



Combining Economic Impact and Business Retention and Expansion: The Aerospace Example

JUNE 4, 2014

FRAMING THE PROBLEM

- Defining the aerospace cluster
 - What is it?
 - Competitors?
- Aerospace businesses in Duluth-Superior
- Economic contribution
- Industry issues/support

AEROSPACE INDUSTRY IN DULUTH-SUPERIOR
Defining the Industry Cluster

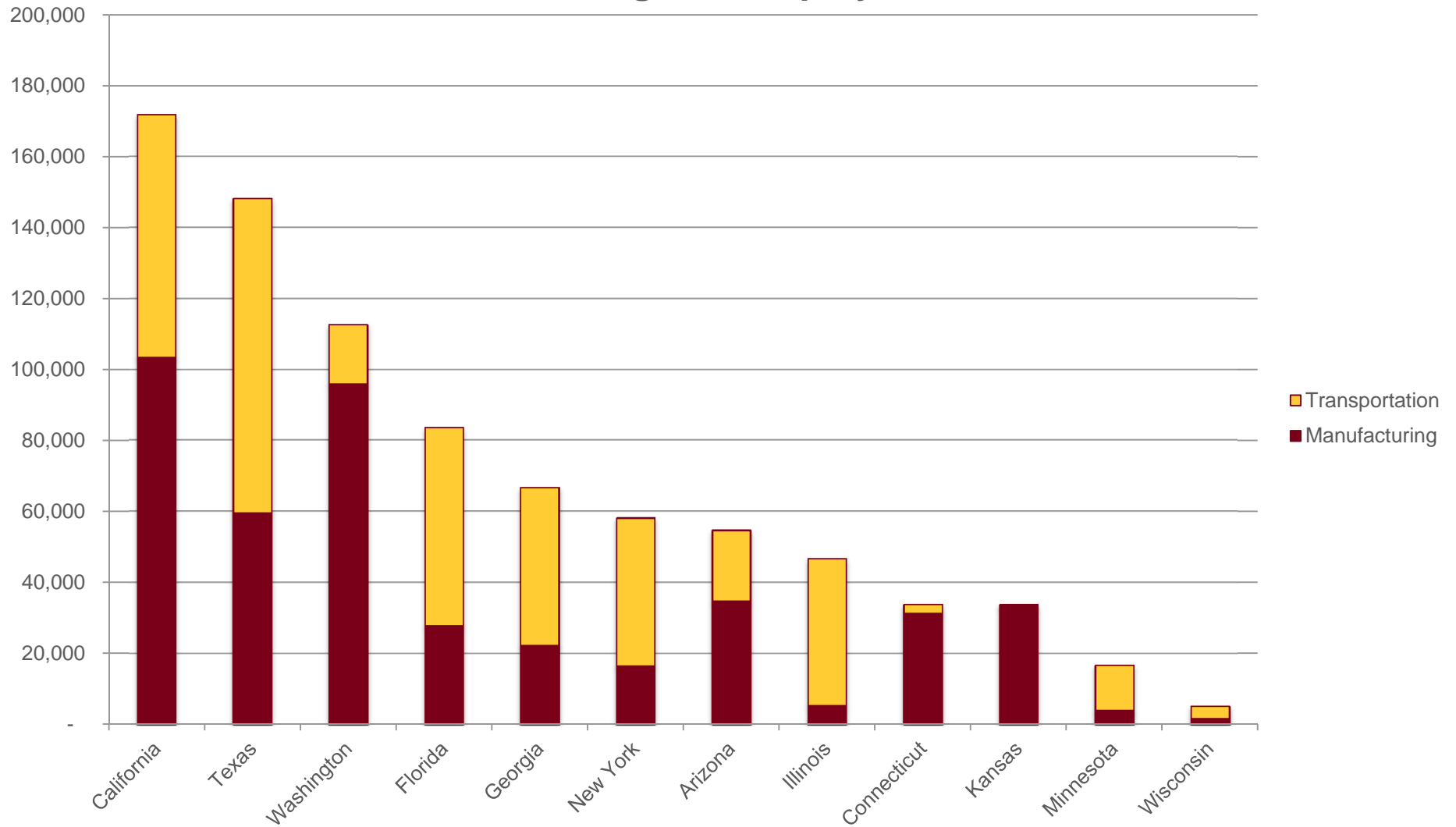
DEFINING AEROSPACE

- What's In
 - **Aerospace** product and parts manufacturing
 - Search, detection, navigation, guidance, **aeronautical**, and nautical system and instrument manufacturing
 - **Air** transportation services
 - Support activities for **air** transportation

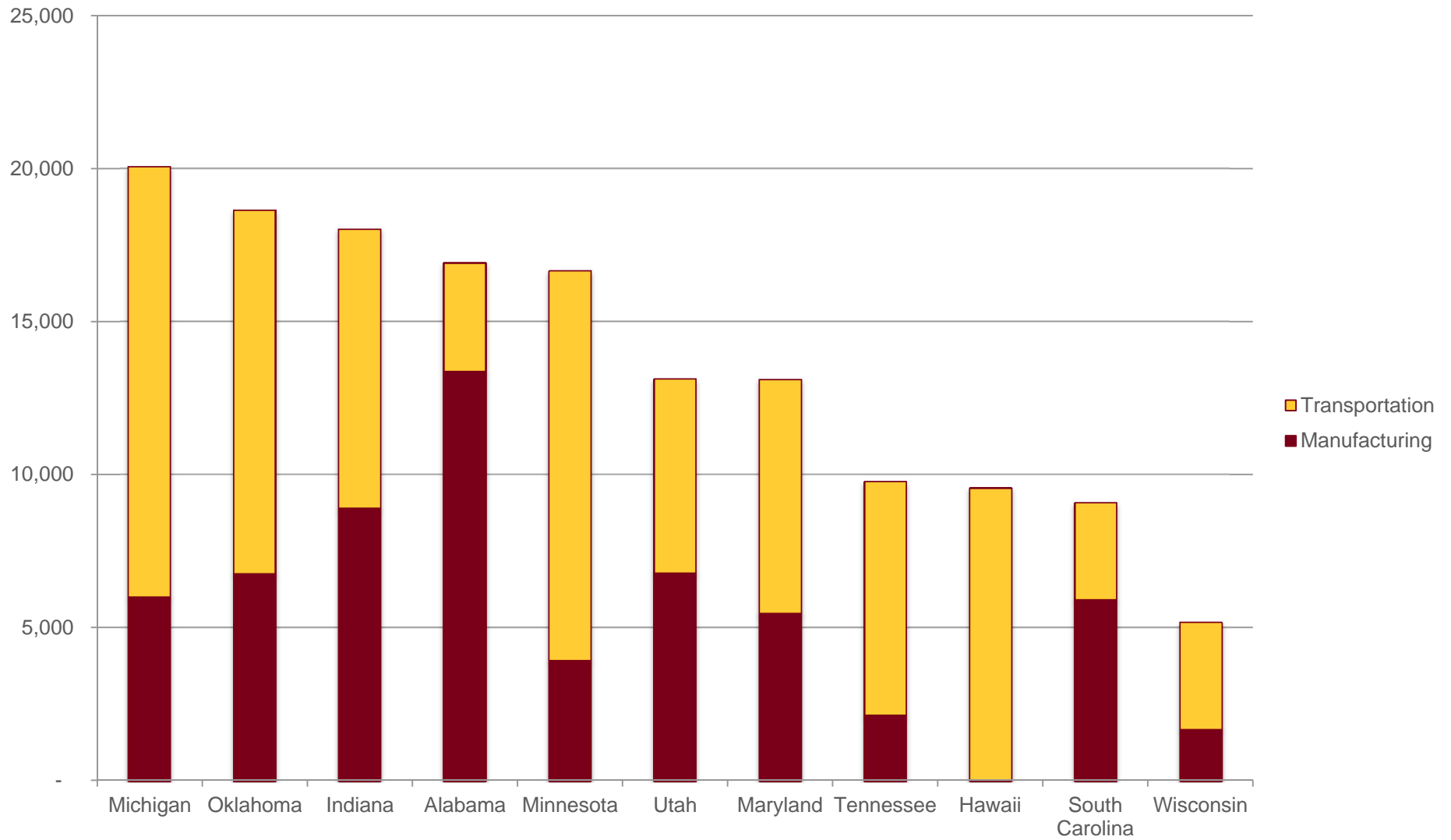
DEFINING AEROSPACE

- What's "On the Bubble"
 - Industrial machinery manufacturing
 - Metalworking machinery manufacturing
 - Engine, turbine, & power transmission equip.
 - Other transportation equip.
 - Research & development

Distribution of Aerospace Jobs by Core Component States with Highest Employment: 2012

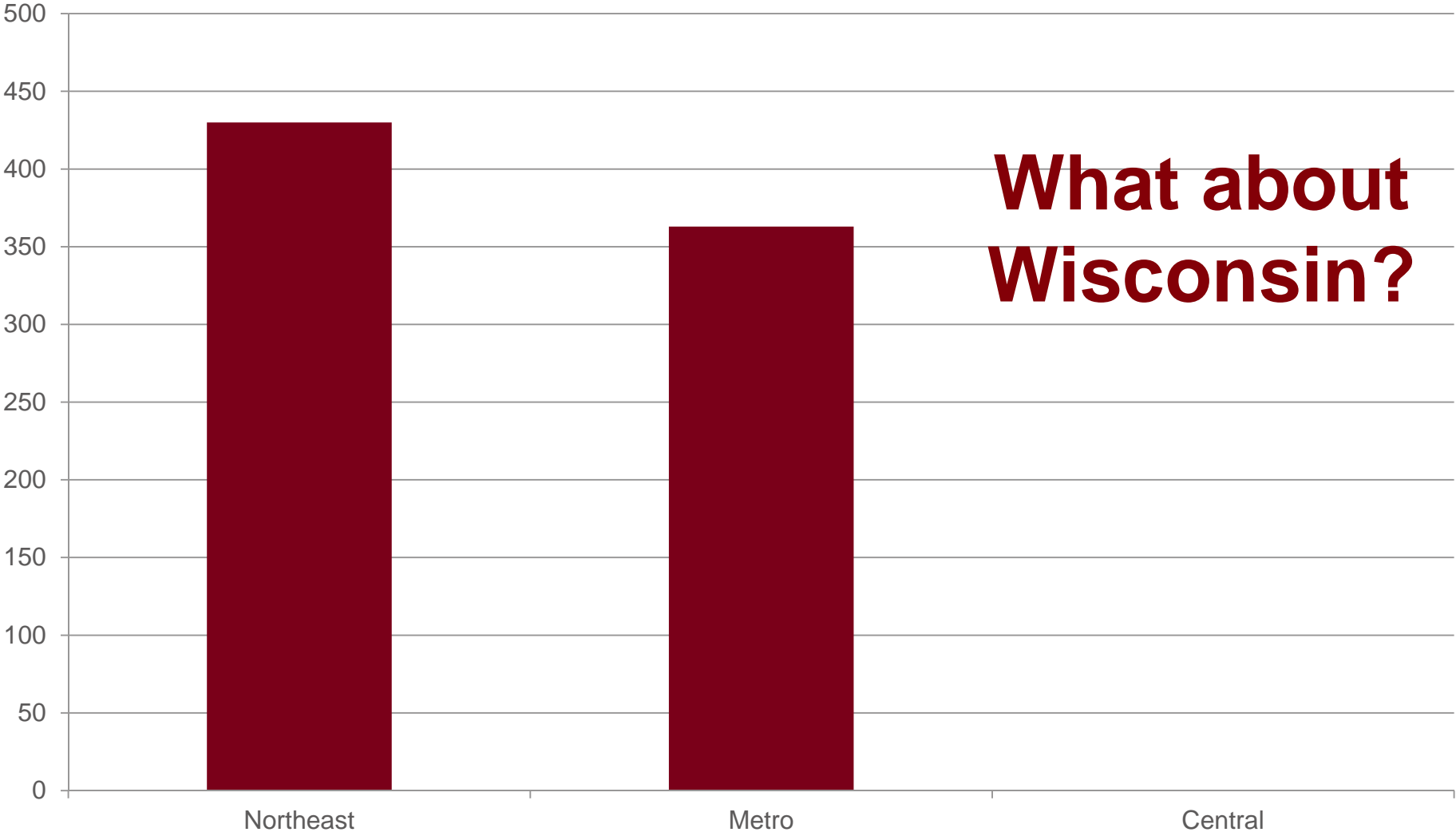


Distribution of Aerospace Jobs by Core Component: States Similar to Minnesota 2012

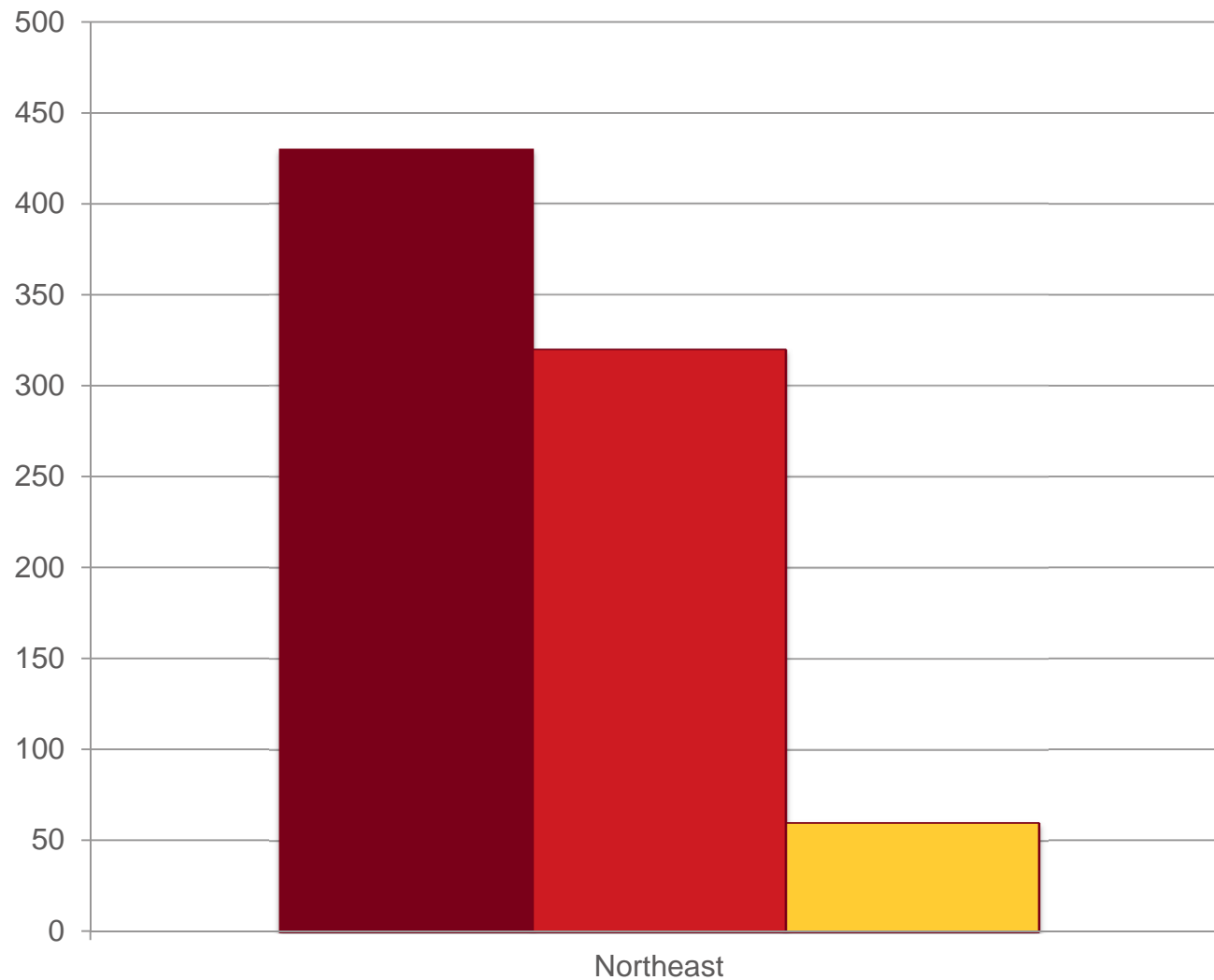


Distribution of Aerospace Manufacturing Jobs Minnesota 2012

**What about
Wisconsin?**



Distribution of Core Aerospace Jobs Northeast Minnesota 2012



**Total number
of jobs = 810**

- Aerospace Product Manuf
- Aeronautical Systems Manuf
- Transport

BUSINESS SURVEYS

- March to September 2013
- Surveys – 16 responses
 - Online
 - In-person visits
 - Phone
- Visits
 - University of Minnesota
 - APEX

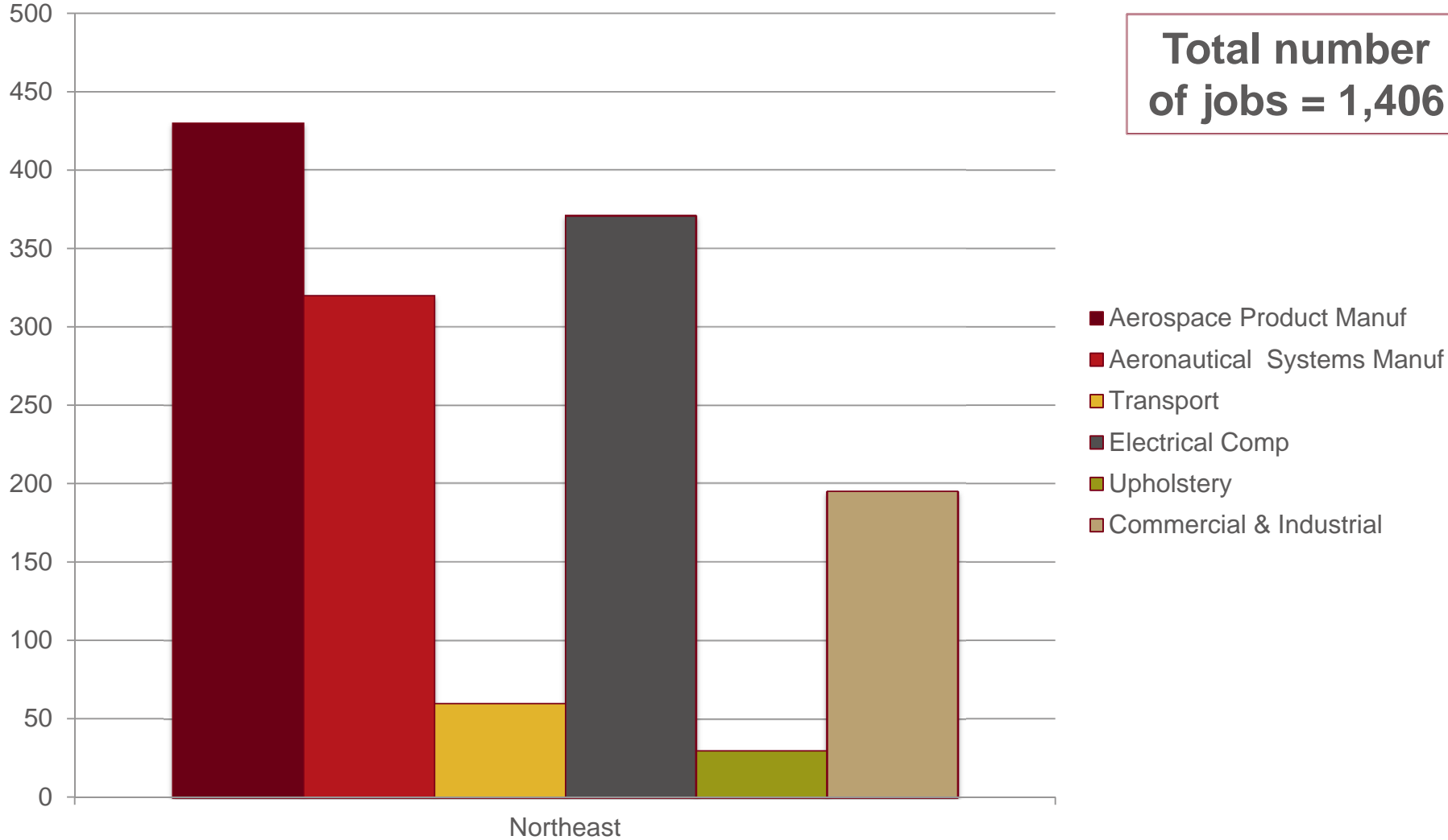
SELF-REPORTED INDUSTRIES

- Engineering & Construction
- Manufacturing
 - Electrical component manufacturing
 - Aerospace product and parts
- Repair and Maintenance
 - Upholstery/flooring
 - Commercial and industrial machinery
- Services
 - Support activities for transportation



Distribution of Aerospace Jobs Northeast Minnesota and Douglas County Wisconsin 2012

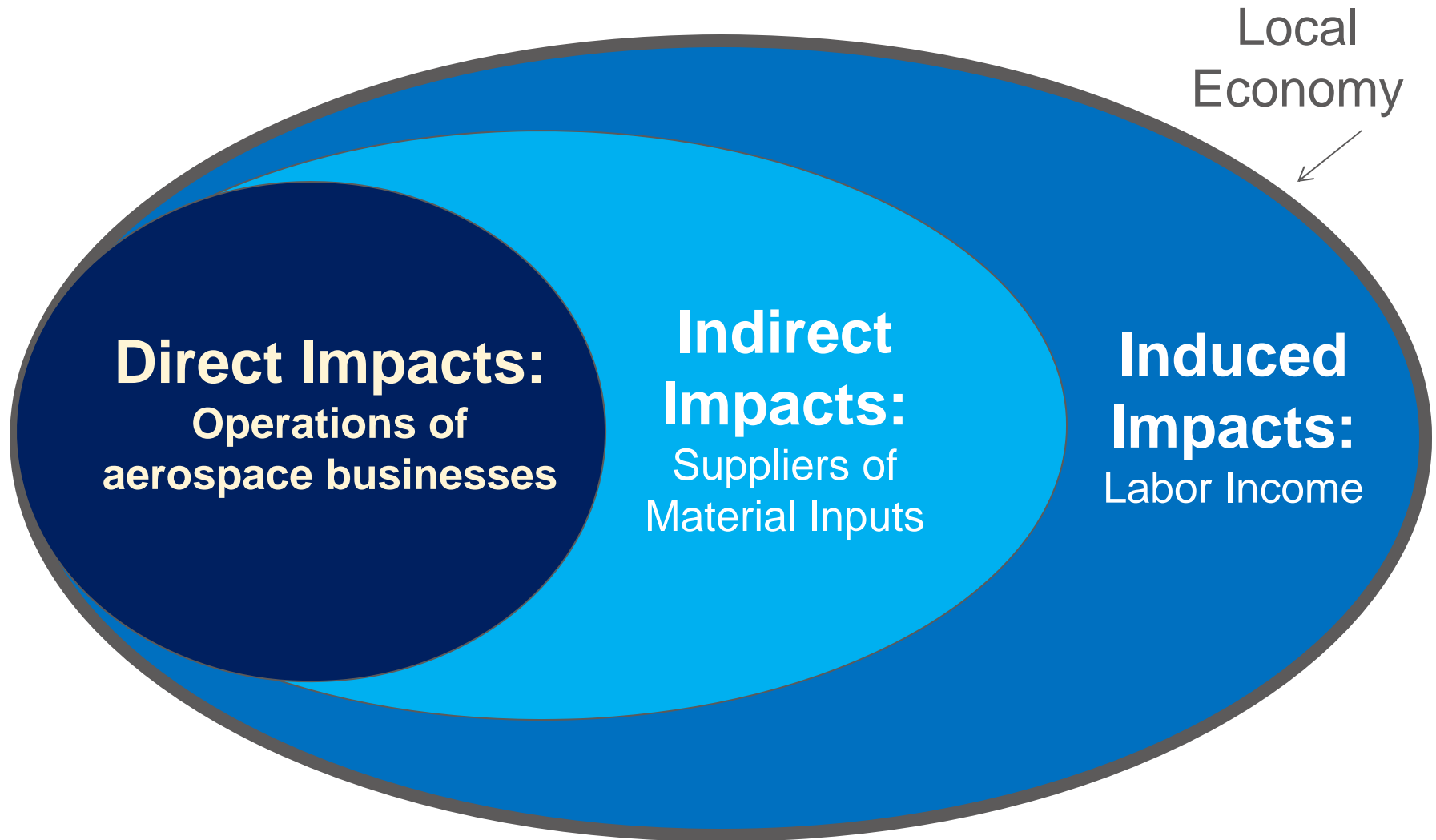
**Total number
of jobs = 1,406**



AEROSPACE INDUSTRY IN DULUTH-SUPERIOR

Economic Contribution

ECONOMIC IMPACT ANALYSIS



ECONOMIC CONTRIBUTION: DULUTH-SUPERIOR AEROSPACE INDUSTRY

	Employment	Labor Income (millions)	Output (millions)
Direct Effect	2,450	\$175.6	\$719.0
Indirect Effect	920	\$48.9	\$122.9
Induced Effect	1,260	\$44.4	\$146.1
Total Effect	4,630	\$268.9	\$988.0

STUDY AREA: ST. LOUIS COUNTY, MINNESOTA AND DOUGLAS COUNTY, WISCONSIN

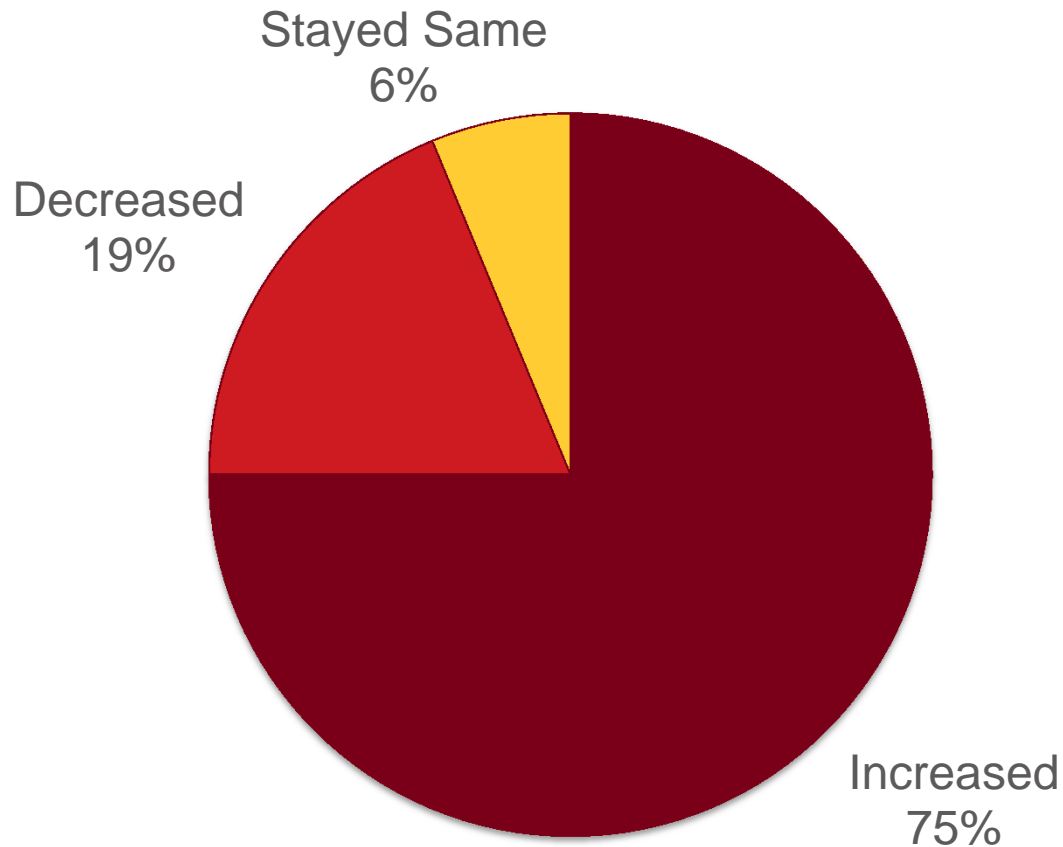
ECONOMIC CONTRIBUTION: CAPITAL INVESTMENTS

	Employment	Labor Income (millions)	Output (millions)
Direct Effect	27	\$1.3	\$3.0
Indirect Effect	7	\$0.3	\$0.8
Induced Effect	10	\$0.3	\$1.1
Total Effect	44	\$1.9	\$4.0

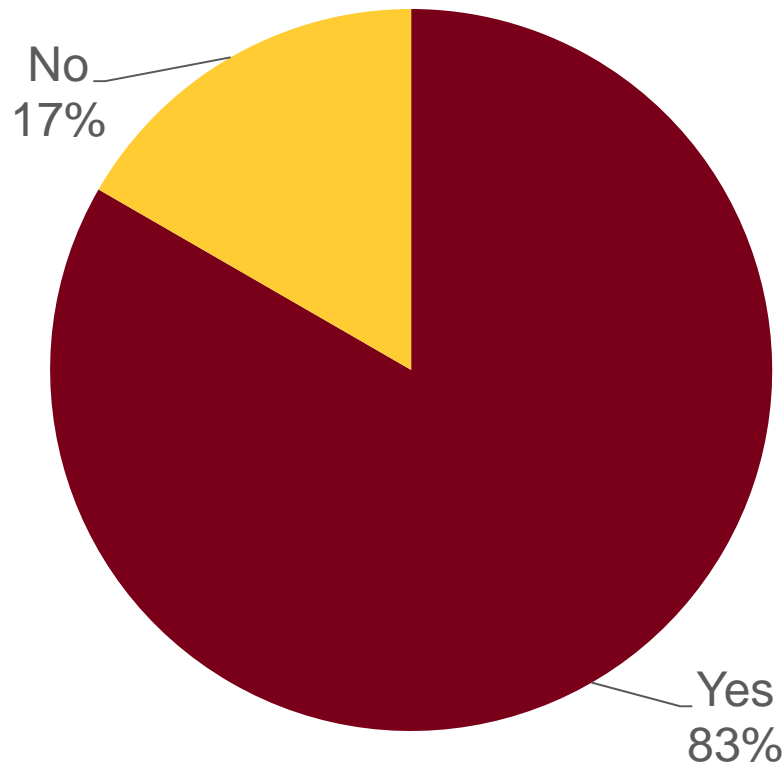
STUDY AREA: ST. LOUIS COUNTY, MINNESOTA AND DOUGLAS COUNTY, WISCONSIN



SINCE 2008, HAVE YOUR AVIATION-RELATED SALES....



IF THE DULUTH AIRPORT DID NOT EXIST, WOULD YOUR SALES BE EFFECTED?



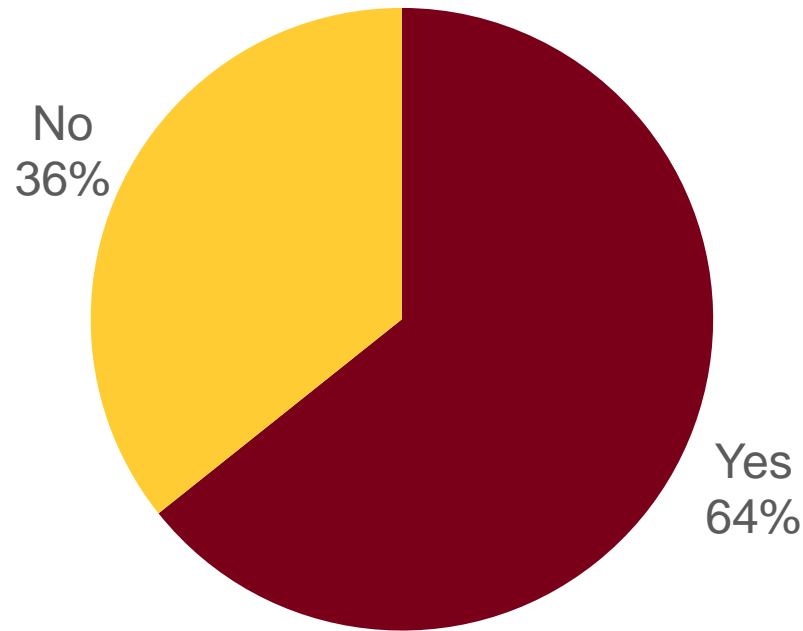
AEROSPACE INDUSTRY IN DULUTH-SUPERIOR
Supporting the Industry

SUPPORTING THE INDUSTRY
Local Purchasing

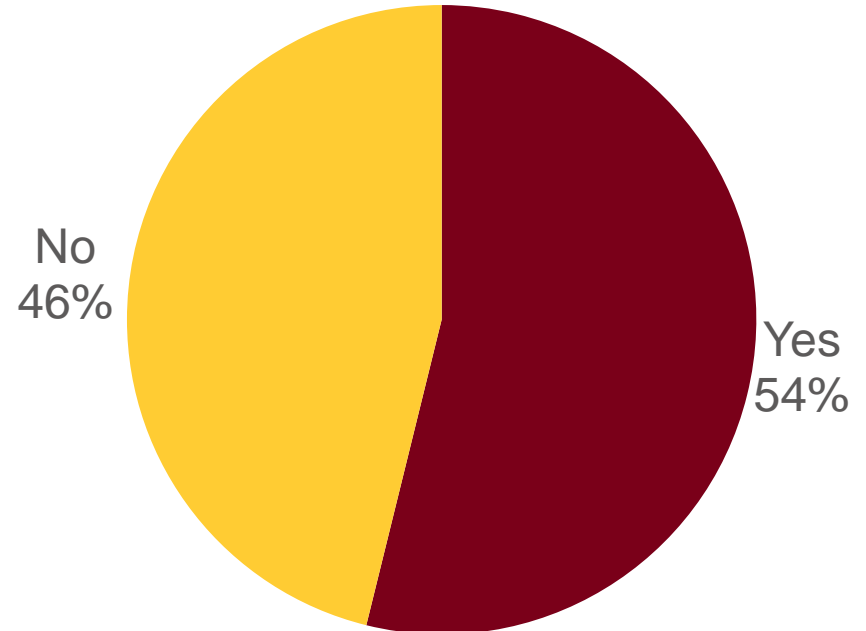


LOCAL PURCHASING

Currently Buy Local?



Potential to Buy Local?



SUPPORTING THE INDUSTRY

Industry Trends

TRENDS AFFECT BUSINESS?

- Sales of general aviation aircraft (5)
- General business issues/taxes (3)
- Input costs/fuel costs (2)
- Workforce (1)
- Public perception (1)
- Federal government changes (1)
- Aerospace business changes (1)

SUPPORTING THE INDUSTRY

Retention and Expansion

KEY BARRIERS TO EXPANSION IN DULUTH-SUPERIOR?

- Distance from customers (4)
- Workforce (3)
- Sales volume/growth (3)
- Finances/cash/credit (2)
- Local governments/authorities (2)
- Networks (1)
- Federal government (1)
- Building/space needs (1)

WHY WOULD YOU CONSIDER MOVING FROM DULUTH-SUPERIOR?

- Not an option/consideration (5)
- Taxes (3)
- Government assistance/incentives (2)
- Rent/building availability (2)
- Sales (1)
- Workforce/union (1)
- Regulations (1)
- Airport access (1)

SUPPORTING THE INDUSTRY

Competitiveness and Threats

WHAT WOULD MAKE DULUTH – SUPERIOR MORE COMPETITIVE?

- Opportunities (4)
- Perception/marketing (3)
- Decrease costs (2)
- Aviation volume (1)
- Workforce (1)
- New airline (1)
- Networks/collaboration (1)

WHAT ARE THE BIGGEST THREATS TO DULUTH – SUPERIOR’S AEROSPACE?

- Economy (3)
- Costs/competition/customers (3)
- Decline in Duluth-Superior’s position as a hub (2)
- Lack of national reputation (2)
- Health of Cirrus (2)
- Federal/Local government (2)
- Collaboration, if it were to lack (1)

SUPPORTING THE INDUSTRY

Moving the Industry Forward

HOW CAN NAA HELP THE INDUSTRY?

- Collaboration, even more inclusivity (5)
- Keep up the current work (3)
- Build a national reputation (2)
- Education/workforce/work with youth (2)
- Help businesses build longevity (1)
- Be the pipeline for news (1)

AEROSPACE INDUSTRY IN DULUTH-SUPERIOR

Questions and Comments



UNIVERSITY OF MINNESOTA | EXTENSION
Driven to DiscoverSM

THANK YOU!

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MAKING A DIFFERENCE IN MINNESOTA: ENVIRONMENT + FOOD & AGRICULTURE + COMMUNITIES + FAMILIES + YOUTH

SHIFT-SHARE ANALYSIS – ST. LOUIS AND DOUGLAS COUNTIES

	National Growth	Industrial Mix Growth	Competitive Share Growth
Other Services	-2.7	4.8	455
Information	-2.7	-8.6	2,265
Construction	-2.7	-23.0	18.3
Natural/Mining	-2.7	11.5	2.3
Financial	-2.7	-5.0	1.4
Public Admin.	-2.7	2.2	-0.8
TTU	-2.7	-1.8	-0.5
Manufacturing	-2.7	-11.1	-2.3
Professional Ser.	-2.7	2.8	-6.3
Leisure/Hosp.	-2.7	5.8	-4.5
Education/Health Services	-2.7	9.2	-2.5

2007 ECONOMIC IMPACT ANALYSIS

	Employment	Labor Income (millions)	Output (millions)
Direct Effect	2,309	\$132.6	\$599.1
Indirect Effect	954	\$40.4	\$146.8
Induced Effect	1,171	\$34.6	\$114.2
Total Effect	4,434	\$207.6	\$861.0

Source: Department of Employment and Economic Development

Employment for Select Industry Sectors: St. Louis County

