

The Defense Industry in Rhode Island: Economic Impact Report

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RHODE ISLAND
Economic Development
CORPORATION

Rhode Island
PTAC 
Procurement Technical Assistance Center



Introduction

“The Rhode Island Defense Industry: Economic Impact Report” is a follow-on to the “Impact of the Defense Industry on Rhode Island: An Overview”, assembled by Ninigret Partners in June 2003 on behalf of the Southeastern New England Defense Industry Alliance (SENEDIA). The Rhode Island House Defense Economy Planning Commission was the funding source for the SENEDIA led study that established a baseline of information as Rhode Island prepared to address the Federal Base Realignment and Closure Act (BRAC) of 2005. The study helped evaluate and define the value of the Defense Industry to the Rhode Island Economy, while providing critical information that helped create the State’s strategy to protect Navy and National Guard assets in Rhode Island. This effort led to successful BRAC results for the State of Rhode Island and the US defense commands located in our state as they are projected to expand with approximately 600 new jobs by the end of 2007.

The Rhode Island Economic Development Corporation (RIEDC), the Procurement Technical Assistance Center (PTAC) and the Newport County Chamber of Commerce partnered and hired Ninigret Partners to establish the latest Economic Impact Report for the Defense Industry. The group felt that with the BRAC process behind us, the issue of benchmarking the State’s defense economy is critical to understanding how we shape policy for its continued success. The current report clearly demonstrates that the Rhode Island Defense Industry is growing. This report allows the RIEDC and the PTAC to strategically direct resources to the small businesses involved in this industry sector as part of their continued growth, as well as helping establish sound policy for all businesses involved in and associated with the industry.

On behalf of the State of Rhode Island, we feel the “Rhode Island Defense Industry, Economic Impact Report” identifies the value of the defense Industry to the State, its residents, and most importantly, the people who are directly and indirectly employed and associated with the industry.

Rhode Island's Defense Industry – Summary of Findings

Defense Industry Study Findings

Comments

Rhode Island's Defense Industry has Substantial Economic Impact

- The defense industry employs nearly 16,000 people
- Economic impact is in excess of \$2.0 billion
- Nearly 2 private sector jobs need to be created to equal the value of 1 defense industry job
- At least \$63 million a year is paid to the state treasury in the form of taxes

Defense Industry Growth in Rhode Island has been Driven by Job Growth rather than Contract Awards

- Prime contract awards to RI companies are still below their late 1980s peak of the Cold War
- 72% of the growth in impact is attributable to growth in wages instead of growth in purchases
- This suggests RI is a very competitive place positioned to perform more value added work for the defense industry than in any time in its history

The Defense Industry is a Major Component of RI's High Tech Sector

- The defense industry generates more than 25% of the state's patents
- 22% of the state's scientists and engineers work in the defense industry
- Nearly 50% of the state's professional and technical services employment is tied to the defense industry

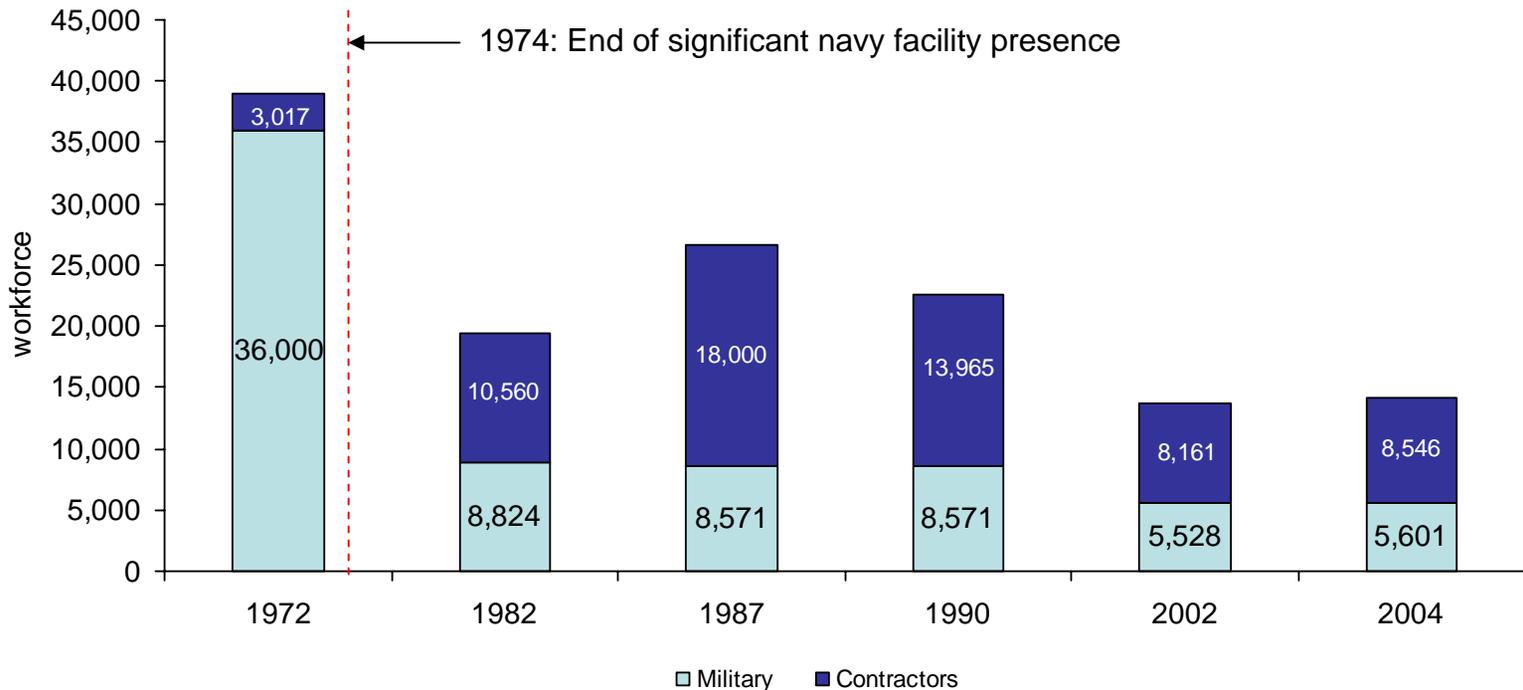
Measuring the Defense Economy

- Historical trends

While the employment levels remain significant, the defense industry is still substantially below its 1970s levels and is approximately 1/2 of its size from the 1987 Cold War peak

- Defense industry contractors have been the primary driver of employment in this industry over the last 20 years
- To make this report consistent with earlier reports military education programs are excluded

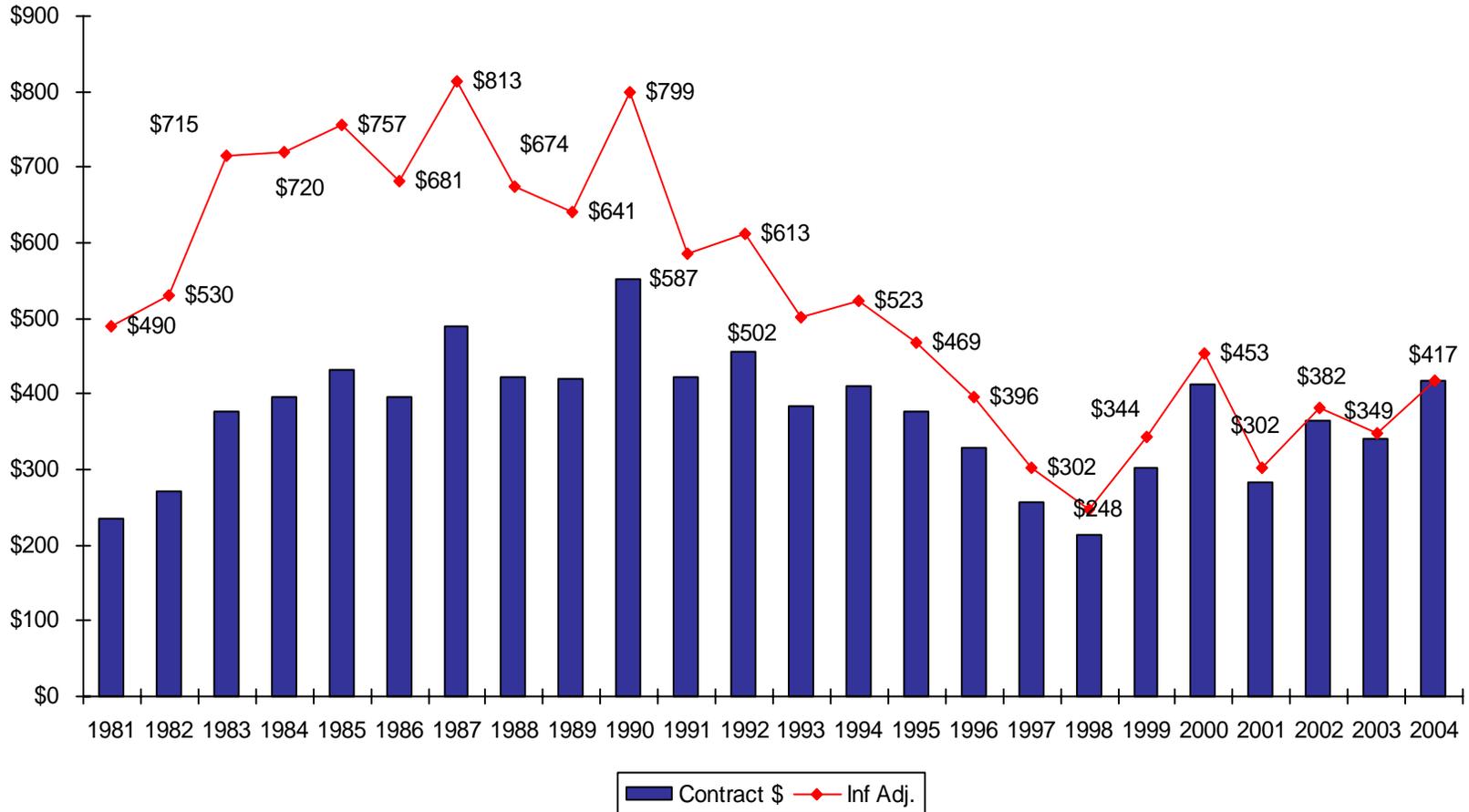
**Estimates of Defense Industry Employment
Defense Contractor and Military Employment
1972 - 2004**



*Note: excludes students at Naval Training facilities, National Guard and Army Reserve units; and RI workers in Connecticut and Massachusetts

Source: Strategic Development Commission, 1982 (GreenHouse Compact); RI Defense Adjustment Project, 1993; SENEDIA, 2003; NAVSTANNEWPORT/NUWC reports 2005, NP calculations

Defense industry contract awards in RI peaked in the late 1980s during the Cold War



Constant dollars are 2004

Source: Federal Procurement Data System (FPDS), various years, federal CPI, NP calculations

Measuring the Defense Economy

- Contracts and Programs

Rhode Island's defense industry ranges across a variety of military and civilian industries

- Research, Development ,Testing and Engineering professional services
- Computers systems and software development
- Program management and outsourced services
- Navigation equipment makers
- War game development
- Sonar and acoustics
- Submarine fabrication and outfitting
- Command and control systems development and integration
- Precision tooling
- High performance parts for aerospace applications
- Materials testing services
- Computer aided engineering software
- Language translation tools
- Military woolen blankets
- Insoles for footwear
- Dyeing services for camouflage fatigues
- Medals and insignia
- Security services
- Laminated pouches
- Construction services
- Fencing and guardrail
- Ship repairs

*This excludes businesses
such as health insurance companies,
legal and accounting services, public utilities,
and other companies that directly or
indirectly benefit from defense revenues*

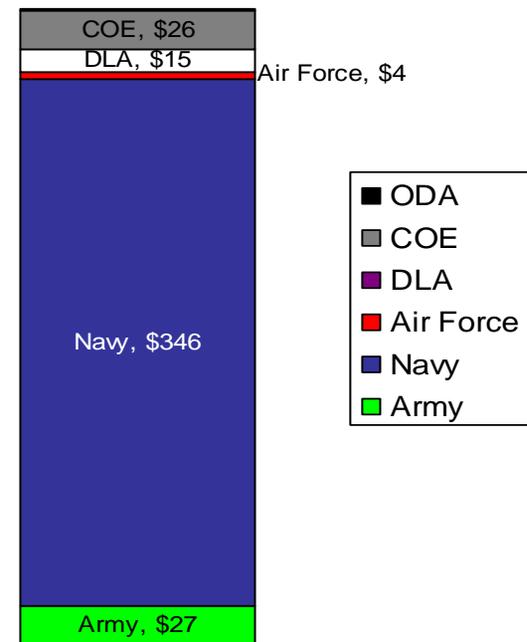
Department of Defense contracts within Rhode Island for a wide range of its needs and across multiple departments of the military

Defense contracting is spread across a wide range of procurement programs...

AIRCRAFT ENGINES AND SPARES	\$406,727
AIRFRAMES AND SPARES	\$1,781,483
ALL OTHER SUPPLIES AND EQUIP	\$30,400,201
AMMUNITION	\$1,657,473
BUILDING SUPPLIES	\$113,561
COMBAT VEHICLES	\$2,627,481
CONSTRUCTION	\$66,817,290
ELECTRONICS AND COMMUN EQUIP	\$108,057,342
MATERIALS HANDLING EQUIP	\$3,046
MEDICAL & DENTAL SUPPLIES & EQUIP	\$257,111
MISSILE AND SPACE SYSTEMS	\$35,562,393
NON-COMBAT VEHICLES	\$8,094
OTHER AIRCRAFT EQUIP	\$2,085,604
OTHER FUELS AND LUBRICANTS	\$3,400
PRODUCTION EQUIP	\$66,975
SERVICES	\$115,366,307
SHIPS	\$23,340,110
SUBSISTENCE	\$2,752
TEXTILES, CLOTHING, AND EQUIPAGE	\$7,262,974
WEAPONS	\$22,080,909

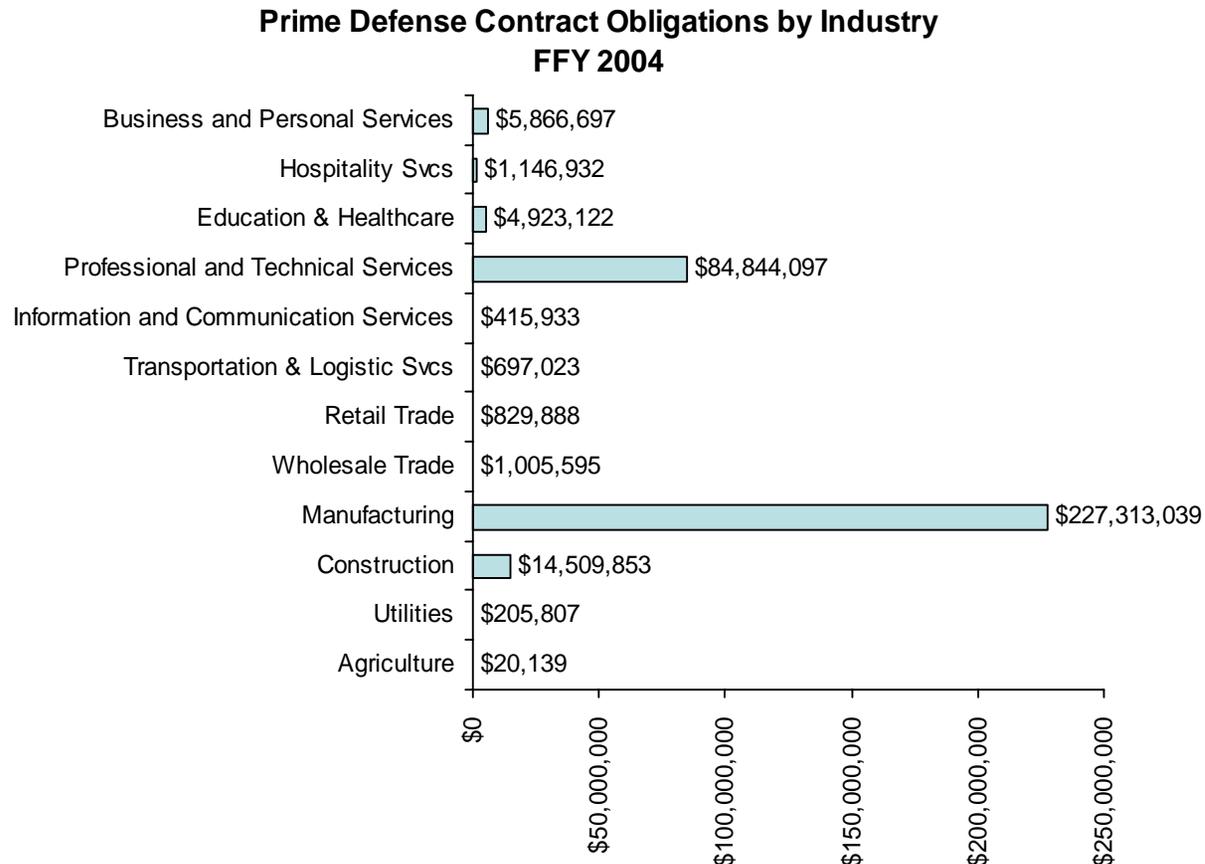
The Navy represents the bulk of defense contracting in Rhode Island...

**Prime Defense Contracts by Source
2004
(\$millions)**



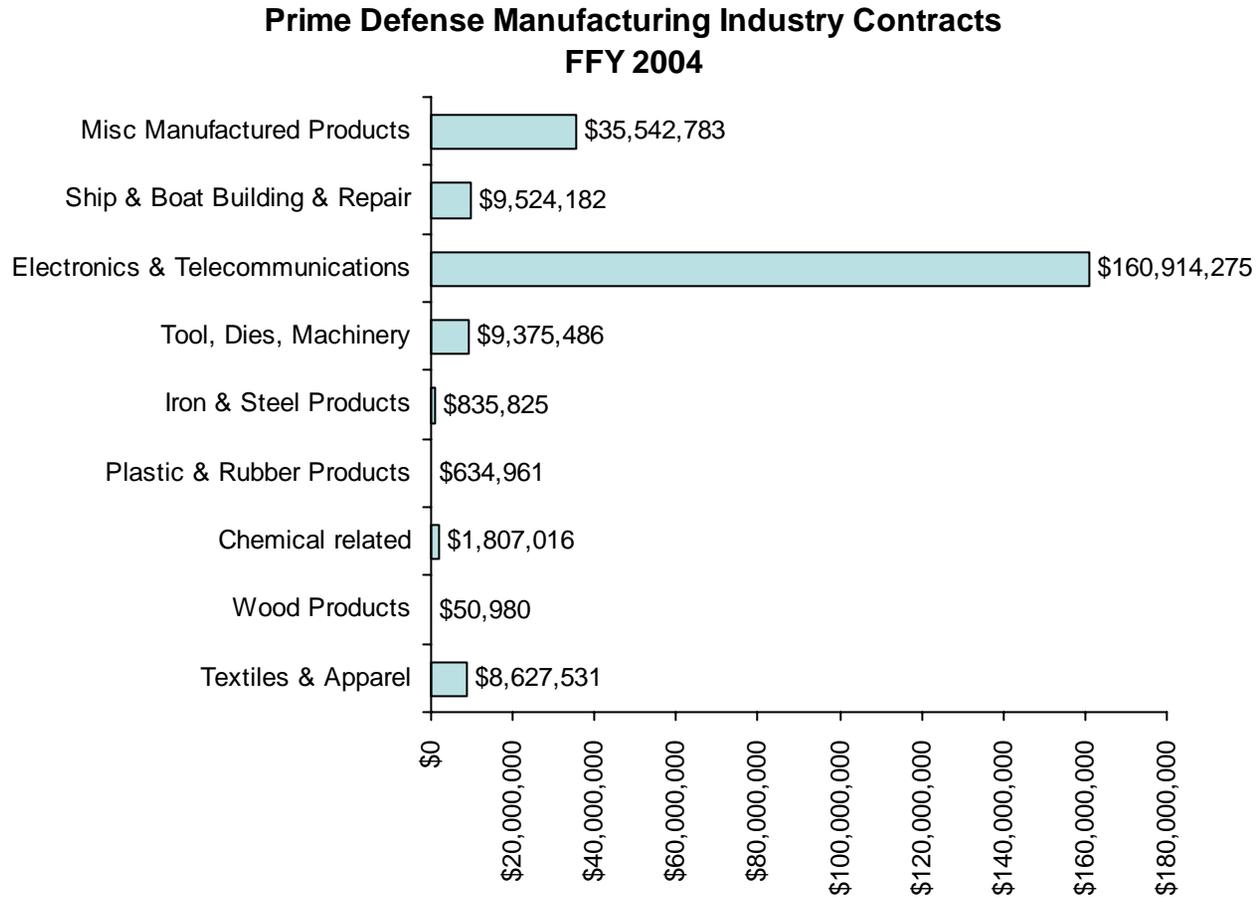
Actual expenditures totaled \$340 million with manufacturing representing more than 2/3 of prime defense contract spending in Rhode Island...

Note: excludes research contracts awarded to universities in Rhode Island which would add an additional \$14 million



Source: FDPS-NG, NP calculations and analysis

... with contracts that cut across a wide range of the state's manufacturing sector



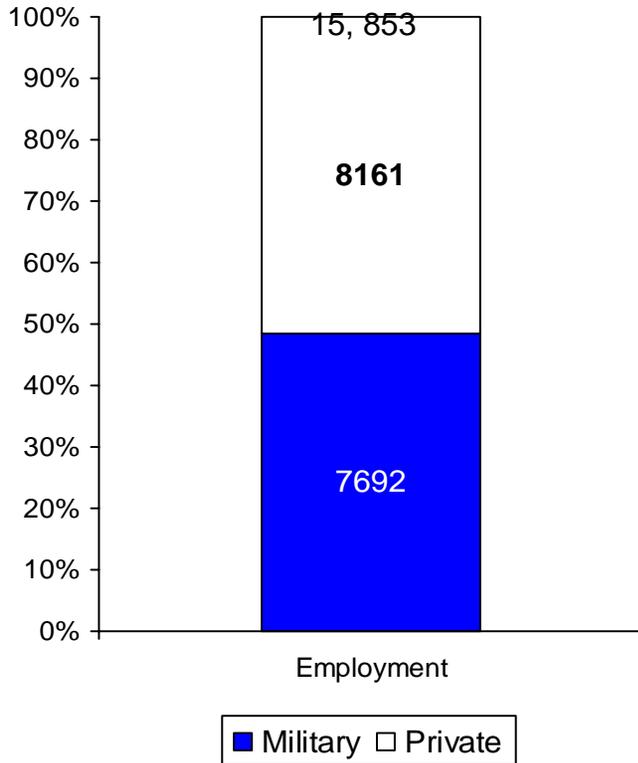
Measuring the Defense Economy

- Employment & Payrolls

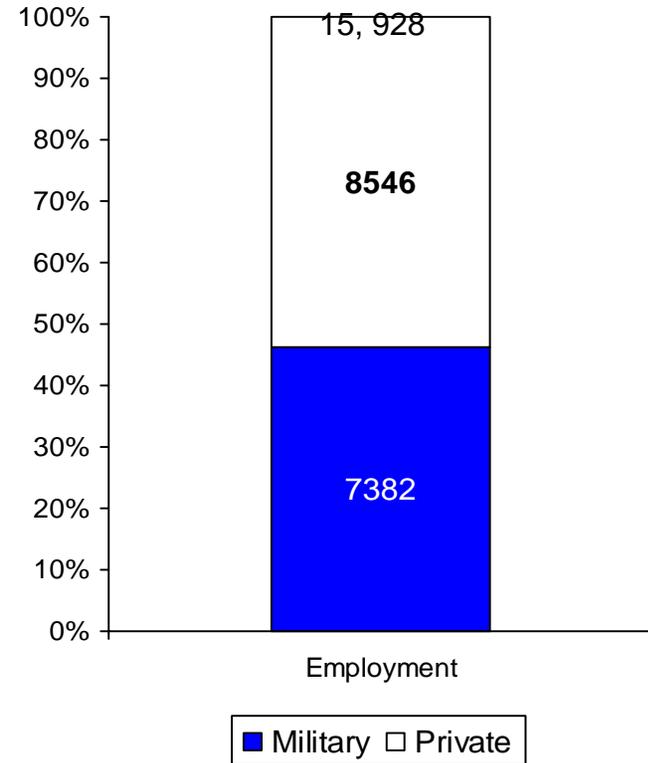
The defense industry represents 3% of the state's employment base...

- The defense industry may represent more than 7% of the state's manufacturing sector

Defense Related Employment 2002



Defense Related Employment 2004

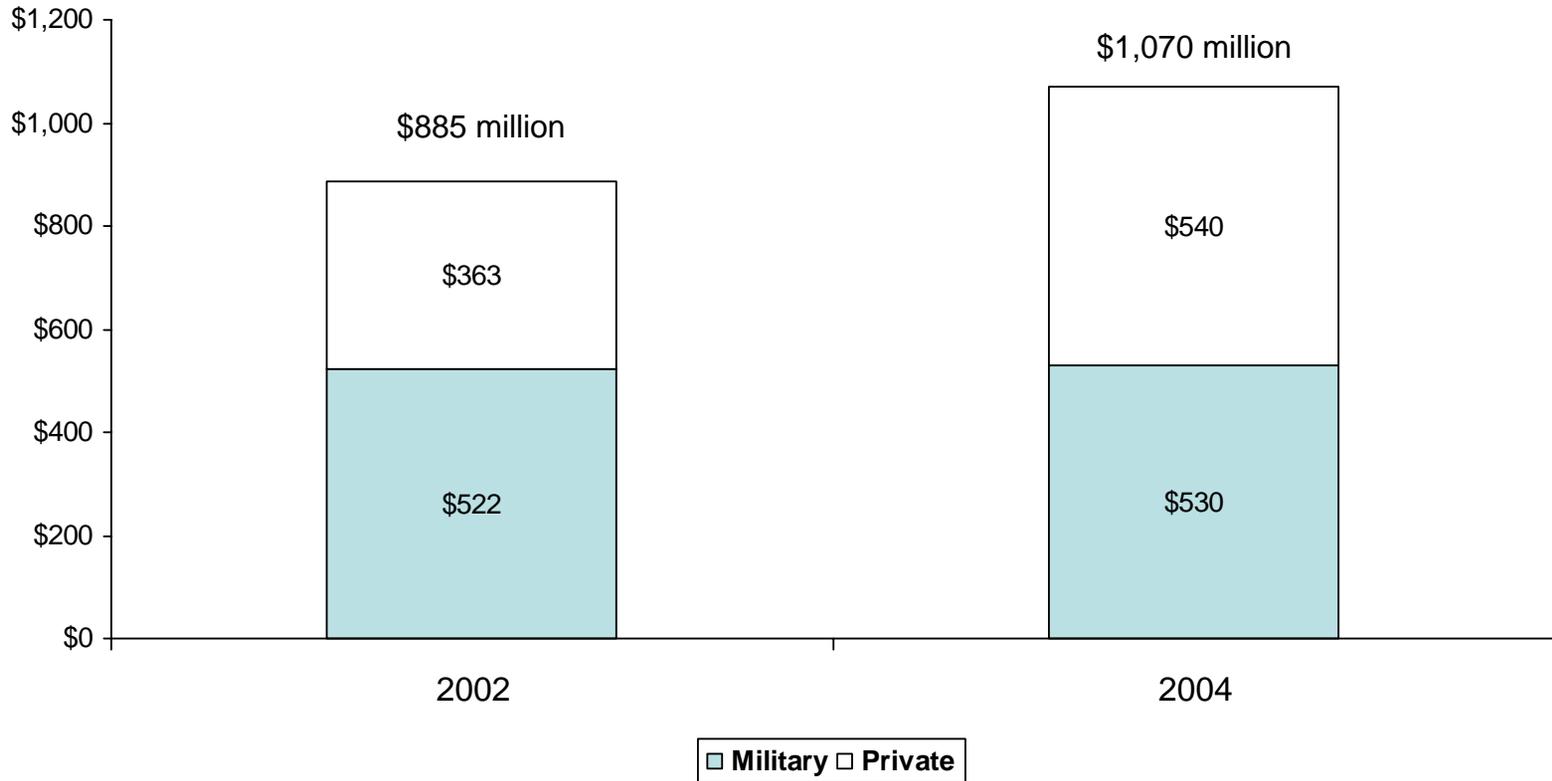


Note: includes students at naval education programs; excludes National Guard and Army Reserve units; and RI workers in Connecticut and Massachusetts
Source: SENEDIA 2002 Impact Statement, NUWC Impact data 2004, ES 202 data 2004/2005, personal communications, Dun & Bradstreet, government filings, NP calculations

Does not reflect projected employment gains from the Base Realignment and Closure Act (BRAC) of 2005

... and 6% of Rhode Island's wage base

- The defense industry may represent more than 50% of the state's manufacturing wage base

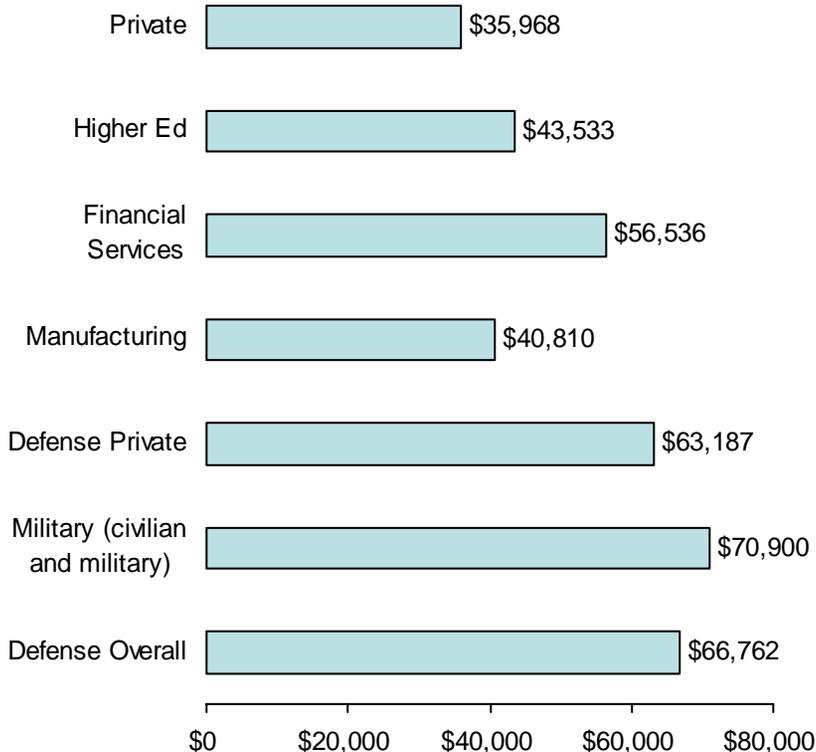


Note: includes students at naval education programs; excludes National Guard and Army Reserve units, and RI workers in Connecticut and Massachusetts

Source: SENEDIA 2002 Impact Statement, NUWC Impact data 2004, ES 202 data 2004/2005, personal communications, Dun & Bradstreet, government filings, NP calculations

The high level of engineering and technical skill required in Rhode Island's defense industry leads to higher wage levels than in many other important Rhode Island industries

**Defense Industry Average Wages
2004**



To equal the wage value of 1 defense industry job

It would take

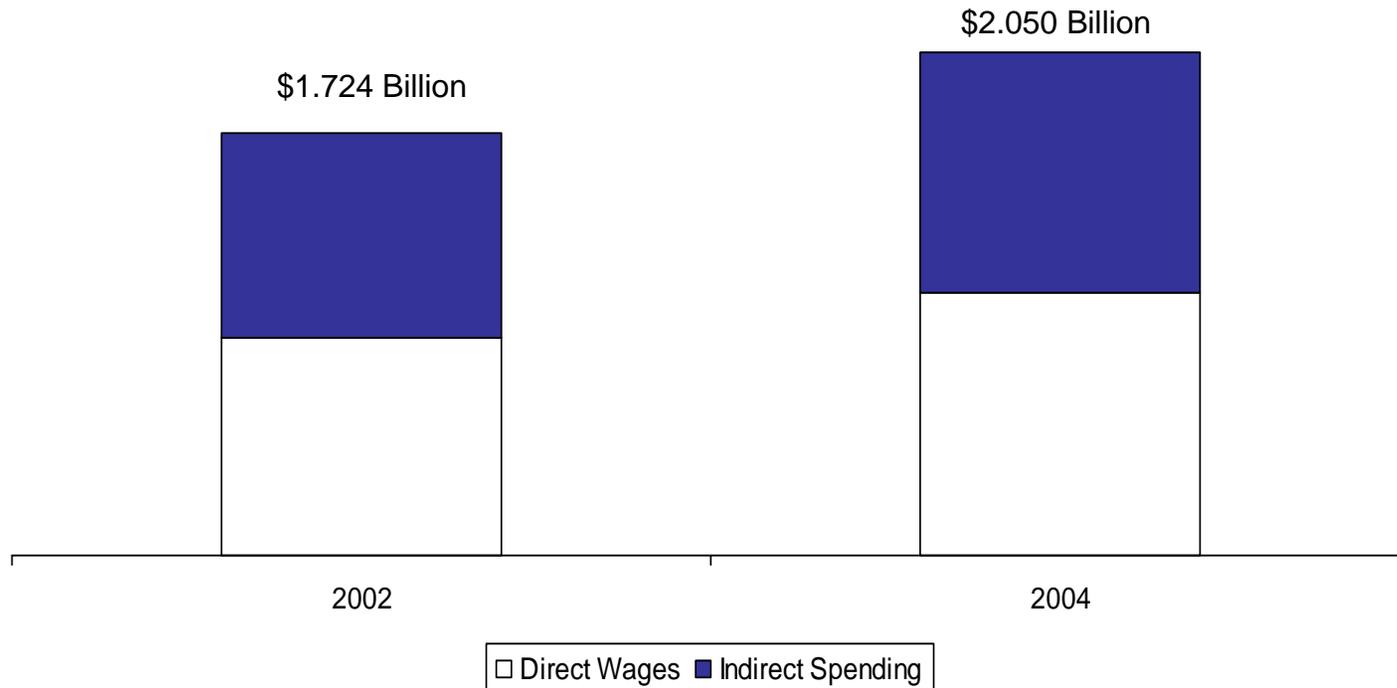
- nearly 2 “average” private sector jobs
- 1.53 higher education jobs
- 1.64 manufacturing jobs
- 1.18 financial service jobs

Measuring the Defense Economy

- Economic Impact

The total economic impact of the defense industry in Rhode Island is more than \$2.0 billion

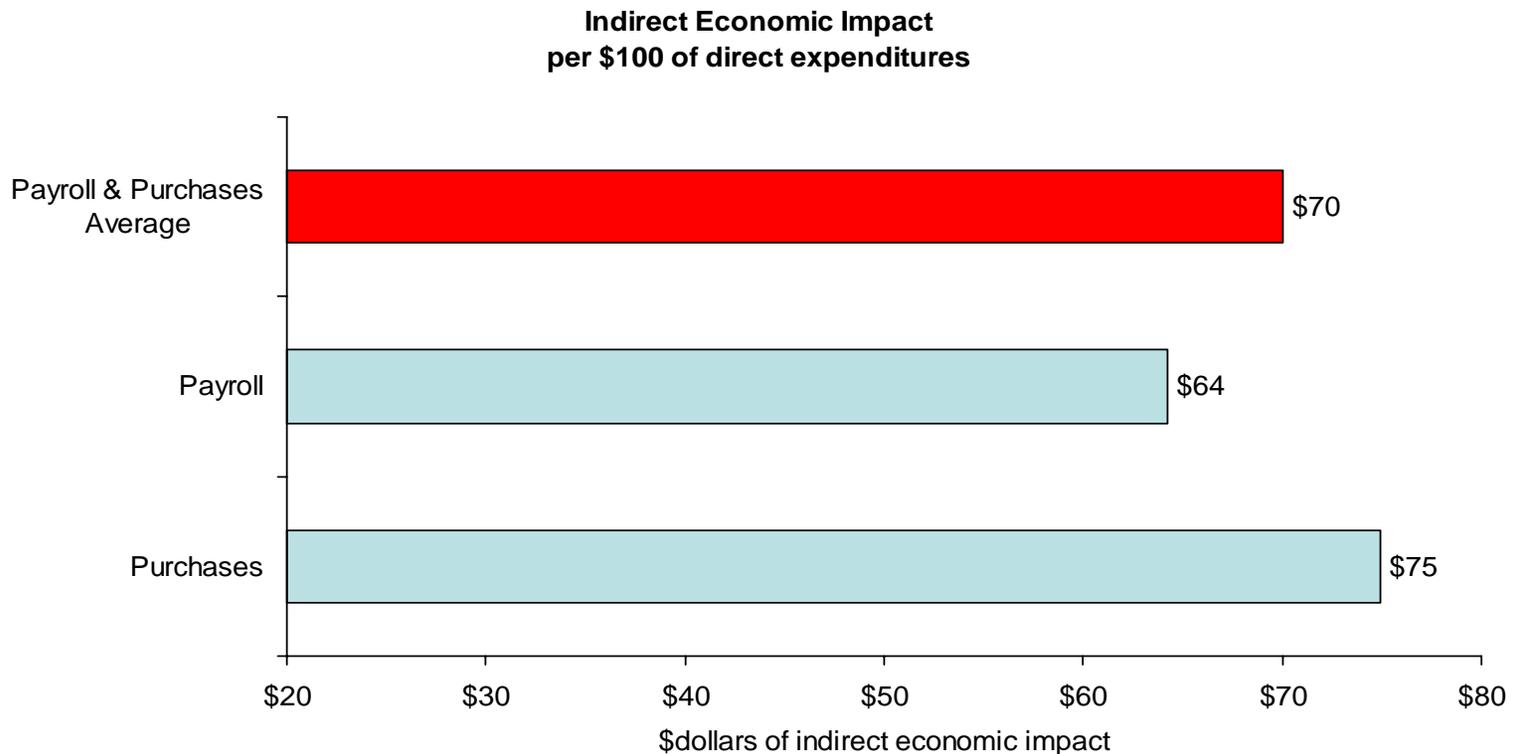
Total Estimated Defense Economic Impact



NOTE: Due to the proprietary nature of contracts, the small number of defense OEMs, local contractor spending in RI has been excluded. For information purposes it is less than direct wages and does not materially impact the estimates

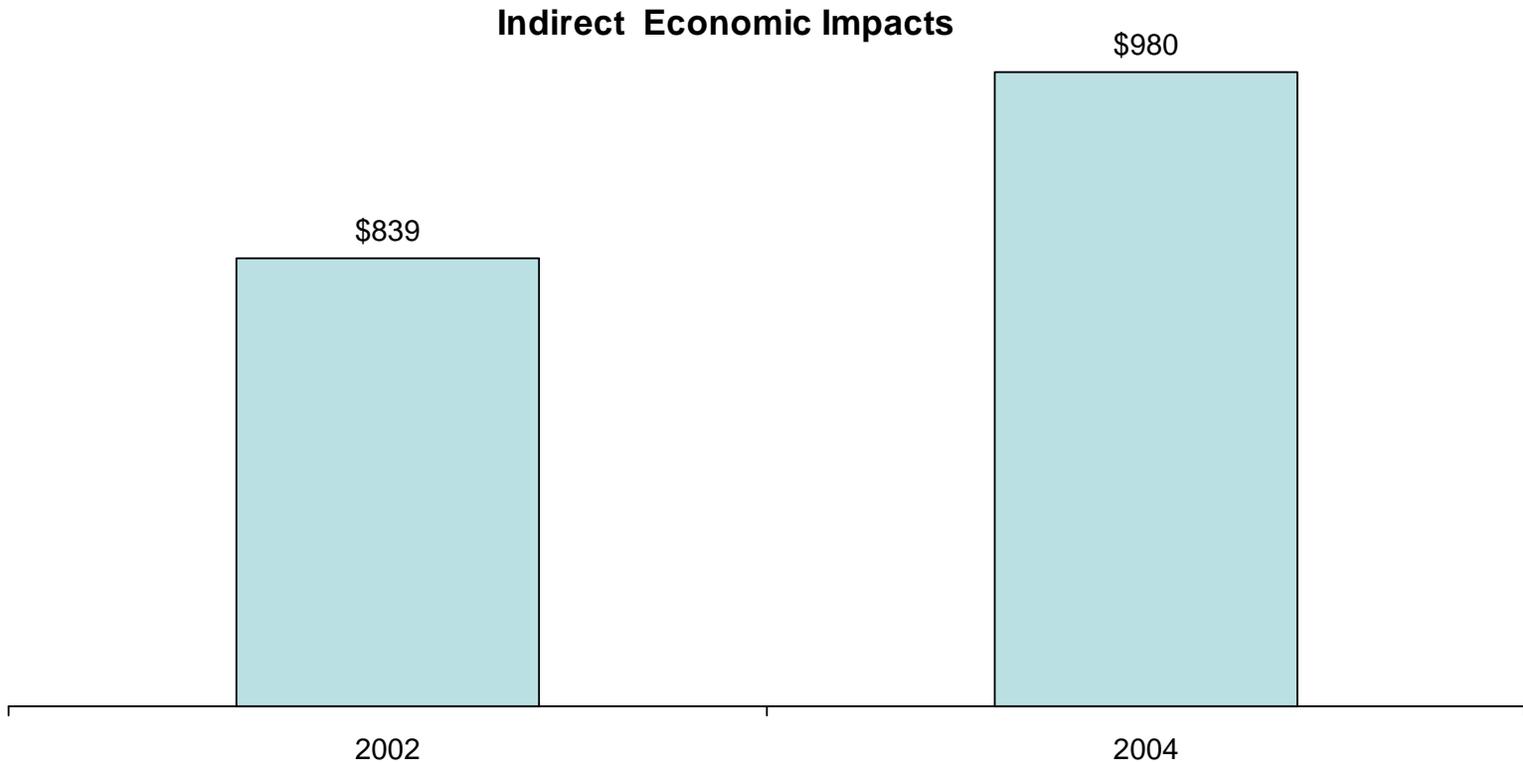
The Department of Defense estimates every \$100 of defense spending generates approximately \$70 in “spin off” activity in the state economy

- Indirect economic impact is the “spin off” effects into the economy of each dollar spent directly by the military or prime contractor



Based on the DEPPS multipliers, nearly \$1 billion in economic spin off activity in Rhode Island is generated by the defense industry

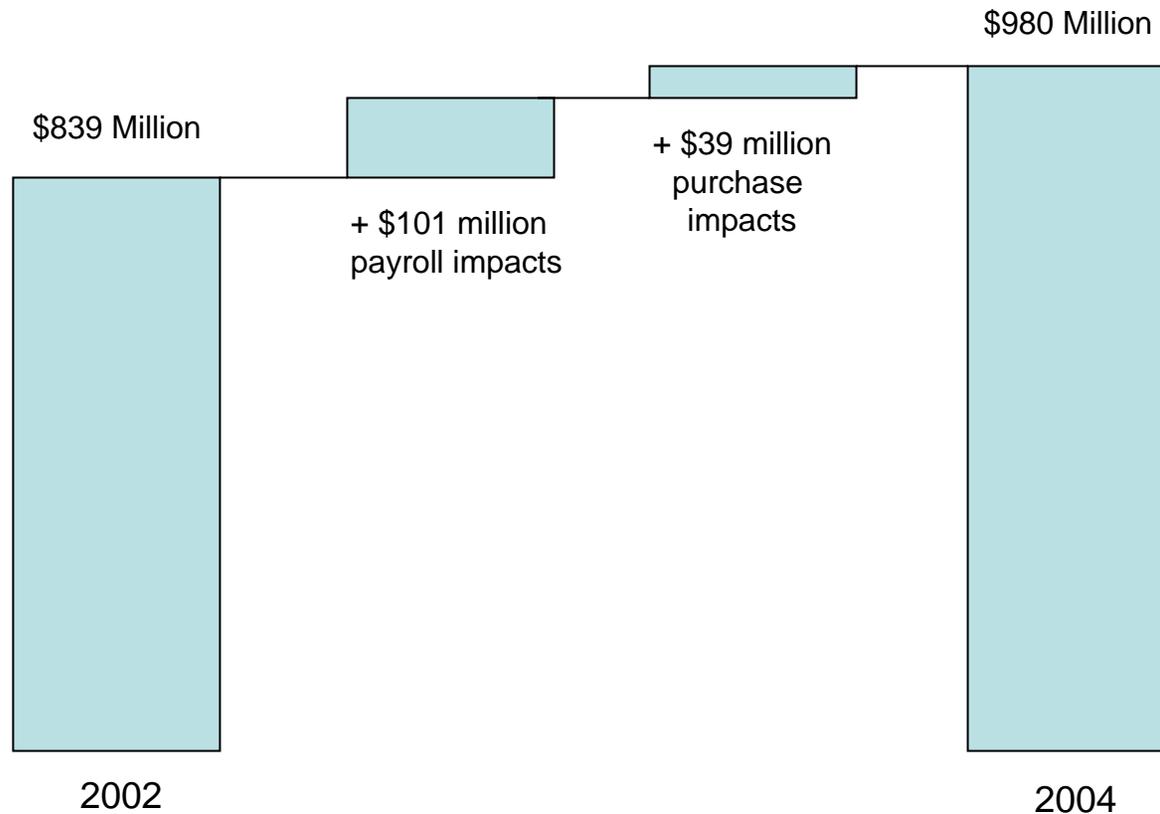
- 2002 is revised from the SENEDIA 2002 report based on updated information and new methodology



NOTE: Excludes retiree, Guard and Reserve pay

Source: NP calculations based Defense Economic multipliers; purchases based on prime contract awards

Growth in indirect impacts has largely been driven by increased defense employment



Measuring the Defense Economy

- Additional Benefits of the Defense Industry

Rhode Island continues to be more dependent than its neighbors on military employment

Employment Dependence

- Military employment in Rhode Island as a percentage of private sector employment is 6x greater than in Massachusetts and 3x greater than in Connecticut
- Overall, Rhode Island is 28% more dependent than the nation on military facility employment

Wage Dependence

- Military wage impacts follow the same pattern as employment
- Military wages in Rhode Island (3.9% of private sector wages) play a much greater role than in the US economy (1.7% of private sector wages)

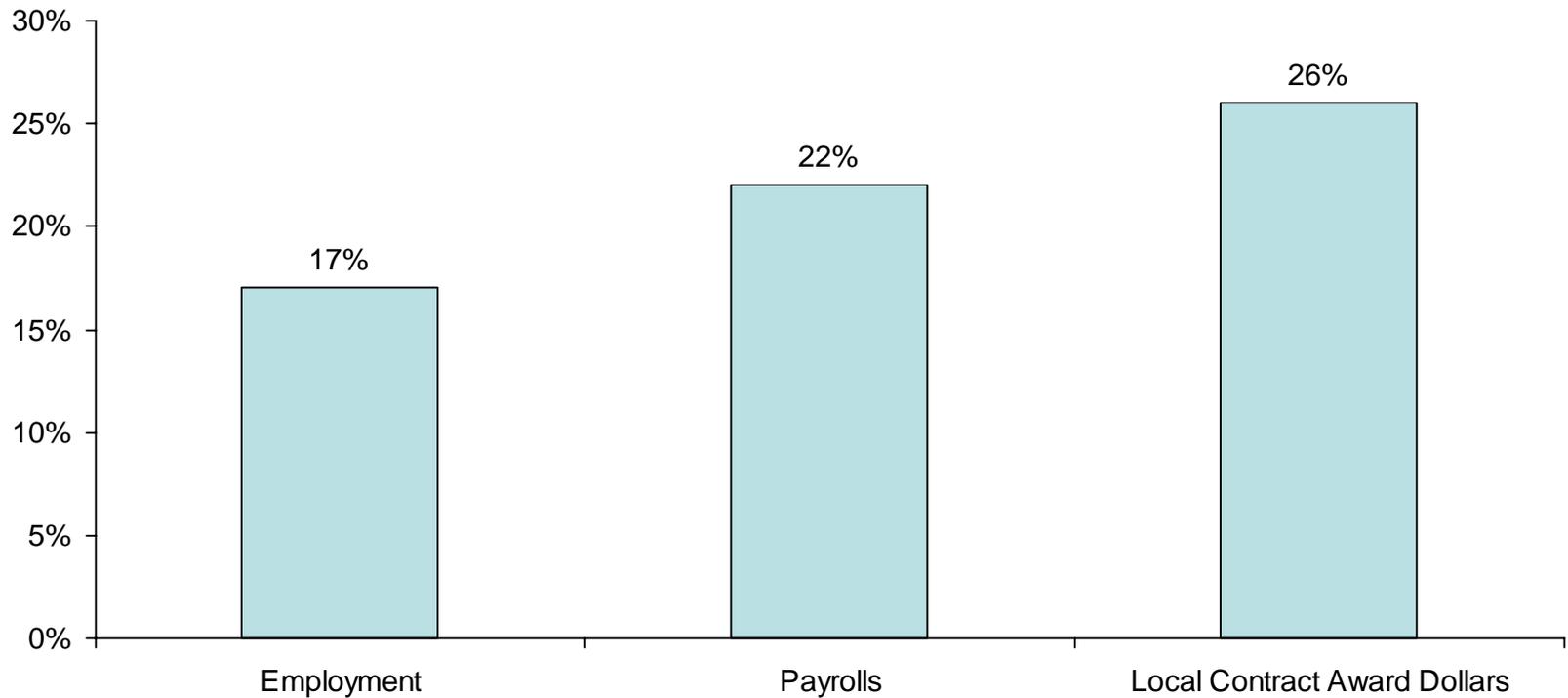
Note: Wage dependence is the ratio of military payroll as a percentage of private payroll and then indexed against the US

Employment dependence is the ratio of active duty and civilian jobs as a percentage of private jobs indexed against the US

Source: DoD Defense Almanac and data abstract various years, Bureau of Labor Statistics 2002/2004, Ninigret Partners calculations

... with NUWC being an important driver of the defense economy

NUWC as a Percent of RI Defense Industry Totals
2004



Source: NP calculations based on NUWC data

Defense contractors play an important role in RI's high tech and technical services industries

- NUWC generated 81 patents in 2004 – 26% of the state's total
- NUWC alone represents 10% of the state's engineering and scientific workforce
- Overall the defense industry may represent 22% of the state's engineering and scientific workforce ...
- ...And 48% of Rhode Island's professional and technical employment

Rhode Island's defense industry has a substantial fiscal impact on the state

RI's defense industry employment generates at least \$63 million in tax revenue for the state

- Income taxes of approximately \$ 42 million (1)
- Sales taxes of approximately \$21 million
- This excludes taxes generated directly by the businesses:
 - Corporate income taxes
 - Sales taxes on purchases
 - Pass-through taxes such as the public utilities gross receipt taxes

*These businesses
also generate local
property taxes*

(1) Excludes retiree and Guard and Reserve pay
Source: NP calculations

Measuring the Defense Economy

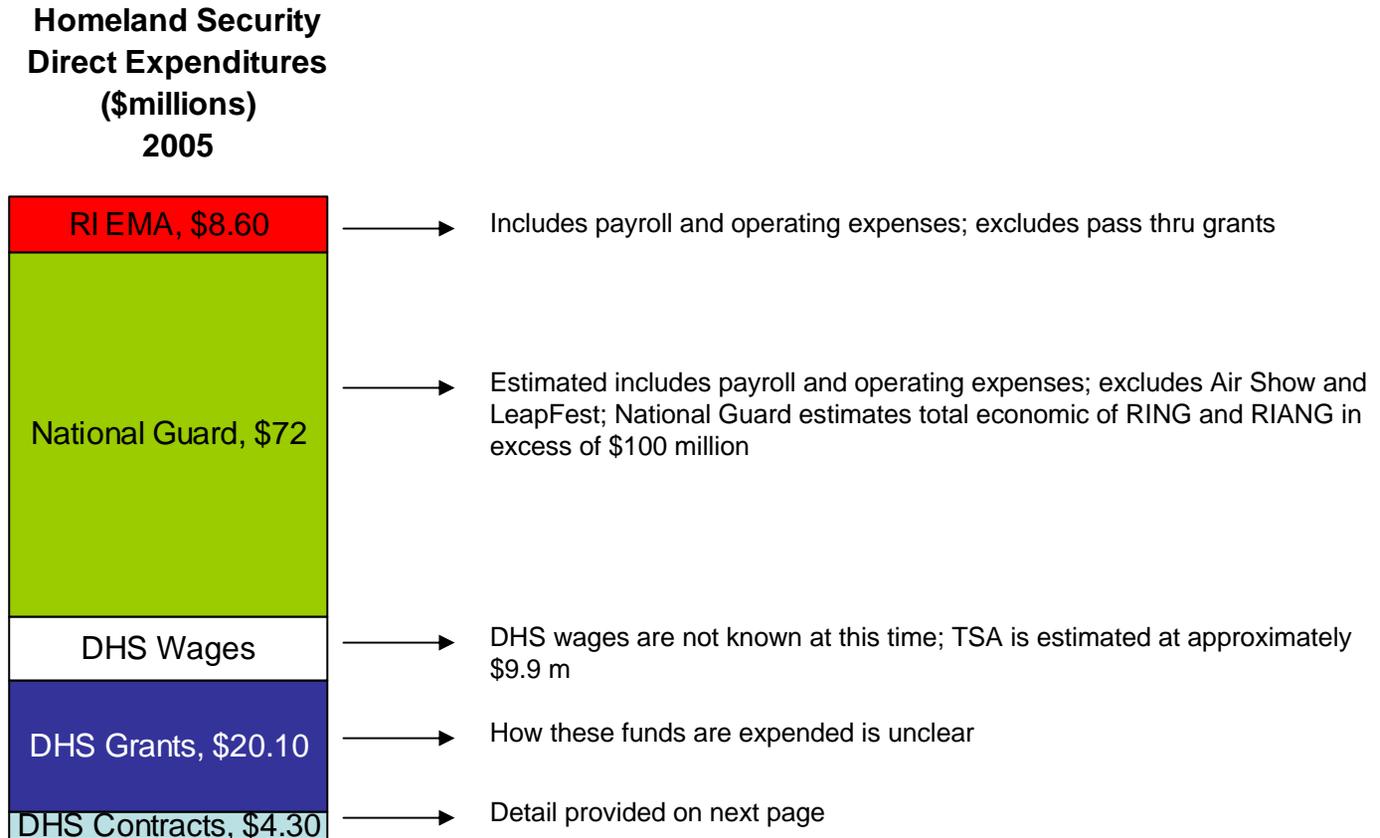
- Estimating a Homeland Security Economic Baseline

Estimating a baseline for homeland security economic impact

- The following pages represent an attempt to begin building a baseline on homeland security spending in RI
- Below are some sample questions for consideration
 - What categories are appropriate for measurement and inclusion?
 - First responders
 - Public health
 - Staples (blankets, food, etc.) versus specialized equipment (detection systems, etc.)
 - What challenges exist in collecting information ?
 - Data access
 - E.G., Spending by other states on RI vendors providing homeland security products
 - Properly accounting for spending
 - E.G., Utilization of GSA contracts to purchase homeland security materials such as blankets, etc.

What is known about homeland security spending in RI

- ❑ Homeland security spending in RI is at least \$115 million



The Department of Homeland Security contracted for approximately \$4.3 million in FY2004 with Rhode Island companies

- A significant portion was for construction by the Coast Guard
- This excludes any money that was spent by states under the \$2.5 billion homeland security grant program

DHS Contracts in Rhode Island by NAICS

COMMERCIAL AND INSTITUTIONAL BUILDING CONSTRUCTION	\$13,559
COMMERCIAL AND INSTITUTIONAL BUILDING CONSTRUCTION	\$285,196
WATER AND SEWER LINE AND RELATED STRUCTURES CONSTRUCTION	\$3,195
OTHER HEAVY AND CIVIL ENGINEERING CONSTRUCTION	\$880,350
SITE PREPARATION CONTRACTORS	\$357,810
ALL OTHER SPECIALTY TRADE CONTRACTORS	\$474,016
SCHIFFLI MACHINE EMBROIDERY	\$58,950
OTHER COMMUNICATIONS EQUIPMENT MANUFACTURING	\$99,572
SEARCH, DETECTION, NAVIGATION, GUIDANCE, AERONAUTICAL, AND NAUTICAL SYSTEM AND INSTRUMENT MANUFACTURING	\$149,019
INSTRUMENTS AND RELATED PRODUCTS MANUFACTURING FOR MEASURING, DISPLAYING, AND CONTROLLING INDUSTRIAL PROCESS VARIABLES	\$0
OTHER AIRCRAFT PARTS AND AUXILIARY EQUIPMENT MANUFACTURING	\$0
SHIP BUILDING AND REPAIRING	\$169,086
ALL OTHER TRANSPORTATION EQUIPMENT MANUFACTURING	\$54,458
SCENIC AND SIGHTSEEING TRANSPORTATION, LAND	\$46,886
CABLE AND OTHER PROGRAM DISTRIBUTION	\$271,355
FACILITIES SUPPORT SERVICES	\$36,125
REMEDIATION SERVICES	\$21,880
OTHER ELECTRONIC AND PRECISION EQUIPMENT REPAIR AND MAINTENANCE	\$10,678
COMMERCIAL AND INDUSTRIAL MACHINERY AND EQUIPMENT (EXCEPT AUTOMOTIVE AND ELECTRONIC) REPAIR AND MAINTENANCE	\$2,740
No NAICS Description Provided	\$1,364,656