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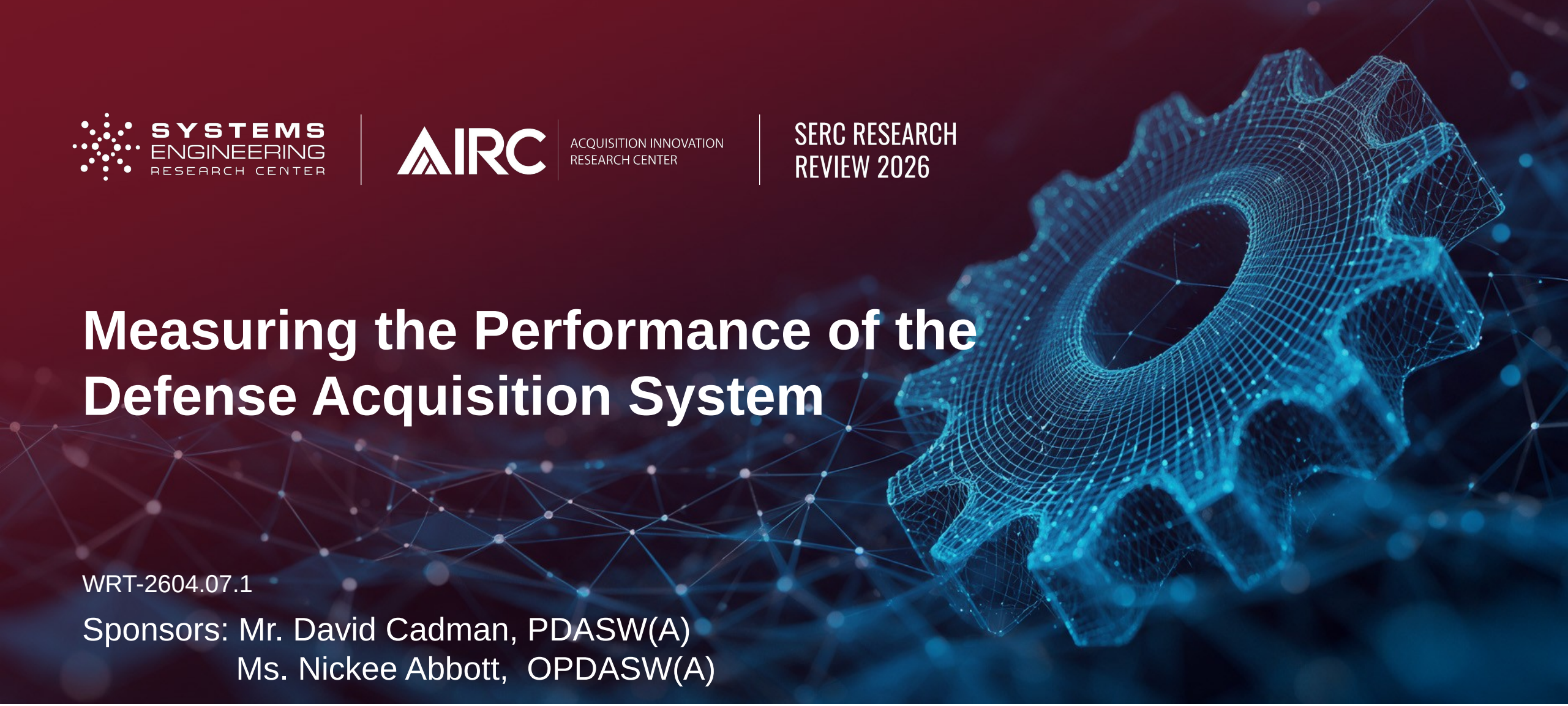

Measuring the Performance of the Defense Acquisition System

WRT-2604.07.1

Sponsors: Mr. David Cadman, PDASW(A)
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STEVENS INSTITUTE of TECHNOLOGY
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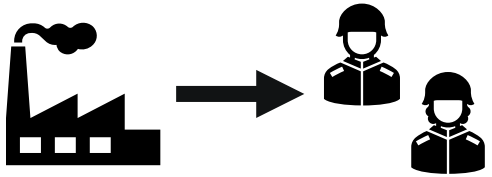
What?

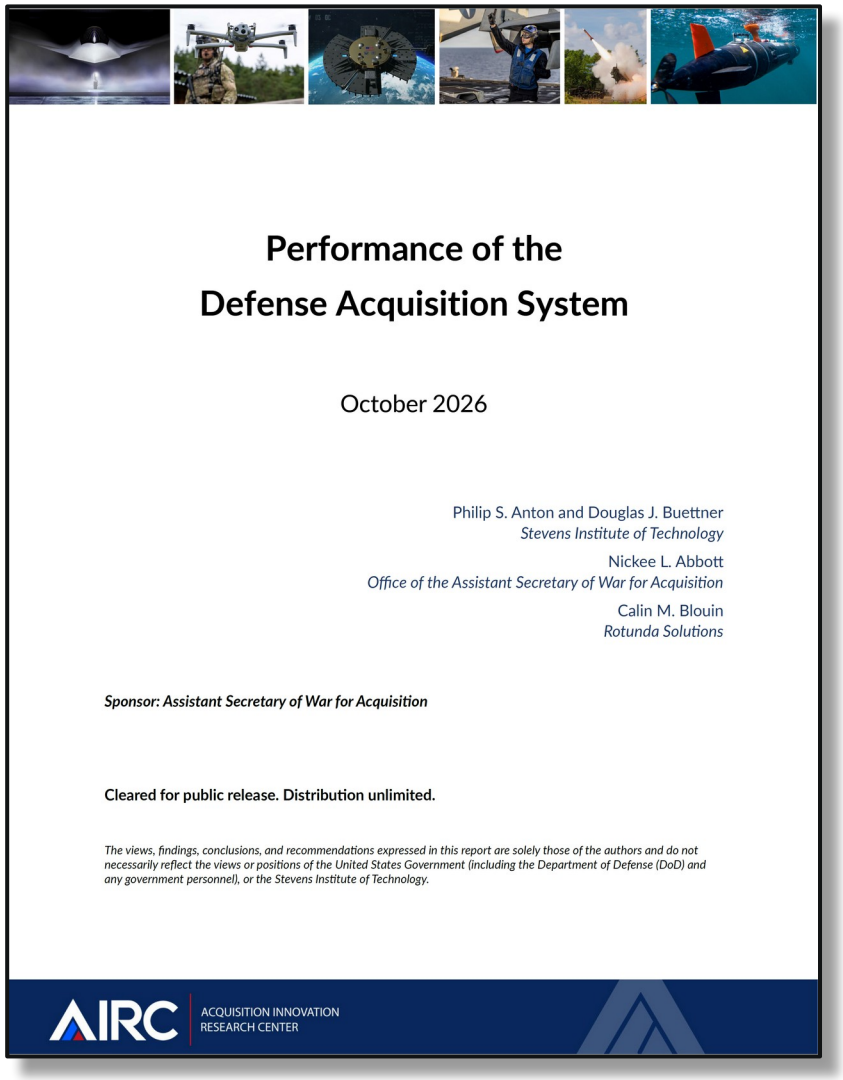


- Rigorously assess acquisition performance

How?



- Quantitative assess using available data
  - Initial insight on policy effects
  - Seek any statistically significant differences or trends



Performance of the
Defense Acquisition System

October 2026

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Sponsor: Assistant Secretary of War for Acquisition

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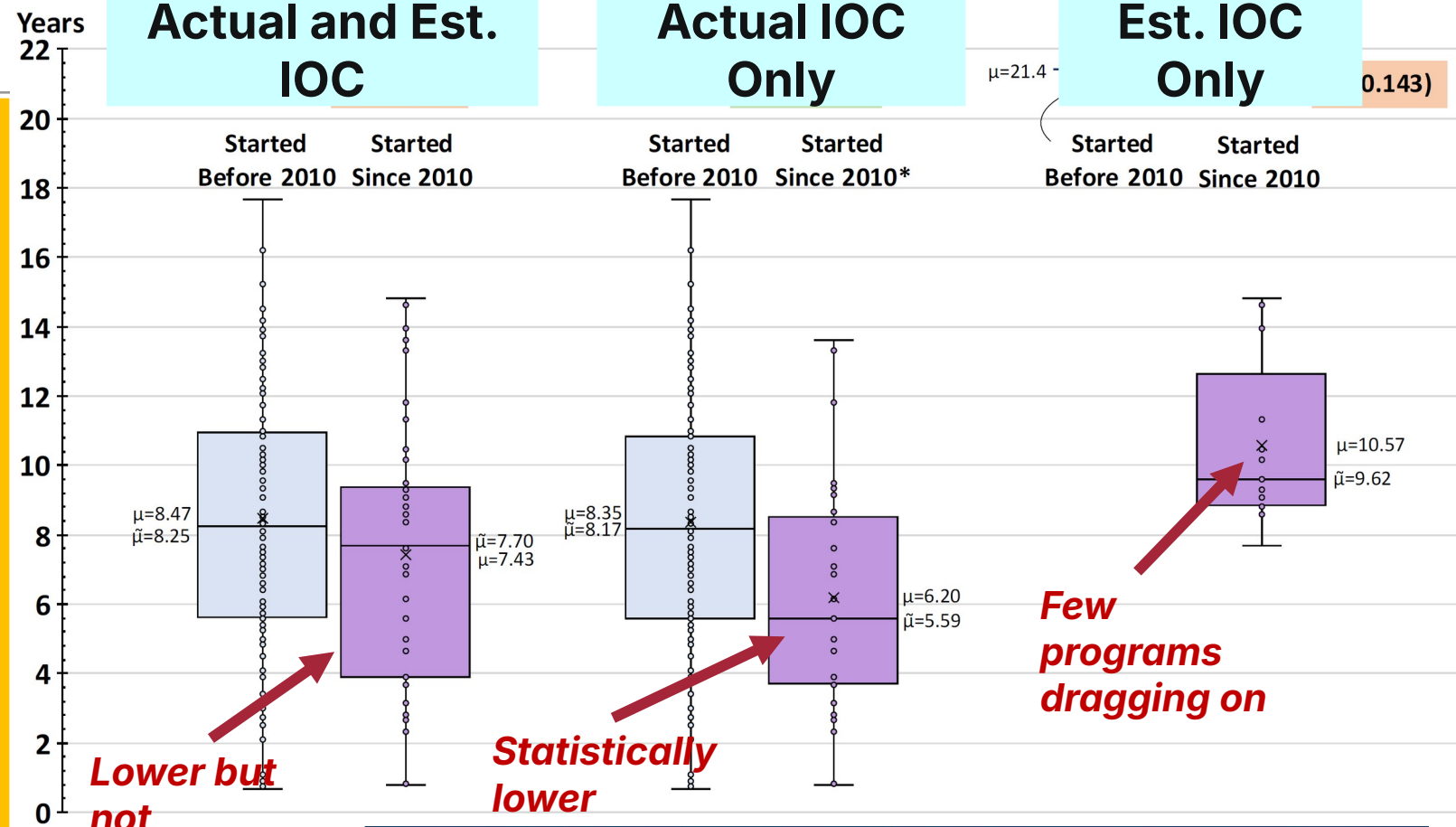
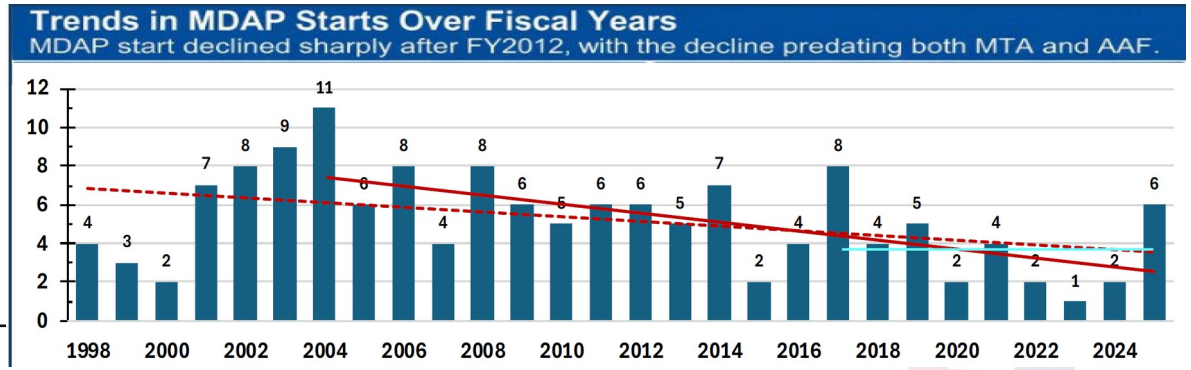
Selected Insights: MDAP Time to Initial Operational Capability (IOC)

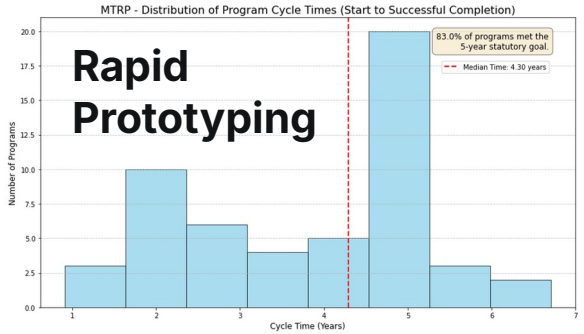
- Time to IOC dropped significantly since 2010
  - but only for post-IOC programs
- Pre-IOC programs since 2010 pulled up medians
  - Significantly fewer recent MDAP new starts could be a factor
- Note distributions—not just averages
  - Just looking at averages and above is misleading
- Cost growths remained flat

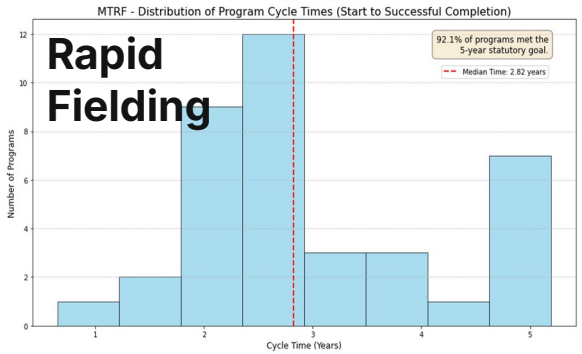


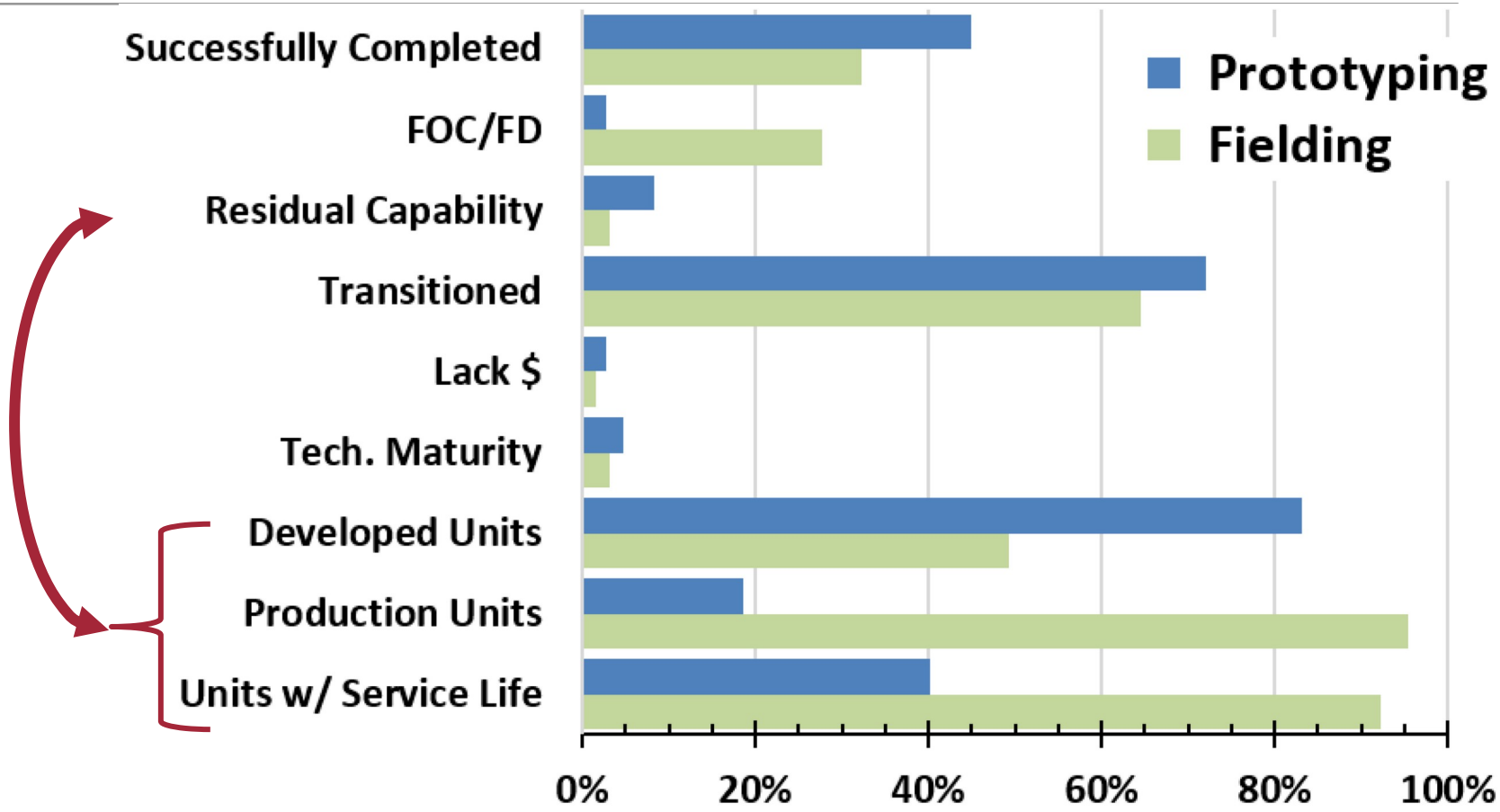


Selected Insights: Middle Tier of Acquisition (MTA)

MTA is relatively fast (median 4.3 and 2.8 years)…but we don't have counterfactuals







MTA produces serviceable units more often than indicated by residual capability outcomes

Selected Insights: Contracting

Commercial contracts:

- Nearly all by count; flat
- About 1/3rd by dollars; flat

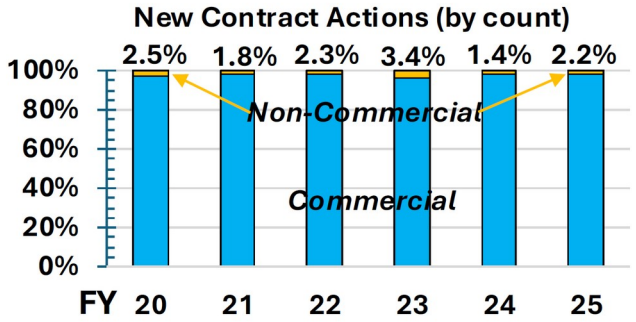
Other Transactions (OTs)

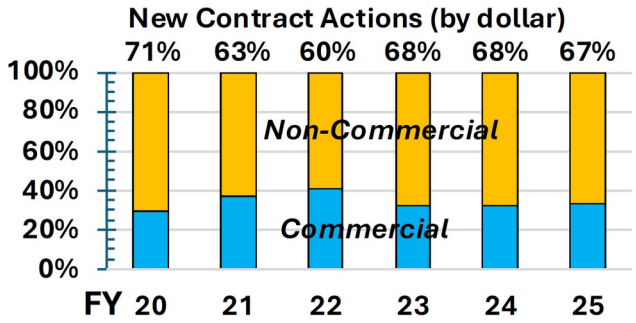
- Increasing #
- Statistically flat by $

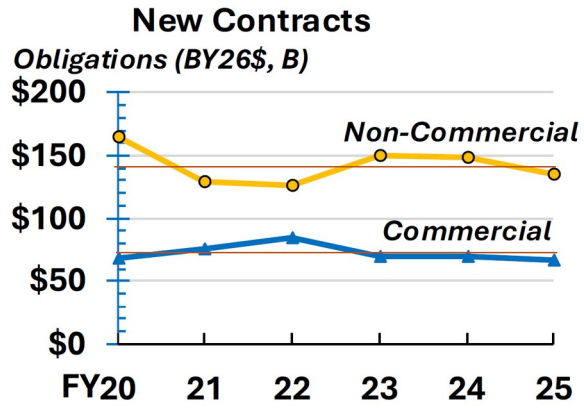
Competed Contracts

- Nearly all by count; increasing
- About 54% by $; flat

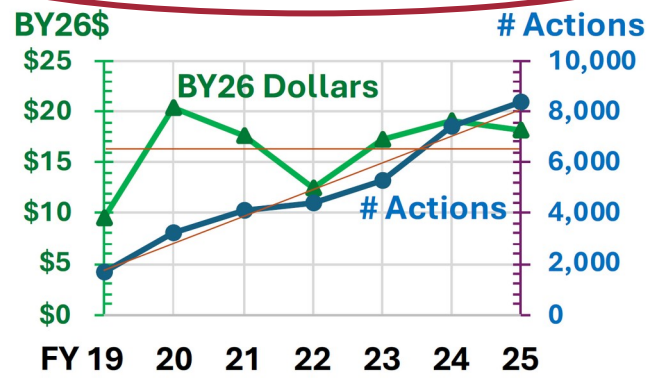
Commercial vs. Non-Commercial



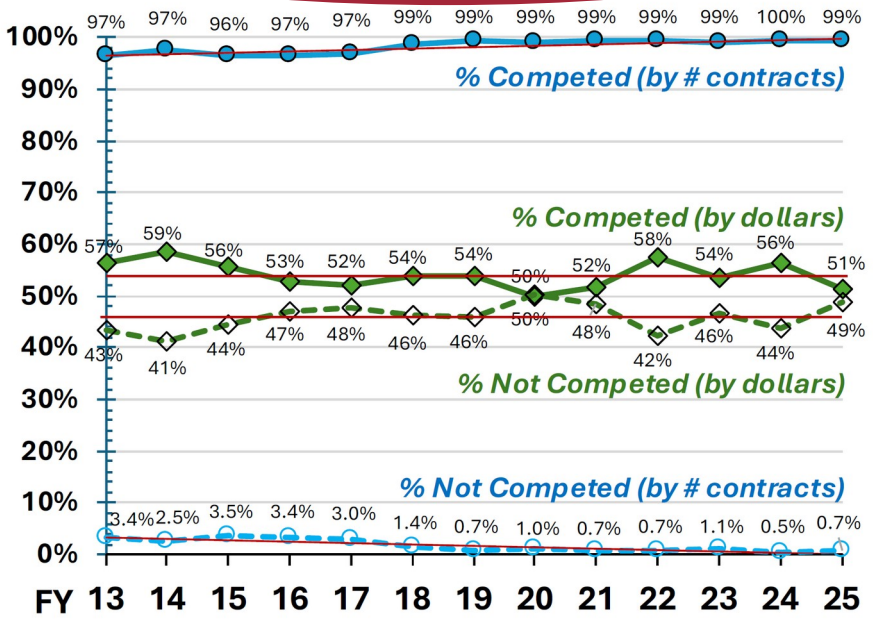




Other Transactions (OTs)



% Contracts Competed



SOURCE: AIRC analysis of FPDS and SAM.gov data

Recommendations *(1 of 2)*

Baselines:

- **Require schedule & cost baselines for all program types**
  - Not just ACATs but also for MTA, software, business systems, acquired services
  - ***WHY?*** Cannot calculate cost and schedule growth without a baseline reference point. Need to know when capabilities are needed to assess warfighter responsiveness.
- **Consider setting original Production baselines at Milestone C (not B)**
  - ***WHY?*** Design is in flux between Milestone B and C, so that would better reflect production realities vs. needed and approved design changes.
- **Consider separating upgrade schedule & cost from originals**
  - ***WHY?*** Upgrades are not in original baselines but are important for operational warfighter needs. Better understand responsiveness to warfighting needs.

Recommendations *(2 of 2)*

Costs:

- **Require quantity-aligned cost data in MSARs for production**
  - ***WHY?*** Must adjust for quantity in procurement cost growth (non-linear relationship)
- **Change Nunn-McCurdy policy to quantity-adjusted cost-growth metric**
  - ***WHY?*** Linear PAUC and APUC do not reflect non-linear quantity change effects

MTAs:

- **De-conflict MTA outcome measure options**
  - ***WHY?*** Can have multiple outcomes, but current measure forces reporting just one
- **Don't set a simple MTA TRL entry policy** (vs. GAO report)
  - ***WHY?*** Very weak to no correlation of starting TRL to MTA program length

Some Observations on Analysis Approaches

This is a re-start on a deeper PDAS annual report

- **Tools**
  - AI-assisted analysis and visualization tools increasingly beneficial
    …but human data understanding and quality cleaning needs remain
  - Expand use of advanced tools to allow more time for deeper investigations
- **Data**
  - Data accessibility easier than 10–15 years ago,
    …but inconsistent demand affects availability and quality
  - Major data gaps remain
  - Data use helps drive data management
  - Consider using CPARS data for expanded performance insights

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Thank you!

Email the presenter

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