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Exhibit R-2, RDT&E Budget Item Justification: PB 2025 Defense Logistics Agency **Date:** March 2024

Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide / BA 3: Advanced Technology Development (ATD)</i>	R-1 Program Element (Number/Name) PE 0603712S / <i>Logistics Research and Development Technology (Log R&D)</i>
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COST (\$ in Millions)	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	Cost To Complete	Total Cost
Total Program Element	108.100	13.389	16.580	18.543	-	18.543	18.858	19.037	19.419	19.899	Continuing	Continuing
LOI: <i>Logistics Operations Innovation</i>	48.166	6.134	7.391	8.373	-	8.373	8.513	8.593	8.268	8.480	Continuing	Continuing
PAM: <i>Predictive Analytics / Modeling & Simulation</i>	30.633	4.063	3.914	3.942	-	3.942	4.037	4.100	4.215	4.327	Continuing	Continuing
SWM: <i>Smart-Warehouse Modernization</i>	29.301	3.192	5.275	6.228	-	6.228	6.308	6.344	6.936	7.092	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Defense Logistics Agency (DLA) is responsible for providing the Military Services, other Federal Agencies, as well as combined and allied forces, the full spectrum of logistics, acquisition and technical services. DLA acquires, manages and provides virtually 100 percent of the consumable items the military services need to operate – including food, uniforms, fuel and energy, medical supplies, construction and barrier materials, equipment, and more than 85 percent of the military’s spare parts. DLA also provides logistics related services such as logistics information data management, the reutilization of military equipment, as well as document automation and production services. DLA R&D established five Lines of Effort (LOEs) in FY 2023. The Log R&D Program Element executes three LOEs: Logistics Operations Innovation, Predictive Analytics, Modeling & Simulation, and Smart Warehouse Modernization. The DLA Manufacturing Technology Program (P.E.0603680S) executes two LOEs: Industrial Base and Aging weapon Systems Support and 3DTechnical Data Modernization/Model Based Enterprise.

The Log R&D program helps ensure that advanced logistics concepts and business processes are used to accomplish the agency’s mission with the leanest possible infrastructure. Log R&D identifies the best commercial business practices and tailors them, as necessary, into the most effective business processes for the agency. Log R&D develops and demonstrates high risk, high payoff technology that provides a significantly higher level of support at the lowest possible costs.

The LOEs are closely aligned to priorities specified in the most current DLA Strategic Plan, which identifies Digital Business Transformation as one of three critical capabilities to achieve DLA’s business goals of enhancing performance, reducing costs, and becoming more predictive and data driven. This critical capability also seeks to transform systems and processes to improve data transparency, reliability, and security for our employees, customers, and suppliers. DLA’s initiatives within this critical capability align with the National Security Strategy (NSS) by emphasizing the importance of harnessing rapid emerging technologies that will transform how DLA does business.

- Logistics Operations Innovation: R&D efforts to cultivate integration of innovative processes and technology into the DLA supply chains to enhance warfighter readiness and weapons system sustainment. This LOE focuses on supporting the DLA LOE 4: Modernized Acquisition and Supply Chain Management, while also investment in cross-cutting supply chain efforts, to include fuel quality and alternative fuel sources, or emergent needs that impact DLA’s ability to effectively support the warfighter through the following portfolios: Energy Readiness Program (ERP), Acquisition Modernization Technology Research (AMTR), and Supply Chain Management and Sustainability (SCMS).

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- Predictive Analytics, Modeling & Simulation: R&D efforts develop predictive analytic solutions using data and Artificial Intelligence/Machine Learning (AI/ ML) to solve high-impact problems, improve business operations, and provide actionable strategies to inform business decisions. Primarily focused on the DLA Strategic Plan Critical Capability C: Digital Business Transformation, these LOE efforts cut across DLA Strategic Plan LOE 1: Warfighter Always, LOE2: Trusted Mission Partner, and LOE 4: Modernized Acquisition and Supply Chain Management, supporting the warfighter through the Logistics Technology Research (LTR) portfolio of projects.

- Smart Warehouse Modernization: R&D efforts to modernize distribution and disposition operations through infusion of smart-warehousing, interconnected technologies, and automation. This LOE is dedicated to one of the primary focus areas of DLA’s Critical Capability for Digital Business Transformation: warehousing modernization through efforts within the Strategic Distribution and Disposition (SDD) portfolio of projects.

DLA’s focus for this budget cycle highlights advanced capabilities in digital and technical data modernization, management and analytics to transform DLA Business Processes to lower the Agency’s material acquisition and operation costs along with improving weapons systems support.

B. Program Change Summary (\$ in Millions)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Previous President's Budget	13.663	16.580	16.896	-	16.896
Current President's Budget	13.389	16.580	18.543	-	18.543
Total Adjustments	-0.274	0.000	1.647	-	1.647
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.474	-			
• Below Threshold Reprogramming	0.200	-	-	-	-
• Internal Reallocation	-	-	2.001	-	2.001
• Program Increase: Non-labor Inflation	-	-	0.036	-	0.036
• Program Decrease	-	-	-0.390	-	-0.390

Change Summary Explanation

FY 2025 Internal Reallocation: Logistics Operations Innovation (LOI) baseline was increased by \$2.000 million to initiate programs for Class IV Supply Chain and DLA Disposition, expand Acquisition Modernization Technology Research.

FY 2025 Program Decrease: Reduction to fund higher DoD priorities.

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Appropriation/Budget Activity 0400 / 3					R-1 Program Element (Number/Name) PE 0603712S / <i>Logistics Research and Development Technology (Log R&D)</i>				Project (Number/Name) LOI / <i>Logistics Operations Innovation</i>			
COST (\$ in Millions)	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	Cost To Complete	Total Cost
LOI: <i>Logistics Operations Innovation</i>	48.166	6.134	7.391	8.373	-	8.373	8.513	8.593	8.268	8.480	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Logistics Operations Innovation Line of Effort (LOE) seeks to improve DLA supply chain performance and security through the integration of advanced technology and innovative processes into daily business operations. Research in these areas drive improvements to internal costs, reduce award delays, and improve material availability, supply chain security, and logistical planning. This will be accomplished through the use of artificial intelligence/machine learning, block-chain technology, and research of emerging commercial best practices and technologies. In addition, out of cycle emergent technologies across all DLA supply chains and logistics processes are resourced in a timely manner without disrupting ongoing projects by funds reallocation. The objectives for this LOE include:

1. Secure supply chains: Improvements to the DoD Class III Bulk Fuel Petroleum, Oil and Lubricants supply system
 - New or improved analytical methods to determine product quality or identify anomalies
 - Renewable energy technologies for military and government use
 - Enhanced military adoption and use of fuel products derived from petroleum alternatives

2. Technical Solutions for anti-counterfeiting detection: innovative solutions to prevent counterfeit parts in the logistical supply chain.
 - Reduced supply chain vulnerabilities through low-cost anti-counterfeiting solutions

3. Integrated logistics and acquisition information that yields cost savings and shortens lead times:
 - An enterprise market intelligence capability to optimize spending strategies and business outcomes
 - An automated contract quality capability that will result in a higher percentage of contracts executable upon award and subsequently a reduction of Production Lead Time
 - Improved e-commerce and supplier bidding systems

The Logistics Operations Innovation LOE includes R&D efforts to develop new products and services for DLA customers in three programs:

- The Energy Readiness Program (ERP) roadmap helps to achieve the operational energy strategy goals of increasing sources of supply, developing and implementing alternative fuels under the ERP.

- The Acquisition Modernization Technology Research (AMTR) program officially established in FY 2022. Many of the current efforts were initiated and funded under the Logistics Tech Research (LTR) Program; however, because of the increasing focus on DLA Acquisition modernization to enhance market intelligence capabilities,

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improve contract quality, and enable best value acquisitions, these efforts transitioned to a dedicated program. These and similar efforts will be managed by the AMTR program in close coordination with DLA J7 moving forward.

– Supply Chain Management & Sustainment (SCM-S) seeks to deliver enterprise-level capabilities for Joint Warfighter readiness and lethality in contested logistics environments. Severe compound threats through sufficient, resilient, transparent global supply chains & infrastructure, for a secure and sustainable future

- Ensure installation of resiliency under severe compound threats
- Deliver Class IV Total Asset Visibility and Supplier Illumination
- Enhance SCRM efforts across DoD and industry while supporting globally integrated joint logistics operations.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2023	FY 2024	FY 2025
<p>Title: Logistics Operations Innovation Line of Effort (R&D LOE 4)</p> <p>Description: FY 2023 Accomplishments: The Energy Readiness Program executed the Congressional Add supported project with the University of Maine, "Woody Biomass Conversion to Liquid Hydrocarbon Fuels, has completed operational campaigns on producing synthetic crude oil and upgrading that crude oil to jet fuel. U of Maine has garnered interest from a major oil refinery in the results of the campaign for potential incorporation into refinery operations. – Hydraulic Fluid Jet Fuel Contamination Study, conducted by the Air Force Research Laboratory (AFRL) completed with sufficient data supporting the development and documentation of robust gas chromatography – mass spectrometry (GC-MS) test method for the detection of hydraulic fluid contamination in fuels removed from military aircraft. This method will assist in rapidly validating contamination content in order to approve returning the affected fuels to aircraft service.</p> <p>The Acquisition Modernization Technology Research (AMTR) Program completed individually tailored Market Intelligence projects at DLA Aviation and DLA Energy and launched a third project at DLA Land & Maritime. Other efforts included prototyping of a contract quality analytics dashboard and third-party proofs of concept; developing a better understanding of harder to procure DLA parts and what makes those items a fit for an automated pricing platform (integrated management readiness logistics support solution); and beginning the modernization journey of DLA's Internet Bid Board System (DIBBS).</p> <p>The Supply Chain Management and Sustainment (SCM-S) program successfully established and transitioned a Class IV Trade Agreement Act (TAA) Compliant Database for Suppliers and Products for 19 countries within the INDOPACOM region and Taiwan while initiating AFRICOM and EUCOM regions. SCM-S also completed Class IV Demand Estimate studies for AFRICOM and INDOPACOM that estimates demands and activities within those regions to improve demand capacity planning. SCM-S transitioned a Jet Fuel and Crude Oil study was also transitioned for key INDOPACOM countries to validate inventory, production, consumption, and import/export proportions. SCM-S also prioritized human machine teaming technologies by incorporating the first autonomous robotic system in DLA Disposition warehouses. The Supply Chain Management and Sustainment (SCM-S) program will begin transition of the Advanced Modeling and Optimization of Supply Chains (AMOS) supply chain simulator in</p>	6.134	7.391	8.373

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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2023	FY 2024	FY 2025
<p>support of contingency operations and continue research efforts in asset visibility, dynamic network analysis, information mapping, and disposition technologies.</p> <p>FY 2024 Plans: The Energy Readiness Program (ERP) program will continue working with the Service customers to improve specifications and standards for fuel quality, engage in modeling and simulation of the energy supply chain, and identify alternative energy sources for Military Customers. ERP will focus on determining R&D solutions for ongoing issues affecting fuel and fuel additive quality and operational requirements (e.g., thermal stability, storage stability, ignition capability) and providing additional alternatives for military unique fuels. With the current Administration’s increased focus and climate change initiatives and alternatives to petroleum products, the program’s efforts to assist the military services in the qualification and certification of alternative fuels to meet military specification requirements are anticipated to increase significantly.</p> <p>The Acquisition Modernization Technology Research (AMTR) Program will build upon previous efforts to implement an enterprise-wide Market Intelligence program, focusing on DLA Distribution and DLA Disposition Services. Other planned efforts include piloting the contract quality analytics dashboard, continuing research efforts and proof of concepts surrounding improving or replacing the DLA Internet Bid Board System (DIBBS) and testing the Integrated Manufacturing Readiness Logistics Support (IMRLS) solution prior to enterprise launch.</p> <p>The Supply Chain Management and Sustainment (SCM-S) program will begin transition of the Advanced Modeling and Optimization of Supply Chains (AMOS) supply chain simulator in support of contingency operations and continue research efforts in asset visibility, dynamic network analysis, information mapping, and disposition technologies.</p> <p>FY 2025 Plans: The Energy Readiness Program (ERP) will continue to working with DLA Energy Service customers to improve specifications and standards for fuel quality, engage in modeling and simulation of the energy supply chain and identifying alternative energy. ERP will also focus on determining R&D solutions for ongoing issues affecting fuel and fuel additive quality and operational requirements (e.g., thermal stability, storage stability, ignition capability). The program will continue to assist the military services in the qualification and certification of alternative fuels to meet military specification requirements; this will be in alignment with the current Administration’s goals addressing climate change through the decarbonization and carbon neutral emission attainment of transportation fuels.</p> <p>The Acquisition Modernization Technology Research (AMTR) program will conclude implementation of an enterprise-wide Market Intelligence program, continue efforts to improve or replace the DLA Internet Bid Board System (DIBBS), review program support</p>			

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2023	FY 2024	FY 2025
and develop an integrated view of contract quality, improve DLA's e-commerce capabilities, and implement computer-aided design (CAD) on demand.				
FY 2025 Supply Chain Management and Sustainment (SCM-S) program baseline was increased across the FYDP to support to ensure Mission Accomplishment in a contested environment .				
FY 2024 to FY 2025 Increase/Decrease Statement: Logistics Operations Innovation (LOI) baseline was increased in FY 2025 to accelerate AMTR projects and SCMS.				
Accomplishments/Planned Programs Subtotals		6.134	7.391	8.373
C. Other Program Funding Summary (\$ in Millions)				
N/A				
Remarks				
D. Acquisition Strategy				
DLA R&D primarily uses Broad Agency Announcements (BAA) to competitively award contracts to industry and academic organizations for Advanced Technology Development projects. BAAs allow DLA R&D to see a wide range of technical approaches to address an area of interest or specific requirement. Multiple awards can be made so that the chances of a successful R&D outcome are maximized. BAAs are a flexible way to access all parts of the technology supply chain and structure a contract that satisfies the DOD requirements. To save potential offeror time and money, most BAAs include a short white paper submission that allows stakeholders to determine if the level of interest justifies requesting a full cost and technical proposal. Full proposals resulting from the white paper review are evaluated and move through an expedited evaluation and award process. AMTR has an open BAA through FY 2026.				
Occasionally, DLA uses Other Transaction Authority (OTA) to rapidly deliver prototype capabilities with design and discovery techniques rather than requirements-based approaches. OTA agreements are especially useful for advancing technology adoption because they reach non-traditional, small business companies with innovative technologies and have the advantage of being able to go from development into production without a follow-on competitive contract.				
In 2024, DLA R&D will use the DLA Joint Enterprise Technology Services (JETS) JETS 2.0 multi-award Indefinite Delivery/Indefinite Quantity (IDIQ) contract vehicle. JETS 2.0 will be used to acquire IT services from small and large pre-qualified performers, including R&D Support tasks, with AM SME, AM Tech Specialist, Biologist, Chemist, Food Scientist, and Industrial Engineer labor categories.				

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COST (\$ in Millions)	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	Cost To Complete	Total Cost
PAM: <i>Predictive Analytics / Modeling & Simulation</i>	30.633	4.063	3.914	3.942	-	3.942	4.037	4.100	4.215	4.327	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Predictive Analytics, Modeling & Simulation Line of Effort (PAM) includes R&D efforts within the Logistics Technology Research (LTR) program. The focus of LTR is to develop predictive analytic solutions by applying AI/ML algorithms to data obtained from DLA and external sources which can help solve high-impact problems, improve business operations, and provide actionable strategies for optimized business decisions. Through the development of decision support tools, such as modeling, simulation, and other analytics to improve operational strategy decision-making, forecasting, and procurement, DLA will achieve more effective and efficient responses to emerging market and customer requirements. The objectives for this LOE include:

1. Leverage technological solutions for data analytics and integration for demand projections and supply chain risk management.
2. Data analytics integration for DLA, the military services and industry: allows businesses and vendors to aggregate data, analyze it, and transform it into useful information.
3. Explore emergent technologies in quantum computing and edge computing to enable advanced analytics.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2023	FY 2024	FY 2025
Title: Predictive Analytics, Modeling & Simulation Line of Effort (R&D LOE 3)	4.063	3.914	3.942
Description: Funding and efforts for the Predictive Analytics, Modeling & Simulation Line of Effort begins in FY 2023. FY 2022 efforts related to this LOE are outlined in the R-2A for Improving Logistics Processes (GLTD) under the LTR program.			
FY 2023 Accomplishments: LTR Program completed Phase I and II of Operation Sly Boar which was dealt with an risk and analysis of DLA's supplier base by conducting a comprehensive supply chain illumination into three product lines within DLA. During this time AI/ML products were developed for Lead Time Prediction models that will predict the likelihood of on-time delivery using DLA and risk data. A second Supply Chain Risk Management (SCRM) model was developed to predict impacts of disruptions and mitigations for the supply chain.			
Also, during this time the LTR program conducted efforts to improve DLA's metadata management posture, improve on DLA's vendor onboarding procedures, and also the successful transition for the digital traceability of DLA vendors that can now be accessed through a web-portal that was created as a result of the project.			

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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2023	FY 2024	FY 2025
<p><i>FY 2024 Plans:</i> LTR program will continue predictive analytics research through execution of AI/ML research based on high value use cases identified by the agency leadership, and research incorporating edge computing technology into DLA business processes to complement predictive analytics capabilities.</p> <p>LTR will continue supply chain risk management research through exploration of data lakes and other data analytics integration methods to store classified and unclassified data for supply chain risk analysis and AI/ML applications. Additional risk identification and mitigation capabilities will be explored.</p> <p>One or more block-chain pilot studies will be conducted based on use case research completed in FY 2023.</p> <p><i>FY 2025 Plans:</i> The LTR program will continue to develop more AI/ML models for Supply Chain Risk Management and Supply Chain Security. Continue to explore the integration of AI/ML within DLA to include Large Language Models (LLM), such as ChatGPT. Further efforts will also be made for the integration of Blockchain for some of DLA's business processes, and the use of Digital Twins (Modeling and Simulation) to improve various business processes. Continue to conduct further research on new emerging technologies to safeguard and protect DLA's supply chain, and to improve DLA's requirements for data analytics.</p> <p><i>FY 2024 to FY 2025 Increase/Decrease Statement:</i> No significant change from FY 2024 to FY 2025.</p>			
Accomplishments/Planned Programs Subtotals	4.063	3.914	3.942

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

DLA R&D primarily uses Broad Agency Announcements (BAA) to competitively award contracts to industry and academic organizations for Advanced Technology Development projects. BAAs allow DLA R&D to see a wide range of technical approaches to address an area of interest or specific requirement. Multiple awards can be made so that the chances of a successful R&D outcome are maximized. BAAs are a flexible way to access all parts of the technology supply chain and structure a contract that satisfies the DOD requirements. To save potential offeror time and money, most BAAs include a short white paper submission that allows stakeholders to determine if the level of interest justifies requesting a full cost and technical proposal. Full proposals resulting from the white paper review are evaluated and move through an expedited evaluation and award process.

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0400 / 3	PE 0603712S / <i>Logistics Research and Development Technology (Log R&D)</i>	PAM / <i>Predictive Analytics / Modeling & Simulation</i>

Occasionally, DLA may use Other Transaction Authority (OTA) to rapidly deliver prototype capabilities with design and discovery techniques rather than requirements-based approaches. OTA agreements are especially useful for advancing technology adoption because they reach non-traditional, small business companies with innovative technologies and have the advantage of being able to go from development into production without a follow-on competitive contract.

In 2024, DLA R&D can use The DLA Joint Enterprise Technology Services (JETS) JETS 2.0 multi-award Indefinite Delivery/Indefinite Quantity (IDIQ) contract vehicle. JETS 2.0 will be used to acquire IT services from small and large pre-qualified performers, including R&D Support tasks, with AM SME, AM Tech Specialist, Biologist, Chemist, Food Scientist, and Industrial Engineer labor categories.

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COST (\$ in Millions)	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	Cost To Complete	Total Cost
SWM: <i>Smart-Warehouse Modernization</i>	29.301	3.192	5.275	6.228	-	6.228	6.308	6.344	6.936	7.092	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Smart Warehouse Modernization Line of Effort will assess and test cyber-secure smart-warehouse technologies to transform and modernize distribution and disposition operations. The objectives for this LOE include:

1. Increase productivity and efficiency through interconnected technologies and automation such as enhanced inventory management, materiel distribution, and asset visibility
2. Provide enhanced and cyber-secure operations

The Strategic Distribution & Disposition (SDD) Program collaborates with DLA Distribution and Disposition Services to identify legacy capabilities that are inadequate for emerging worldwide distribution and disposition requirements. A key objective of the SDD Program is to anticipate, assess, and meet the current and future Warfighter requirements by leveraging R&D to infuse innovation into solutions. Long-term objectives include mitigating the DOD Supply Chain Management high risk issues identified by the Government Accountability Office (GAO), 2018 (Inventory Management, Material Distribution and Asset Visibility).

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2023	FY 2024	FY 2025
Title: Smart Warehouse Modernization Line of Effort (R&D LOE 5)	3.192	5.275	6.228
<p>Description: Funding and efforts for the Smart Warehouse Modernization Line of Effort began in FY 2023 and is focused on R&D efforts which support the DLA Distribution Modernization initiatives, while the Supply Chain Management and Sustainment (SCMS) program includes emerging initiatives which support DLA's Disposition Operations mission.</p> <p>SDD -</p> <ul style="list-style-type: none"> • 5G Private Network is active at DLA Distribution Albany, GA and ready for testing of 4.0 technologies. • Sequential Phase II B Small Business Innovative Research (SBIR) Augmented Reality (AR) case study to prove out DLA's acquisition approach for implementing Augmented Reality (AR) technology for the Warehouse Picking and Stowing processes. Prototype is in progress at both DLA Distribution Anniston, AL and DLA Distribution Oklahoma City, OK. • Phase one feasibility study underway with the Naval Postgraduate School to identify a range of alternative solutions and determine the most suitable and feasible forecasting methodology that will fuse information on projected Fleet Material requirements for the DLA Distribution Material Processing Center (MPC) workload predictability. 			

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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2023	FY 2024	FY 2025
<p>• SBIR Phase 1: Feasibility Study of an Automated Inventory Technology for the Defense Logistics Agency (DLA), Distribution Centers (DCs) submitted, accepted, and received a great number of responses to help solve the DOD Supply Chain Management high risk issues identified by the Government Accountability Office (GAO), 2018 (Inventory Management). Selection in process.</p> <p>FY 2024 Plans: The Strategic Distribution and Disposition (SDD) program will continue to provide applied research, analytical, and decision support to DLA Distribution and Disposition Services, and also provide support to the Distribution Modernization Program (DMP). SDD will continue to engage with Industry, DOD sponsored FFRDCs and UARCs leveraging subject -matter expertise in key areas of research such as 5G Networks, Sensor Internet of Things (IoT), Block-chain, Quantum Computing, Artificial Intelligence/ Machine Learning (AI/ML), and leverage the benefits realized from proven research studies and pilot projects in the areas of AR, AS/RS, Performance Management, Automated Inventory, 3D Warehouse Mapping, and Autonomous/Robotics systems (e.g., Autonomous Guided Vehicles (AGVs), Autonomous Mobile Robots (AMRs), etc.). SDD will continue to incorporate IPTs for project collaboration and Integrated System Engineering concepts (test and evaluation) into Distribution projects.</p> <p>FY 2025 Plans: SDD - The Strategic Distribution and Disposition (SDD) program will continue to provide applied research, analytical, and decision support to DLA Distribution and Disposition Services, and also provide support to the Distribution Modernization Program (DMP). SDD will continue to engage with Industry, DOD sponsored FFRDCs and UARCs leveraging subject -matter expertise in key areas of research such as 5G Networks, 5G Technologies, Sensor Internet of Things (IoT), Blockchain, Quantum Computing, Artificial Intelligence/ Machine Learning (AI/ML), and leverage the benefits realized from proven research studies to pilot technologies supporting DOD Supply Chain Management high risk issues identified by the Government Accountability Office (GAO), 2018 for Material Distribution Technologies (Goods to Man) and Asset Visibility Technologies.</p> <p>FY 2024 to FY 2025 Increase/Decrease Statement: Smart-Warehouse Modernization (SWM) baseline was increased in FY 2025 to support the Distribution Modernization Program requirements for 5G/Predictive Analytic capabilities to modernize DLA Distribution operations.</p>			
Accomplishments/Planned Programs Subtotals	3.192	5.275	6.228

C. Other Program Funding Summary (\$ in Millions) N/A
Remarks

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Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603712S / <i>Logistics Research and Development Technology (Log R&D)</i>	Project (Number/Name) SWM / <i>Smart-Warehouse Modernization</i>

D. Acquisition Strategy

DLA R&D primarily uses Broad Agency Announcements (BAA) to competitively award contracts to industry and academic organizations for Advanced Technology Development projects. BAAs allow DLA R&D to see a wide range of technical approaches to address an area of interest or specific requirement. Multiple awards can be made so that the chances of a successful R&D outcome are maximized. BAAs are a flexible way to access all parts of the technology supply chain and structure a contract that satisfies the DOD requirements. To save potential offeror time and money, most BAAs include a short white paper submission that allows stakeholders to determine if the level of interest justifies requesting a full cost and technical proposal. Full proposals resulting from the white paper review are evaluated and move through an expedited evaluation and award process. SWM has a BAA open through FY 2027.

Occasionally, DLA may use Other Transaction Authority (OTA) to rapidly deliver prototype capabilities with design and discovery techniques rather than requirements-based approaches. OTA agreements are especially useful for advancing technology adoption because they reach non-traditional, small business companies with innovative technologies and have the advantage of being able to go from development into production without a follow-on competitive contract.

In 2024, DLA R&D can use The DLA Joint Enterprise Technology Services (JETS) JETS 2.0 multi-award Indefinite Delivery/Indefinite Quantity (IDIQ) contract vehicle. JETS 2.0 will be used to acquire IT services from small and large pre-qualified performers, including R&D Support tasks, with AM SME, AM Tech Specialist, Biologist, Chemist, Food Scientist, and Industrial Engineer labor categories.