Mapping the Money: Helping Government Contractors Partner and Prosper

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Overview of the Project

- In 2015, the Maryland Department of Commerce received a grant from the US Department of Defense (DOD), Office of Economic Adjustment (OEA) to conduct research on the impact of future funding fluctuations on the defense industry in Maryland.

- The Regional Economic Studies Institute (RESI) at Towson University was the sole subcontract to the MD Department of Commerce for this research.

- Maryland is one of 43 states and regions in the US to receive this funding.
Why Did Maryland Receive Funding?

Large military presence
+ 
Large defense industry 
+ 
Top 5 state to receive DOD funding 
= 
Highly dependent on DOD funding
Military Presence in Maryland

MARYLAND’S Military Installations

Fort George C. Meade
- Economic Impact: $546,416 in total output; $21.36 in total wages
- Additional Tenants: US Cyber Command

Baltimore District
1,427 jobs; 60.34 in total output; 60.34 in total wages
Main Tenant: Army Research Laboratory

Fort Detrick
- Economic Impact: $36.762 in total output; $0.78 in total wages
- Main Tenants: Army Medical Research and Materiel Command
- Additional Tenants: National Institute for Infectious Diseases, National Cancer Institute, National Interagency Biodefense Campus

Adapt Lab Laboratory Center
2,126 jobs; 60.34 in total output; 60.34 in total wages
Main Tenant: Army Research Laboratory

National Geospatial Intelligence Agency
2,333 jobs; 60.34 in total output; 60.34 in total wages
Main Tenant: Army National Guard

Kansas City District
- Economic Impact: $1.286 in total output; $0.78 in total wages
- Main Tenants: Kansas City District of the United States Army

Naval Support Activity Annapolis
- Economic Impact: $21.013 in total output; $0.78 in total wages
- Main Tenant: United States Naval Academy

National Geospatial-Intelligence Agency
- Economic Impact: $1.286 in total output; $0.78 in total wages
- Main Tenant: US Army

Joint Base Andrews
- Economic Impact: $21.013 in total output; $1.184 in total wages
- Main Tenants: Joint Base Andrews

Naval Air Station Patuxent River
- Economic Impact: $21.013 in total output; $1.184 in total wages
- Main Tenants: United States Navy

Aerospace and Defense Industry
- Economic Impact: $21.013 in total output; $1.184 in total wages
- Main Tenants: Aerospace and Defense Industry

Towson University Division of Innovation and Applied Research
Defense Industry Presence in Maryland

- 9400 defense and aerospace businesses.

- Major defense contractor located here: Lockheed Martin, Northrup Grumman, and Booz Allen Hamilton.

- Federal facilities supporting the industry include the National Institute of Health, the Walter Reed National Military Medical Center, and the National Institute of Standards and Technology.

- Emerging sectors in the state include cybersecurity and unmanned autonomous systems.
What is the Maryland Defense Network?

- Place to find:
  - Upcoming grant/contract opportunities
  - Place to find what the DoD is purchasing
  - Place to find subcontractors/contractors

- Includes the following components:
  - Secure Portal
  - Dashboard with map, tables, charts
  - Supply chain mapping
  - Database of companies
Secure Portal

Welcome to the Maryland Defense Network

Maryland ranks among the top five U.S. states for defense spending. In an environment that continuously evolves, defense contractors must remain agile and adaptive to economic changes.

Get Started  Create Account  Sign In

Get Started

$12,857,670,285  $2,086,961,843  16.23%
Total DoD FY16 Obligations to Maryland Vendors  Total DoD Obligations by Installations in Maryland to Vendors in Maryland  Percent DoD Obligations by Installation Maryland to Vendors in Maryland

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Dashboard

Explore Maryland Vendors  Help Video
Add Map, Table and Chart components to create a dashboard view of vendors located in Maryland.

Hide Filters
Apply Filters

Filter all MDN vendors located in Maryland

Filter by DoD contract and grant recipients and their subs (FY16)

My Dashboard

<table>
<thead>
<tr>
<th>Vendor Name</th>
<th>DBA Name</th>
<th>Primary NAICS</th>
<th>Street Address</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNATEK, INC</td>
<td>(FORMER: UNA TELECOM...)</td>
<td>541511</td>
<td>10411 MOTOR CITY DR ST... BE</td>
<td></td>
</tr>
<tr>
<td>GIDEON'S SECURITY COM...</td>
<td>N/A</td>
<td>561611</td>
<td>7305 EASY STREET</td>
<td>TE</td>
</tr>
<tr>
<td>INFORS USA</td>
<td>N/A</td>
<td>334516</td>
<td>9157 WHISKEY BOTTOM RD</td>
<td>LA</td>
</tr>
</tbody>
</table>
Database of DoD funded Companies in Maryland

Vendor Lookup

Don't see your company listed here? Add it to the Network!

Getting multiple results for the same vendor? This could be because of multiple variations of names entered by contacting officers (variations of names can occur due to misspellings or punctuation), or variations of business units based on separate DUNS numbers.

<table>
<thead>
<tr>
<th>Name Variants</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Details</td>
<td>Details</td>
</tr>
<tr>
<td>BOOZ ALLEN HAMILTON ENGINEERING SERVICES LLC</td>
<td>ANNAPOLIS</td>
</tr>
<tr>
<td>BOOZ ALLEN HAMILTON ENGINEERING SERVICES LLC</td>
<td>LINTHICUM</td>
</tr>
<tr>
<td>BOOZ ALLEN HAMILTON ENGINEERING SERVICES, LLC</td>
<td>LINTHICUM</td>
</tr>
<tr>
<td>BOOZ ALLEN HAMILTON INC.</td>
<td>ANnapolis Junction</td>
</tr>
<tr>
<td>LARRY BOOZER PIANO SERVICES</td>
<td>ANNAPOLIS</td>
</tr>
</tbody>
</table>
Supply Chain Mapping
Technology Overview

- Modern front-end technologies
  - Backbone, D3, Leaflet (and Esri Leaflet)
- Node.js application hosted on state infrastructure
  - A first for both us and state IT department
- Microsoft SQL Server database
- MD iMap ArcGIS Services for certain data layers
Demo

- https://marylanddefensenetwork.org/
Novelty of the MDN

- Bringing publicly available data sources together in a user-friendly environment
  - Makes data accessible for new and advanced users
  - Synthesis of vendor data and contract data

Data Sources

- Contracts, subcontracts, grants, subgrants, and transactions – How to cut through inherent messiness of data? How to automate process for sustainability year over year?
- Vendors – how to identify most accurate and most current vendor attributes?
Parsing the Contract, Grant, and Spending Data

- All spending data is from USA Spending – entirely transaction-based
- Our need: contract and grant information
- Solution: aggregate various attributes from transactions to perform the following:
  - Identify contract and grants using transactions with common identifiers
  - Calculate total dollars awarded to particular vendor
  - Determine the “place of performance” to identify where the work is being done – with a focus on Maryland
Vendors

- Our need: most up-to-date and accurate vendor information
- Solution: Required synthesis of several data sources
  - SAM, DSBS, proprietary survey data, USA Spending transaction data, supplemental information from InfoUSA, and self-reported data from users of application
  - “Cascaded” down through above data sources to find the most authoritative source for each vendor attribute
    - Most authoritative source: self-reported data by users/vendors
    - Captured either by vendor adding themselves to the Network if they were not already included or, if already included, updating any out-of-date or erroneous information
    - If attribute not found, move to next authoritative source until attribute is found
Planned Enhancements

- Overlay the advanced manufacturing companies in Maryland into the MDN.

- Create a more collaborative interface which allows users to engage with other users through the MDN.

- Create a "guide to diversification" for users to access for case studies on successful diversification out of the defense industry in MD.
Thank you for your time.

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