AIRC | ACQUISITION INNOVATION RESEARCH CENTER

Measuring the Use of Middle Tier for Delivering Capabilities

Delivery vs. Prototyping

Philip S. Anton, Ph.D.
Doug Buettner, Ph.D.
Carlo Lipizzi, Ph.D.

8 May 2025

Agenda

- BLUF
- Project Overview
- Key Findings
- Recommendations

BLUF

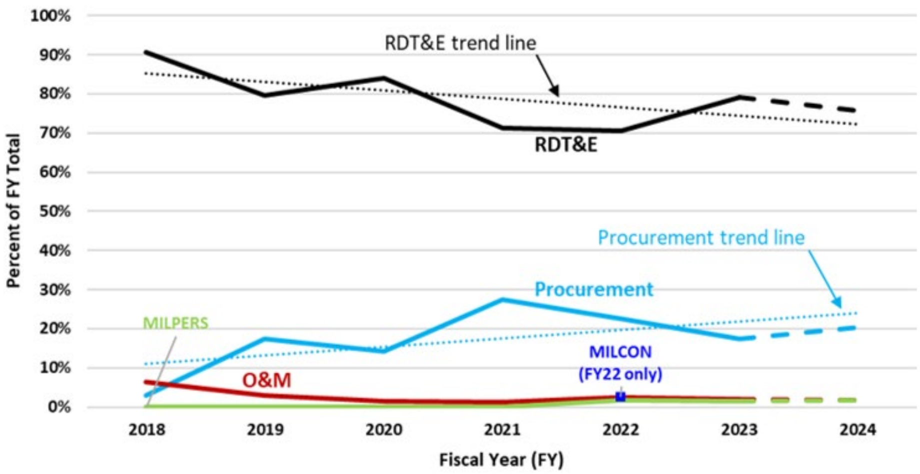
ACQUISITION INNOVATION RESEARCH CENTER

Background: Congress requested measures and quantification of the use of Middle Tier Acquisition (MTA) for production (versus R&D)

- H.R.118-125, accompanying the House version of the FY2024 NDAA
- With critical interests in what is being purchased and verify technology-based

Task: OUSD(A&S)'s Acquisition Policy and Innovation Directorate requested AIRC analyze available data to answer Congress' questions

Appropriation Category % of Total MTA Funding



Major Findings: *(FY 2018–2024)*

Type: MTAs have been used more for prototyping than fielding

- 60% prototyping; 40% fielding

Dollars: Production was increasing from ~10% to ~20%

- Peaked in FY2022; trend?

Other Transactions: 44% of MTAs use Ots (vs. FAR contracts)

Industry: 45% of MTA are with a wide range of manufacturing companies

MTA Programs by Type

(FY 2018–2024)

 # & % of MTA Programs by Rapid Prototyping or Rapid Fielding

Lead Service or Component	Rapid Prototyping	Rapid Fielding	Rapid Prototyping	Rapid Fielding
Air Force	42	23	65%	35%
Army	31	8	79%	21%
Navy	30	5	86%	14%
DCSA	1	0	100%	0%
Space Force	15	0	100%	0%
USSOCOM	20	53	27%	73%
TOTALS	***139***	***89***	***61%***	***39%***

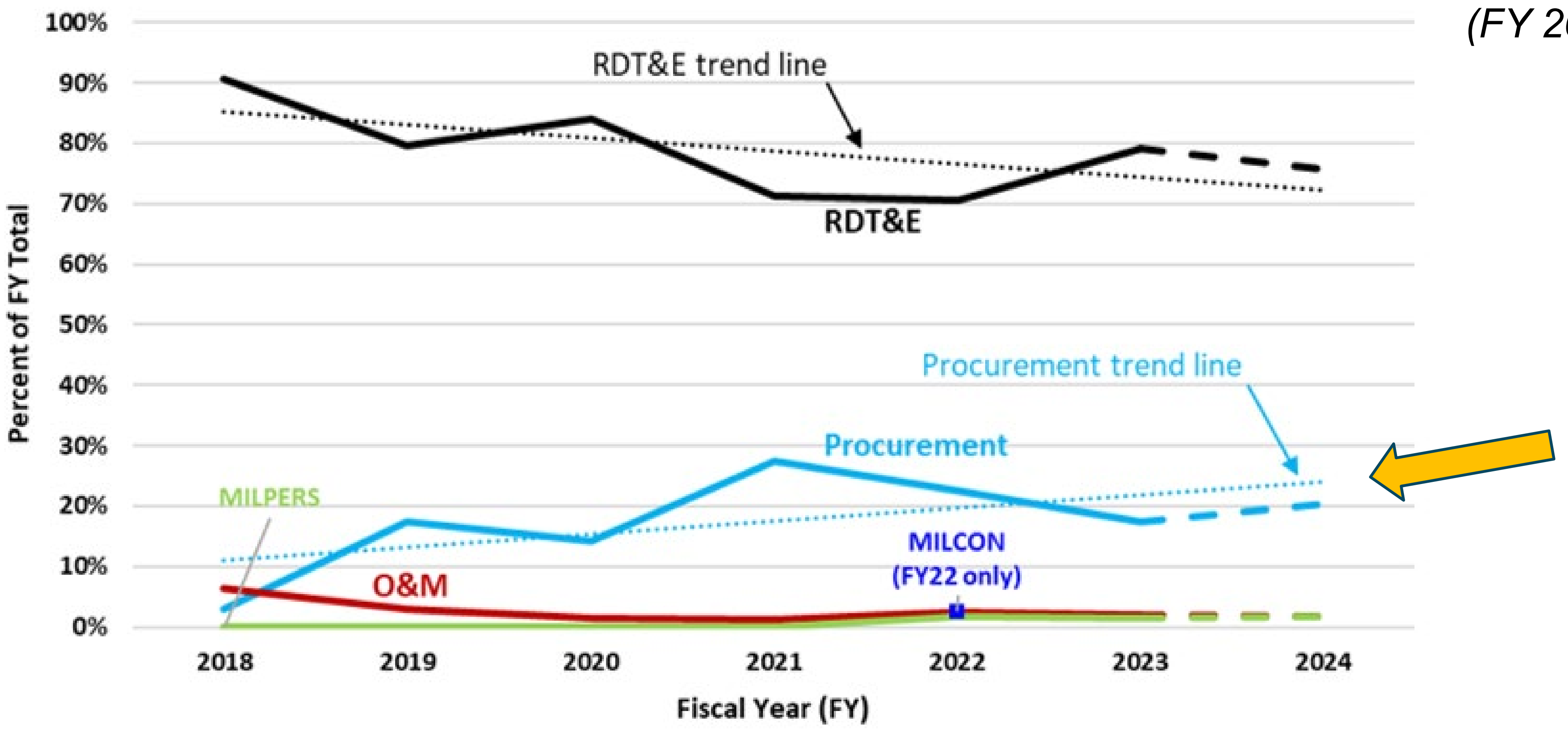
About 2 out of 5 were Rapid Fielding MTAs

SOURCE: DoD DAVE: MTA programs in PB 2018–2024.
DAVE=DoD's Defense Acquisition Visibility Environment

Appropriation Category % of Total MTA Funding

ACQUISITION INNOVATION RESEARCH CENTER

(FY 2018–2024)



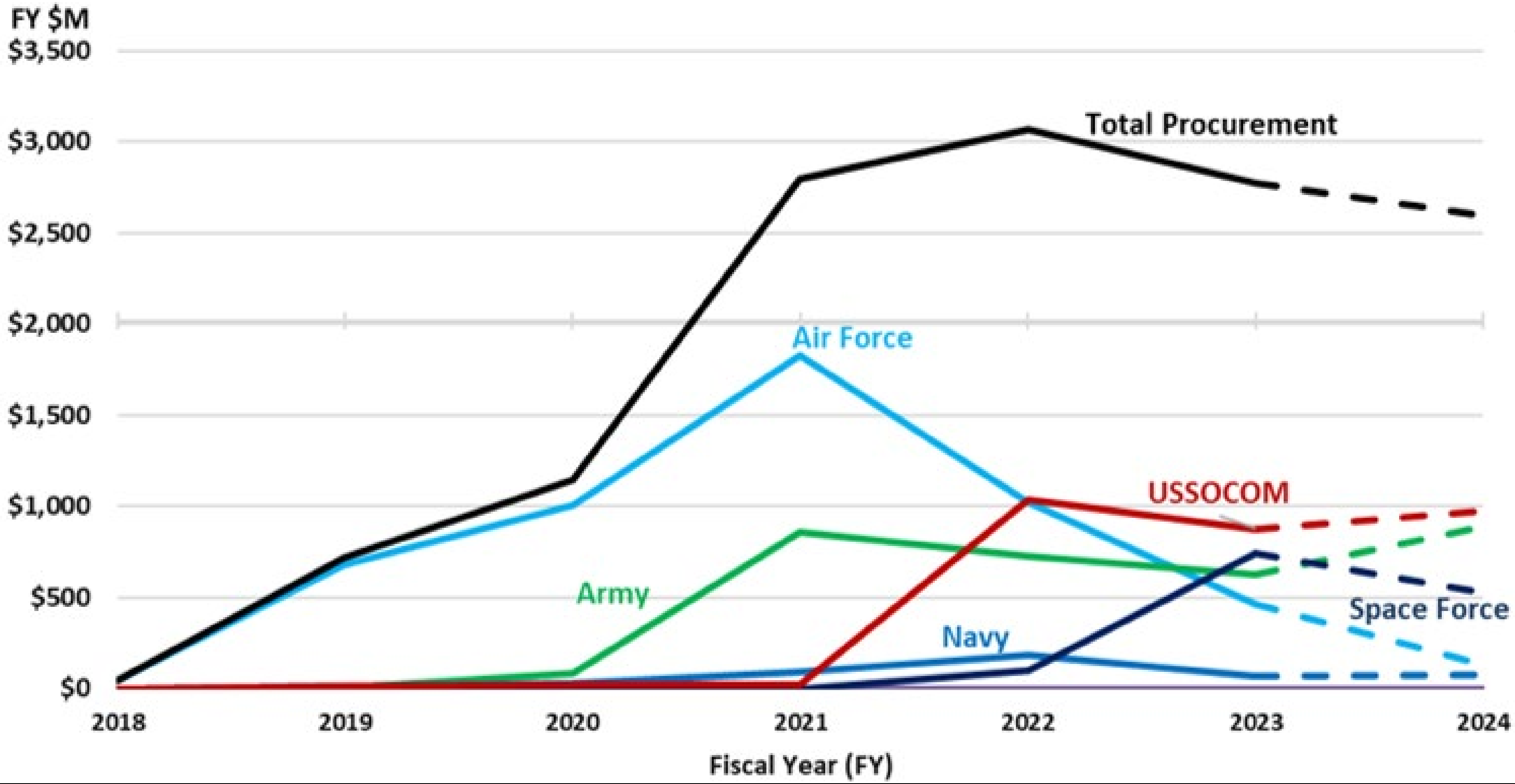
Procurement dollars in MTAs had been rising from ~10% to 20%

SOURCE: President's Budget Request from DoD's DAVE data system.
NOTE: FY 2024 values are requested (not actual) appropriations. Most FY 2018–2023 values are actuals as reported in subsequent PBs. The R^2 (amount of variation explained by the trend line) is 42% for RDT&E trend line; 37% for the Procurement trend line.

MTA Procurement Appropriations by Component

(TY $,M)

(FY 2018–2024)



MTA Procurement dollars had been rising except for Air Force

SOURCE: President's Budget Request from DoD's DAVE data system.
NOTE: FY 2024 values are requested (not actual) appropriations. Most FY 2018–2023 values are actuals as reported in subsequent PBs.

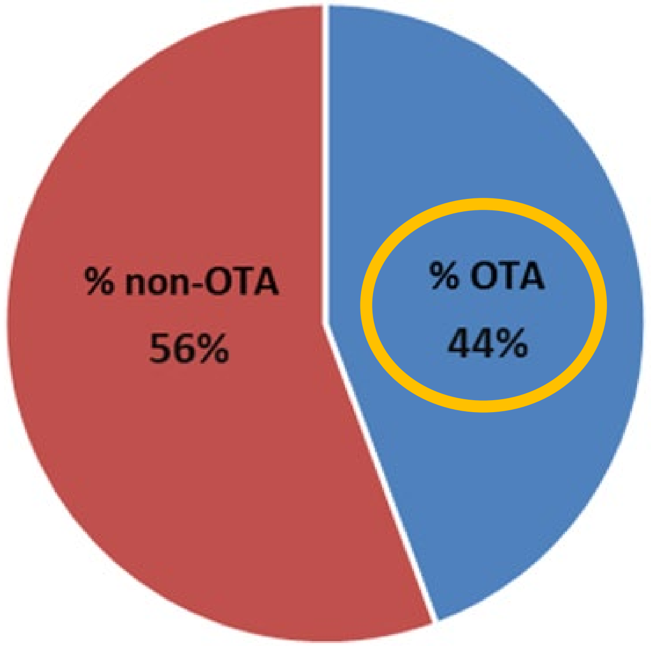
MTA Use of OTs

(FY 2018–2024)

MTA Use of OT Agreements or Non-OTA Contracting by Service or Component

Lead Service	OTs	Non-OTA	% OTs	% Non-OTA
Air Force	11	59	16%	84%
Army	40	17	70%	30%
Navy	15	15	50%	50%
DCSA	1	0	100%	0%
Space Force	12	8	60%	40%
USSOCOM	n/a	n/a	n/a	n/a
TOTALS	***79***	***99***	***44%***	***56%***

% MTA Programs Using OT Agreements



OTs were used almost half of the time

SOURCE: MTA Activities for PB 2018–2024 (extracted from DoD DAVE).
NOTES: Total OT agreements vs non-OTA contracts where the contract type is specified in DAVE. USSOCOM data were not yet available at the time of the data extraction from DAVE for this analysis.

OT and Non-OT MTAs By NAICS Code

NAICS Code	NAICS Code Description	Count	% Total
541715	Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology)	123	19%
541611	Administrative Management and General Management Consulting Services	45	7%
541618	Other Management Consulting Services	26	4%
541330	Engineering Services	18	3%
813910	Business Associations	17	3%
336411	Aircraft Manufacturing	17	3%
334413	Semiconductor and Related Device Manufacturing	11	2%
Remaining NAICS (those not identified & others that are <2%)		389	57%
Total OTA Activities in MTA		**646**	**100%**

Both OT and non-OT MTAs were with a wide range of Industries

NAICS Code	NAICS Code Description	Count	% Total
334511	Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing	65	7%
541715	Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology)	64	7%
334220	Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing	50	6%
336411	Aircraft Manufacturing	48	5%
336414	Guided Missile and Space Vehicle Manufacturing	43	5%
336992	Military Armored Vehicle, Tank, and Tank Component Manufacturing	42	5%
541330	Engineering Services	36	4%
541511	Custom Computer Programming Services	24	3%
488190	Other Support Activities for Air Transportation	22	3%
Remaining NAICS (those not identified & others that are <3%)		481	55%
Total non-OTA Activities in MTA		**875**	**100%**

(FY 2018–2024)

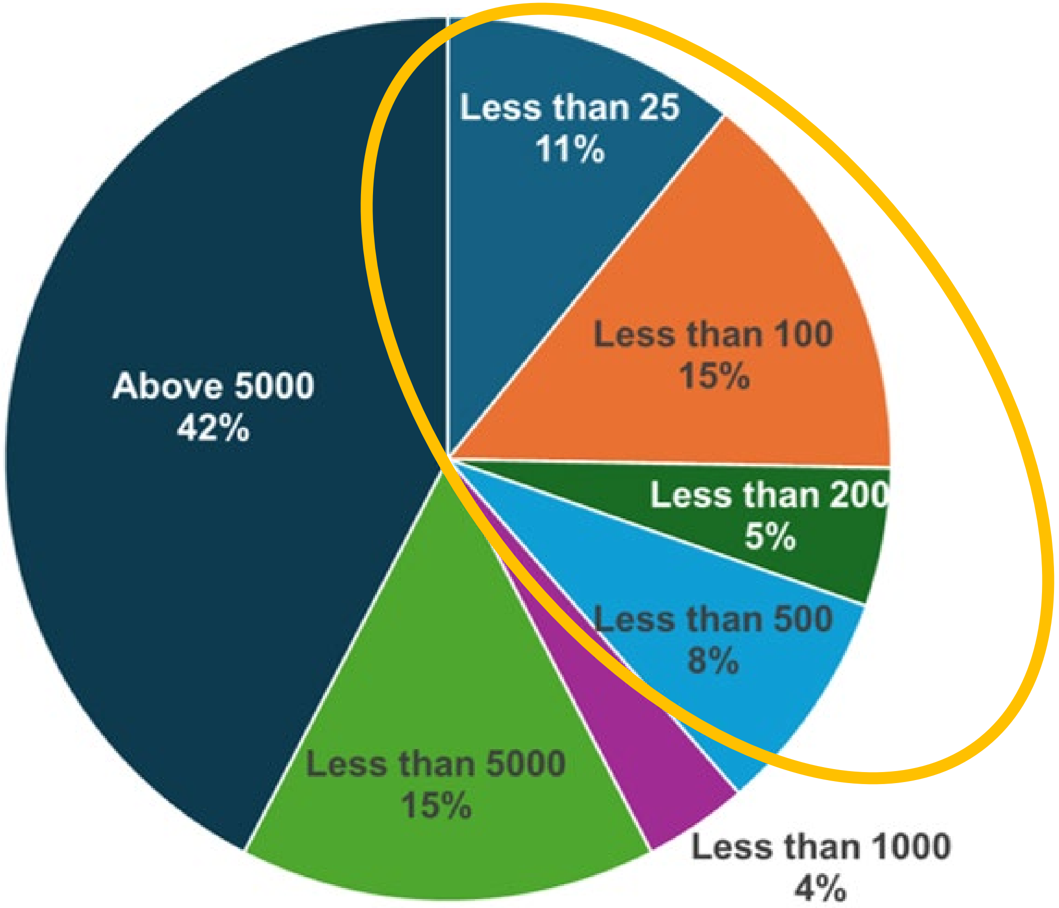
NAICS = North American Industry Classification System

SOURCE: PB Request from DoD's DAVE data system correlated with FPDS contract information.
NOTE: None of the others that were <2% were for nontechnical capabilities (such as food or landscaping).

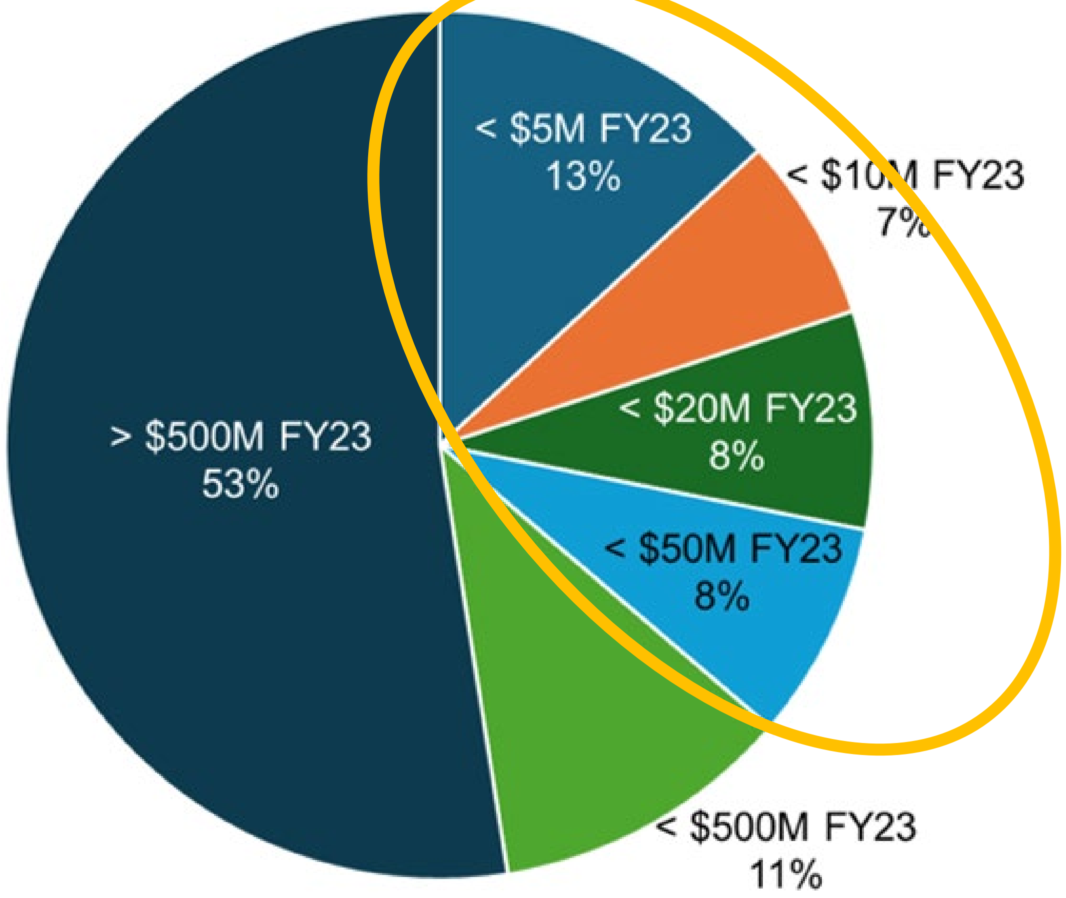
MTA Contracted Company Demographics

AIRC ACQUISITION INNOVATION RESEARCH CENTER

of Employees at MTA Contracted Companies



FY23 Revenue of MTA Contracted Companies



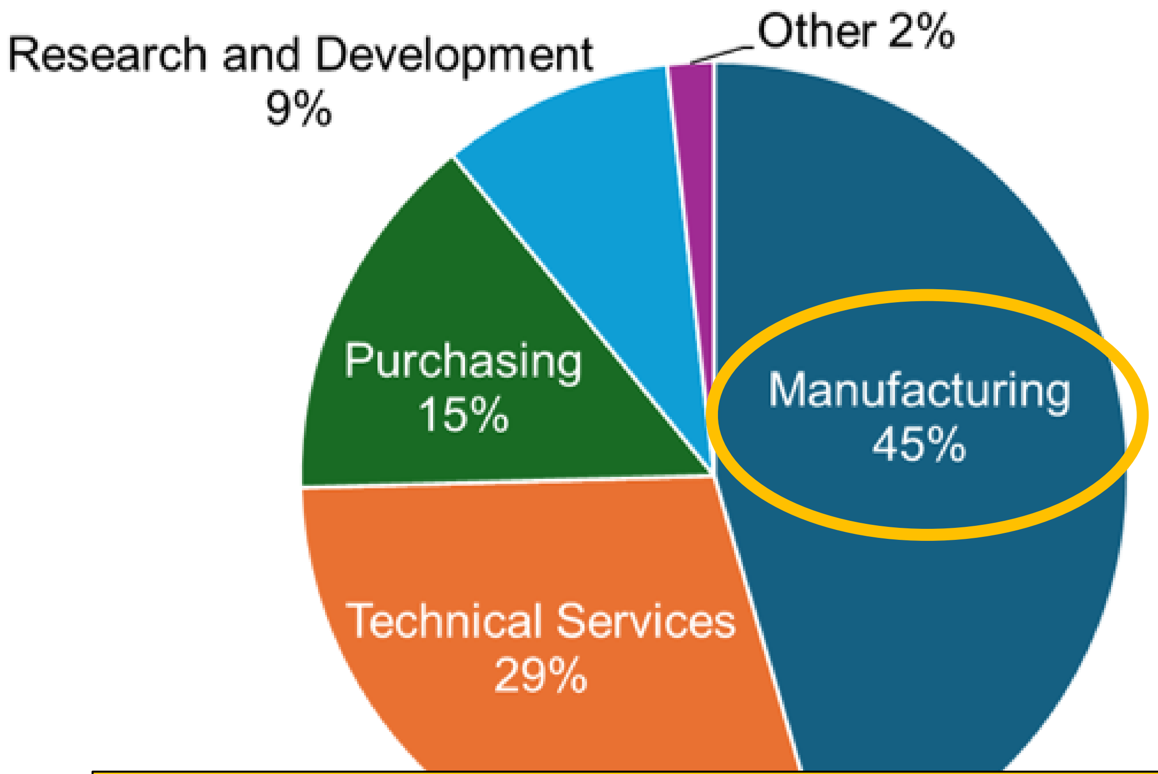
~40% of MTAs went to small businesses

(FY 2018–2024)

SOURCE: Merchant Online™ and ZoomInfo searches of the entity names.

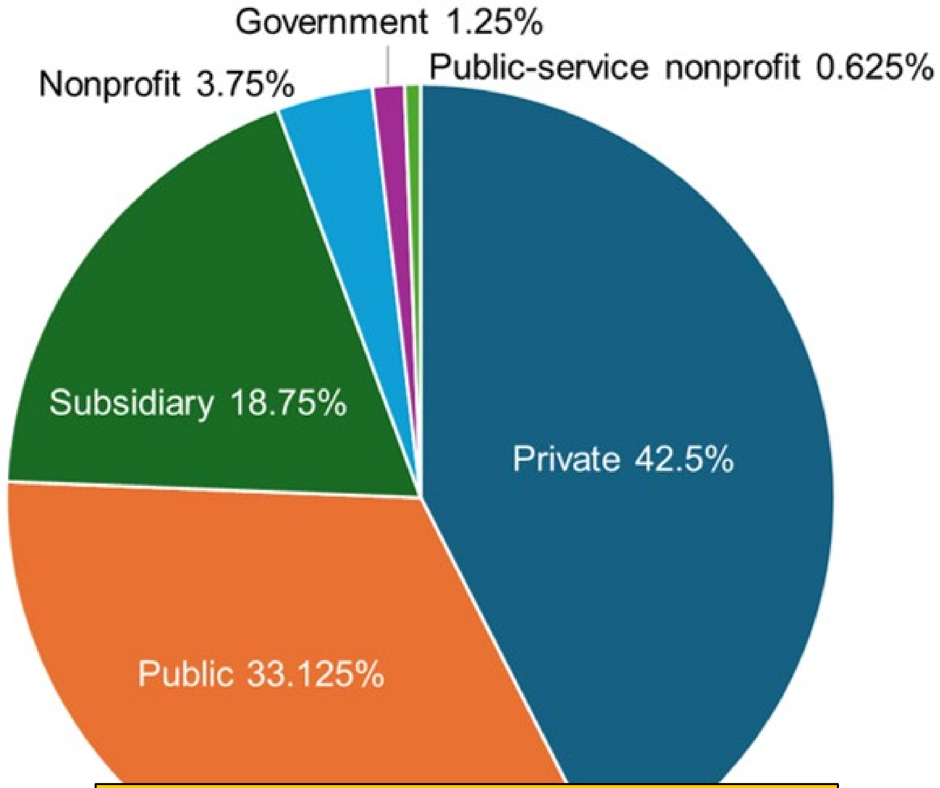
MTA Contracted Company Demographics

Industry Types of MTA Contracted Companies



Just under half of companies were in manufacturing

Filing Status of MTA Contracted Companies



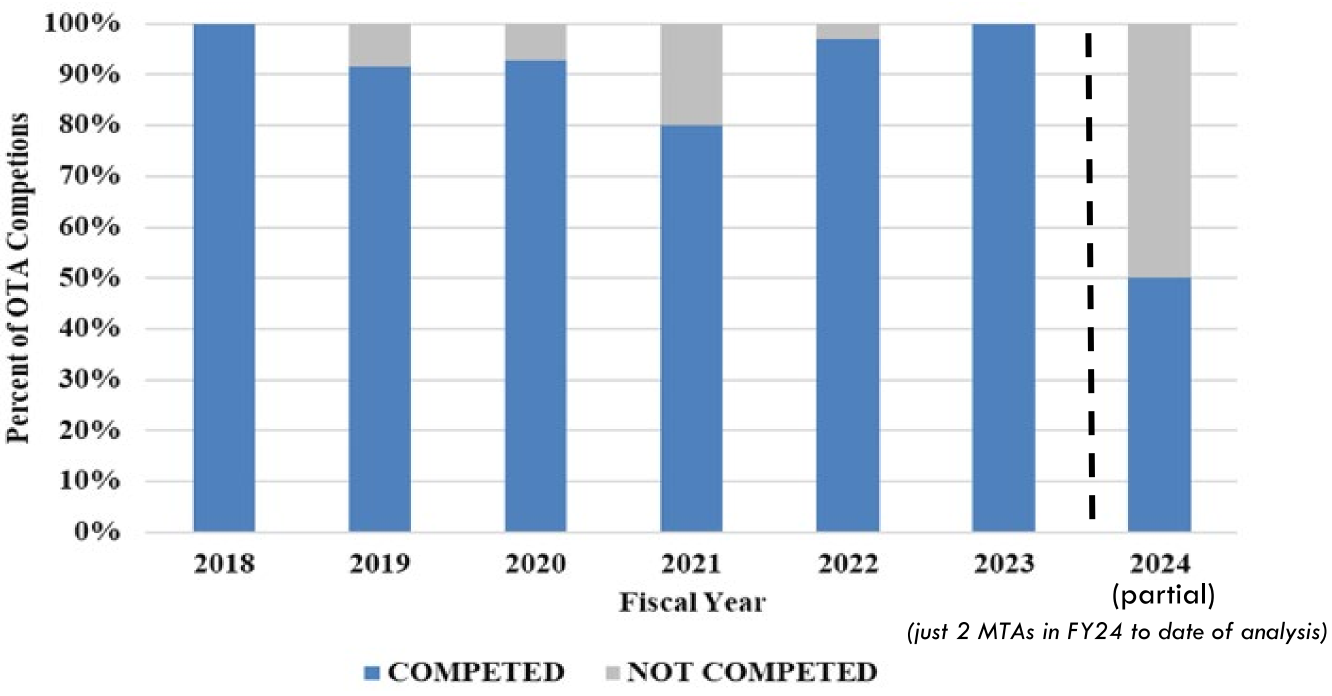
Mix of Private and Public companies

(FY 2018–2024)

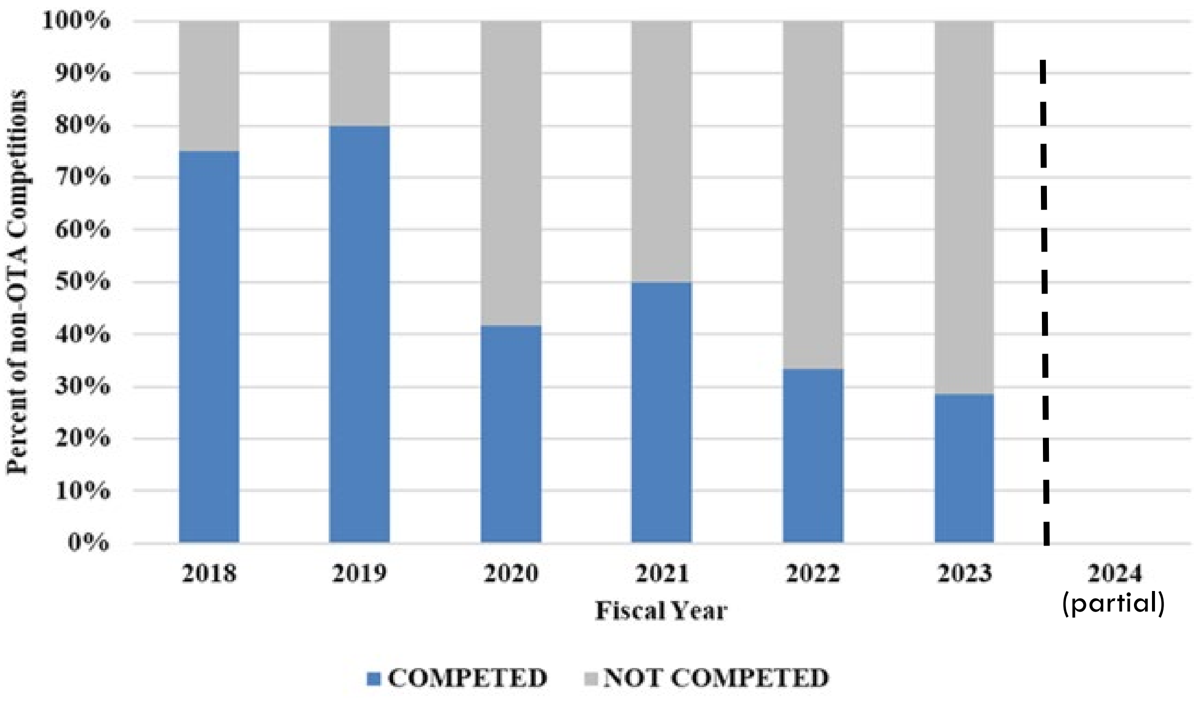
SOURCE: SAM.gov, Merchant Online™ and ZoomInfo searches of the entity names.

Competition on MTA OTs and Non-OTs

Competed OTs



Competed Non-OTs (Contracts)



(FY 2018–2024)

More MTA OTs were competed than non-OT MTA contracts

SOURCE: President's Budget Request from DoD's DAVE data system correlated with FPDS contract information.

Transition Status of MTA Programs

ACQUISITION INNOVATION RESEARCH CENTER

Lead Service	Active	Transitioned/ Restructured	Terminated	Residual Capability	Pre-Decisional	FOC/FD
Air Force	37%	45%	12%	2%	2%	3%
Army	79%	21%	0%	0%	0%	0%
Navy	71%	17%	6%	0%	3%	3%
DCSA	0%	100%	0%	0%	0%	0%
Space Force	67%	20%	0%	0%	13%	0%
USSOCOM	60%	32%	7%	1%	0%	0%
TOTALS	*58.8%*	*30.7%*	*6.6%*	*0.9%*	*1.8%*	*1.3%*

3/5ths were active
~1/3rd transitioned/restructured

(FY 2018–2024)

SOURCE: President's Budget Request from DoD's DAVE data system.

Findings

(FY 2018–2024)

- **Type:** MTAs have been used more for prototyping than fielding
  - 60% prototyping; 40% fielding
- **Dollars:** Production was increasing from ~10% to ~20%
  - Peaked in FY2022; trend?
- **Other Transactions:** 44% of MTAs use Ots (vs. FAR contracts)
- **Industry:** 45% of MTA are with a wide range of manufacturing companies
- **Company Size:** ~40% of MTAs are with small businesses
- **Competition:** Most MTA OTs were competed; ~half non-OTs were
- **Status:** 3/5ths of MTAs were active; 30% transitioned/restructured

Additional Insights

- MTA RDT&E funding steadily increased through FY 2023.
- We found no evidence of non-technical use in the Product Service Codes (PSCs) or NASIC data (per Congress' critical interest)
- Product Service Codes (PSCs) demonstrated MTA purchases (per Congress' critical interest)
  - Predominantly parts, engineering services, etc.
- Details in public report: Utilization of Middle Tier of Acquisitions for Production (AIRC-2024-TR-016)

CONTACT US:

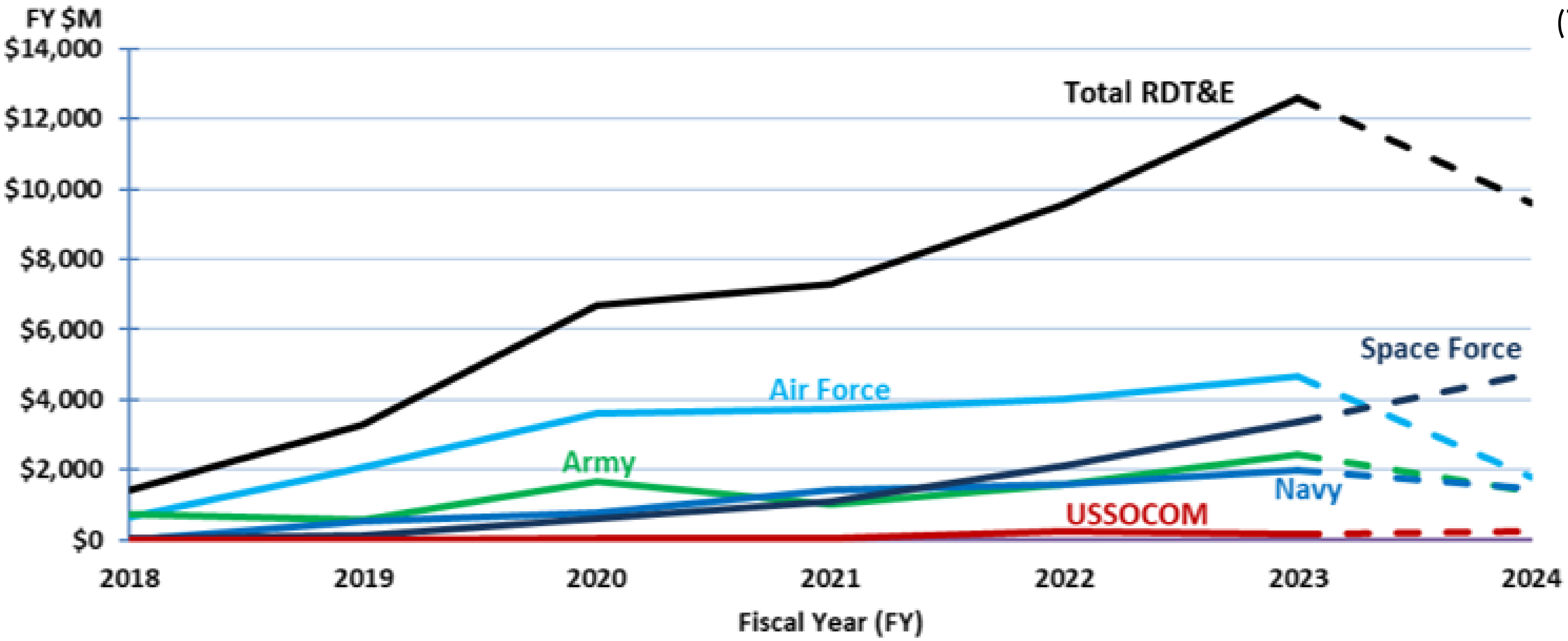
airc@acqirc.org

ACQIRC.ORG

BACKUP

MTA RDT&E Appropriations by Component

(TY $,M)



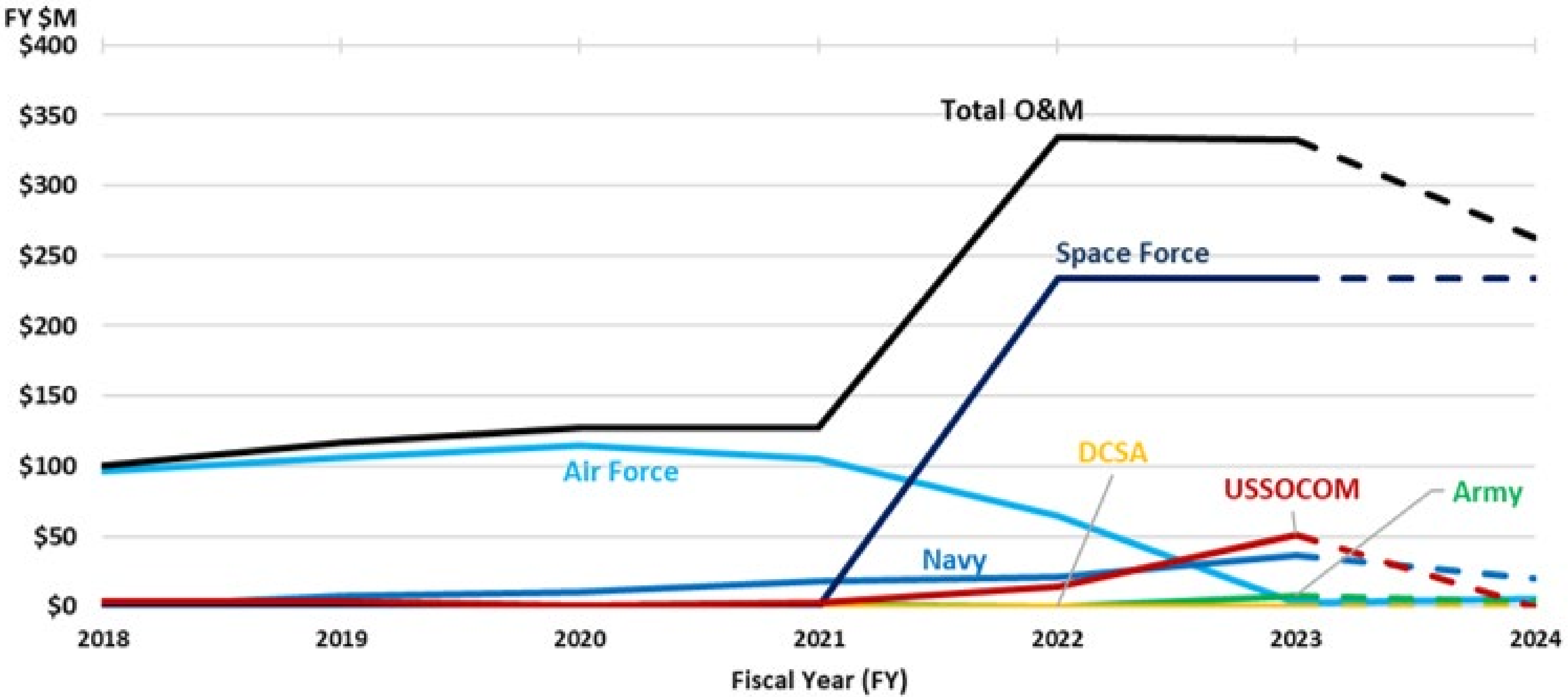
MTA RDT&E has been rising too

SOURCE: President's Budget Request from DoD's DAVE data system.
NOTE: FY 2024 values are requested (not actual) appropriations. Most FY 2018–2023 values are actuals as reported in subsequent PBs.

MTA O&M Appropriations by Component

ACQUISITION INNOVATION RESEARCH CENTER

(TY $,M)



MTA O&M has increased, predominantly by the Space Force

SOURCE: President's Budget Request from DoD's DAVE data system.
NOTE: FY 2024 values are requested (not actual) appropriations. Most FY 2018–2023 values are actuals as reported in subsequent PBs.

OT MTAs by NAICS Code

ACQUISITION INNOVATION RESEARCH CENTER

NAICS Code	NAICS Code Description	Count	% Total
541715	Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology)	123	19%
541611	Administrative Management and General Management Consulting Services	45	7%
541618	Other Management Consulting Services	26	4%
541330	Engineering Services	18	3%
813910	Business Associations	17	3%
336411	Aircraft Manufacturing	17	3%
334413	Semiconductor and Related Device Manufacturing	11	2%
Remaining NAICS (those not identified & others that are <2%)		389	57%
Total OTA Activities in MTA		**646**	**100%**

Both OTs and non-OTs were with a wide range of Industries

NAICS = North American Industry Classification System

SOURCE: PB Request from DoD's DAVE data system correlated with FPDS contract information.
NOTE: None of the others that were <2% were for nontechnical capabilities (such as food or landscaping).

Non-OT MTAs by NAICS Code

ACQUISITION INNOVATION RESEARCH CENTER

NAICS Code	NAICS Code Description	Count	% Total
334511	Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing	65	7%
541715	Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology)	64	7%
334220	Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing	50	6%
336411	Aircraft Manufacturing	48	5%
336414	Guided Missile and Space Vehicle Manufacturing	43	5%
336992	Military Armored Vehicle, Tank, and Tank Component Manufacturing	42	5%
541330	Engineering Services	36	4%
541511	Custom Computer Programming Services	24	3%
488190	Other Support Activities for Air Transportation	22	3%
Remaining NAICS (those not identified & others that are <3%)		481	55%
Total non-OTA Activities in MTA		**875**	**100%**

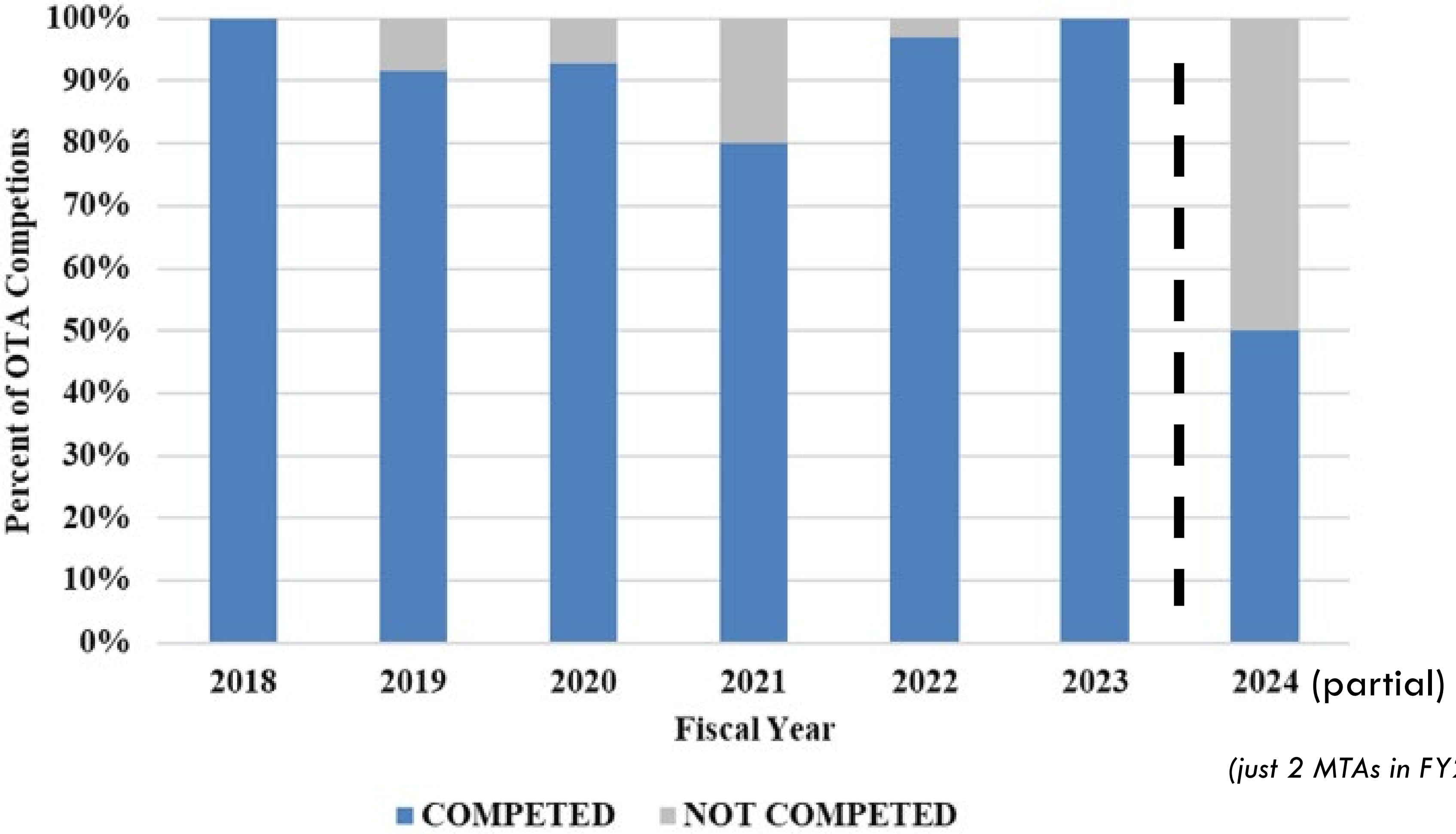
Both OTs and non-OTs were with a wide range of Industries

SOURCE: President's Budget Request from DoD's DAVE data system correlated with FPDS contract information.

NOTE: None of the others that were <3% were for nontechnical capabilities (such as food or landscaping).

Competition on MTA OT Agreements

ACQUISITION INNOVATION RESEARCH CENTER

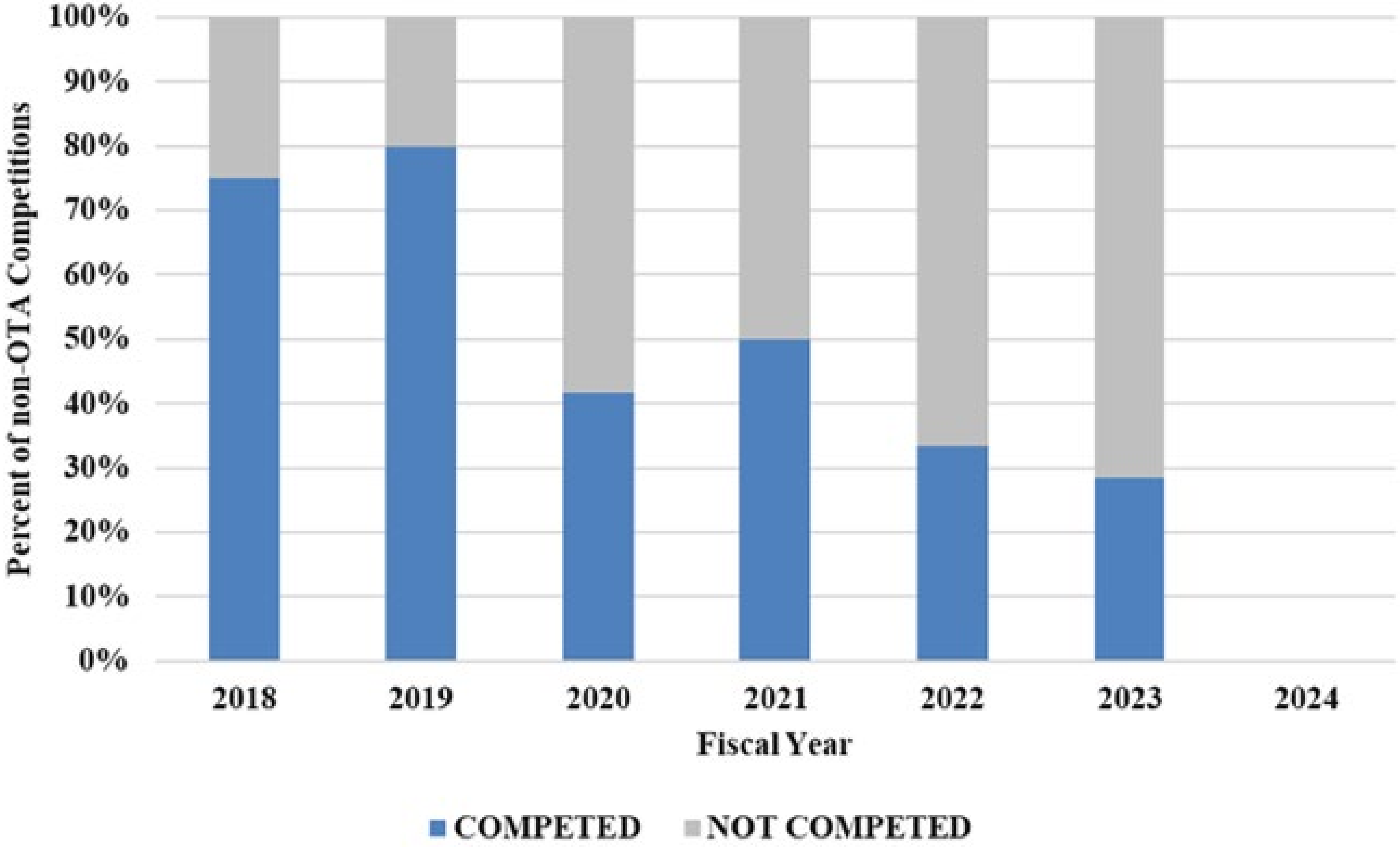


(just 2 MTAs in FY24 to date of analysis)

Most MTA OTs were competed; declining slightly?

SOURCE: President's Budget Request from DoD's DAVE data system correlated with FPDS contract information.

COMPETITION ON MTA NON-OTA CONTRACTS



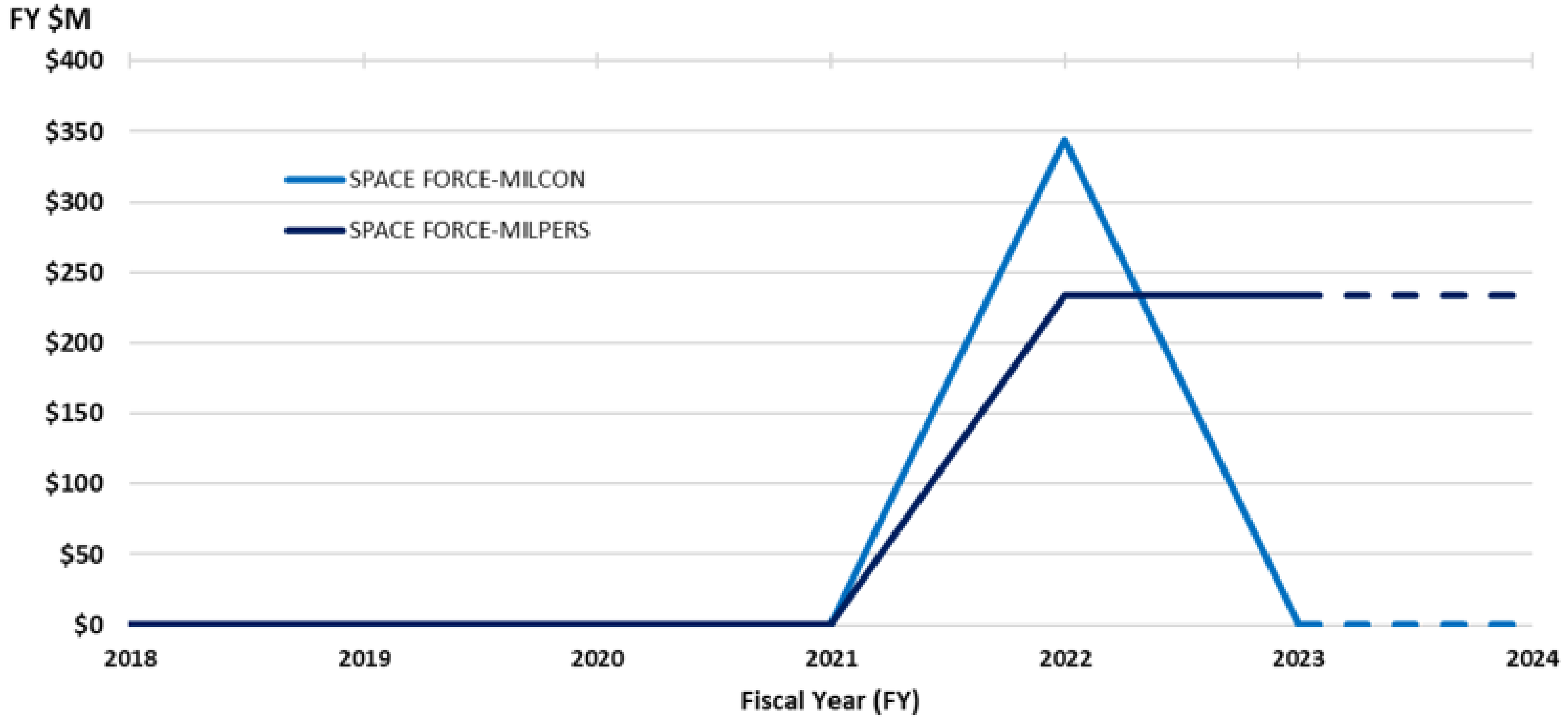
Non-OT MTAs had fewer competed contracts.

SOURCE: President's Budget Request from DoD's DAVE data system correlated with FPDS contract information.

NOTE: To date, for available data, there were no non-OTA MTA contracts in FY 2024 (i.e., all MTA contracting actions in FY 2024 were OTs).

MTA MILCON & MILPERS Appropriations by Component

(TY $,M)



SOURCE: President's Budget Request from DoD's DAVE data system.
NOTE: FY 2024 values are requested (not actual) appropriations. Most FY 2018–2023 values are actuals as reported in subsequent PBs.

Congressional Interests

Congress noted that its most critical interests were:

- The production [basis] demonstrating what is actually being purchased; and
- The technology-focused enterprises to ensure the data [are not] skewed by contracts that are used for food or landscaping, for example.

For MTAs, Congress specified that the DoD's report include:

1. Data on the production…MTA contracts across the Department by service and by product-type;
2. What products and services the Department is procuring using…MTAs." We will also show which of those MTAs are using OTAs;
3. Composition of the entities the Department is [contracting] with using…MTAs, including size (revenue and employees), type (filing status), geography, and industry;
4. Data on the trends in defense MTA obligations by service and buyer for the past 5 years;
5. Data on the competition for production…MTA contracts for each fiscal year beginning with fiscal year 2018; and
6. Data on trends in…MTA production contracts transitions to programs of record.