

PEO Ammunition Appropriation Update



Our Army at War...Relevant and Ready

April 2004

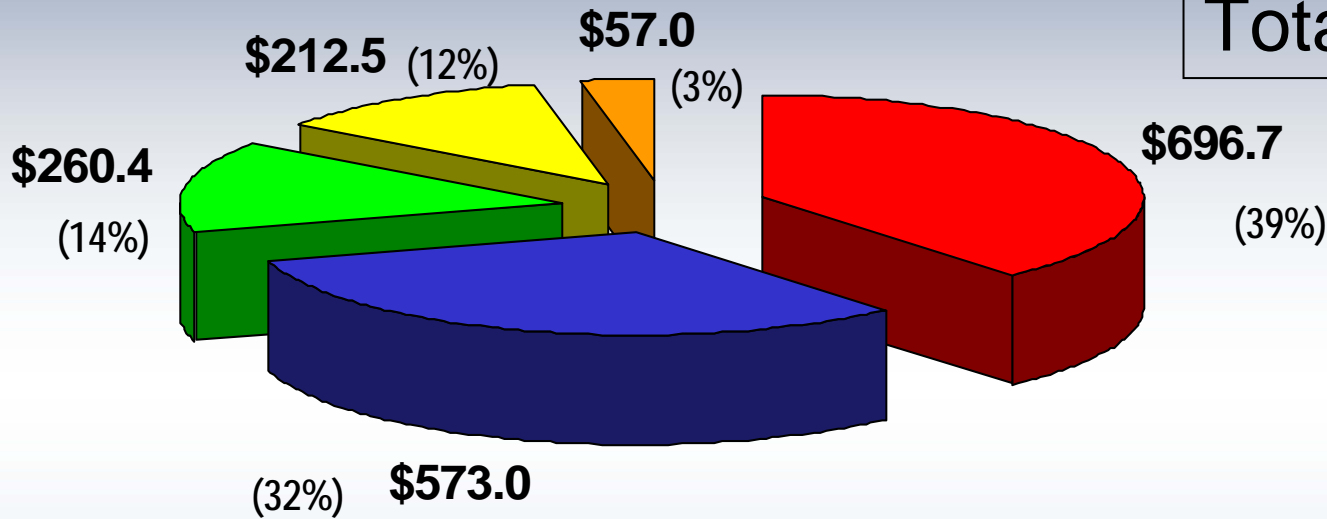
Robin Gullifer

Associate Program Executive Officer, Ammunition – Program Management



RDA FY 04 PEO Ammo Budget Total

Total: \$1,799.6M



Source: FY05 PB

PM Combat Ammunition Systems

- Artillery Ammunition RDTE \$184,067
- Artillery Fuze WTCV \$10,027
- Mortar OPA \$39,224
- Ammo \$339,633

PM Joint Services

- Industrial Base RDTE \$30,937
- Demil Ammo \$181,626

PM Maneuver Ammunition Systems

- Large Caliber RDTE \$26,521
- Medium Caliber Ammo \$670,148
- Small Caliber

PM Close Combat Systems

- Mines, Countermine & Demolition RDTE \$133,615
- Ammo \$108,881

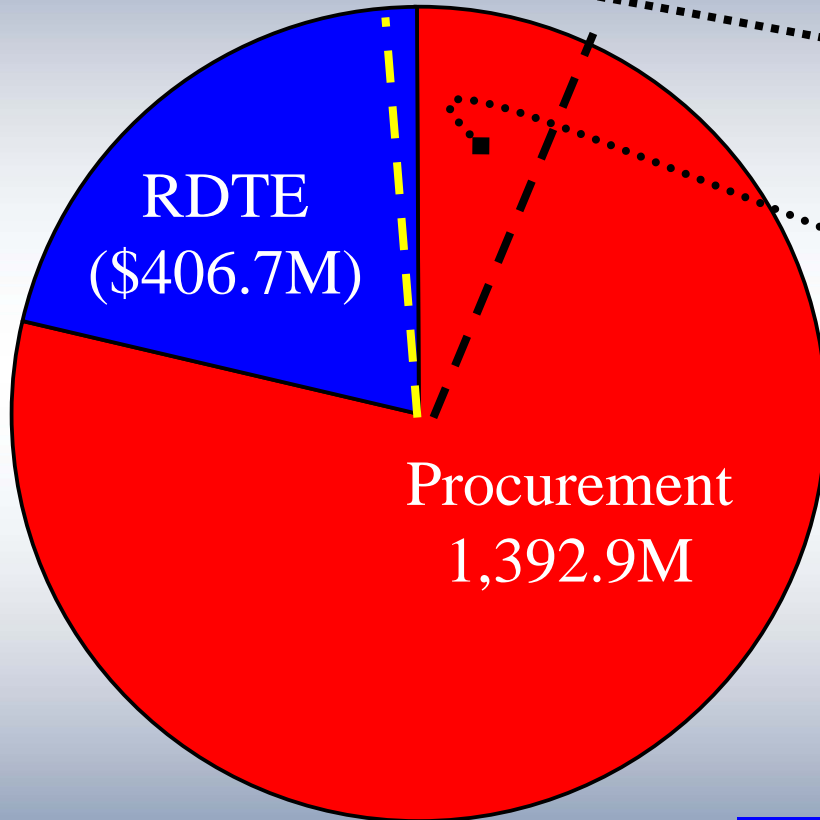
PEO Ammo

- RDTE \$31,595
- Ammo \$25,446

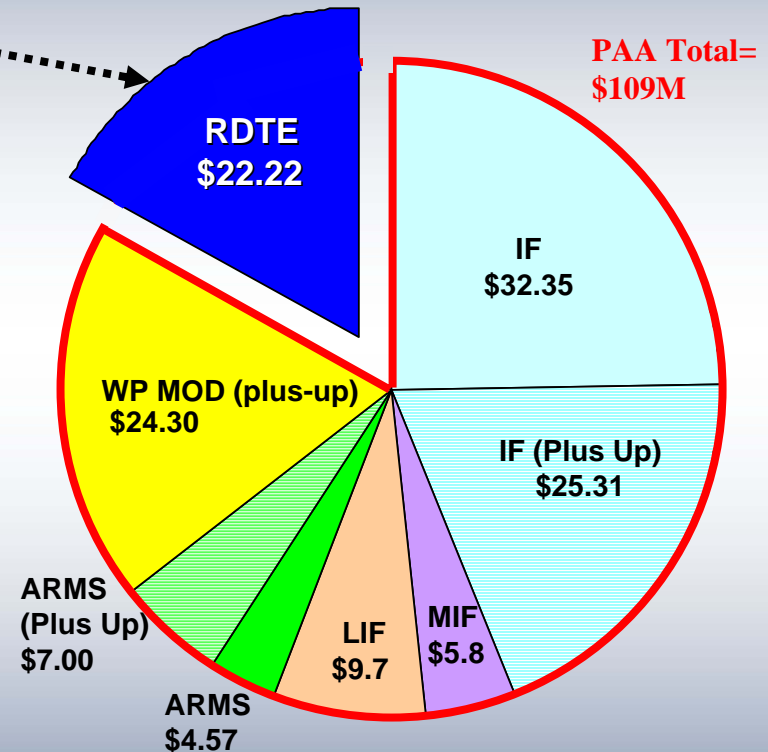


FY04 PEO Ammo Funding (\$M)

**PEO Ammo
Total=\$1,799.6M**



**Industrial Base
Total=\$131.22M**



**Production
Base Support
Program**

- IF**=Industrial Facilities
- MIF**= Maintenance of Industrial Facilities
- LIF**= Layaway of Industrial Facilities
- ARMS**= Armament Retooling & Manufacturing Support (ARMS)
- WP MOD**= White Phosphorous Modernization

Source: FY05 PB



FY2004/FY2005 Ammunition Amended Budget

(Current TOA \$ in Millions)

	<u>FY03</u>	<u>FY04</u>	<u>FY05</u>
Hardware	1778.5	1196.2	1409.0
Prod Base	142.7	182.2	147.9
Total	1921.2	1378.4	1556.9

Funds:

- ✘ Training Ammo at low C-2 Level of Readiness (82% of the executable rqmt)
- ✘ 17 Modern Munitions (Armor Piercing 5.56MM, 7.62mm and .50 CAL; Mortars - M934, XM983, M929A1; Tank M829E3, XM1028; 105MM HEP-T, XM1040 AP, XM982 Excaliber, 155mm M864, MACS, MOFA, NSD-APL, LVOSS, & BDM)
- ✘ Procurement of Hydra 70 Rockets in the Amended Budget
- ✘ Conventional Ammo Demil
- ✘ Limited Ammo Prod Base

Does Not Fund:

- ✘ Restock War Reserve
- ✘ Build-up of Modern Munitions



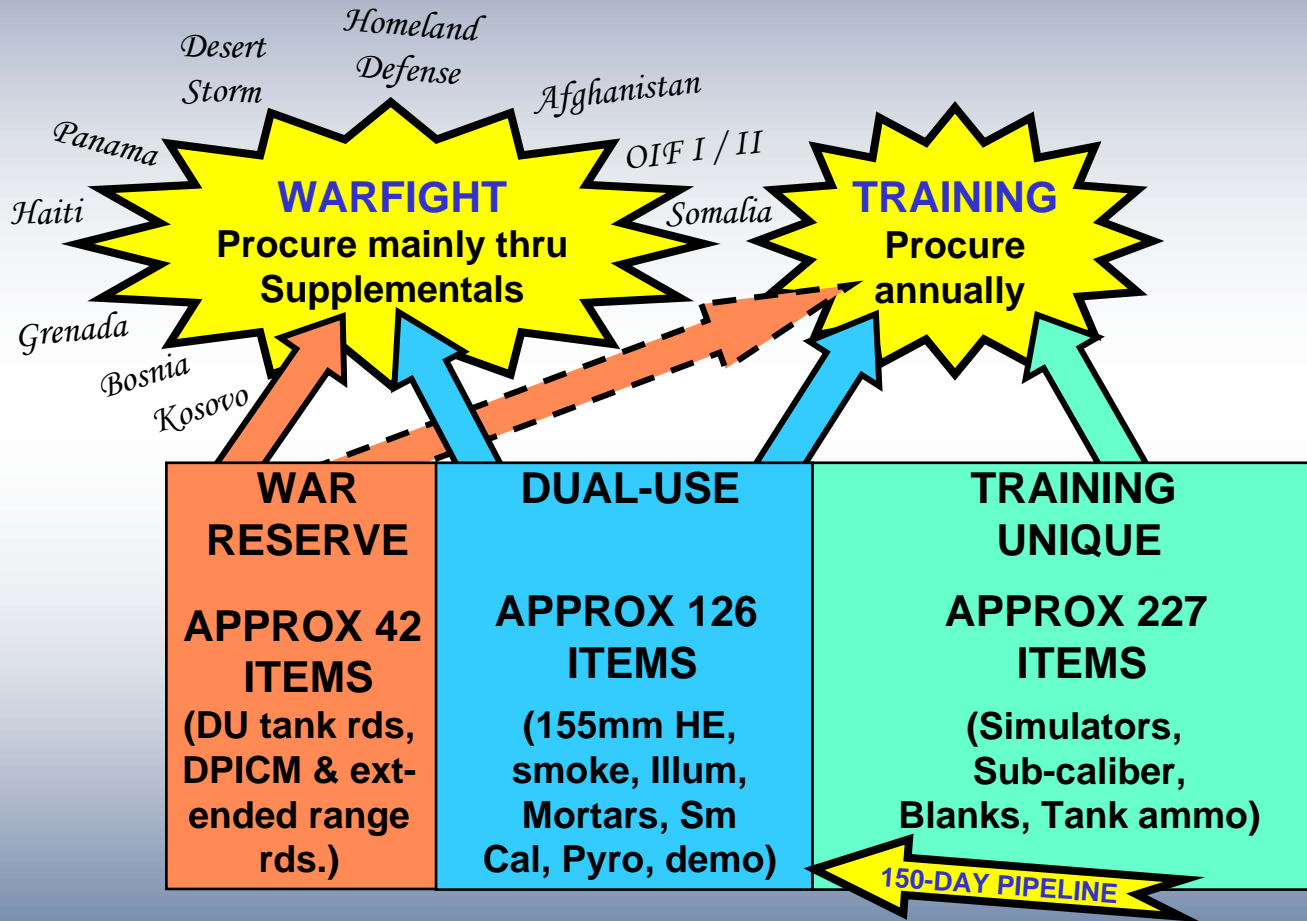
Detailed Funding Breakout Procurement

<i>Procurement (\$M)</i>	<i>FY03</i>	<i>FY04</i>	<i>FY05</i>
Hardware	1778.5	1196.2	1409.0
Training	(1521.9)	(984.2)	(1142.9)
War Reserves	(197.1)	(179.0)	(239.1)
Non-Hardware/Miscellaneous	(59.5)	(33.0)	(27.0)
Production Base Support	142.7	182.2	147.9
Industrial Facilities	61.6	58.6	40.8
Layaway	6.9	12.9	2.3
Maint of Inactive Fac	8.5	9.6	4.7
Demil	57.2	89.5	95.4
ARMS	11.5	11.6	4.7
Total Funding	1921.2	1378.4	1556.9



Army Ammunition Management

ONE GENERIC PILE – “AMMUNITION.”



RESOURCING

- Buy minimal WR.
- Priority to dual-use

- Flexible
- Affordable, but...



- Leads to TNG & WR shortfalls.

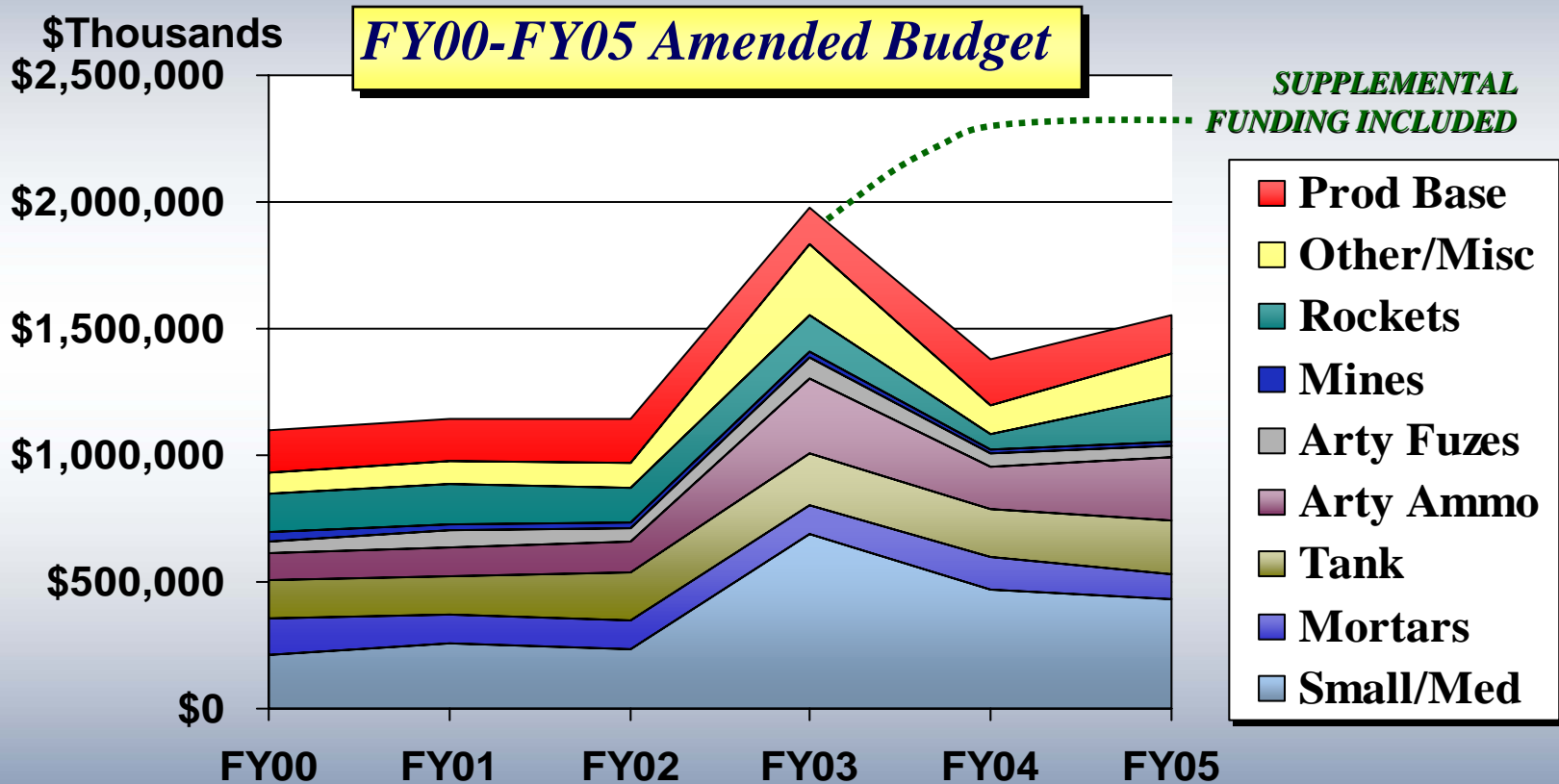
- Guarantees “come-as-you-are” warfight.

- Zero-sum resourcing.

ARMY MUST BUY WAR RESERVE AND TRAINING AMMUNITION

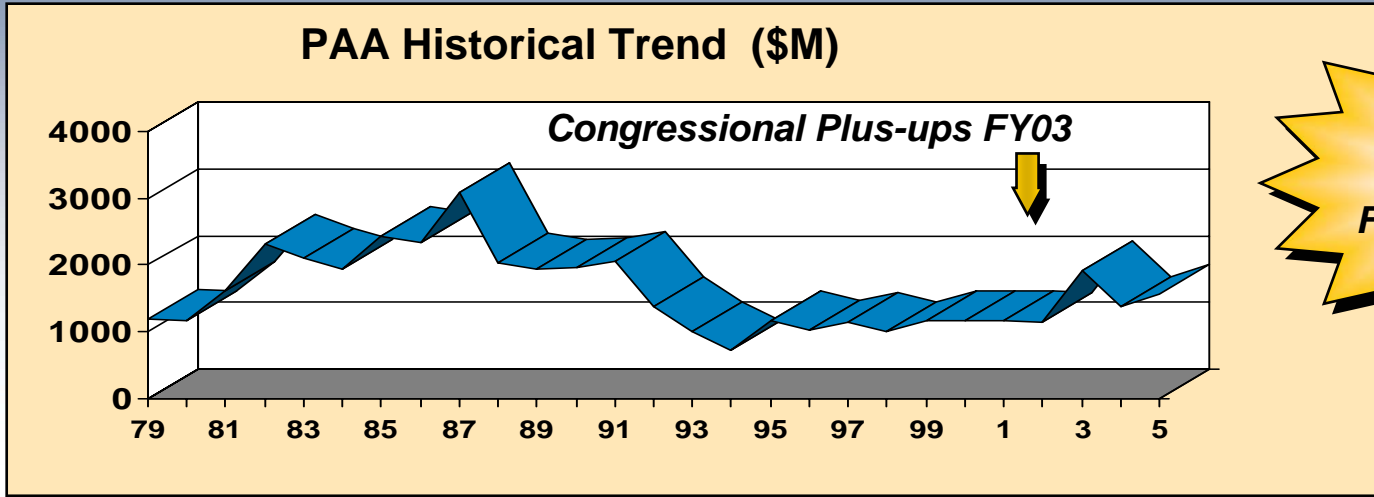


Ammunition Procurement Projection by Categories





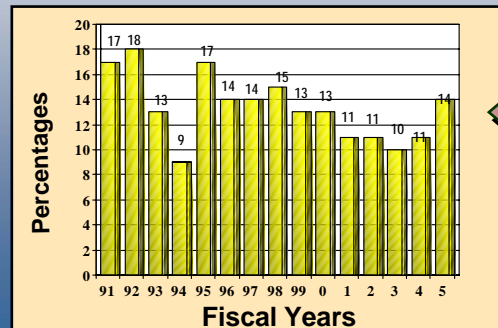
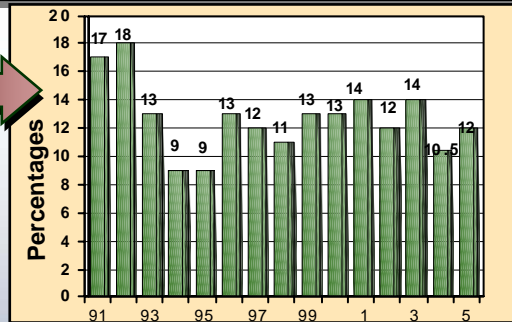
PAA - Funding Profile



Procurement as a Percentage of Army's FY04/FY05 Budget

Army Budget (\$ in Millions)		
APPROPRIATION	FY04	FY05
FAMILY HOUSING	1,309	1,565
MIL PERSONNEL	41,116	29,723
RESERVE COMP	15,491	16,535
RDTE	10,203	10,435
MCA	1,610	1,771
OMA	49,718	26,076
PROCUREMENT	12,850	11,485
ERA	394	401
BRAC	67	100
CHEM DEMIL	1,500	1,372
AWCF	219	184
TOTAL	134,477 *	98,526

* INCLUDES FY04 SUPPLEMENTAL



Procurement Appropriation (\$ in Millions)		
APPROPRIATION	FY04	FY05
AIRCRAFT	2,137	2,658
MISSILES	1,494	1,398
WTCV	1,945	1,640
AMMUNITION	1,378	1,557
OTHER PROCUREMENT	5,896	4,231
TOTAL	12,850	11,485

Ammunition as a Percentage of The Army's FY04/FY05 Procurement Budget



Description Training

- **Army – High-priority program designed to provide sufficient training ammunition to train all Army units and support training base**
- **Mission - Support Army readiness by resourcing 100% of training ammunition requirement**
- **Training Ammunition Acquisition Strategy -**
 - ✓ **Fund training at C-2 level of readiness**
 - ✓ **Support all Army Components and Reserves**
 - ✓ **Does not fund other critical unprogrammed requirements (eg., RC MOB TNG, mission rehearsals and other CONOPs-related TNG)**
- **Critical Training Shortfalls --**
 - ✓ **Small caliber (5.56mm, 7.62mm, .50-cal, 40mm). Particular impact on:**
 - **Individual weapons qualifications**
 - **Special skills TNG (night firing, National Training Center (NTC) firing)**
 - **TRADOC “Schoolhouse” TNG (eg., currently sourcing INF tactical TNG and all others, i.e., basic training)**
 - **Grenades. Currently sourcing only TRADOC Schoolhouse TNG. Simulators and Signals – Impacts collective TNG at all levels**



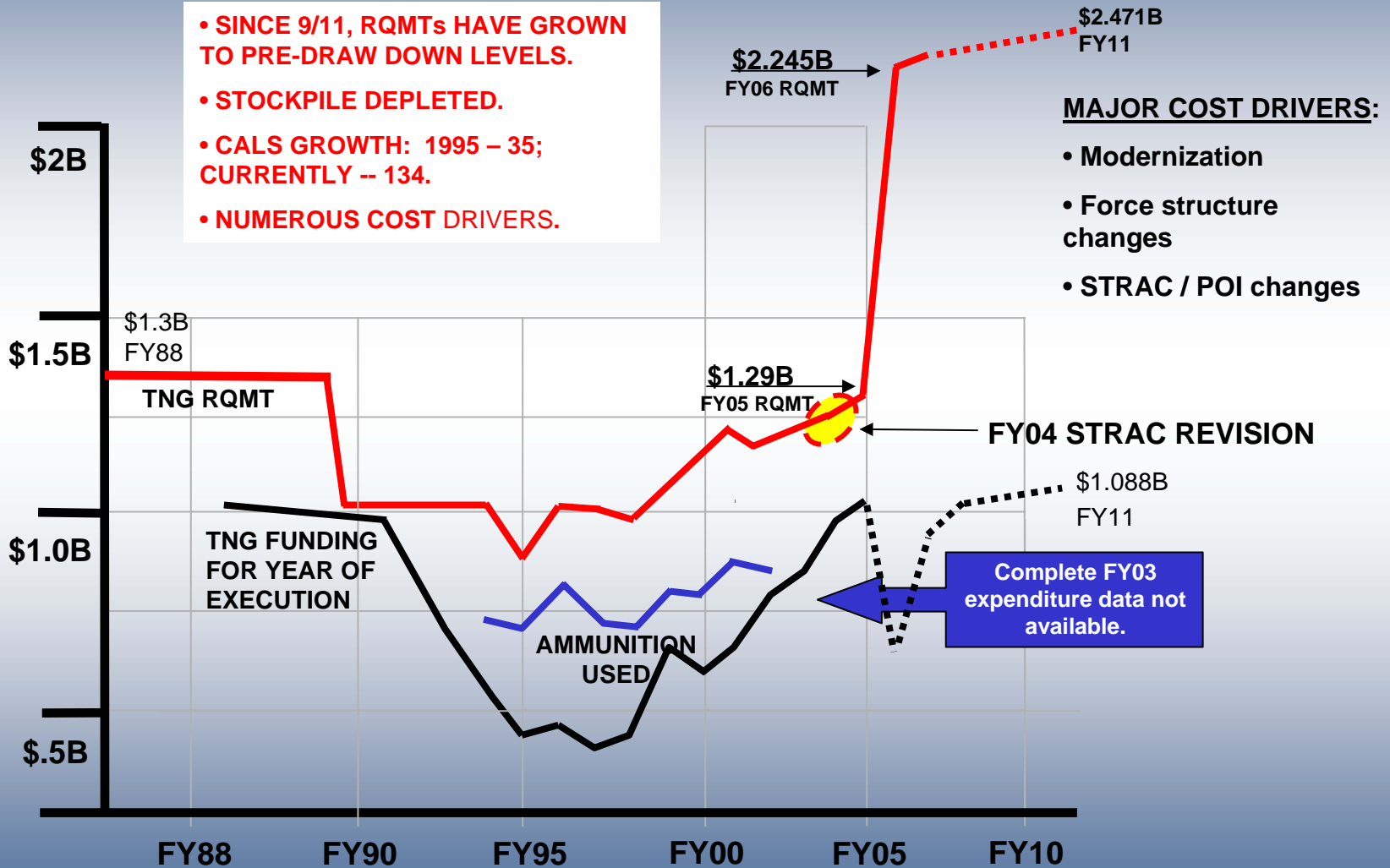
Requirements Training

- **Army Training Requirement**
 - ✓ Total training requirement is funded at \$1.3B annually
 - ✓ Training standard is set by Standards in Training Commission (STRAC) and by TRADOC Programs of Instruction (POI) for schools
 - ✓ FY03 STRAC revision aligned TNG strategies with Army doctrine, resulting in major changes in requirements (e.g., 40mm). Also includes SBCT training strategies (large small-caliber requirements)
 - ✓ Revised STRAC resulted in \$243M annual increase in TNG ammunition costs
- **Budget program developed based on highest year of execution during a three-year period**
 - ✓ Army does not buy 100% of STRAC RQMT and, therefore, could not execute 100% STRAC RQMT if it suddenly decided to do so
 - ✓ Training ammunition shortfalls give false impression of under-execution – soldiers cannot fire bullets they do not have in the first place



Training Ammunition Requirements / Funding Trends

- SINCE 9/11, RQMTs HAVE GROWN TO PRE-DRAW DOWN LEVELS.
- STOCKPILE DEPLETED.
- CALS GROWTH: 1995 – 35; CURRENTLY -- 134.
- NUMEROUS COST DRIVERS.





Training Ammunition Funding

1990s: SUPPORTED FROM THE STOCKPILE (\$2.8B). POM FUNDING AVERAGED \$600M / YEAR.

9/11 – FY03: UNPROGRAMMED CONOPS-RELATED TRAINING TOTALLING \$355M. ESTIMATE ADDITIONAL \$105M IN FY04.

FY03 SUPPLEMENTAL: \$719.2 (\$447.5M + \$271.7M).

- **\$225M used for TNG; all other for WR.**
- **Buys back training pipeline and replenishes WR.**
- **Initial stocks available in mid- to late-FY04 – FY06.**

FY04: \$1.032B funded (82.4%) / \$1.252B RQMT.

- **First year of funding for munitions to support FY05 STRAC.**
- **SEP 03 – OSD Withdrew \$36M (40mm). Adjusted funding: \$996M (79.5%).**

FY05: \$1.038B PB (81.7%) / \$1.299B PF 1.0 RQMT for RE01.

FY05 Amended Budget of \$1142.5 includes \$127M for Hydra 70 Rockets



Description War Reserve

LEGEND:

Underscored: In FY2005
Amended Pres Bud

- **Army** -- high priority program to modernize ammunition available to existing warfighting platforms
- **Mission** -- provide forces with modernized highly capable munitions to support new and existing weapon systems
- **System** -- includes Army direct & indirect fire weapon systems that maintain overmatch capability
 - ✓ Small Arms Armor Piercing 5.56mm, 7.62mm and .50 Caliber – Used to defeat light armor vehicles
 - ✓ 120mm Mortar M934A1 HEMO, M983 IR Illum, M929A1 WP – Supports requirements for the 120mm mortar in the Stryker Brigade Combat Teams (SBCT)
 - ✓ 120mm Tank M829E3 – 4th generation kinetic energy cartridge
 - ✓ 120mm XM1028 – Anti-personnel canister for the United State Forces Korea
 - ✓ 105mm M393A2 HEP-T – Replacement for the aged stockpile of M393 tank rounds
 - ✓ 105mm XM1040 Anti-Personnel-Tracer (APERS-T) Used to defeat infantry squads in the open
 - ✓ 155mm Extended Range XM982 – *Cannon-delivered precision engagement extended range of indirect fire artillery projectiles*
 - ✓ 155MM Dual-Purpose Improved Conventional Munition (Re-capitalization) – Funds the remanufacture and retrofit of this extended range artillery projectile with a self-destruct capability
 - ✓ Modular Artillery Charge Systems (MACS) – Replace older canvas bag charges and provide enhanced firing and logistics capability improvements to the Army's inventory of 155mm cannon artillery
 - ✓ Multi-Option Fuze Artillery M782 – Will replace five current fuzes in 155mm weapon system
 - ✓ Light Vehicle Obscuration Smoke System (LVOSS) – Provides obscuration for tactical vehicles
 - ✓ Non-Self Destruct (NSD) Anti-Personnel Landmine (APL) - This anti-personnel landmine system will replace the M14 and M16 alternative for Korea by 2006
 - ✓ Bunker Defeating Munition (Tactical) – Used by infantry forces in attacking bunkers and enemy troops in urban areas



Requirements War Reserve

- **Army War Reserve Modernization Requirement**
 - ✓ **Army objective - maintain balanced approach to modernization**
 - ✓ **Support Army Transformation while maintaining combat capability**
 - ✓ **Requirements Documents That Identify the Army's Munitions Requirement**
 - ✓ **Quantitative War Reserve Requirements for Munitions (QWARRM) 11**

***Army Vision
Future Combat
System
?***



FY04 Congressional Action

Training

<i>President's Budget</i>	<i>FY02</i>	<i>FY03</i>	<i>FY04</i>	<i>FY05</i>
Training	(876)	(956)	(984.2)	(1142.9)

War Reserve

War Reserves	(92.0)	(144)	(179.0)	(239.1)
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Congressional Action FY04 (\$ in Millions)

<i>REQUEST</i>	<i>HASC</i>	<i>SASC</i>	<i>AUTH</i>	<i>HAC</i>	<i>SAC</i>	<i>APPN</i>	<i>DELTA</i>
1309.9	1428.9	1363.3	1413.3	1355.4	1419.8	1387.7	+77.8

<u>ITEM</u>	<u>+/- \$</u>	<u>REMARKS</u>
- .50 Cal SLAP	+\$1.0M	Support War Reserve Rqmts
- 25mm M919	+10.0M	Maintain Warm Base f/ Steel Ctg Case
- 30mm HEDP	1.0M	Support Revised Training Strategy
- 60mm M768, M769	-18.5M	Reduced based on Rqmts
- 81mm Mortar	+1.0M	Support Revised Training Strategy
- 120mm Mortar	+\$30.3M	White Phosphorous Facility Equip/Spt WR and Trng
- 120mm Tank	-5.5M	Reduced Requirements
- 155mm M864	-18.0 M	Reduce Program Delay
- 155mm M485 Illum	+1.0M	Support Revised Training Strategy
- MACS	+1.0 m	Support War R RQMTS
- HYDRA ROCKET	+20M	Supports Training and War Reserve
- DEMO MUNITIONS	7.0M	Supports War Build- Up of APOBS/MDI
- PBS	40.1M	Increase to PIF, Demil and ARMS



Fuze Base Concerns

➤ Concerns:

- ✓ Lack of funding across the board
- ✓ Financial viability of Fuze Base
- ✓ Maintaining critical core competencies

➤ What PEO Ammo is observing:

- ✓ Communication is improving, people are starting to listen
- ✓ Collaboration between all Services, Government and Industry will facilitate success
- ✓ Fuzing as part of systems contracting will increase



Organic Production Base Capabilities

11 GOCOs

Holston (TN)	Ordnance Systems Inc., BAE	Energetics - HMX, RDX
Iowa (IA)	American Ordnance	Load, Assemble & Pack (LAP) - Tank/Artillery, FASCAM
Lake City (MO)	Alliant Techsystems	Small Arms Manufacturing
Lone Star (TX)	Day & Zimmerman	LAP - Grenades, Initiators, Detonators, Mines, Cargo Munitions
Milan (TN)	American Ordnance	LAP - Mortars, 40mm Cartridges; C-4 Extrusion
Radford (VA)	Alliant Techsystems	Propellant Manufacturing (Rocket, Artillery, Tank, Med Cal; NC for Small Cal)
Scranton (PA)	Chamberlain Manufacturing	Large Caliber-Artiller/Mortar Metal Parts
Riverbank (CA)	Norris, Inc.	Steel/Brass Cartridge Cases, Grenade Metal Parts
Kansas (KS)	Day & Zimmerman	LAP-Sensor fuzed weapon; Mortar/Artillery
Mississippi (MS)	Day & Zimmerman	Semi Active - Cargo Metal Parts
Louisiana (LA)	Valentec	Semi Active - Large Caliber Metal Parts

3 Active GOGOs

Crane (IN)	LAP- Pressed/Cold Cast Navy Gun, Illum Candles
McAlester (OK)	LAP-Cold Cast Bomb
Pine Bluff (AR)	LAP-Smoke Artillery/Mortar

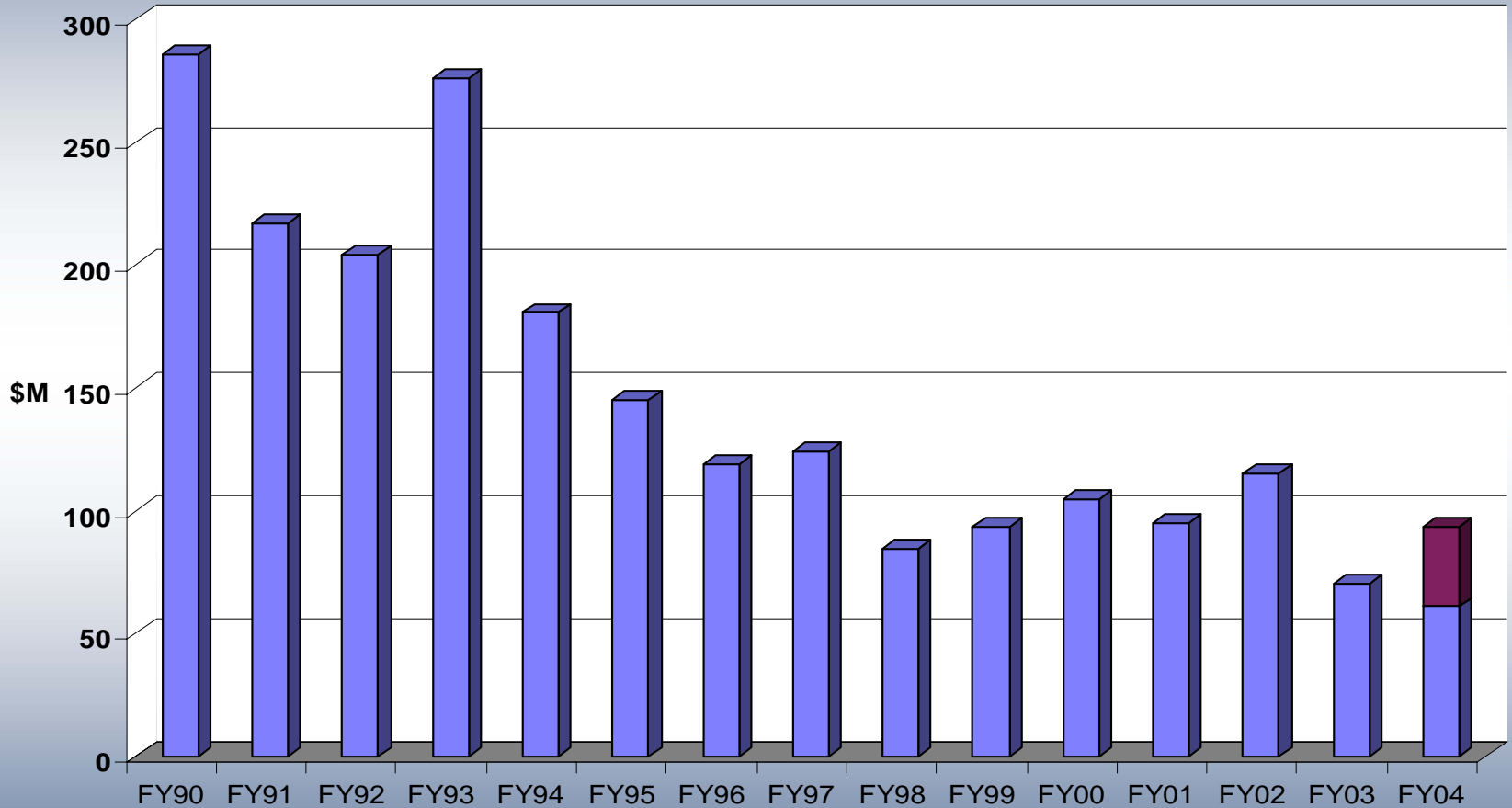
Current Production Base PAA \$\$

- 25% Directly to GOCO's
- 5 % Directly to GOGO's
- 70% Directly to Commercial

Key for Common Plant Capabilities	Small Arms
	Propellants
	Energetics
	LAP
	Metal Parts



FY90-FY04 PAA Production Base Funding





Industrial Base Strategic Plan

**7 Overarching
Strategies**

**30 Tactical
Strategies**

Strategic Goals:

1. Transform to Meet Current and Future Requirements
2. Modernize Utilized Manufacturing Capacity
3. Balance Industrial Base & Acquisition Management Risk
4. Operate Efficiently and Effectively
5. Incentivize Industry to Reinvest in Capital Equipment and Processes



Sample Overarching Strategies:

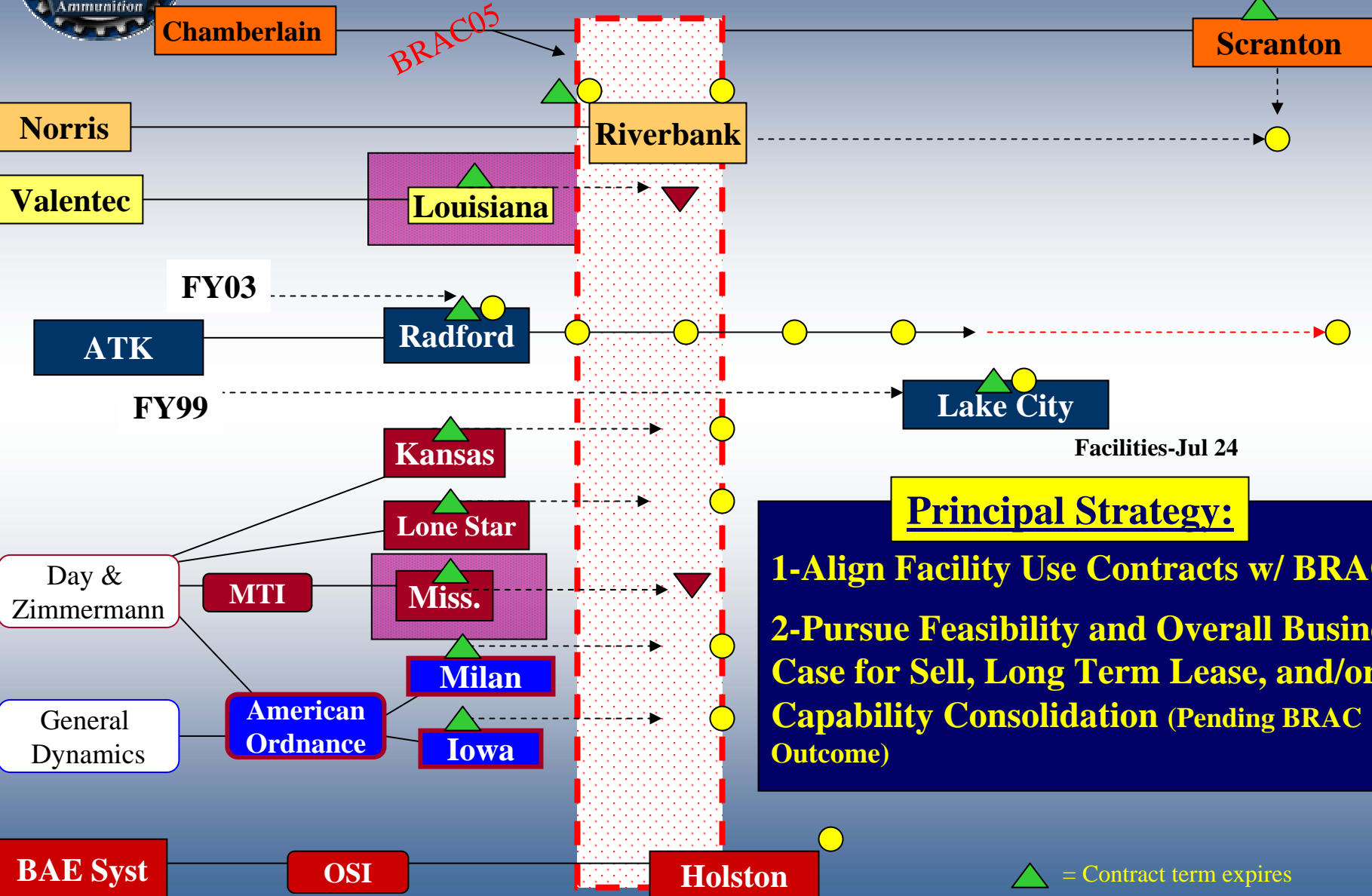
1. Acquisitions Will Determine and Posture the Production Base.
2. Acquisitions and Investments Will be Synchronized to Assure Required Manufacturing Capabilities Remain Available.
3. Opportunities for Greater Joint Service Activity Will be Identified and Implemented.

Outlines Goals and Tactics to Shape the Industrial Base



GOCO Production Base Outlook

FY04 FY05 FY06 FY07 FY08 FY09 FY10 FY11 FY12



Facilities-Jul 24

Principal Strategy:

- 1-Align Facility Use Contracts w/ BRAC05
- 2-Pursue Feasibility and Overall Business Case for Sell, Long Term Lease, and/or Capability Consolidation (Pending BRAC Outcome)

Facilities-Jun 23

▲ = Contract term expires
● = Decision or actionable point



Conclusions

- **Near term procurements relatively stable**
- **DoD IPT making good progress**
- **Fuze Industrial Base and critical core competencies receiving increased focus**
- **Working hard on developing a good acquisition business model with industry input**



PEO
Ammunition

Joint Lethality





Back-ups