The Competitive Advantage of Regions

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This presentation draws on ideas from Professor Porter's articles and books, in particular, The Competitive Advantage of Nations (The Free Press, 1990), "The Microeconomic Foundations of Economic Development," in The Global Competitiveness Report 2001, (World Economic Forum, 2001), "Clusters and the New Competitive Agenda for Companies and Governments" in On Competition (Harvard Business School Press, 1998), the *Clusters of Innovation Initiative*, a joint effort of the Council on Competitiveness, Monitor Group, and Professor Porter. Additional content is drawn from the work of the Initiative for a Competitive Inner City, www.icic.org.

Additional information may be found at the website of the Institute for Strategy and Competitiveness, www.isc.hbs.edu

TOPICS

- **Foundations of regional competitiveness**
- **A new model for inner city revitalization**

What is Competitiveness?

- Competitiveness is determined by the **productivity** with which a region uses its human, capital, and natural resources. Productivity sets a region's standard of living (wages, returns to capital)
  - Productivity depends both on the **value** of products and services (e.g. uniqueness, quality) as well as the **efficiency** with which they are produced.
  - It is not **what** industries a region competes in that matters for prosperity, but **how** firms compete in those industries
  - Productivity in a region is a reflection of what both domestic and "foreign" firms **choose to do in that location.**
  - The productivity of **"local"** industries is of fundamental importance to competitiveness, not just that of traded industries

- Regions compete in offering the **most productive environment** for business
- The public and private sectors play **different but interrelated roles** in creating a productive economy

Productivity, Innovation, and the Business Environment

Context for Firm Strategy and Rivalry

- A local context and rules that encourage **investment** and **sustained upgrading**
  - e.g., Intellectual property protection
- **Meritocratic** incentive systems across all major institutions
- Open and vigorous competition among **locally based rivals**

Factor (Input) Conditions

- **Presence of high quality, specialized inputs** available to firms
  - Human resources
  - Capital resources
  - Physical infrastructure
  - Administrative infrastructure
  - Information infrastructure
  - Scientific and technological infrastructure
  - Natural resources

Demand Conditions

- **Sophisticated and demanding** local customer(s)
- Local customer needs that **anticipate** those elsewhere
- Unusual local demand in **specialized segments** that can be served nationally and globally

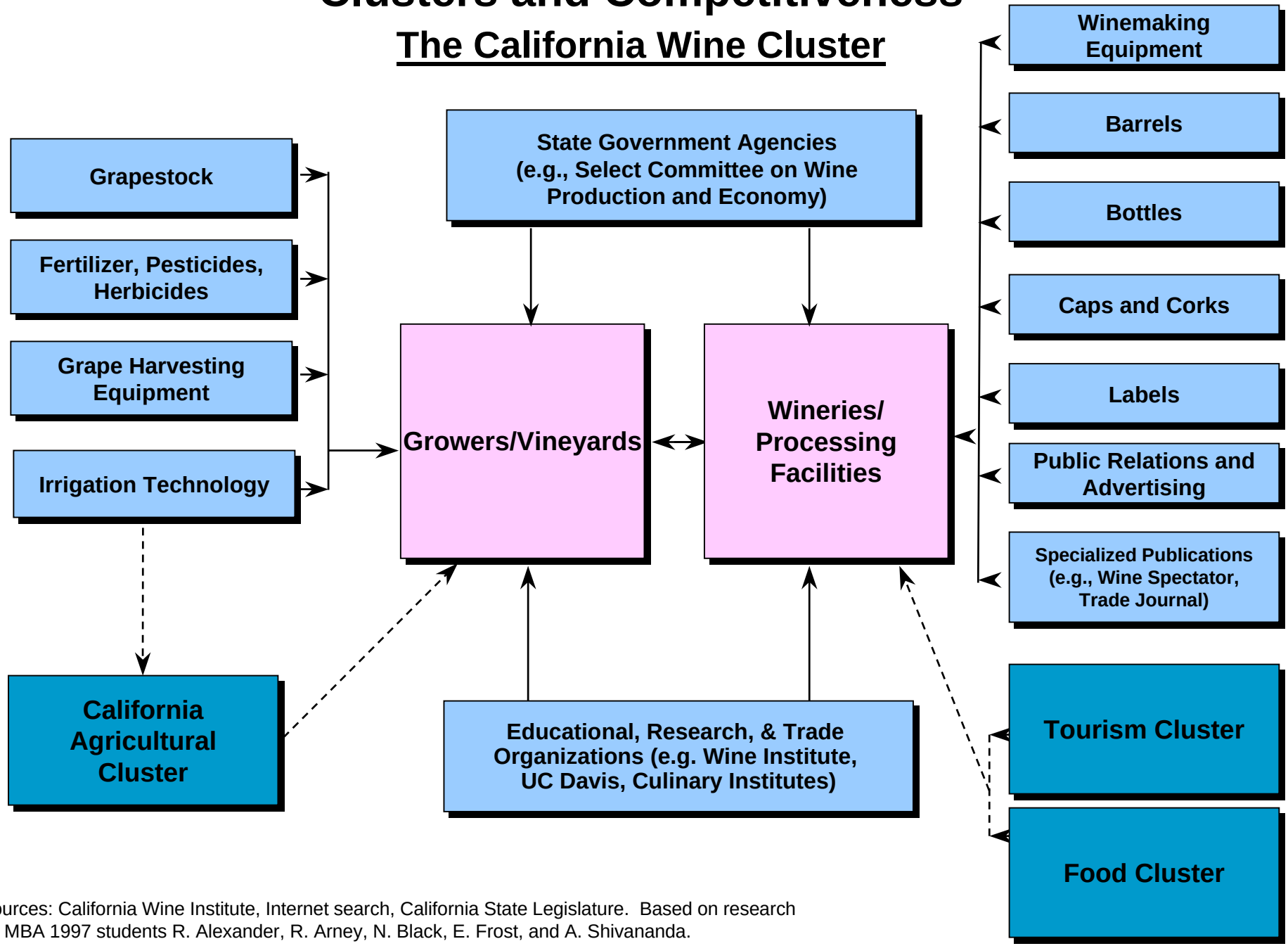
Related and Supporting Industries

- Access to capable, locally based **suppliers** and firms in **related fields**
- Presence of **clusters** instead of isolated industries

- Successful economic development is a process of **successive economic upgrading**, in which the business environment in a nation or region evolves to support and encourage increasingly sophisticated ways of competing

Clusters and Competitiveness

The California Wine Cluster



Sources: California Wine Institute, Internet search, California State Legislature. Based on research by MBA 1997 students R. Alexander, R. Arney, N. Black, E. Frost, and A. Shivananda.

Shifting Responsibilities for Economic Development

Old Model

- **Government** drives economic development through policy decisions and incentives

New Model

- Economic development is a **collaborative process** involving government at multiple levels, companies, teaching and research institutions, and institutions for collaboration

Composition of Regional Economies

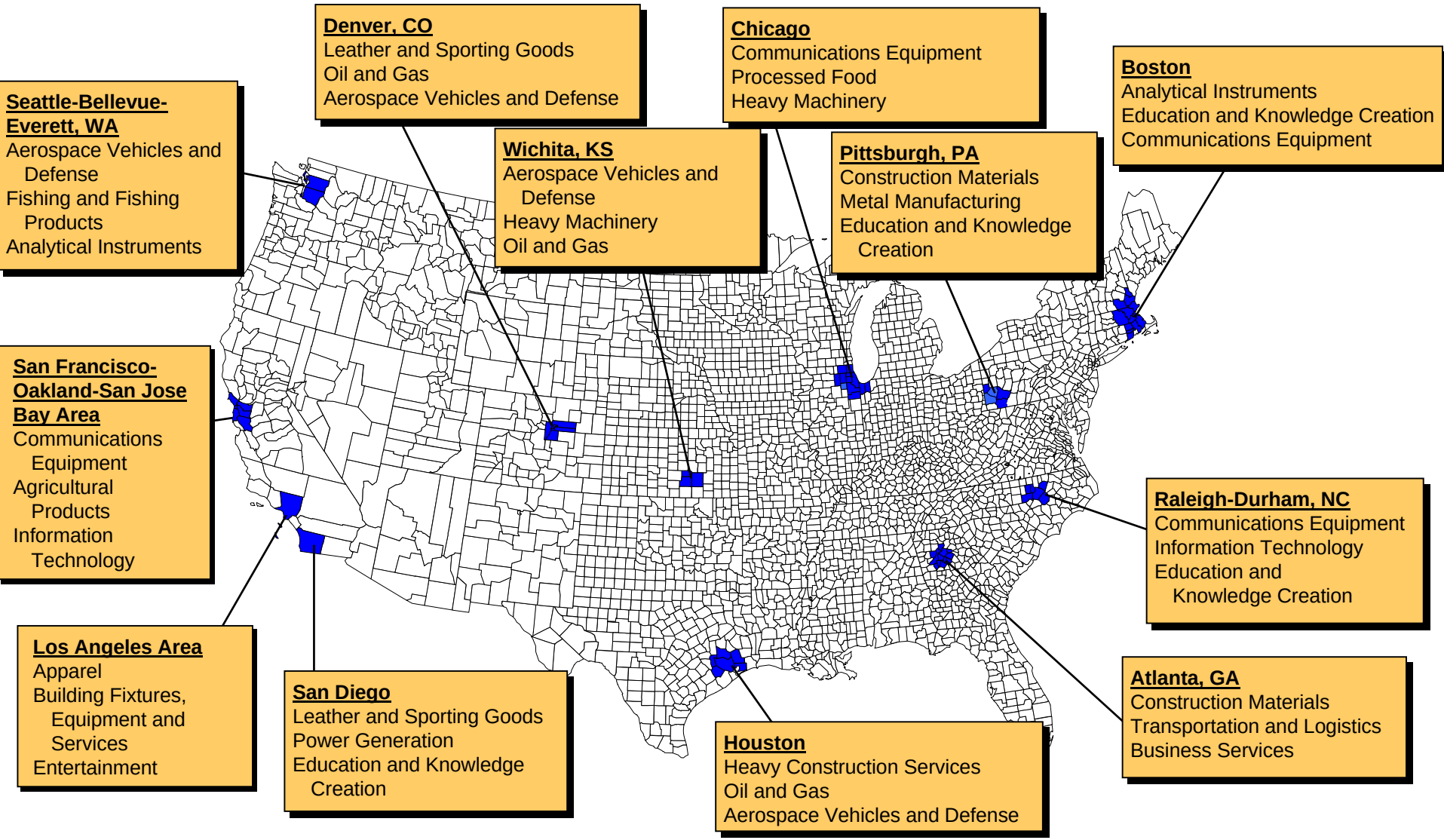
United States, 2001

	Traded Clusters	Local Clusters	Natural Resource-Driven Industries
Share of Employment	31.6%	67.6%	0.8%
Employment Growth, 1990 to 2001	1.7%	2.8%	-1.0%
Average Wage	$46,596	$28,288	$33,245
Relative Wage	133.8	84.2	99.0
Wage Growth	5.0%	3.6%	1.9%
Relative Productivity	144.1	79.3	140.1
Patents per 10,000 Employees	21.3	1.3	7.0
Number of SIC Industries	590	241	48

Note: 2001 data, except relative productivity which is 1997 data.
Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

Specialization of Regional Economies

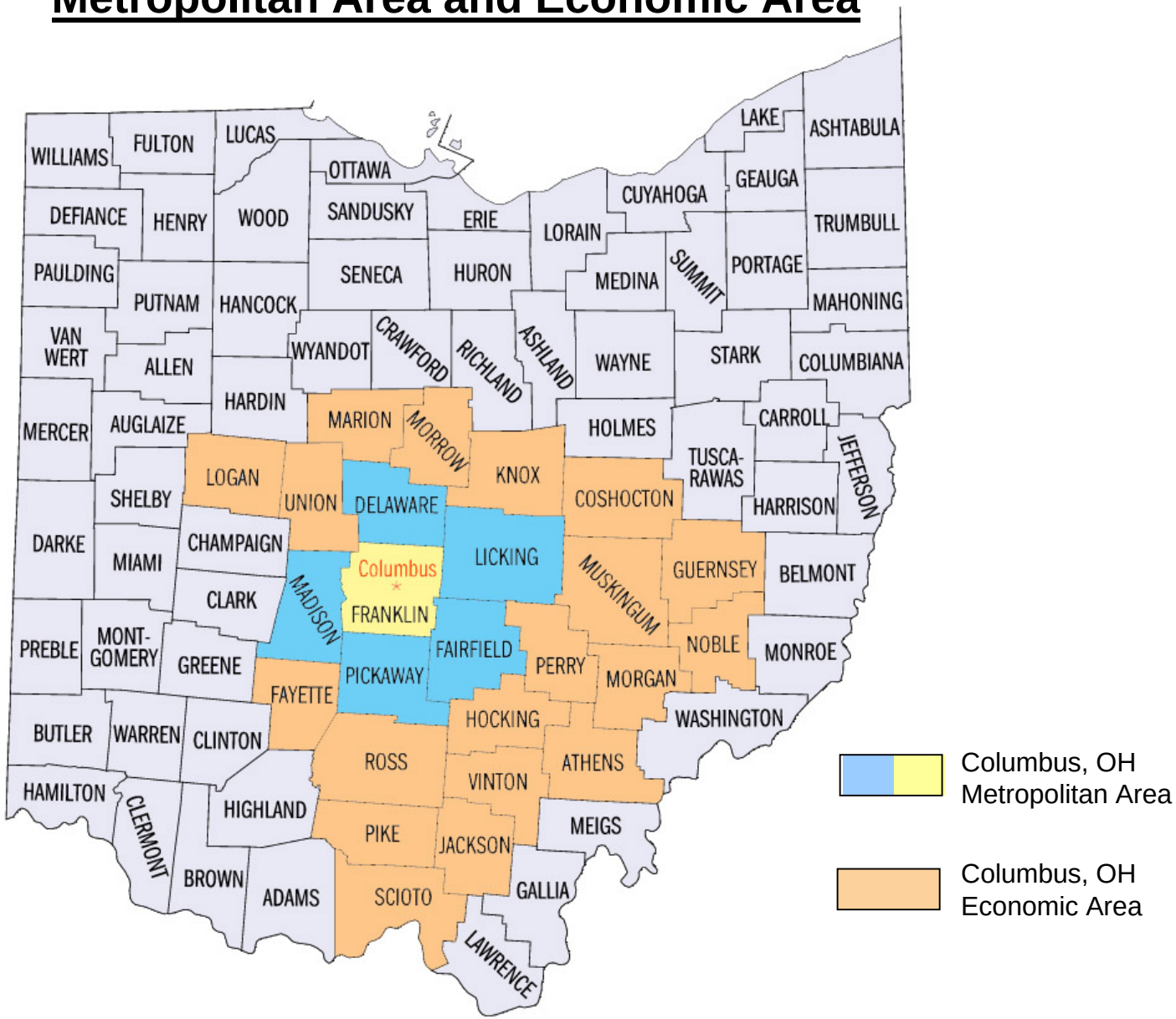
Select U.S. Geographic Areas



Note: Clusters listed are the three highest ranking clusters in terms of share of national employment
Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

Columbus, Ohio

Metropolitan Area and Economic Area



Economic Performance Indicators

Columbus Metropolitan Area

Economic Performance

Employment[1], 2001

- in Columbus: 773,508 (rank 37)[2]
- % of US: 0.67%

Employment growth per year, 1990 to 2001

- in Columbus: 2.45% (rank 117)
- in the US: 1.91%

Unemployment rate, December 2003

- in Columbus: 4.1% (rank 93)
- in the US: 5.4%

Average local wages, 2001

- in Columbus: $27,511 (rank 53)
- in the US: $28,288
- Columbus as % of US: 97.2%

Average traded wages, 2001

- in Columbus: $ 43,501 (rank 53)
- in the US: $ 44,956
- Columbus as % of US: 96.8%

Traded wage growth per year, 1990 to 2001

- in Columbus: 5.27% (rank 100)
- in the US: 4.53%

Innovation Output

Patents per 10,000 employees, 2001

- in Columbus: 4.69 (rank 149)
- in the US: 7.71

Growth in patents per year, 1990 to 2001

- in Columbus: 5.0% (rank 142)
- in the US: 5.9%

Traded establishment formation, 1990 to 2001

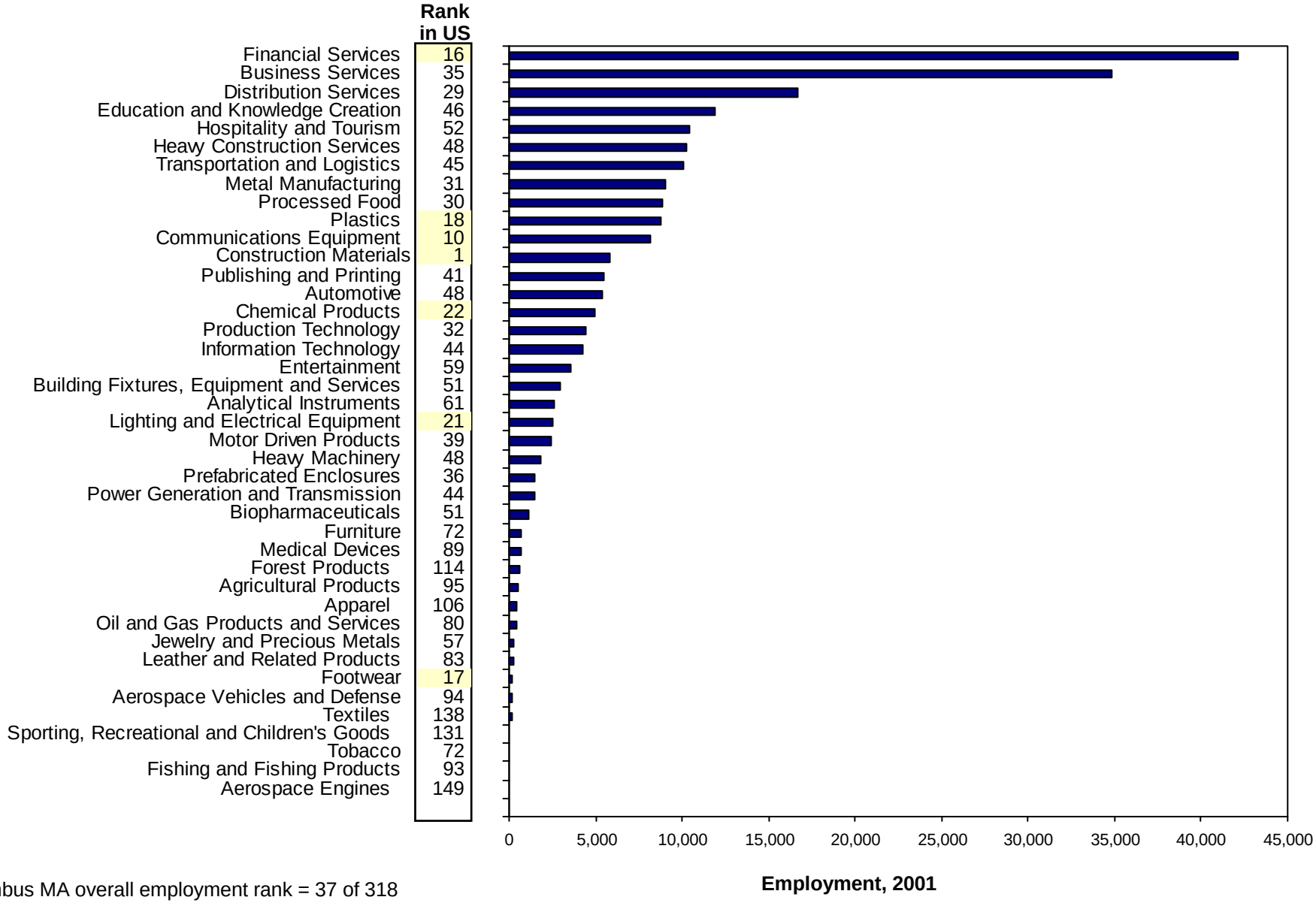
- in Columbus: 4.2% (rank 125)
- in the US: 4.0%

[1] Employment data includes all employees on firm payrolls; excludes government and agricultural employees and the self-employed.
[2] Ranks are among 318 US metro areas.

Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

Employment By Traded Cluster

Columbus Metropolitan Area

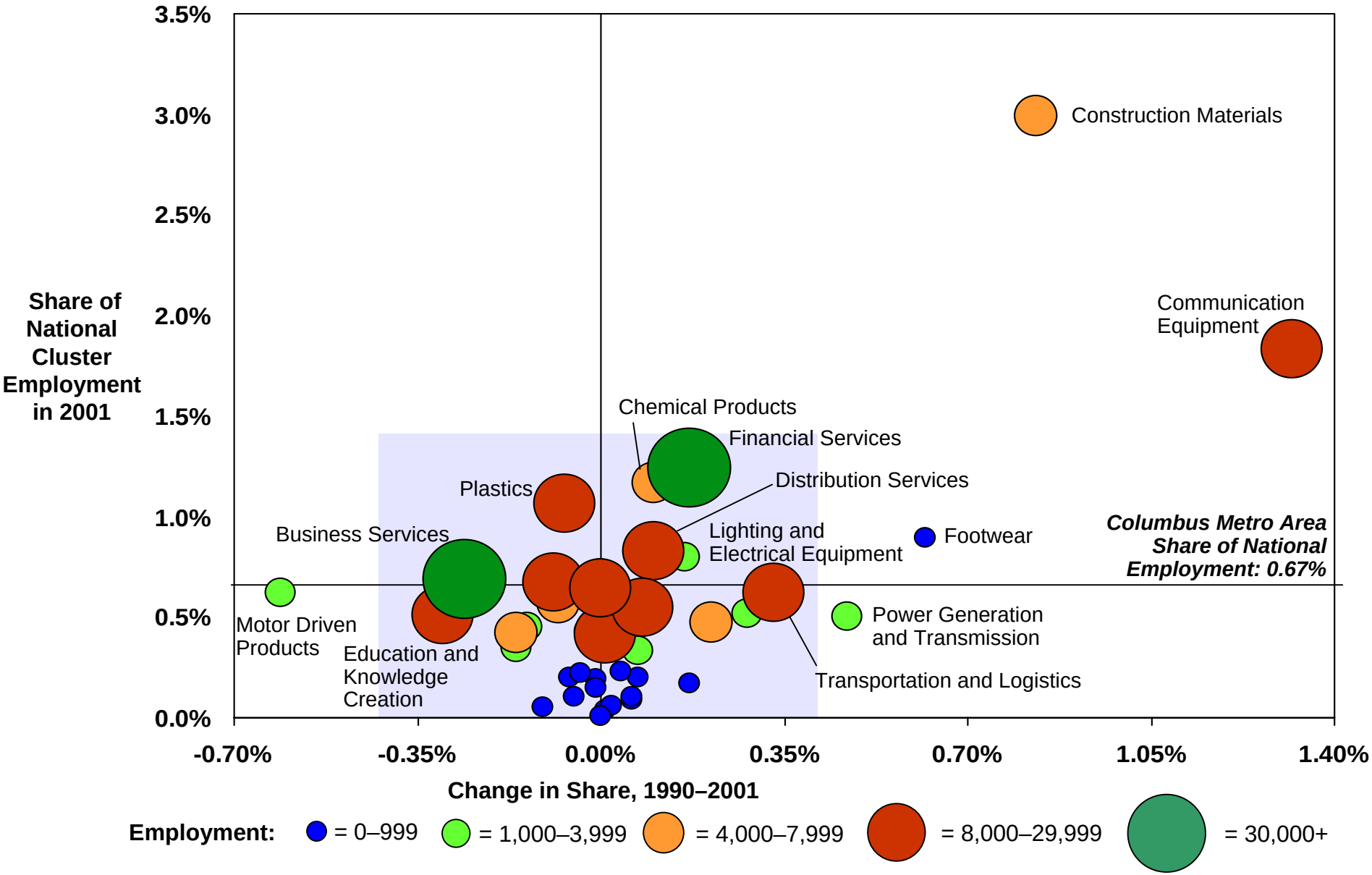


Columbus MA overall employment rank = 37 of 318

Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

Specialization By Traded Cluster

Columbus Metropolitan Area



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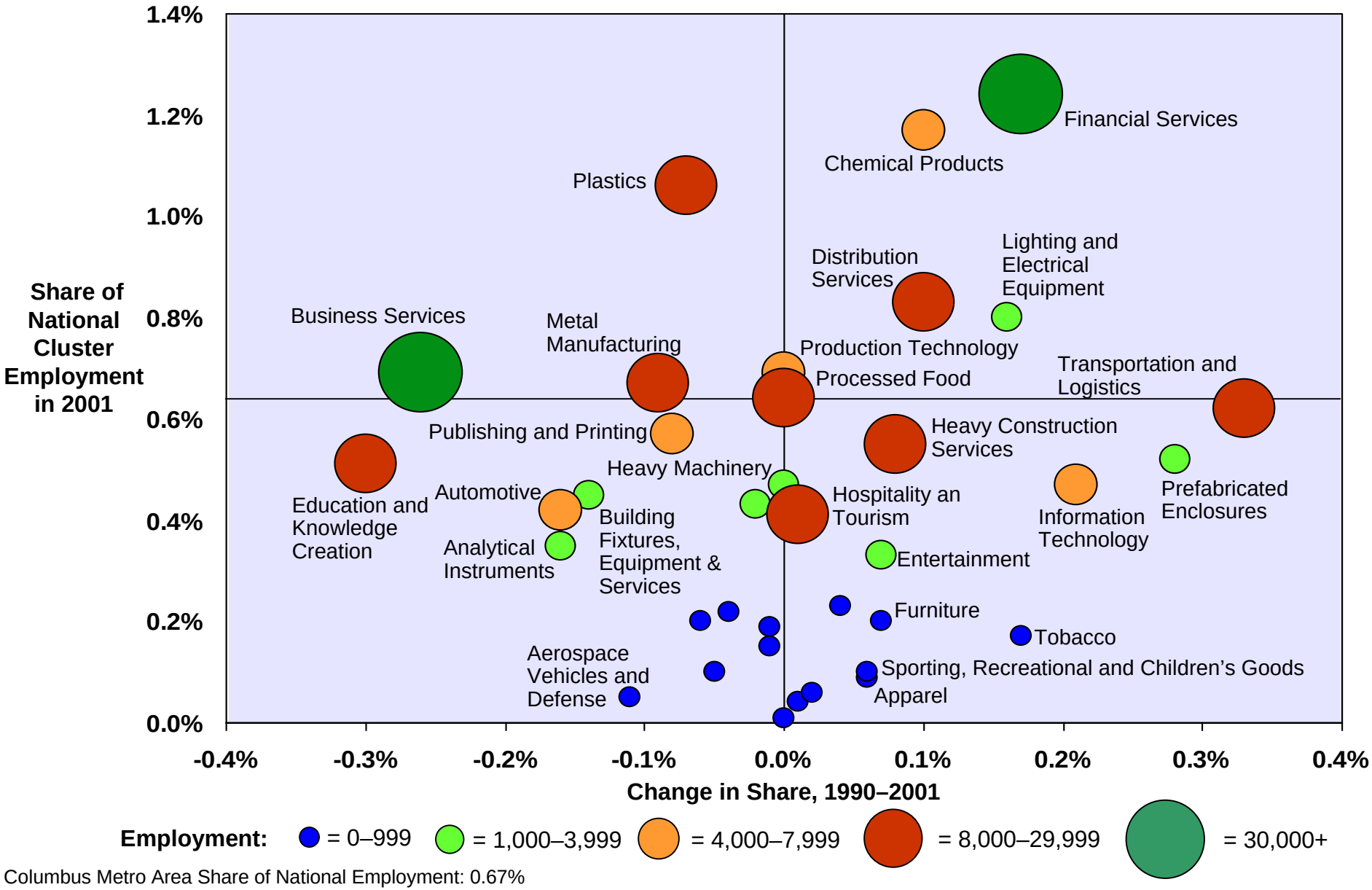
Specialization By Traded Cluster

Columbus Metropolitan Area

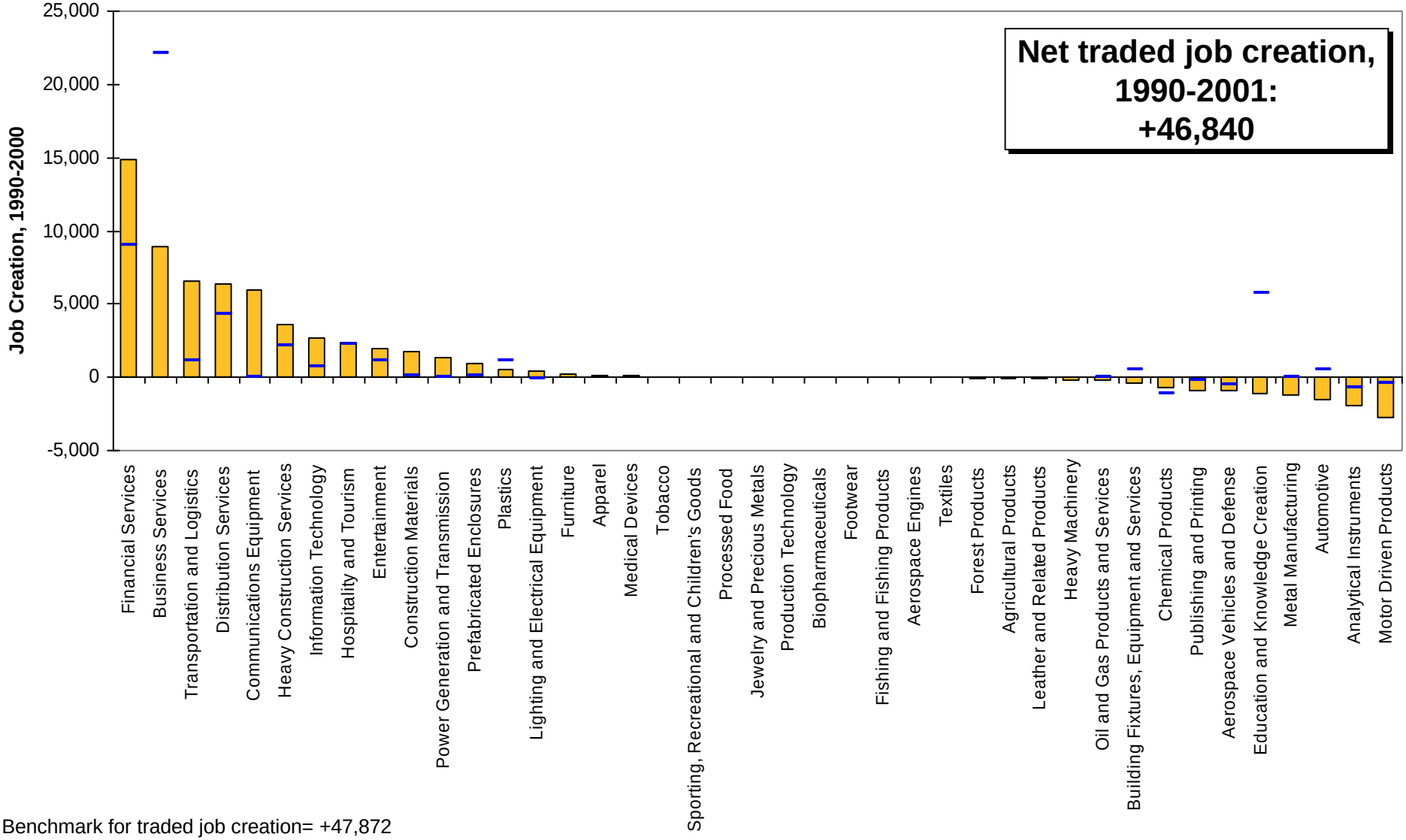


Columbus Metro Area Share of National Employment: 0.67%

Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

Job Creation By Traded Cluster

Columbus Metropolitan Area



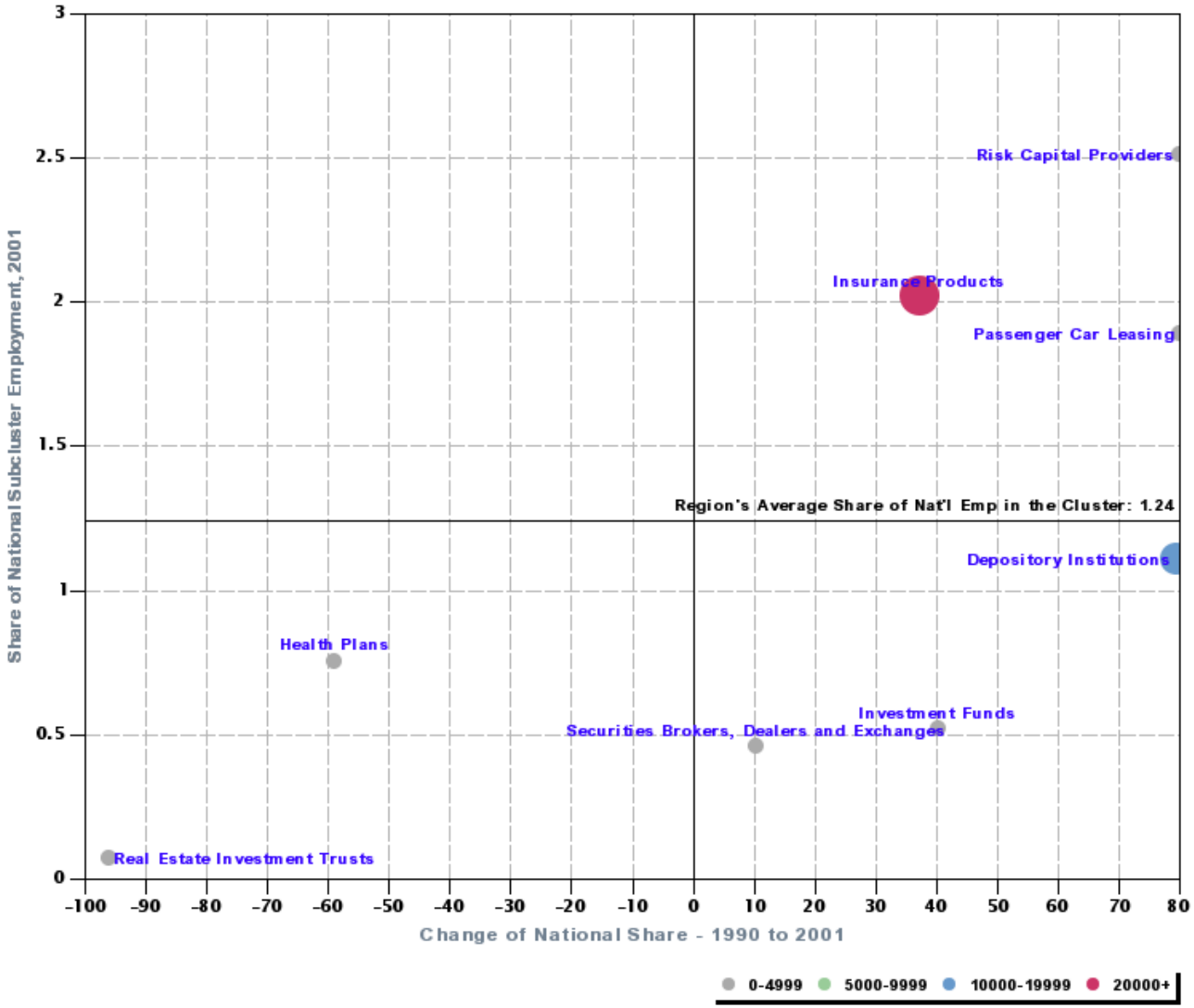
Benchmark for traded job creation= +47,872

— Indicates expected job creation at rates achieved in national benchmark clusters, i.e. percent change in national benchmark times starting local employment.

Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

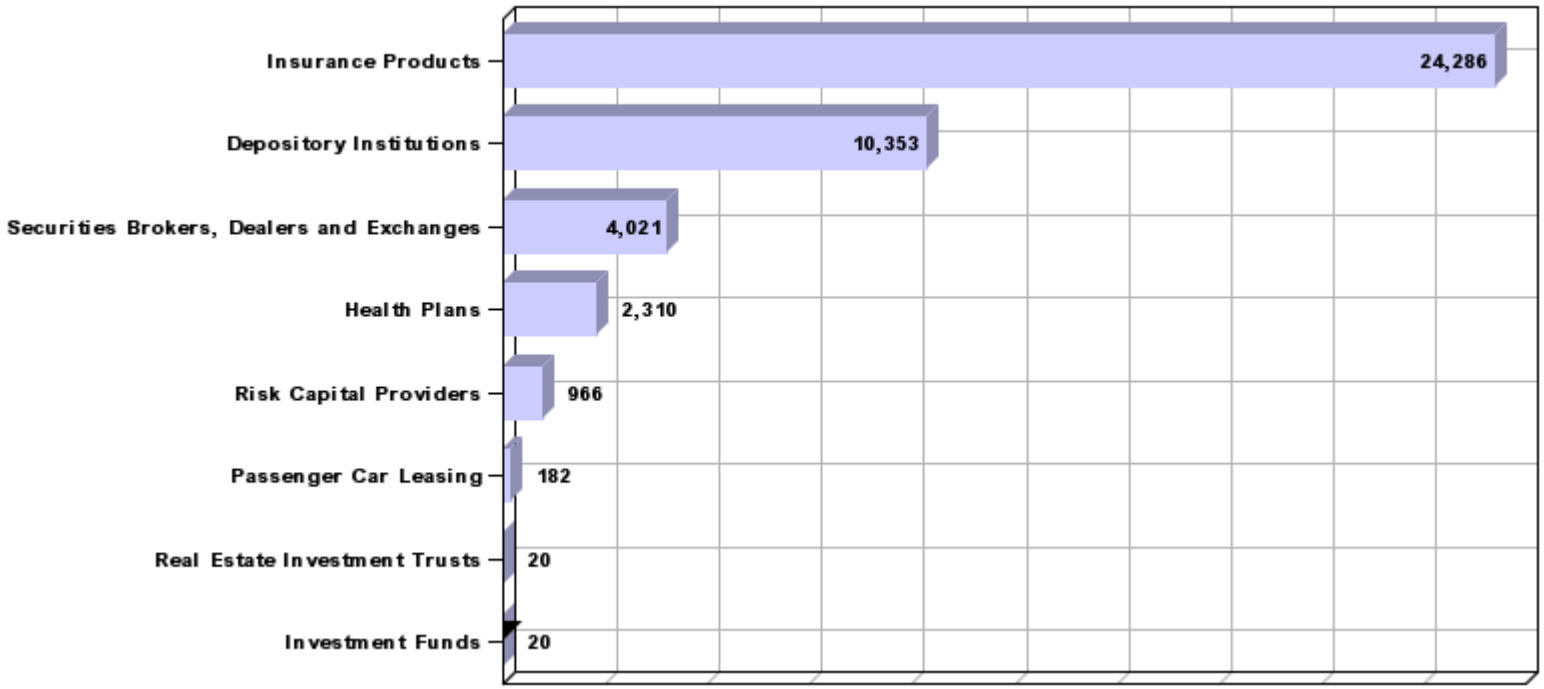
Financial Services Cluster Specialization by Subcluster

Columbus Metropolitan Area



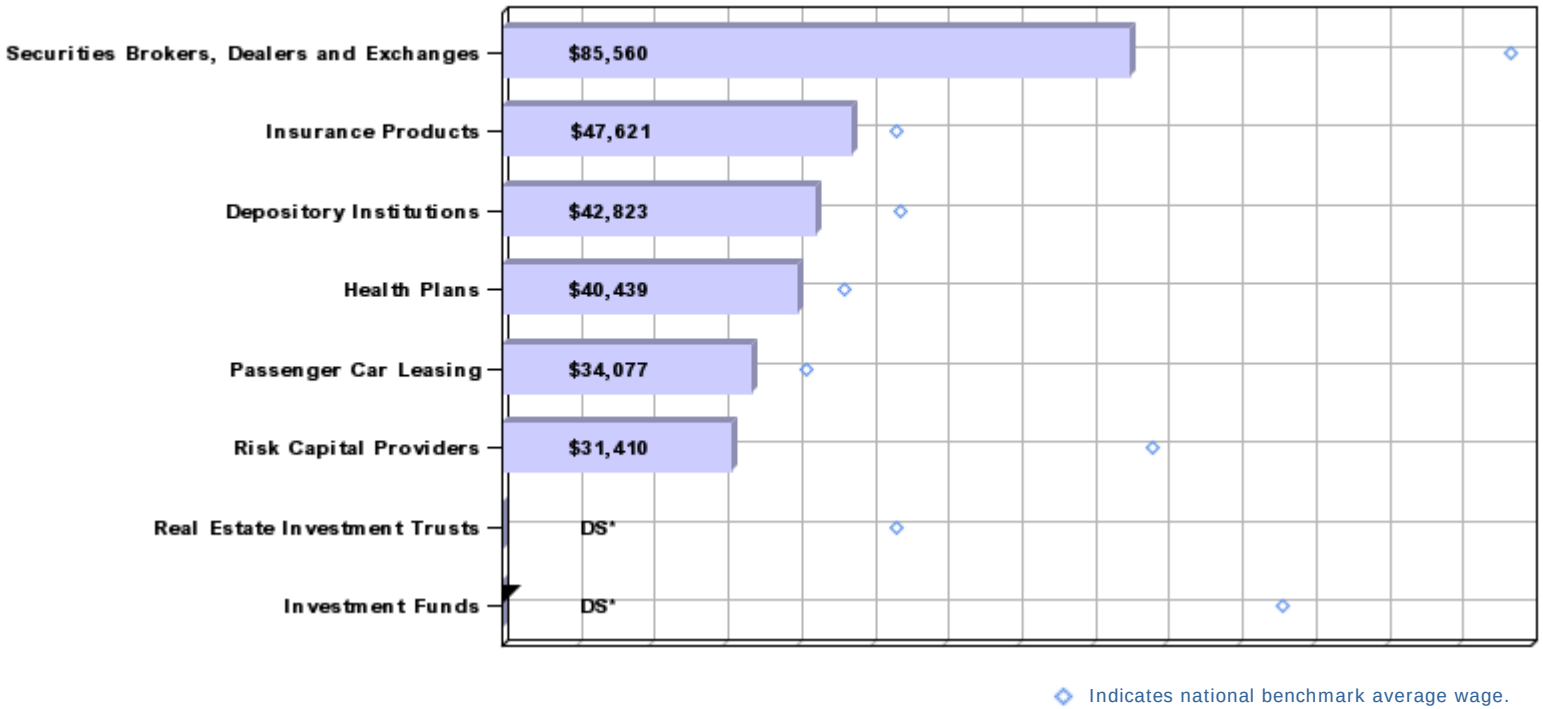
Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

Financial Services Cluster
Employment by Sub Cluster
Columbus Metropolitan Area



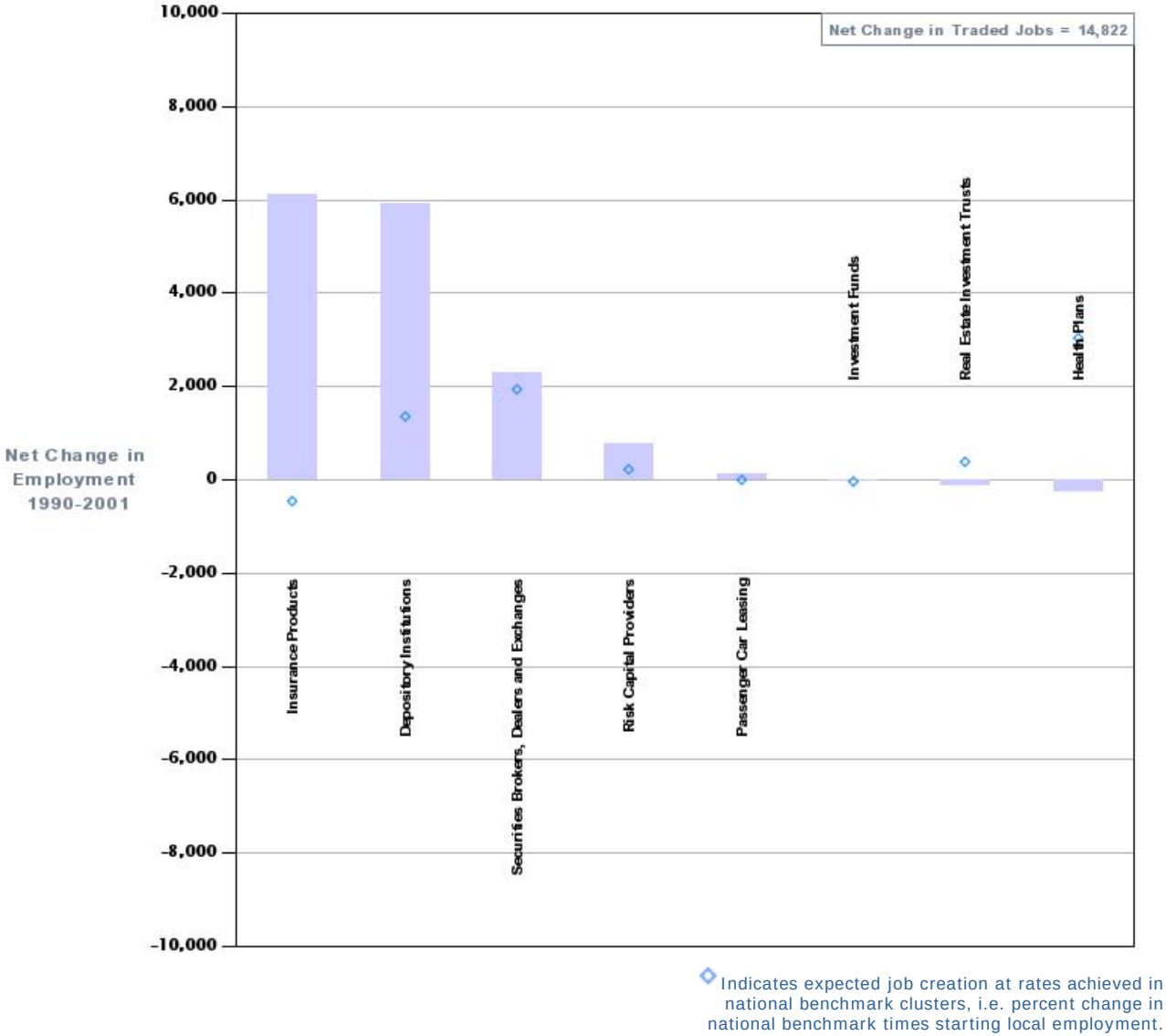
Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

Financial Services Cluster
Wages by Subcluster
Columbus Metropolitan Area



Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

Financial Services Cluster
Job Creation by Subcluster
Columbus Metropolitan Area



Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

Inner City Economic Revitalization

Premises of the New Model

Traditional Model		New Model
Reduce Poverty	→	Create Jobs and Wealth
Focus on Deficiencies and Social Needs	→	Focus on Competitive Advantage and Investment
Economic Space: Neighborhood	→	Economic Space: Region
Lead: Government	→	Lead: Private Sector

Competitive Advantages of the Inner City

Strategic location

- Located near central business district
- Close proximity to regional transportation networks

Underutilized workforce

- Large pool of available workers amid long-term labor shortages

Inner City

Underserved local market

- Large and diverse consumer and business market currently being under-served

Linkage to industrial/ regional clusters

- E.g., back-office support to clusters such as entertainment and financial services

The Role of Inner Cities in Regional Prosperity

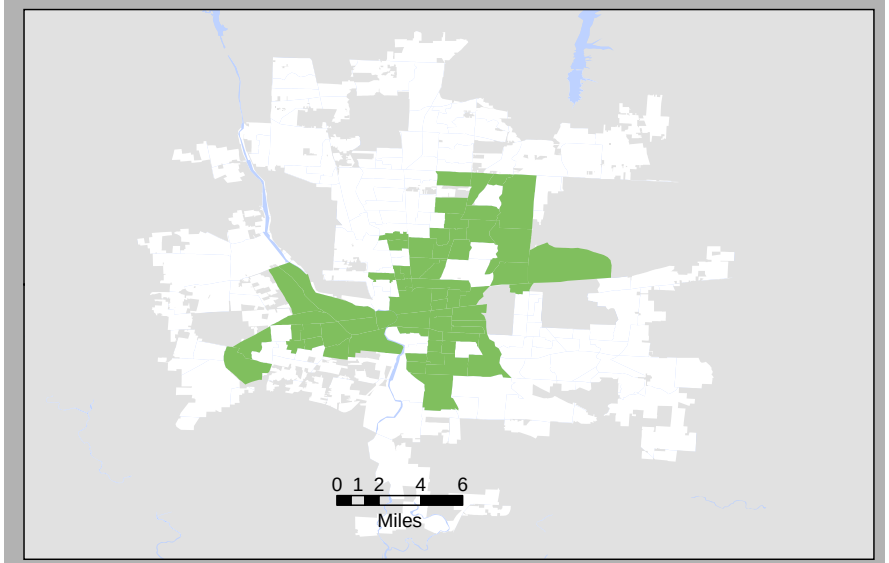
- **Equity**

- Inner city vitality **frees up resources** now required to address social and economic disadvantage
- Enhances the **return to public investment in transportation infrastructure**, expands the **housing stock**, and **mitigates urban sprawl**
- Eases constraints to **regional** economic growth through utilizing the inner-city's labor force, land, and infrastructure more fully
- More **efficient spatial organization** of regional industry
- **Substantial growth and profit opportunities** in the inner city itself

Columbus Inner City

2001

Columbus Inner City



Legend
Green = Inner City Areas
White = Columbus boundary

Key Facts

- Inner city Columbus is home to 188,000 residents or 26% of the city's total population.
- Inner city Columbus is home to over 6,000 establishments employing 37,000 workers.
- Employment growth of negative 1.3% in Inner City Columbus is far below the rest of the MSA (+4.2%).
- The largest industry clusters in inner city Columbus:
  - Local Commercial Services
  - Local Health Services
  - Local Real Estate, Construction, and Development
  - Local Hospitality Establishments
  - Financial Services

Source: State of the Inner City Economies Project, Initiative for a Competitive Inner City

Columbus Inner City

2000

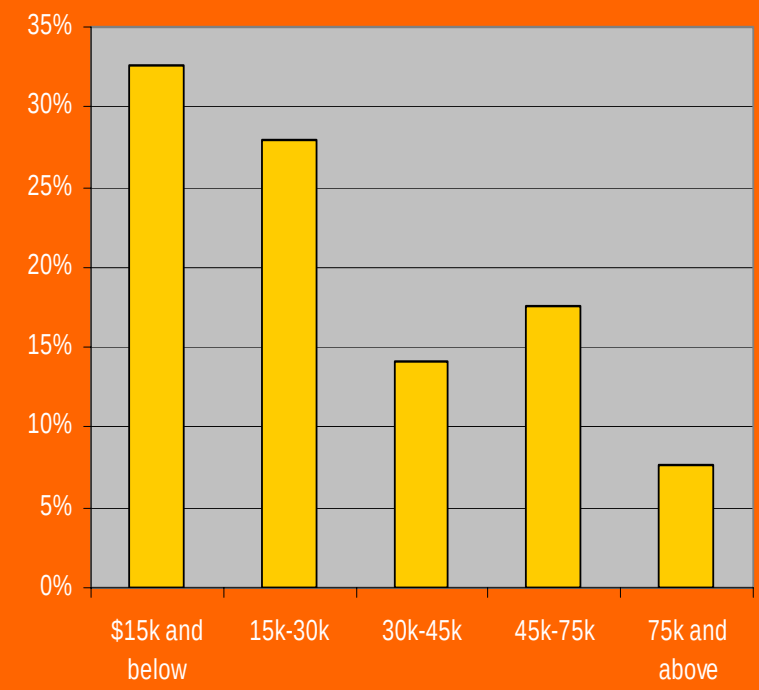
Resident Prosperity

	Inner City	Rest of City	Rest of MSA
Population Size	187,743	523,901	828,513
Median Household Income	$25,333	$43,089	$52,338
Unemployment Rate	9.7%	3.5%	3.3%
High School/ College Attainment	68% / 14%	89% / 34%	88% / 29%
Minority Population	55%	25%	7%
Population 25 and under	59%	63%	66%
Homeownership Rate	39%	50%	75%
Income Density ($MM per sq. mi.)	57	73	7

Source: US Census 2000; ICIC Analysis

Income Distribution

(% Households in Range)



Source: US Census 2000; ICIC Analysis

Source: State of the Inner City Economies Project, Initiative for a Competitive Inner City

Columbus Inner City
2001

Business Vitality

	Inner City	Rest of City	Rest of MSA
Total Employment	36,533	352,978	367,162
Total Establishments	6,095	10,083	21,215
Employment Growth (1995–2001)CAGR	-1.3%	1.6%	4.2%
Establishment Growth (1995–2001) CAGR	0.2%	0.2%	4.4%
Nominal Payroll Growth (1995–2001) CAGR	2.7%	6.0%	9.0%
Business Startups (>1 year old)	5.3%	5.8%	5.4%
Bankruptcies (per 1000 establishments)	2.0	2.9	2.6

Source: US Census Zipcode Business Pattern Data and Dun & Bradstreet; ICIC Analysis

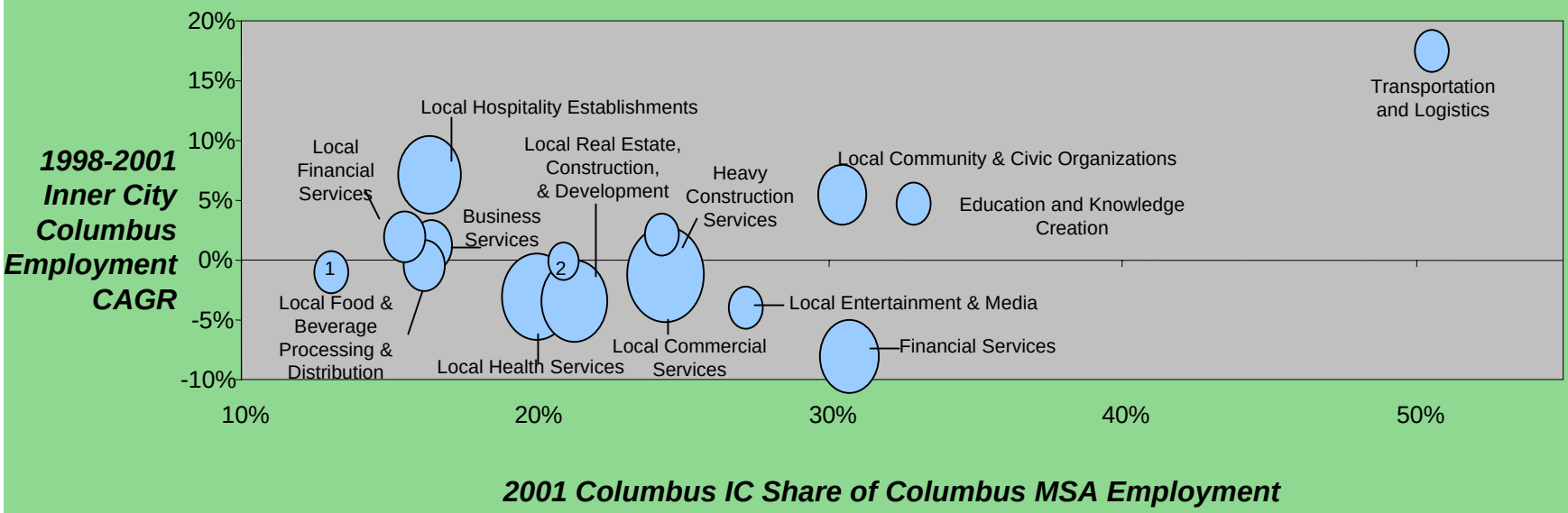
Source: State of the Inner City Economies Project, Initiative for a Competitive Inner City

Columbus Inner City

2001

Inner City Employment Growth VS. Inner City Share of MSA Employment

(Largest 15 Inner City Clusters by Employment)



Note: 1 = Local Motor Vehicle Products and Services; 2 = Distribution Services; Bubble Size Corresponds to Cluster Employment

Source: US Census Zipcode Business Patterns 1998 & 2001; ICIC Analysis

Source: State of the Inner City Economies Project, Initiative for a Competitive Inner City