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## Economic Impacts from DoD Technology Transfer

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## Problem

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- ✚ **Rationale for federal tech transfer (T2):**
  - ✓ Spur economic growth
  - ✓ Create and retain jobs
  - ✓ Contribute to national economic competitiveness
  
- ✚ **However, current T2 metrics are poor measures of these economic impacts**





## Problem

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- ✦ Current metrics count *inputs and outputs*:
  - ✓ Invention disclosures and patenting
  - ✓ New and active licenses and CRADAs
  - ✓ License and CRADA income
- ✦ Useful for assessing performance of federal labs and lab T2 offices
- ✦ Do NOT measure **economic outcomes and impacts**



## Agenda

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- ✦ Two case studies involving DoD technology transfer
- ✦ Intended to answer key question:  
***WHAT IS the economic impact of technology transfer from DoD labs?***



## The Two Studies

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- ✦ **Studies related but different:**
  - All TechLink-brokered agreements
  - “100” Navy T2 agreements
- ✦ **Examined overall economic impacts from T2 agreements**
  - **Sales (economic output)**
  - **Jobs**

## Data Collection

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### **TechLink Study**

- 2000-2007
- Licenses, CRADAs
- Independent market researcher
- Phone survey:  
166 firms, 326 deals
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- Data collected:  
Total sales, jobs created

### **Navy Study**

- 2005-2009
- CRADAs, licenses
- Indiana Business Research Center (IBRC)
- Web survey:  
103 firms, 103 deals
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- Data collected:  
Total sales, jobs created



## Data Analysis

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- ✦ Both used national IMPLAN model
- ✦ Analyzed economic “ripple” effects, or multipliers
- ✦ Basic question:  
*How much economic output and employment has been generated?*



## TechLink Study Results

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### *Nationwide Economic Impacts, TechLink-brokered agreements for DoD*

	Direct	Indirect	Induced	TOTAL
<b>Sales</b>	\$240 Million	\$192 Million	\$298 Million	<b>\$729 Million</b>
<b>Jobs</b>	1,258	1,041	1,991	<b>4,290</b>



## Navy Study Results

### *Nationwide Economic Impacts, Navy T2 agreements*

	Direct	Indirect	Induced	TOTAL
<b>Sales</b>	\$200 Million	\$190 Million	\$155 Million	<b>\$545 Million</b>
<b>Jobs</b>	670	910	1,050	<b>2,630</b>



## Economic Impacts

### TechLink Study

- ✦ Impact per agreement:
  - \$2.24 million in economic output
  - 13 jobs
- ✦ Average job compensation:
  - \$73,279

### Navy Study

- ✦ Impact per agreement:
  - \$5.4 million in economic output
  - 26 jobs
- ✦ Average job compensation:
  - \$79,300

## Conclusions

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- ✦ Federal lab tech transfer generates *significant* economic impacts
- ✦ More studies needed to *validate economic-impact* of federal labs and their T2 operations

