

The Impact of DoD Contracting on Maryland's Economy

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Project Overview

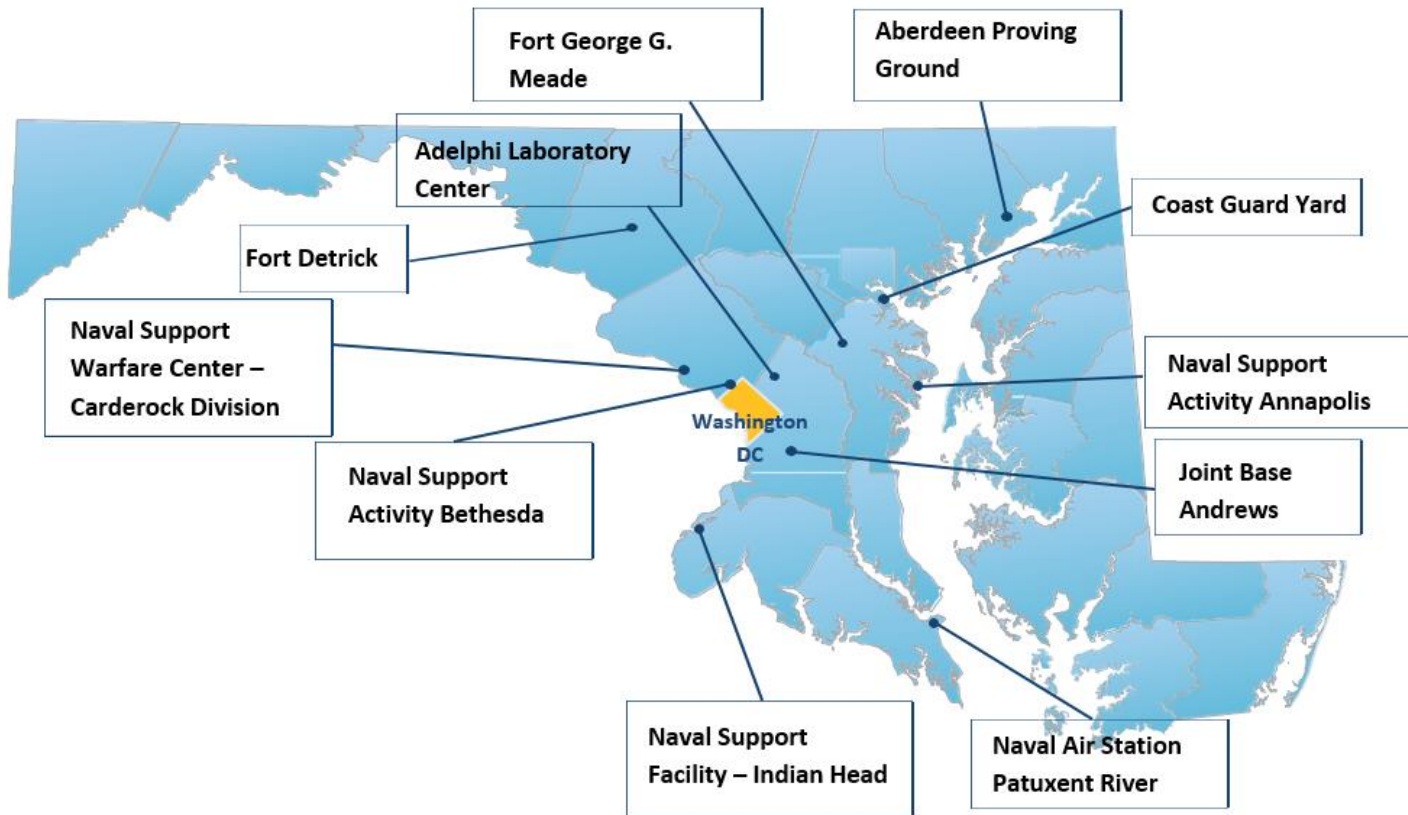
- ▶ In 2015, the Maryland Department of Commerce received grant from the US Department of Defense (DOD), Office of Economic Adjustment (OEA) to conduct research on the impact of future funding fluctuations on the defense industry in Maryland.
- ▶ The Regional Economic Studies Institute (RESI) at Towson 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.



Defense Industry Presence in Maryland

- ▶ Maryland receives the 4th highest amount of defense funding in the nation.
- ▶ 9400 defense and aerospace businesses located in state.
- ▶ Major defense contractor located here: Lockheed Martin , Northrup Grumman, and Booz Allen Hamilton.

Military Presence in Maryland



Defense Industry Presence in Maryland

- ▶ Maryland is prepared for the future of the military, though not immune to shocks.
- ▶ 2005 BRAC led to 19,090 new direct jobs and 60,000 indirect/induced jobs estimated through 2020.
- ▶ Maryland well positioned with emphasis on cybersecurity, UAS, and biotech
- ▶ Sequestration hit Maryland's economy hard
 - ▶ Estimated losses of 25,000 jobs and \$1.6 billion in lost wages

Project Scope

- ▶ Under the grant, RESI completed 5 tasks:
 - ▶ SWOT analysis
 - ▶ Cluster analysis
 - ▶ Economic impact analysis of defense contracting on Maryland's economy
 - ▶ A diversification plan containing state, regional, and county-level strategies
 - ▶ Creation of an interactive dashboard mapping the defense industry supply chain in Maryland
 - ▶ <https://marylanddefensenetwork.org>

Economic Impact Analyses

► Explored 5 scenarios:

1. Overall impact of defense contracting
2. Impact of a 10% reduction in DoD funding
3. Impact of a 10% reduction in R&D funding
4. Impact of a 10% increase in cybersecurity funding
5. Impact of a large defense contractor

Data Source

- ▶ USA Spending data
 - ▶ www.usaspending.gov
 - ▶ Analyzed Grants and Contracts
 - ▶ Awarded to Maryland-based vendors or place of performance defined as in Maryland
 - ▶ Data covers 2011 to 2015
 - ▶ Classified contracts and NSA data not included
 - ▶ Only covers defense contracting, not direct military employment

Data Preparation

- ▶ Maryland received over \$16 billion in DoD funding between 2011 and 2015
- ▶ Data geocoded to identify the county of the vendor/place of performance.
- ▶ USA Spending includes NAICS code for vendor
 - ▶ NAICS mapped to REMI industry codes
 - ▶ Roughly \$170 million in contracts missing NAICS codes

Data Preparation

- ▶ R&D and cybersecurity funds classified using Product-Service Codes
- ▶ Data input annually, output reported as average annual impacts
- ▶ Studied Maryland as a whole, 5 sub-regions, and each county
 - ▶ County-level analysis only examined overall impact

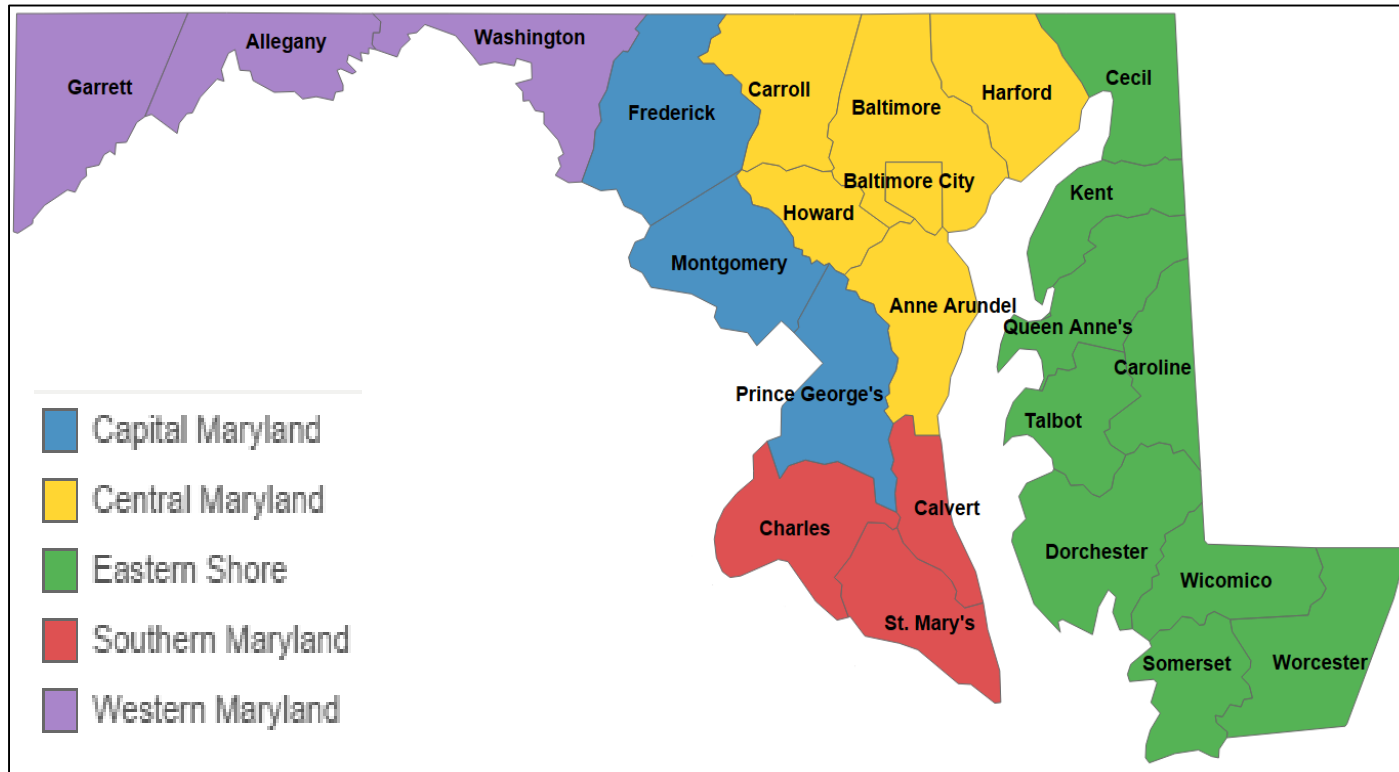
Impact of Average Large Defense Contractor on Maryland

- ▶ Wanted to explore impacts of large defense contractors without focusing on any specific firm
- ▶ To calculate, RESI identified four largest defense contractors in Maryland, including AAI and Lockheed martin.
- ▶ Using Reference USA, the team determined NAICS code and revenue associated with each subsidiary of these 4 companies in Maryland
- ▶ Averaged NAICS/revenue combinations across 4 companies
- ▶ Input into Central and Capital Maryland

Regional vs County-Level Analysis

- ▶ Regional analysis more accurate for spending patterns and prime-sub relationships.
 - ▶ Contractor in Baltimore likely to subcontract pieces out to firms in region.
- ▶ County analysis lets economic developers better understand local variations.
- ▶ RESI explored both, but most scenarios are not explored at the county-level.

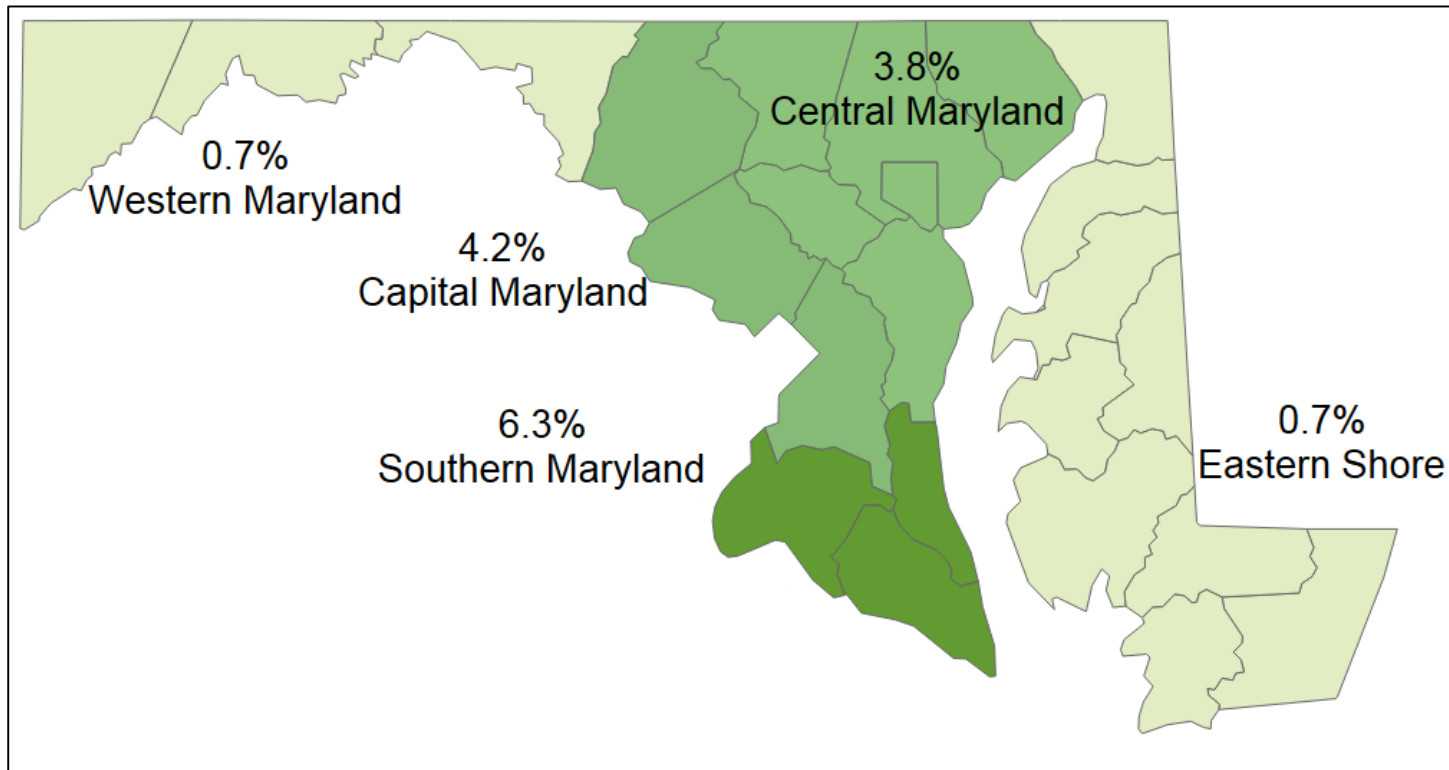
Regions of Analysis



Impact of Defense Contracting on Maryland

Impact Type	Direct	Indirect/ Induced	Total
Employment	61,546	51,731	113,277
Output	\$8.4 Billion	\$6.6 Billion	\$15 Billion
Wages	\$3.5 Billion	\$2.2 Billion	\$5.7 Billion

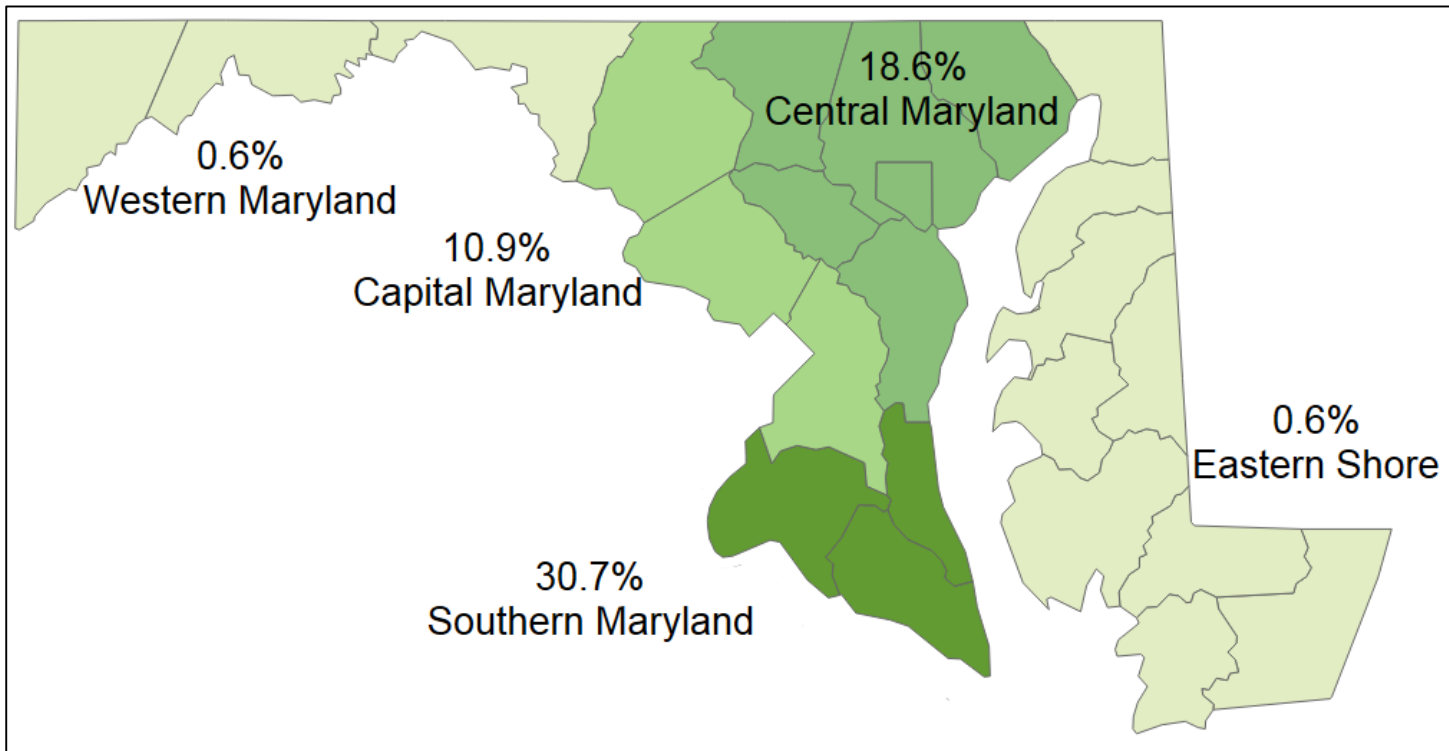
Impact of Defense Contracting on Maryland – Regional Impacts



Impact of Defense Contracting AND Military Bases on Maryland

- ▶ In 2015, RESI conducted an economic impact analysis of Maryland's military installations on the state
 - ▶ Analysis used self-reported data on employment
 - ▶ Data only for FY 2012
 - ▶ Study conducted in IMPLAN, not REMI
- ▶ Reports combined for illustrative purposes only.
 - ▶ Important to give context to size of the defense industry as a whole

Impact of Defense Contracting AND Military Bases on Maryland



Impact of Defense Contracting on Maryland – Top Counties

County	Total Impact	Total for Area	Ratio
St. Mary's	6,542	49,256	13.28%
Harford	7,352	101,813	7.22%
Montgomery	34,299	598,651	5.73%
Howard	10,594	197,590	5.36%
Anne Arundel	14,881	304,479	4.89%
Frederick	3,911	120,307	3.25%
Calvert	913	29,458	3.10%
Charles	1,330	52,722	2.52%

Impact of Defense Contracting on Maryland – Top 10 Industries

Industry	Direct	Total
Professional, Scientific, and Technical Services	32,165	38,240
Construction	11,068	21,492
Administrative and Waste Management Services	7,616	12,821
Retail Trade	840	7,965
Health Care and Social Assistance	2,677	7,925
Accommodation and Food Services	2,440	6,491
Other Services, except Public Administration	570	3,898
Transportation and Warehousing	1,065	2,550
Manufacturing	1,194	2,127
Real Estate and Rental and Leasing	10	1,993

Impact of Defense Contracting on Maryland - Occupations

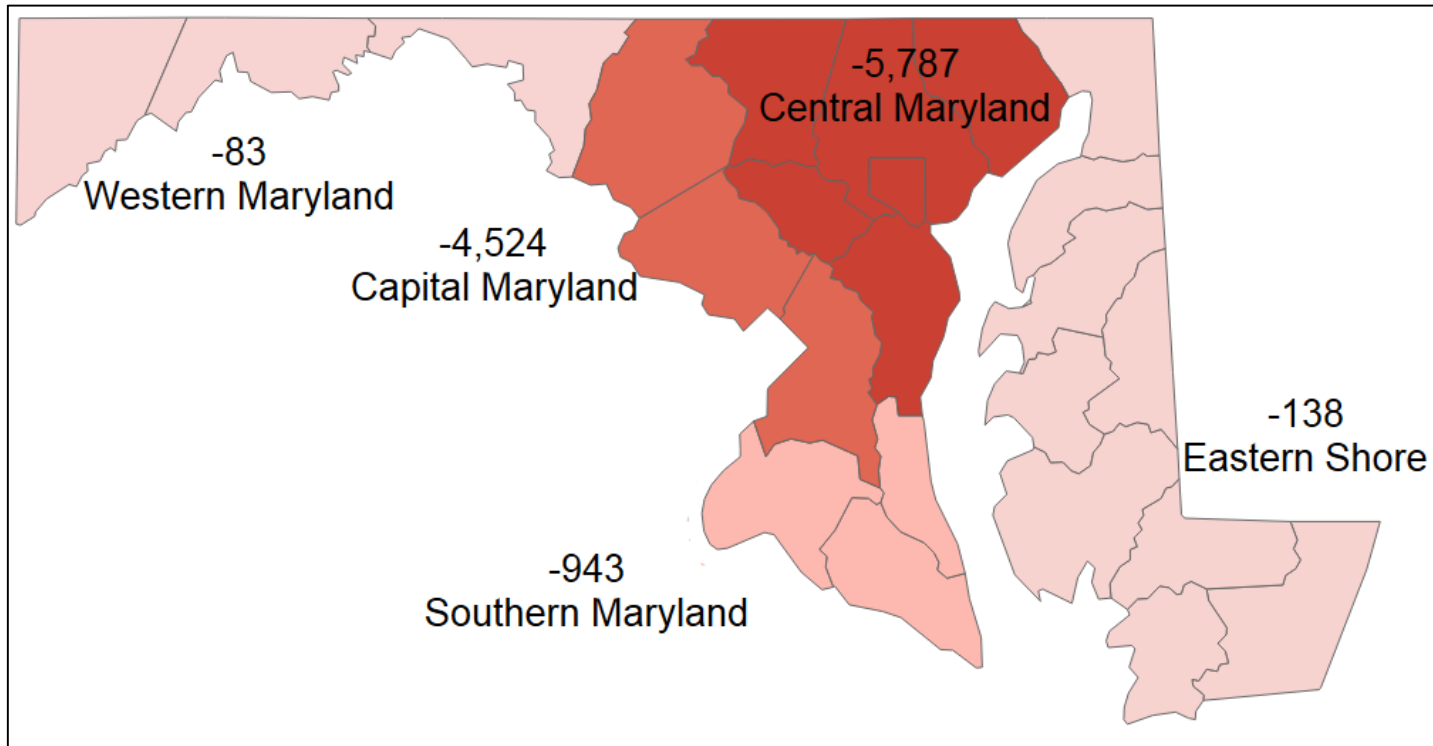
SOC Code	SOC Group	Annual Impact, 2011–2015
43	Office and Administrative Support	17,041
47	Construction and Extraction	14,796
15	Computer and Mathematical	9,966
13	Business and Financial Operations	9,290
41	Sales and Related	9,014
11	Management	7,243
35	Food Preparation and Serving Related	6,059
53	Transportation and Material Moving	5,033
17	Architecture and Engineering	4,958

Impact of Defense Contracting on Maryland - Occupations

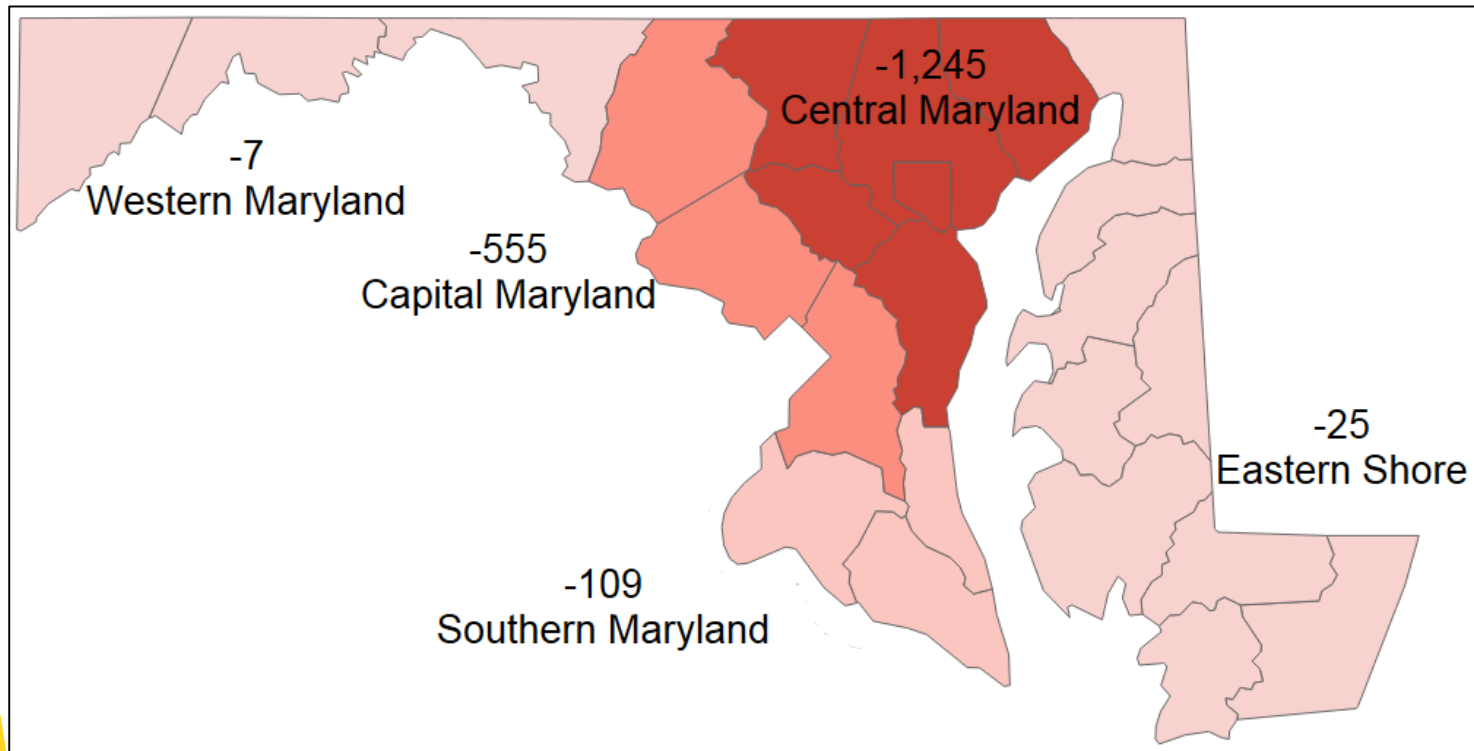
- ▶ Occupations broken out by job zone
 - ▶ Job zones show required level of education/experience

	Job Zone 1	Job Zone 2	Job Zone 3	Job Zone 4	Job Zone 5	Total Impact
Jobs Reliant on DoD Contracting	9,207	36,400	28,549	32,125	6,996	113,277

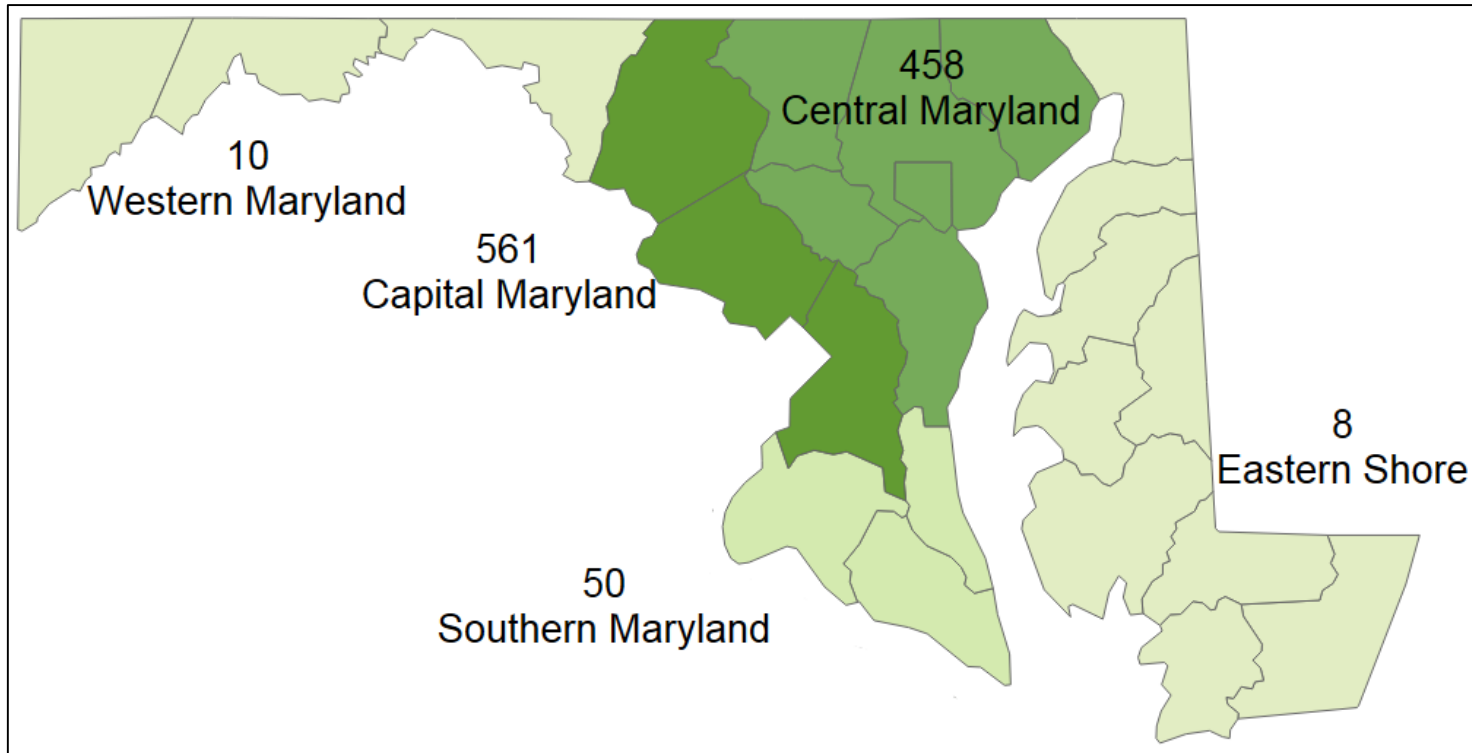
Impact of 10% Cut in Defense Contracting



Impact of a 10% Cut in R&D Contracting



Impact of 10% Increase in Cybersecurity Funding



► Estimates low due to no classified/NSA data

Impact of Average Large Defense Contractor on Maryland

Region	Direct	Indirect/ Induced	Total
Capital Maryland	-1,212	-1,215	-2,428
Central Maryland	-1,187	-2,219	-3,406
Southern Maryland	0	-59	-59
Western Maryland	0	-33	-33
Eastern Shore	0	-52	-52
Total	-2,399	-3,578	-5,978

So What?

- ▶ Economic impact analysis results are great, but we already know defense contracting is big in Maryland.
- ▶ What can these results tell us, and how do they fit in with the results from other parts of the analysis?

So What?

- ▶ Separating Maryland into five sub-regions allows us to identify hot spots.
 - ▶ Showing reliance of Southern Maryland allows Commerce and other economic developers to know where to focus resources.
- ▶ County-level analysis illustrates defense spending correlates with proximity to military installations

So What?

- ▶ Analysis shows defense-reliant jobs are high-paying.
 - ▶ Average defense-reliant job has annual salary of \$59,911
 - ▶ Average Maryland wage is \$54,777
- ▶ Focus on vulnerable sectors of Maryland's economy.
 - ▶ A ten percent reduction in DoD contracts in Maryland would lead to a job loss of 11,475 jobs, 3,824 of which would be in Professional, Scientific, and Technical Services.

Pathways Towards Diversification

- ▶ Four key themes:
 - ▶ Maintaining Maryland's existing military installations/contractors
 - ▶ Attracting and retaining skilled workers
 - ▶ Creating a favorable climate for entrepreneurs
 - ▶ Commercialization as a pathway to diversification

Thank you for your time.

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