & Workforce Development 2012

SECDEF Product Support Manager of the Year 2013

Army AL&T Director, Acquisition Career Management Award 2013

Thomas Alva Edison Patent Award 2011



We Support the Joint Warfighter and . . .



Marines



Navy



Army



Air Force



Coast Guard

Defense

- Joint Improvised Explosive Device Defeat Organization
- Defense Ordnance Technology Center
- US Northern Command
- Defense Threat Reduction Agency
- US Special Operations Command
- Defense Advanced Research Projects Agency

Other Government Agencies

- Department of Justice
- Department of Homeland Security
- Federal Bureau of Investigation
- State Department
- Transportation Security Administration
- New Jersey Department of Transportation
- New Jersey State Police
- Department of Energy

Every Joint Warfighter is equipped with world-class Picatinny lethality!



Program Executive Office Ammunition Organization



COL Willie Coleman

Project Manager Combat Ammunition Systems

Indirect Fire Munitions and Mortar Weapon Systems

- Excalibur
- Guided Precision Munitions & Mortar Systems



PEO Ammunition
BG John McGuiness



DPEO Ammunition
Mr. James Shields



Mr. Chris Grassano

Chief of Staff

- Systems Acquisition
- Business Management
- Human Resources
- International
- CIO
- S&T



COL Richard Hornstein

Project Manager Close Combat Systems

Networked Munitions, Force Application Systems, Explosive Hazard, and Countermine

- Counter Explosive Hazard
- Area Denial
- Combat Systems
- Support Munitions

A world class organization delivering the most capable and affordable ammunition, weapons and counter IED products to the Joint Warfighter as efficiently as possible.



Mr. Keith Gooding
USMC

Project Manager Towed Artillery Systems

Support Fires for Maneuver forces

- M777A2 Lightweight 155mm Howitzer
- M119A3 105mm Howitzer Digitization



COL Steven Cummings

Project Director Joint Services

- Demilitarization
- Ammunition Industrial Base
- Ammunition Logistics
- Technology and Prototyping



COL Paul Hill

Project Manager Maneuver Ammunition Systems

Direct Fire Munitions

- Large, Small, Medium and Large Caliber
- Non-Standard Ammunition



CAPT Ronald Kocher USN

O/EDCA

Executive Director Conventional Ammunition

SMCA Assessment



COL Victor Rodriguez USAF

Project Director Joint Products

- Air Force and Navy Bombs
- Navy Deck Gun Ammo
- Energetics
- CAD PAD

- US ARMY
- US AIR FORCE
- US NAVY
- USMC

Single Manager for Conventional Ammunition






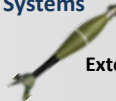




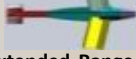



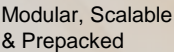











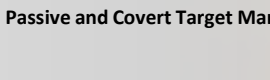
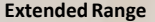



















PEO Modernization Strategy

Emerging Technology (next 6 Years)

Next Generation (6-16 years)

Future Concepts (16+ years)

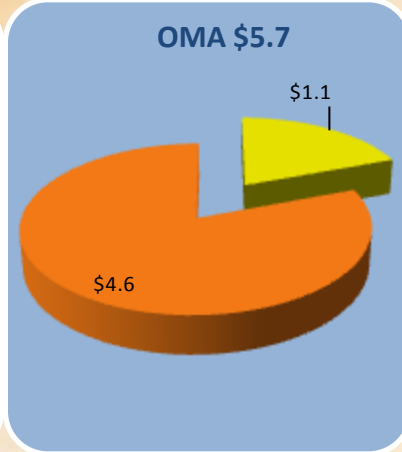
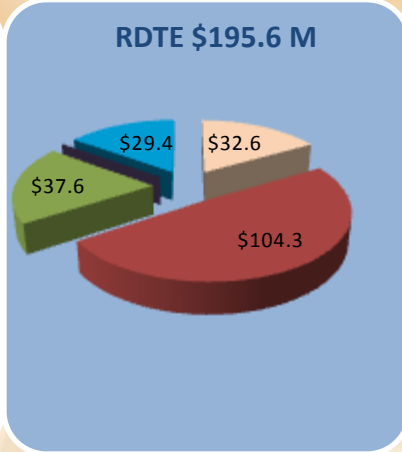
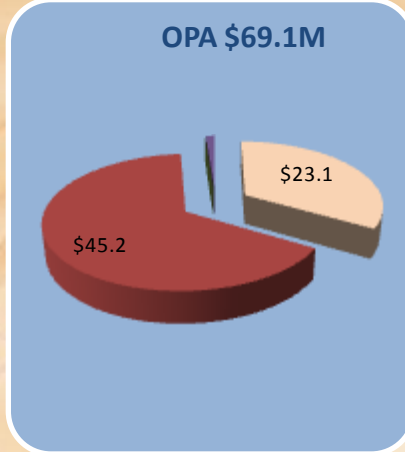
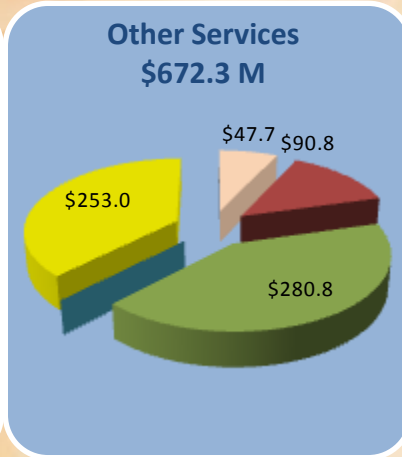
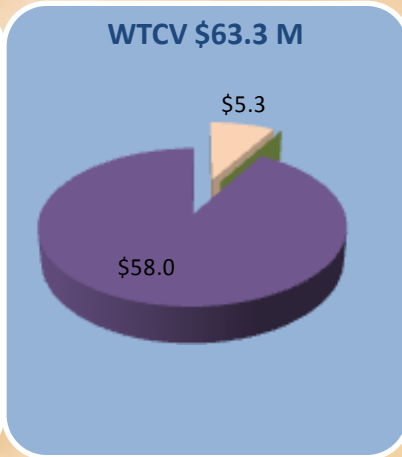
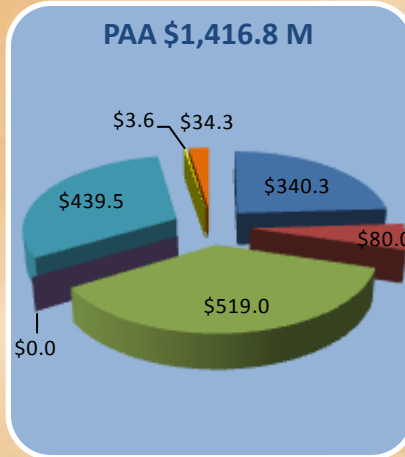
<p>Artillery Systems Precision Guidance Kit </p> <p>Extended Range Ammo </p>	<p>Affordable, Anti-Jam Precision </p> <p>Extended Range Guided (Ammo and Weapon) </p>	<p>Lightweight FC </p>	<ul style="list-style-type: none"> Extended Range Autonomous Weapons Swarming Munitions Non-Kinetic Engagement
<p>Mortar Munitions and Weapon Systems Precision Mortar w/6 DOF Ballistics </p> <p>Environmentally Benign Smoke Mortars </p> <p>Extended Range Ammo </p>	<p>Affordable, Anti-Jam Precision </p>	<p>Lightweight Fire Control </p> <p>Extended Range Guided Projectiles </p>	<ul style="list-style-type: none"> Extended Range Autonomous Weapons Direct & Indirect Fire Swarming Munitions Non-Kinetic Engagement
<p>Demolitions, Flares & Signals Increased Countermeasures & Environmentally Friendly </p> <p>Modernized Demolition Initiators (MDI) Producibility Improvements </p>	<p>Defeat Advanced Threats </p>	<p>Modular, Scalable & Prepacked </p>	<ul style="list-style-type: none"> Remote Emplacement & Initiation Scalable/Tunable Effects
<p>Tank Ammo 120MM, Advanced Kinetic Energy </p> <p>Advanced Multi-Purpose </p>	<p>Depleted Uranium (DU) Replacement </p>		<ul style="list-style-type: none"> Long Range Scalable Effects Autonomous Systems Non-Kinetic Engagement
<p>Small & Medium Caliber 7.62 EPR </p> <p>One Way Luminescence (OWL) </p> <p>40mm Non Dud Prod. </p>	<p>Med Cal Extended Range 40mm Airburst </p> <p>30mm Airburst For Apache </p>	<p>Lightweight Ammo & Advanced Armor Defeat </p>	<ul style="list-style-type: none"> Scalable Effects / Swarming Munitions Non-Kinetic Engagement Ammo on Demand Information Dominance / Reduced Detection
<p>Non-Lethal Individual Non-Lethal System (INS) (will transition to PM SW) </p> <p>40mm & 12ga Improvements </p>	<p>Passive and Covert Target Marking </p>	<p>Extended Range </p>	<ul style="list-style-type: none"> Integrated Lethal/Non-Lethal Non-Kinetic Engagement
<p>Shoulder Launched & Area Denial Individual Assault Munition (IAM) </p> <p>Spider Improvements & Remote Emplacements </p>	<p>Standoff Entry Breaching and Asset Neutralization </p>	<p>Next Gen Networked Munitions </p>	<ul style="list-style-type: none"> Longer Range – Advanced Target IAM Non-Kinetic Engagement Deep Insertion Networked Munitions with Moving Vehicle and Anti-Tank Capability and Non-Munition, Non-Lethal Capability.
<p>Counter Explosive Hazard Mounted Detection and Marking </p> <p>Robotic Dismount Detection and Marking </p>	<p>Automated Standoff Explosive Detection, Marking & Neutralization </p>	<p>Increased Speed and Stand-off Standoff Substance Identification </p>	<ul style="list-style-type: none"> Automatically Anticipate, Detect, Mark and Identify/Classify, and Neutralize Explosive Hazards
<p>Grenades Enhanced IM with Benign Smoke </p> <p>Fuze & Primer Improvements </p>	<p>Dual Mode (Lethal/N-L) Grenade </p>	<p>Multi-Purpose Smoke </p>	<ul style="list-style-type: none"> Lighter Weight Greater Effects Non-Kinetic
<p>Industrial Base, Ammunition Logistics & Demil Ammunition Plant Modernization </p> <p>Lighten the Logistics Load </p> <p>Design for Demil </p>	<p>Enhanced Equipment and Process for Demilitarizing IM Explosives </p>	<p>Solvent-less Propellant Lines Additive Manufacturing Facility </p>	<ul style="list-style-type: none"> Flexible Production Lines/On-site production Automated Condition Monitoring, Distribution & Re-Arm Integrated Life-Cycle Design for Demil Advanced Bio-Demil Technologies



PEO Ammunition FY14 Budget

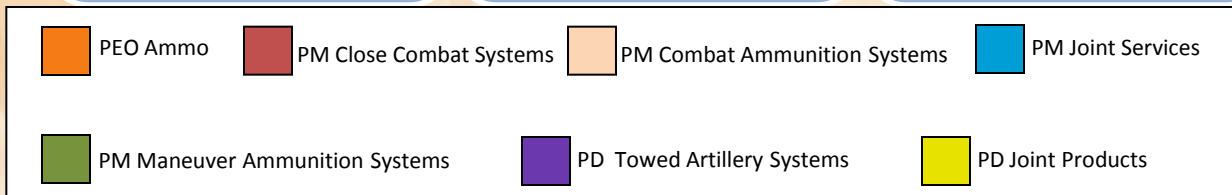
Operating under CRA until Jan 2014

Effects of Sequestration Cuts



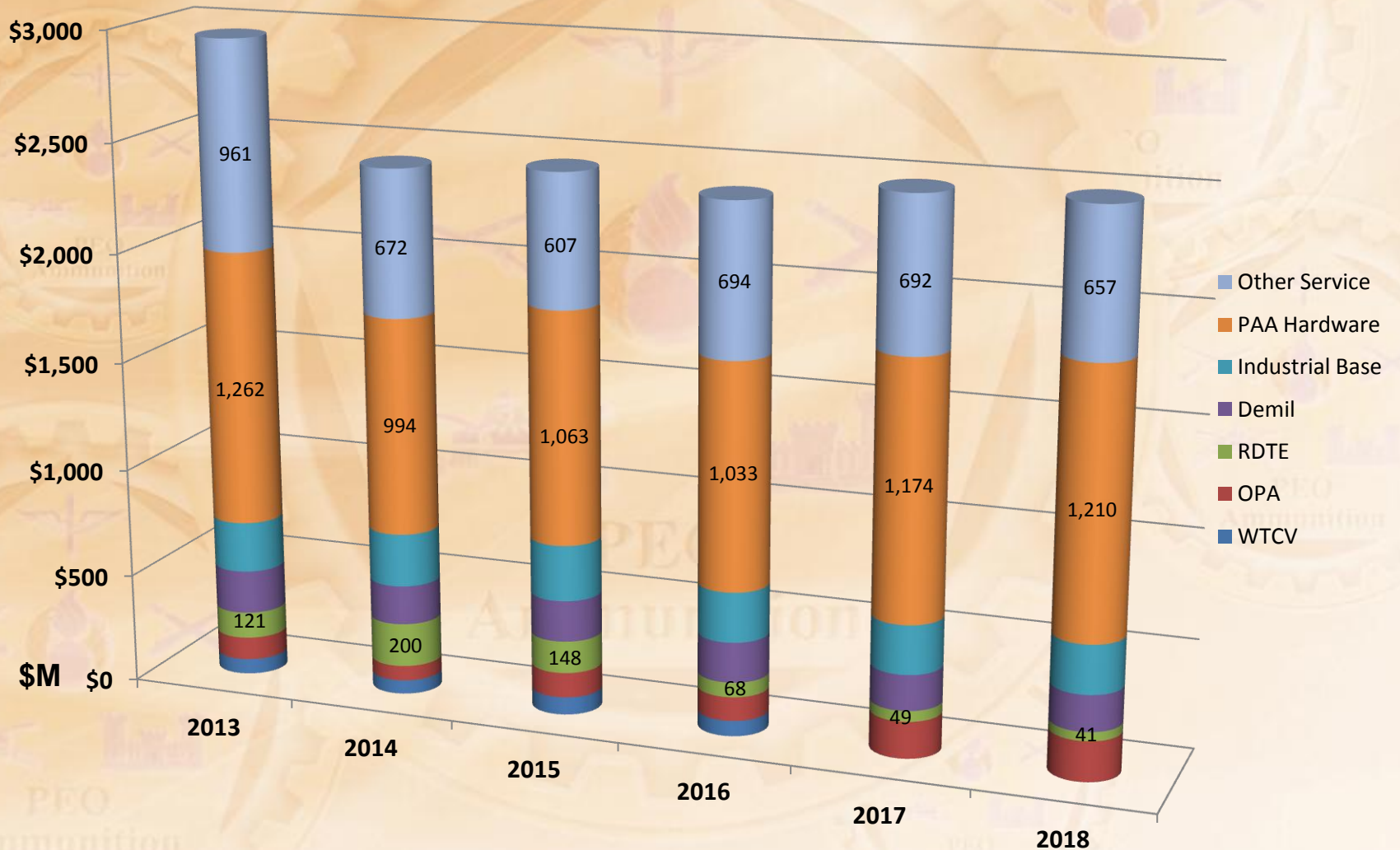
Key Program Metrics	
Programs (Army Only):	
ACAT I	1
ACAT II	4
ACAT III	156
QRCs	18
Product Phases*:	
Pre-System Acquisition	2
Eng & Mfg Dev	6
Prod & Dep	237
Operations & Support	679

*Some programs in multiple phases





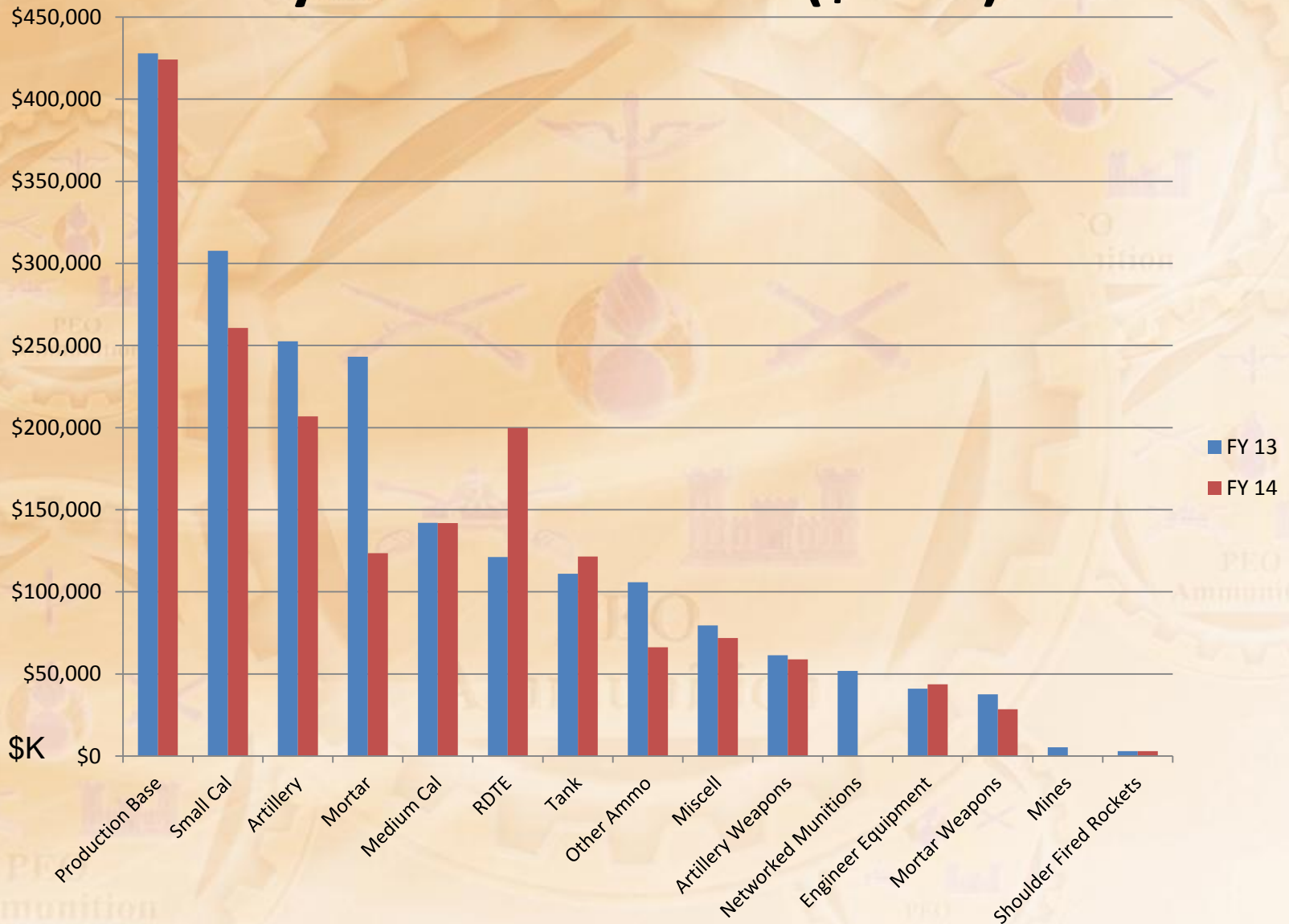
Conventional Ammunition Fiscal Outlook (FY13-18)



Source: 14 Pres Bud dated Feb 2013



FY13 – FY14 Funding Comparison by Ammo Families (\$ in K)





Key Ammo Industrial Base Risks/Challenges & Opportunities

Risks/Challenges:

- Support the Warfighter
- Financial viability of ammo supply chain
- Loss of defense unique 2nd/3rd tier suppliers
- Increase in Single Point Failure suppliers & higher unit costs long term due to a lack of competition
- Less economical production rates & stretched schedules resulting in higher unit costs short term
- Reduction of industry investment in new technology
- Loss of uniquely skilled production engineering workforce
- Loss of capacity for future surge requirements

Opportunities:

- Consolidation of oversized capacity
- Leaning of manufacturing operations
- GOCO AAP Tiger Team cost reduction initiatives
- Foreign Military Sales / Direct Commercial Sales



At the End of the Day...



We're Meeting Joint Warfighter's Needs !

