



ARROYO CENTER

# ***Factory to Foxhole: Improving the Army's Supply Chain***

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*"For want of a nail the shoe was lost.□*

*For want of a shoe the horse was lost.□*

*For want of a horse the rider was lost□*

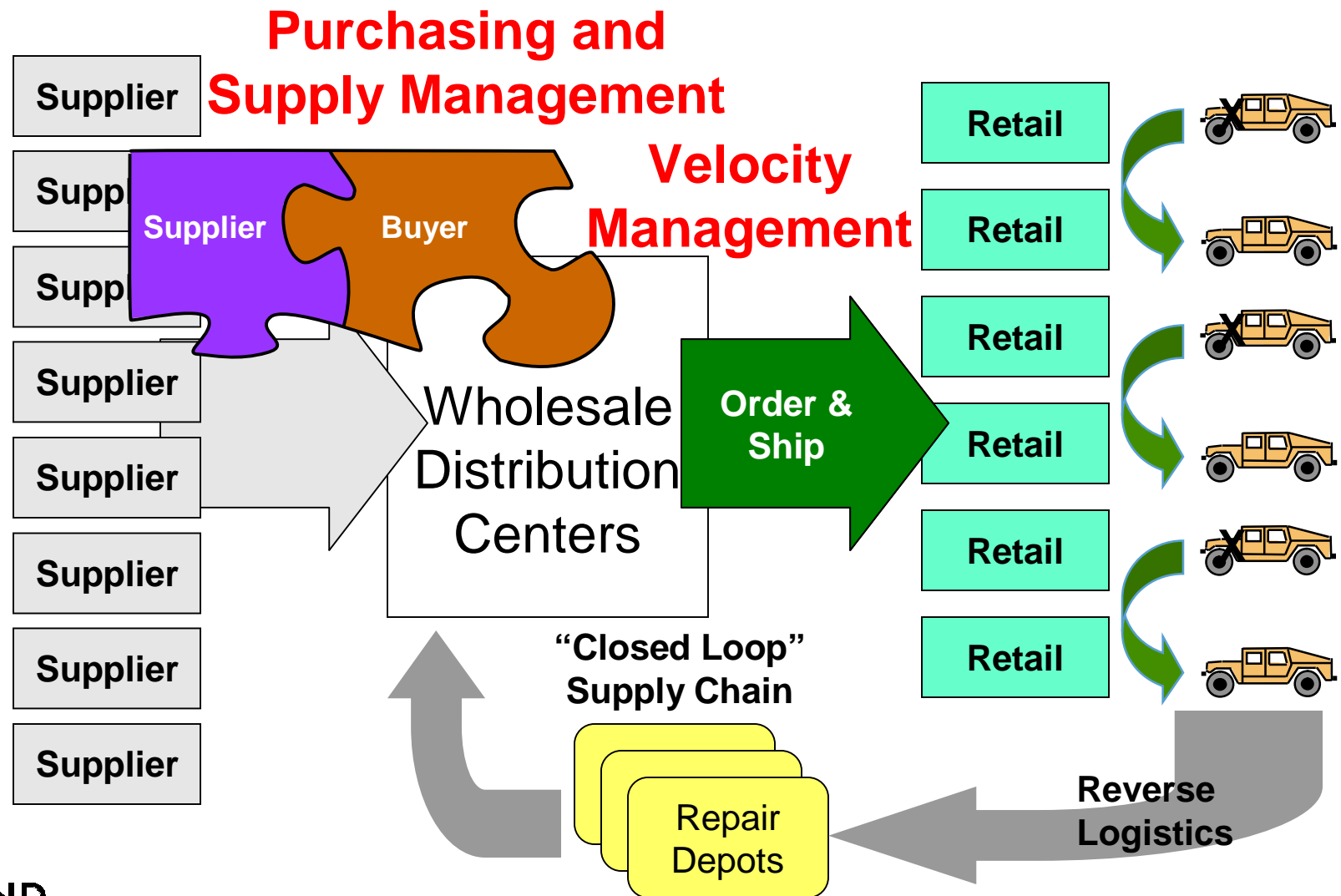
*For want of a rider the battle was lost.□*

*For want of a battle the kingdom was lost.□*

*And all for the want of a horseshoe nail."*

**- Benjamin Franklin**

# ***Military Supply Chain has Many Elements Similar to Commercial Supply Chains***



# ***Military's Mission Dictates a Demand-Responsive Supply Chain***

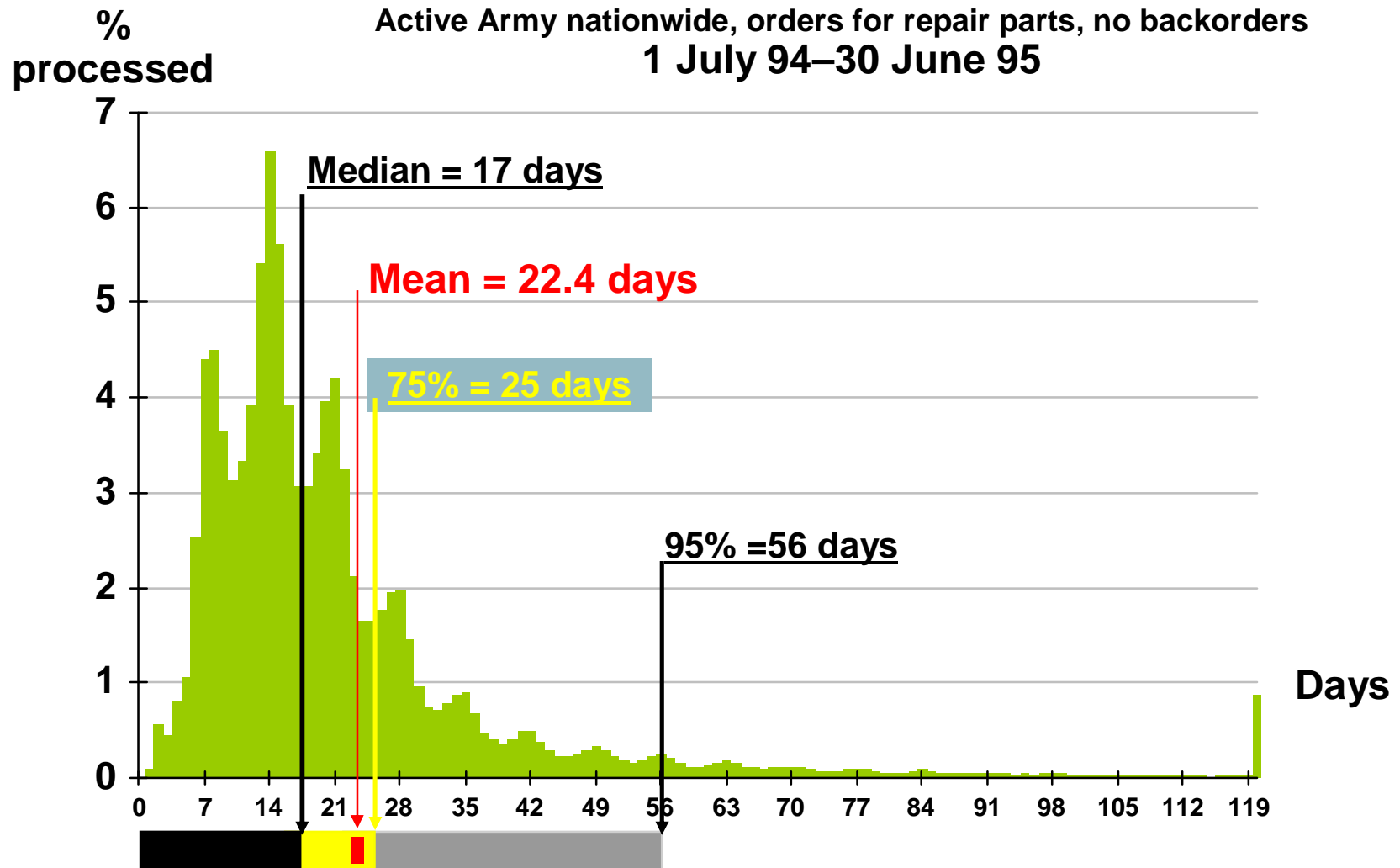
## **Commercial**

- Physical efficiency
- Lowest possible costs
- Minimize inventory investments
- Maximize capacity utilization
- Actively manage demands to smooth flow
- Mitigate surges, spikes, and unpredictability

## **Military**

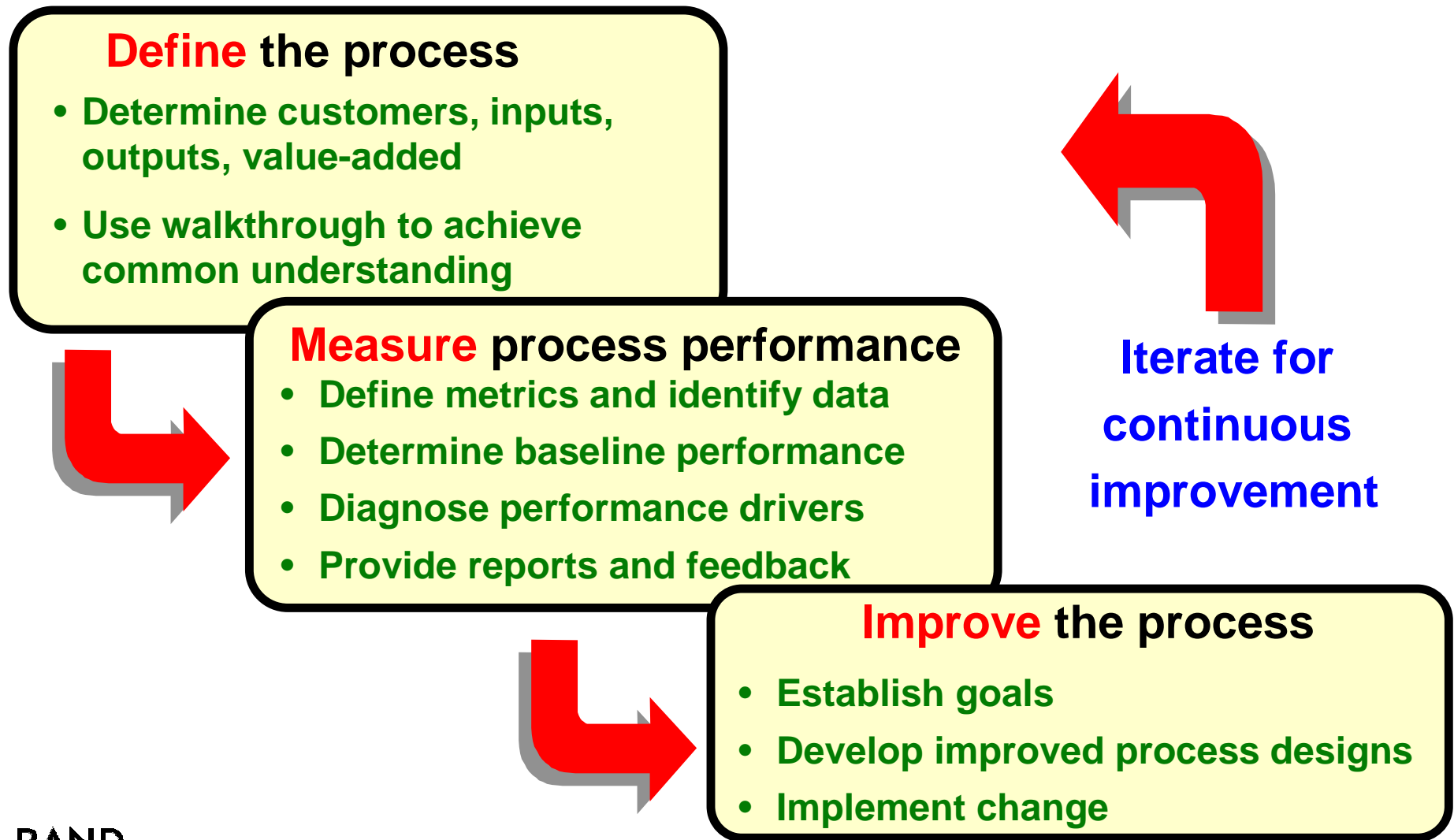
- Responsiveness, adaptability
- Surge capability
- Deployability
- Uncertain demands
- Highly specialized, sole-source parts
- Reverse logistics, “closed loop” for reparable

# ***In 1994-1995, Army Order and Ship Times had a Long and Variable Distribution***

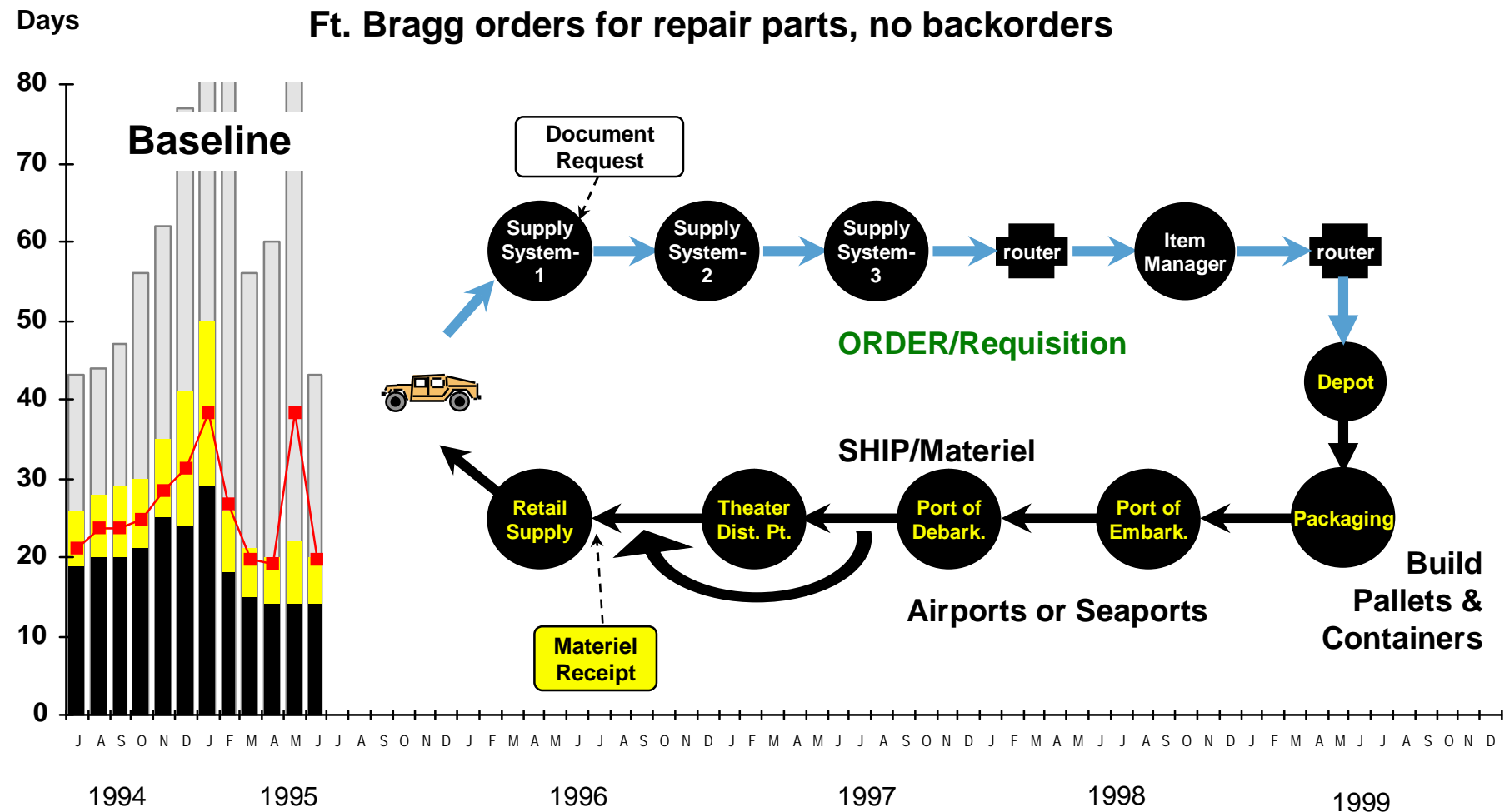


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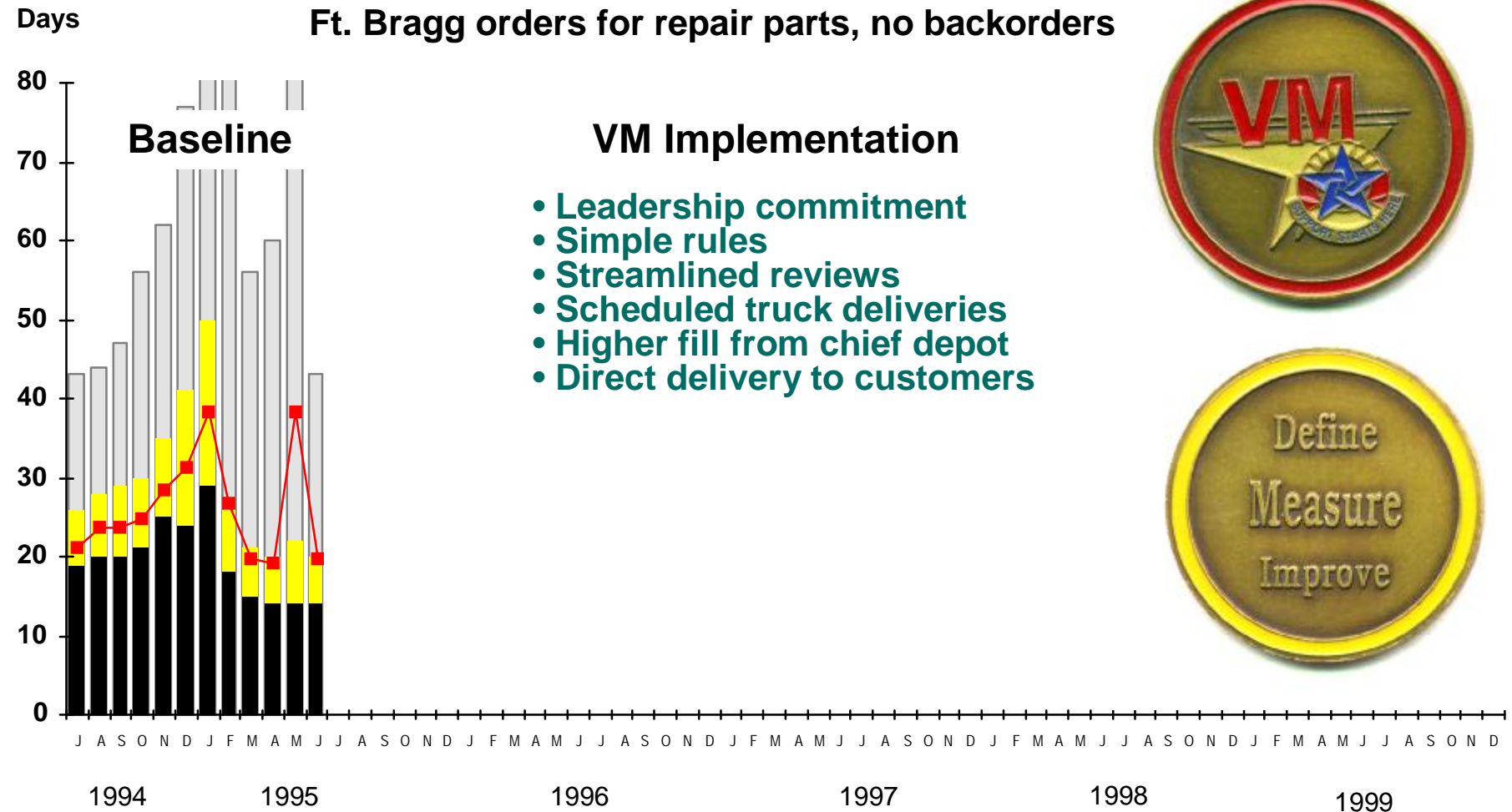
# ***The Define-Measure-Improve Methodology Leads to Continuous Improvement***



# Delays Were in All Segments of the Process, and Times Varied Month to Month

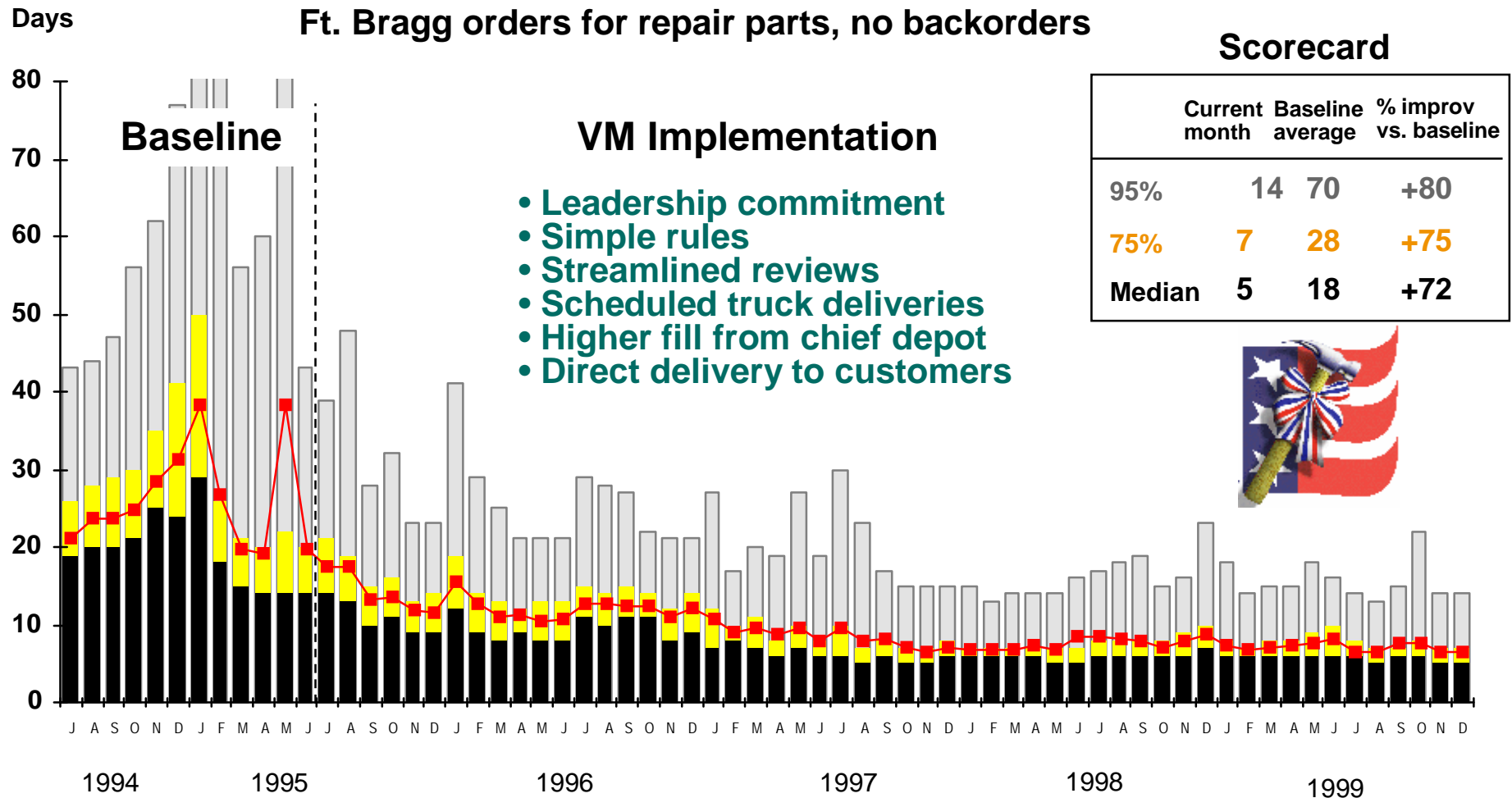


# *Many Process Improvements Contributed to Reduced Order and Ship Times*



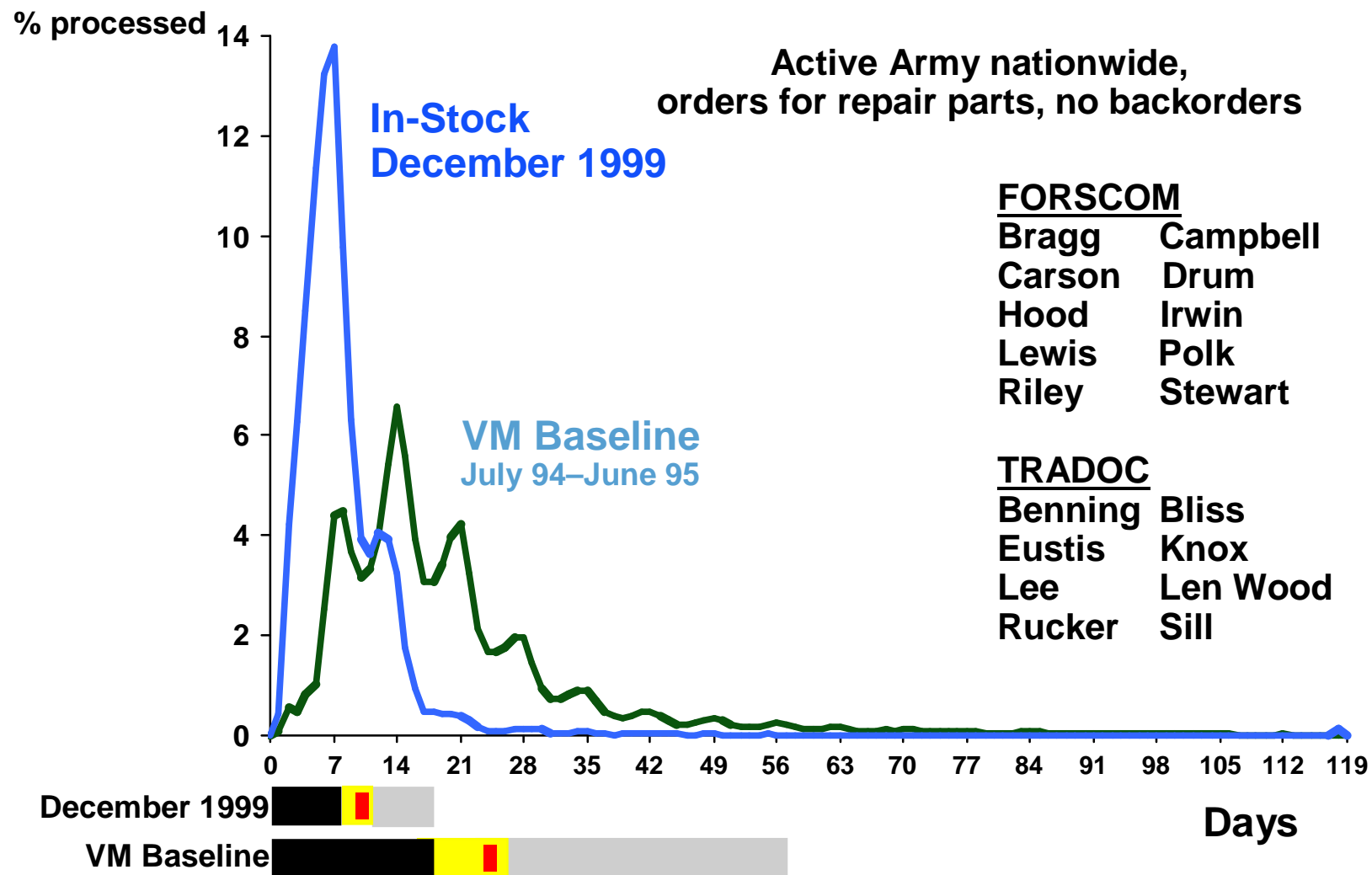


# At FORSCOM Installations, Order and Ship Time Improvements Have Been Dramatic



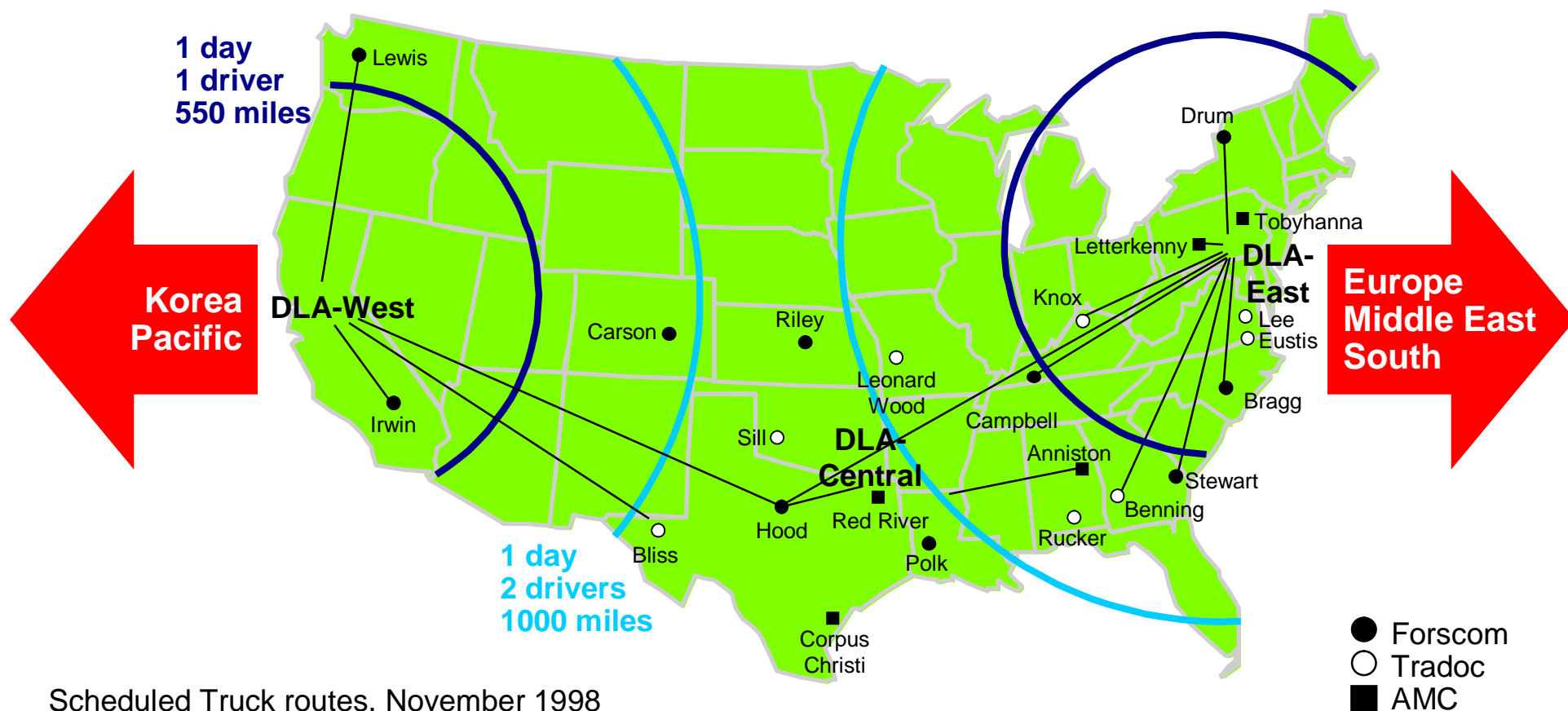
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# ***Army Order and Ship Times Dropped Dramatically with Velocity Management***



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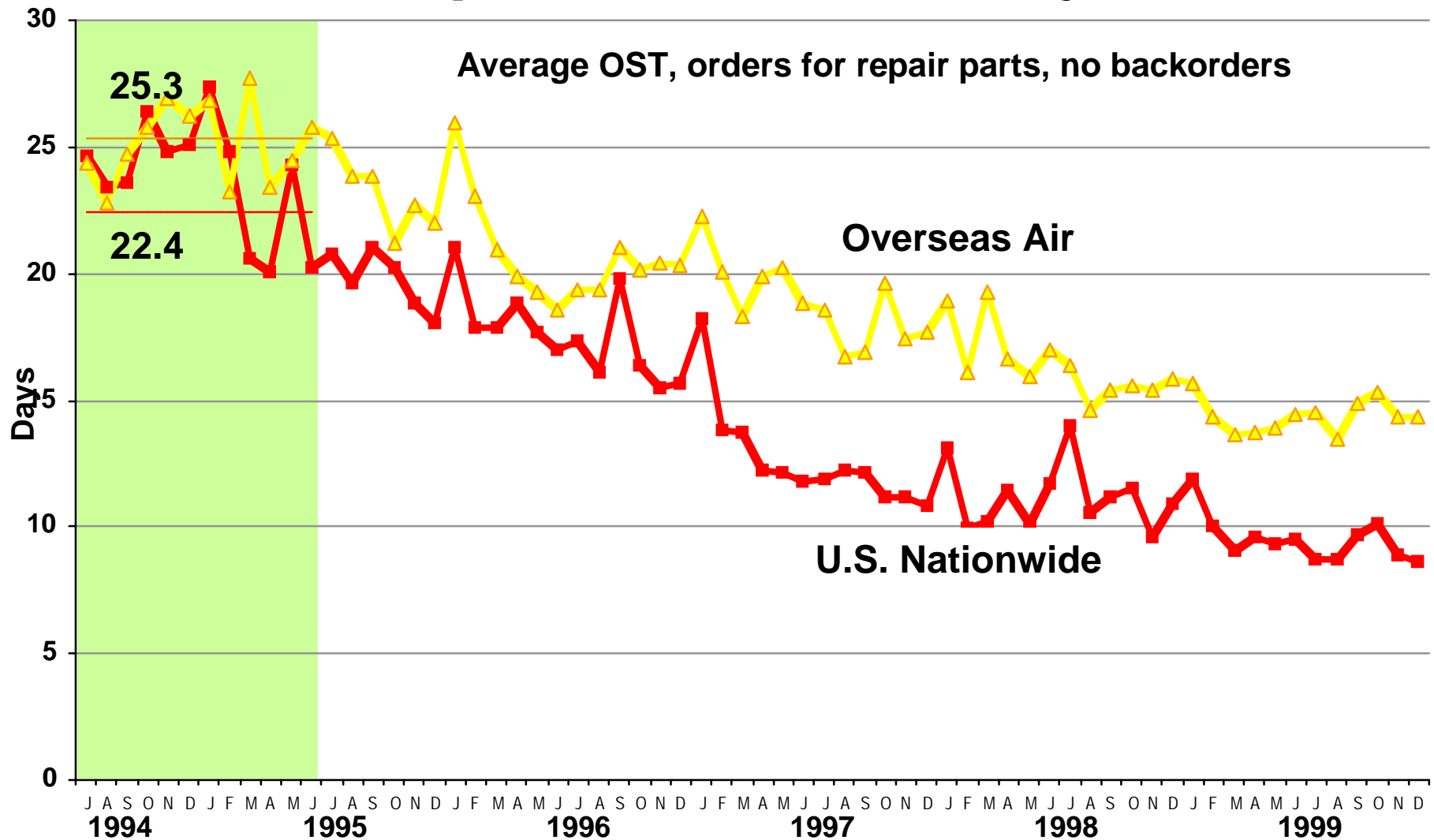
# *National Area-Oriented Depots Also Facilitate Overseas Distribution Strategy*



Scheduled Truck routes, November 1998

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# Overseas Order and Ship Times also Improved Dramatically

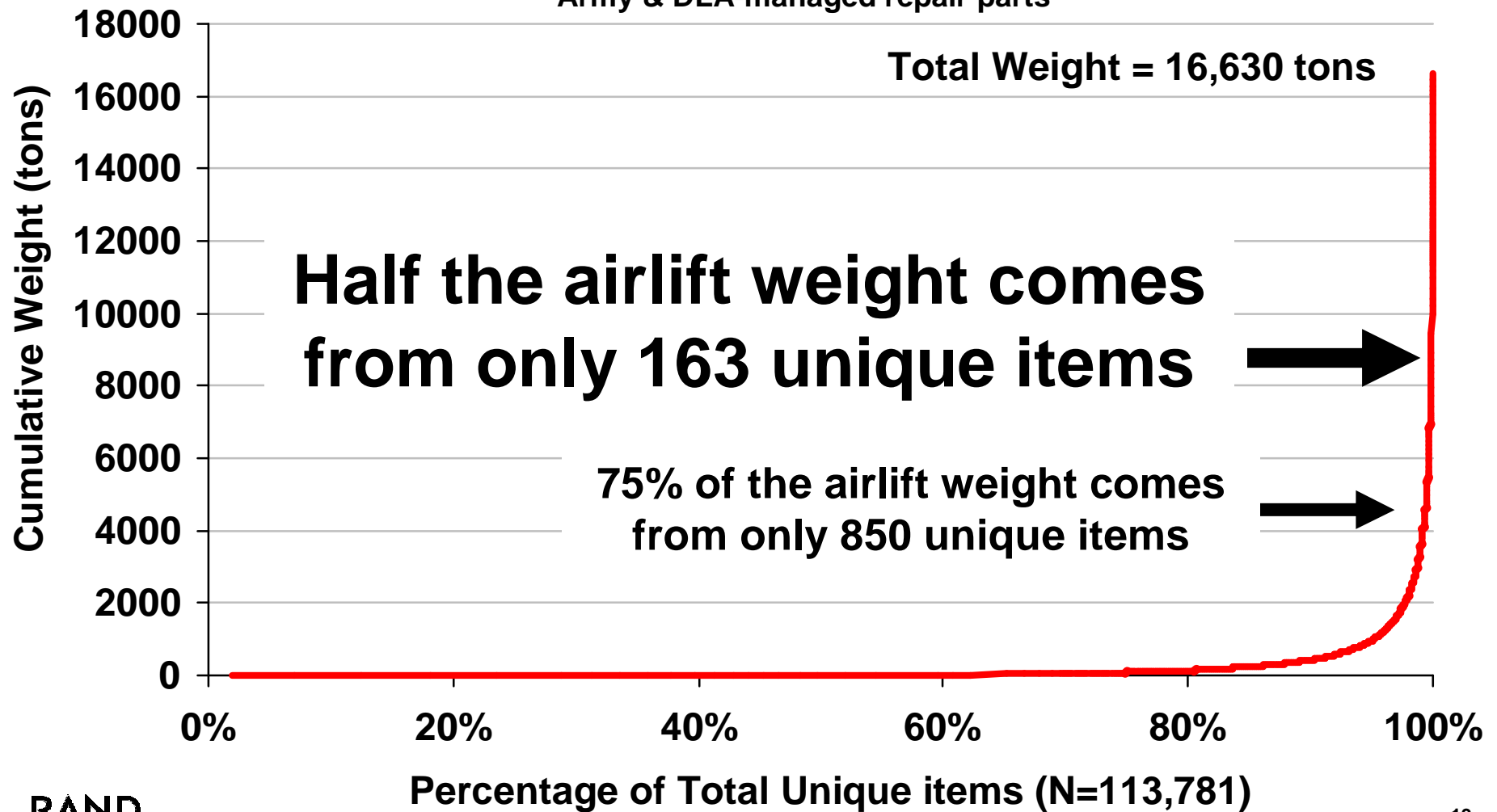


**RAND** Data are for the Active Army (not including the National Guard or U.S. Army Reserves).

# ***Airlift Weight is Driven by a Very Small Percentage of the Total NIINs***

Jan 1998-July 1999: Air Shipments to U.S. Army Europe  
Army & DLA-managed repair parts

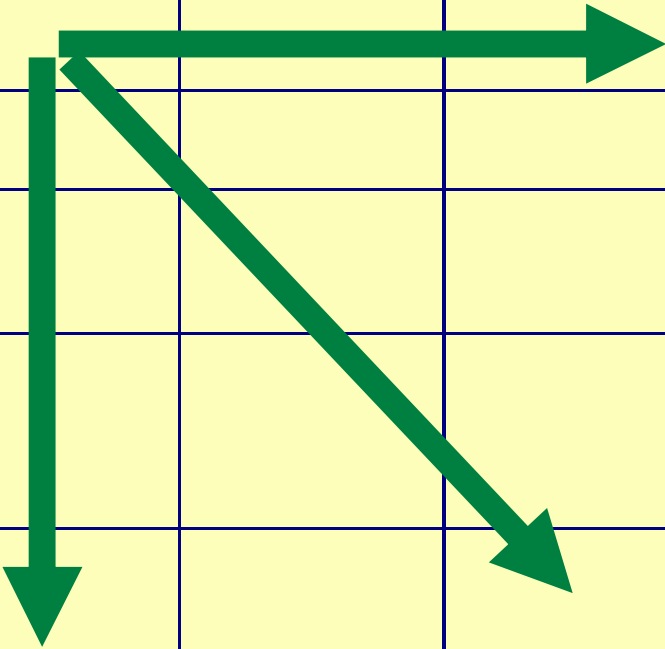
Total Weight = 16,630 tons



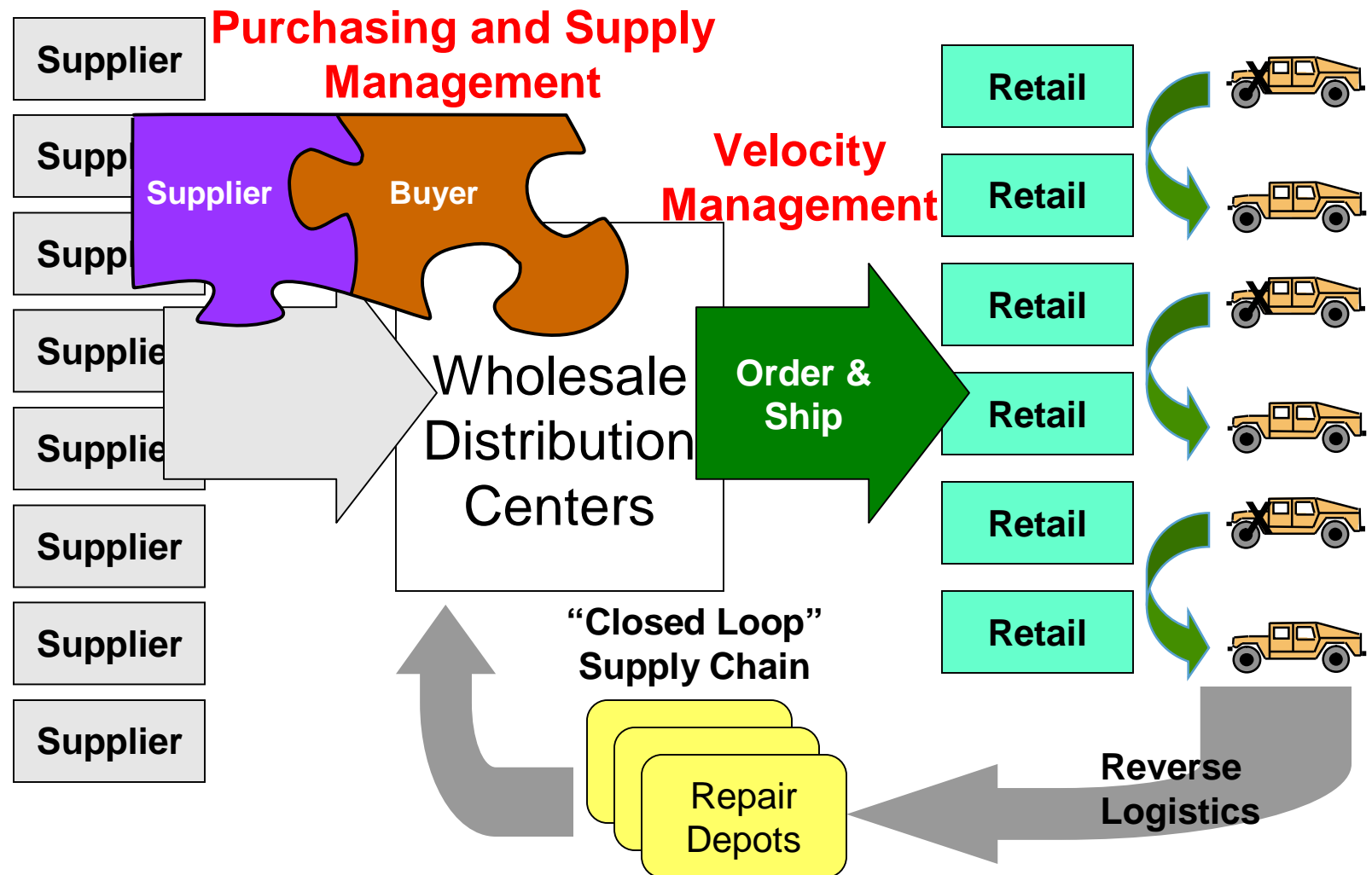
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# ***VM Systematically Seeks Improvements in All Dimensions of Process Performance***

Process	Time	Quality	Cost
Order and ship			
Repair			
Stockage determination			
Financial management			
Deployment			



# *Improving Purchasing and Supply Management Aims at Keeping Items in Stock*



# ***A Spend Analysis Is the First Step to Improve Purchasing and Supply Management Practices***

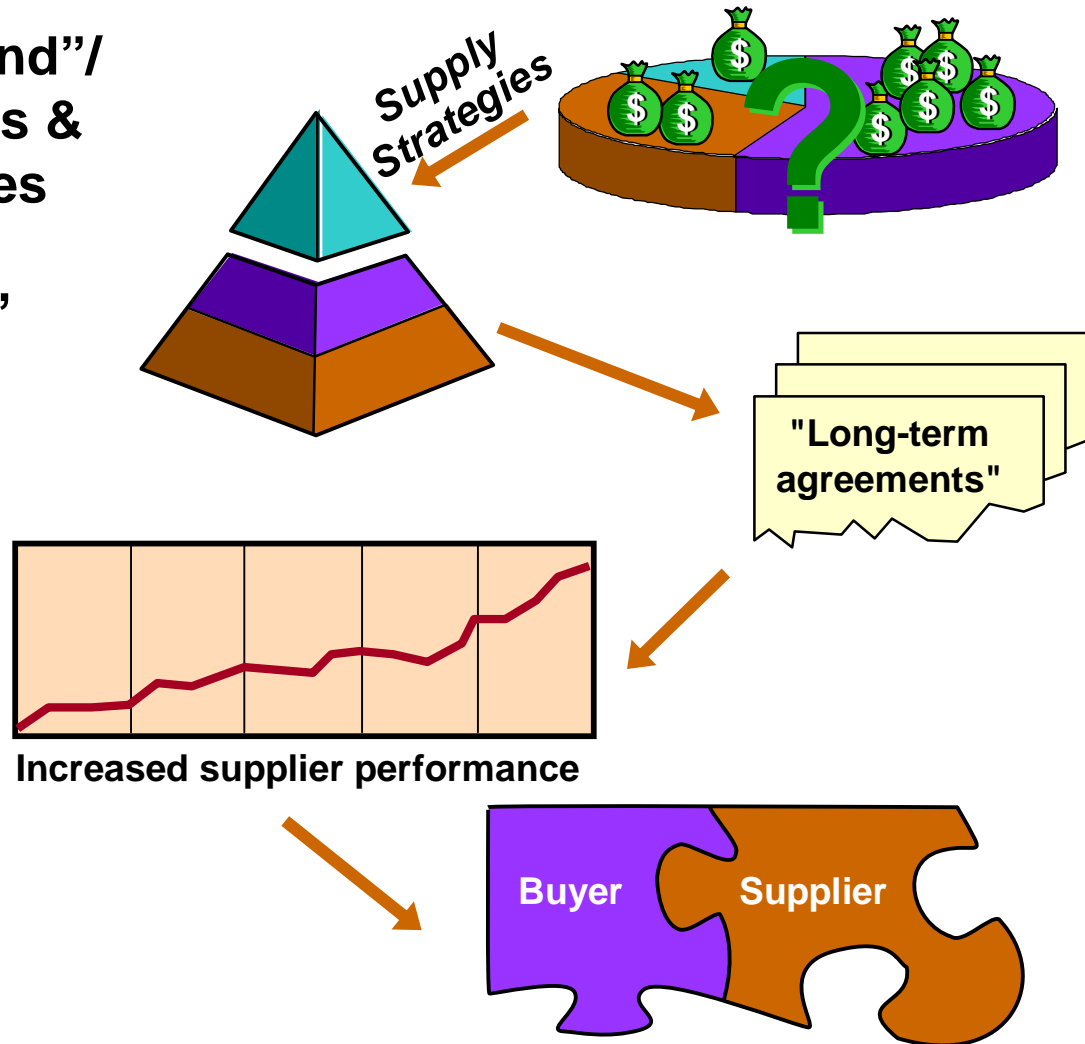
**Conduct firm-wide “spend”/ supplier/market analyses & develop supply strategies**

**Rationalize supply base, consolidate contracts**

**Establish long-term partnerships with best suppliers**

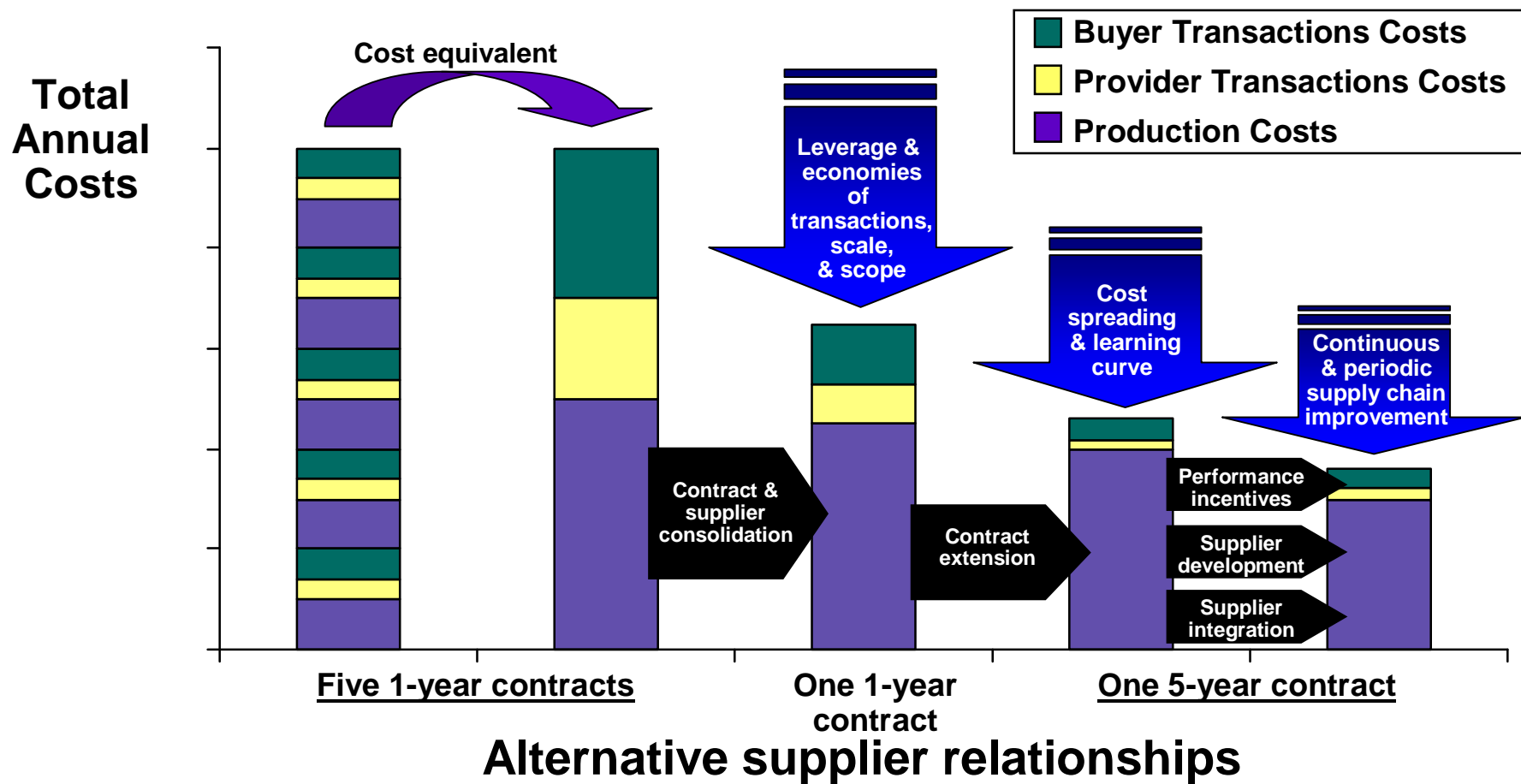
**Help key suppliers improve quality, cost, and service**

**Integrate key suppliers into organization**





# Notional Example of How Best PSM Practices Can Reduce Total Costs\* and Improve Performance



**Note: Transactions costs have been exaggerated for illustration purposes**

# ***A Fundamental Paradigm Shift in Purchasing and Supply Management***

**MANAGE**

**SUPPLIERS AND**

**SUPPLIER CAPACITY**

**NOT**

**ITEMS AND CONTRACTS**



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***Questions?***

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