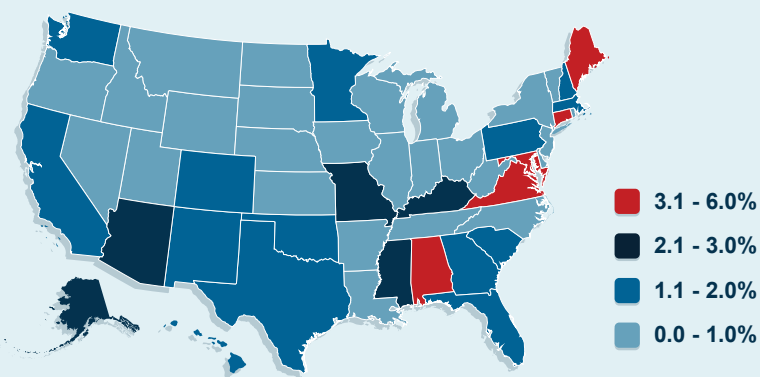


# The Defense Manufacturing Supply Chain: Critical to the U.S. Economy and National Security

MADE STRONGER WITH MEP NATIONAL NETWORK™ SUPPORT

## Contribution of Defense Contract Spending to State Economies

DEFENSE CONTRACT SPENDING DOLLARS AS PERCENTAGE OF STATE GDP:



Source: DoD Office of Economic Adjustment, Defense Spending by State, FY 2017; US DOC Bureau of Economic Analysis

TOP 10 STATES	
Virginia	6.0%
Connecticut	5.4%
Alabama	3.7%
Maryland	3.5%
Maine	3.1%
Mississippi	2.9%
District of Columbia	2.8%
Kentucky	2.7%
Alaska	2.5%
Arizona	2.5%

## Challenges Faced by the Defense Supply Chain

### Defense Federal Acquisition Regulation Supplement (DFARS) Compliance Awareness (Survey of NDIA members)

64% Are Aware of Mandatory DFARS requirement

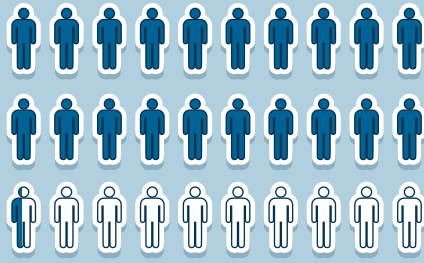
60% Have read DFARS requirement document

46% Found DFARS requirements difficult to understand

Source: National Defense Industrial Association, Implementing Cybersecurity in DoD Supply Chains - White Paper, July 2018

### The Aging Workforce in Aerospace and Defense

68% of the A&D workforce is over the age of 41.



Source: 2017 Aviation Week Workforce Study

### Business Challenges Identified by MEP Center Clients in the Defense Supply Chain

Cost Reduction 67%

Employee Recruitment 58%

Growth Opportunity 50%

Product Development 43%

## Manufacturing's Contribution to the Defense Supply Chain IMEC (AND HOW THE MEP NATIONAL NETWORK HELPS)

MEP Center Client Company	Material, Component, or Subsystem Supplied	Defense/National Security System where Used	MEP National Network Support for Company
Limco Airepair, OK Heat transfer solutions	Cooling systems for...	Military shelters & vehicles	Oklahoma Manufacturing Alliance; NADCAP certification
Greno Industries, NY Key precision parts	High pressure & temperature safety GIS valve for...	Navy ships	NY MEP; AS9100D compliance
Triton Defense, MD Electromagnetic protection solutions	Armor, electrical housing units for...	FEMA alert system	MD MEP; Strategic consulting & presentation development
General Tool Company, OH Hardware, equipment, parts, systems	Torpedo for...	Submarines	Ohio MEP; NIST SP 800-171 and DFARS compliance
ER Precision Optical Corp., FL High precision infrared & visible optics	Optical components for...	Night vision surveillance equipment	FloridaMakes; Updating and training on metrology systems
Emhiser Research, NV Airborne & ground-based telemetry equipment	Command transmitters/ encoders for...	Drones	Nevada Industry Excellence; ISO 9001 recertification

## Emerging Technologies Identified as Critical for National Defense

DOD NEEDS THE DEFENSE INDUSTRIAL BASE TO SUPPORT SCALE UP AND INNOVATION IN:



Hypersonics



Directed-Energy Weapons



Cyber



Artificial Intelligence/ Machine Learning



Quantum Science



Fully Networked Command, Control, & Communications



Microelectronics

Source: 2018 Industrial Capabilities Annual Report to Congress