

The Brookings Institution

Metropolitan Policy Program
Bruce Katz, Director



John Austin, Senior Fellow

Briefing: Great Lakes Regional Economic Initiative

The Big Ten University Representatives

Washington, D.C.

November 3, 2005



Great Lakes Regional Economic Initiative: Briefing

I

Goals of the Initiative

II

The Importance of the Great Lakes Region

III

What matters for Great Lakes growth

IV

Shared challenges, shared strengths

V

Strategic areas for focus



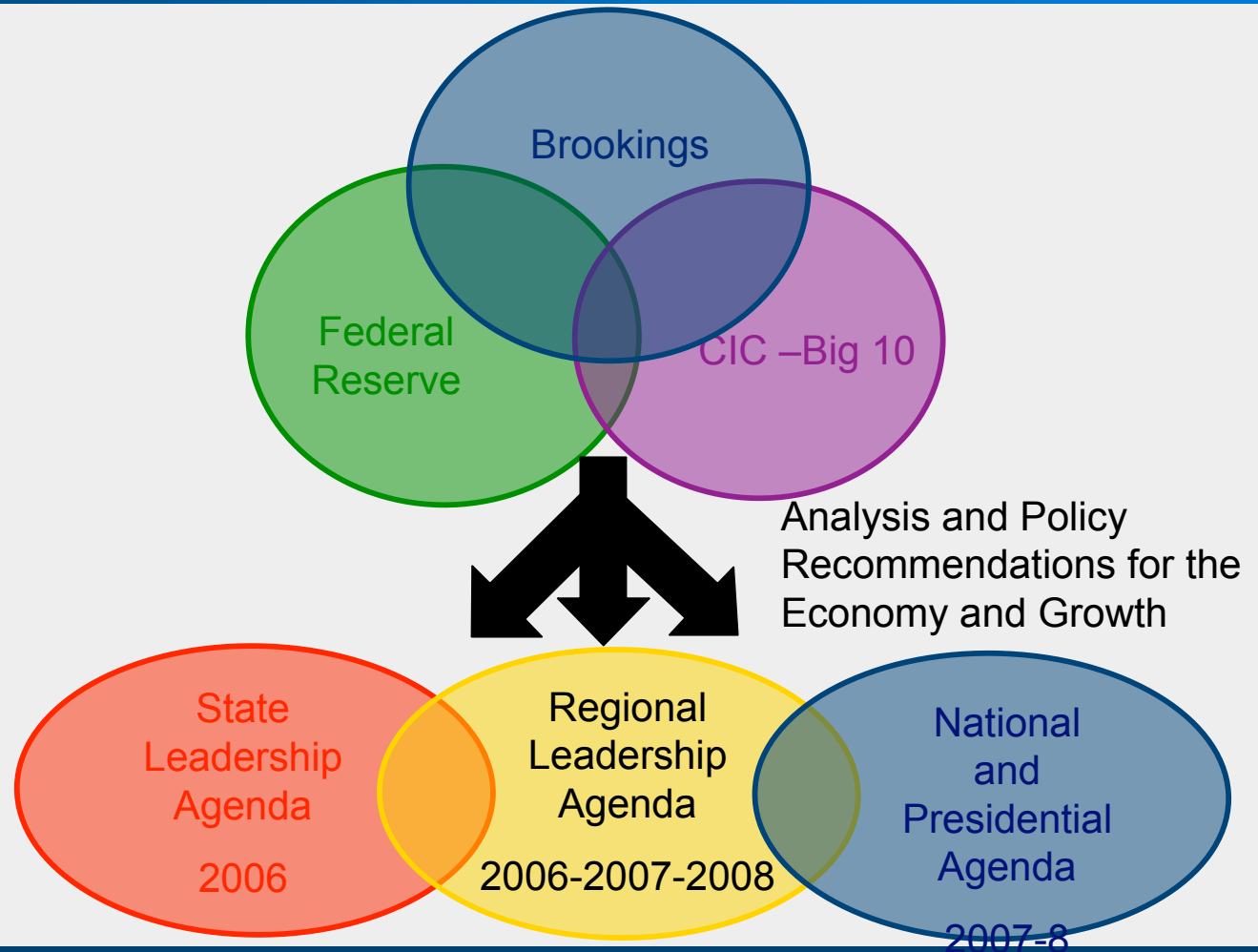
Goal of the Initiative: Improve the economic vitality of the region

- Understand the history, forces and trends shaping the economic prospects of the region and its comparative position in the global economy
- Describe what matters for economic growth and make an argument for the most effective avenues to support region's economic growth for the future
- Build support for effective economic growth strategies among state, regional and federal political, opinion, civic and business/labor leaders
- Develop policy directions and recommendations for state, regional and federal/national leadership
- Create an ongoing mechanism for nurturing the region's economic future



The Great Lakes Economic Initiative

Interlocking
Objectives and
Coordination





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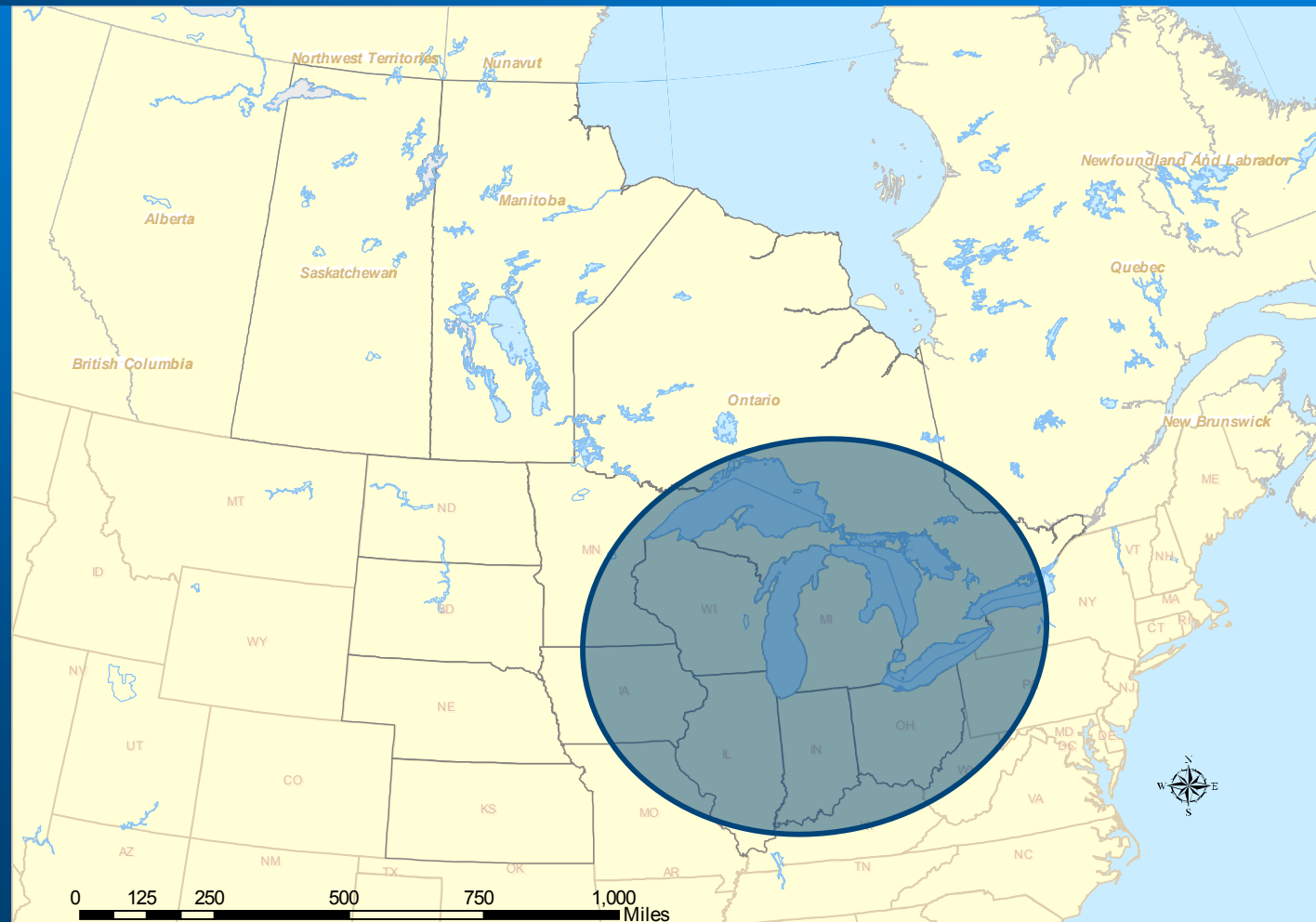
Strategic areas for focus



Great Lakes is an important economic meta region with shared history and future

The Great Lakes Meta-Region

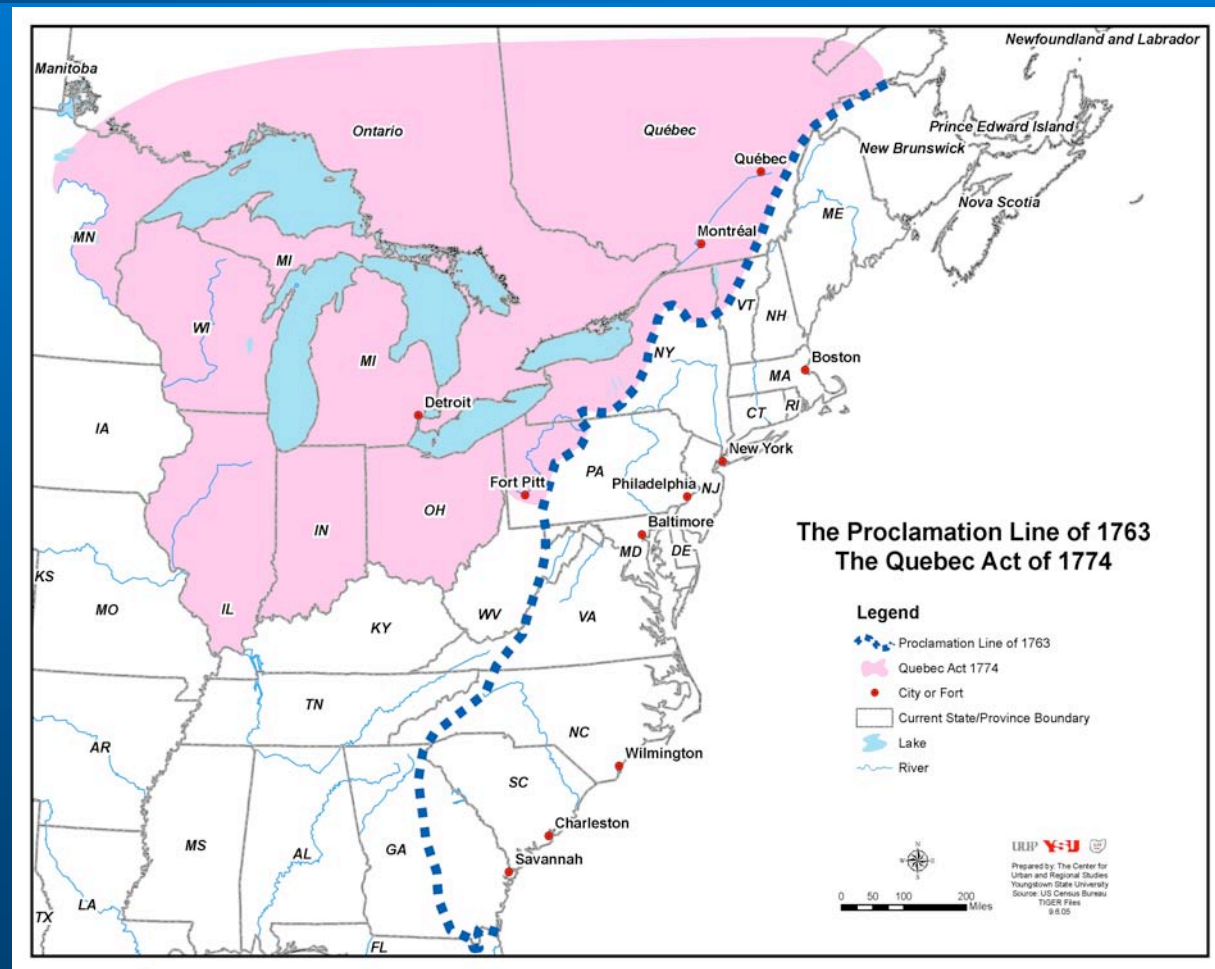
Source:
S. Swan & B.
Affolter-Caine,
March, 2005



Shared Early History

The Proclamation Line of 1763, The Quebec Act of 1774

Source: Youngstown State University, Center for Urban and Regional Studies, 2005



Shared Governance Structure

The Old Northwest Territory

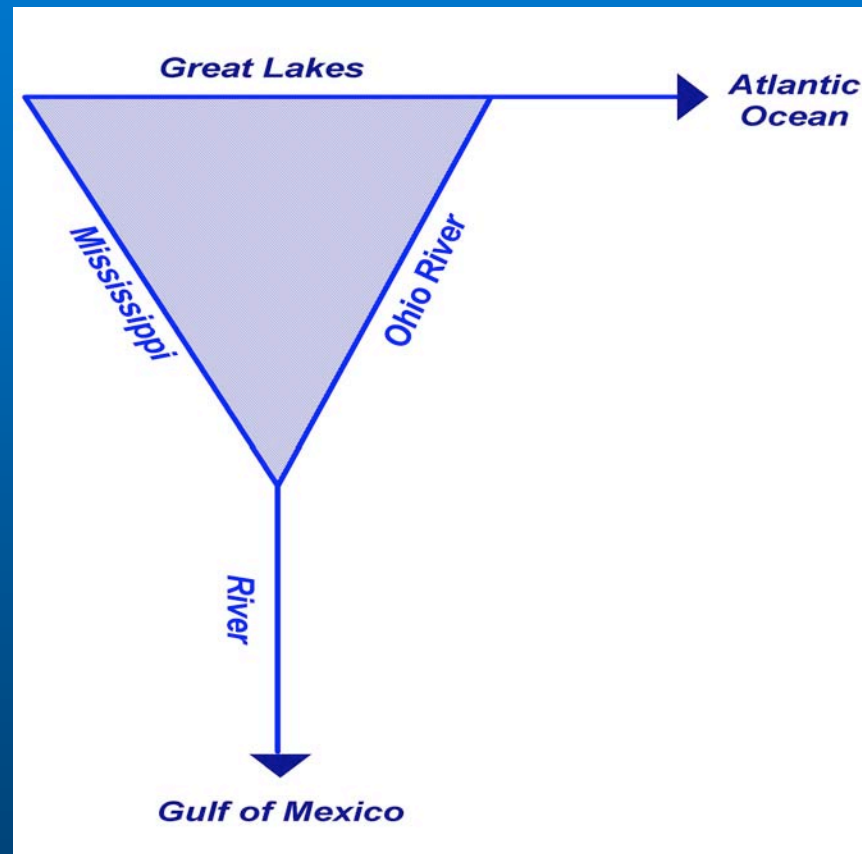
Source: Youngstown State University, Center for Urban and Regional Studies, 2005



Trade Defined and Grew the Region

Trade Diagram of the Great Lakes Region

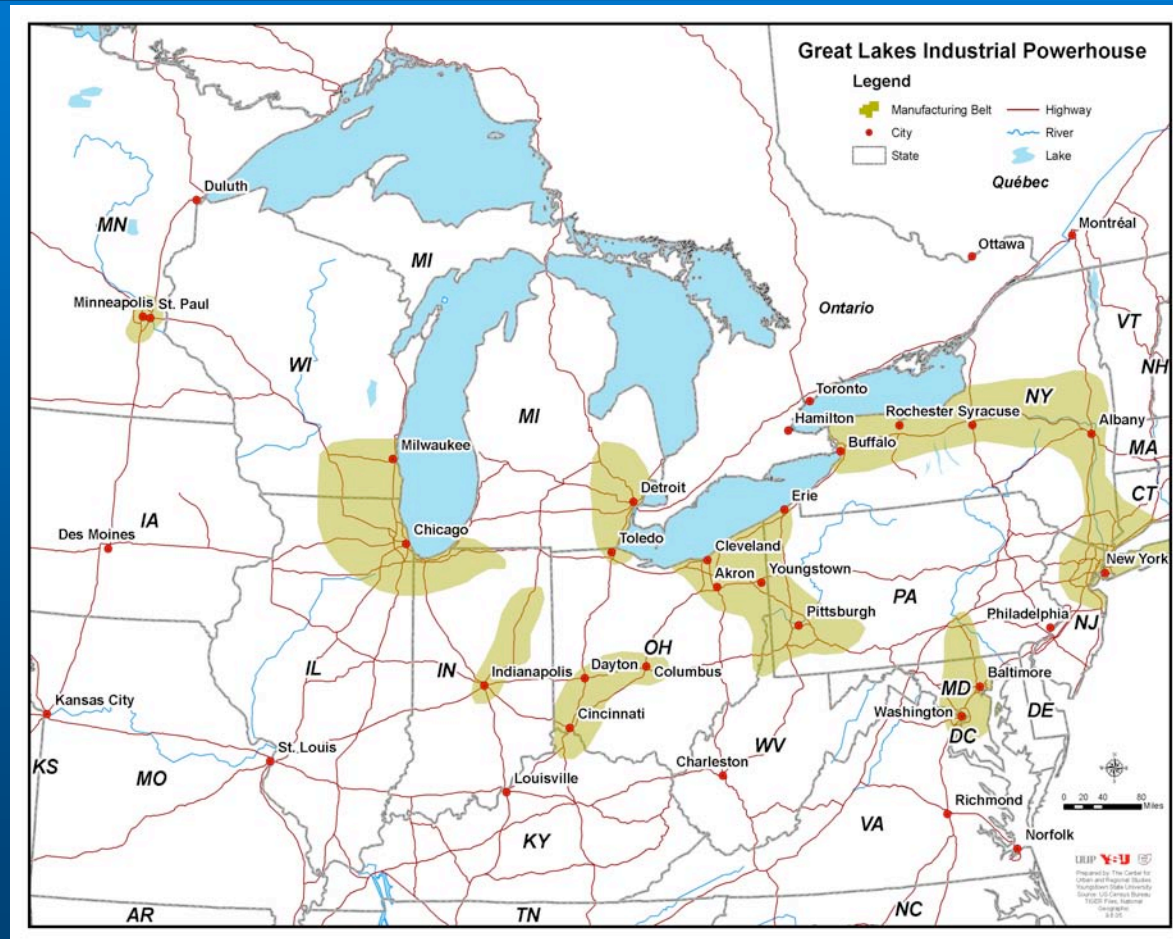
Source: Youngstown State University, Center for Urban and Regional Studies, 2005



The Great Lakes Region: Historic Industrial Powerhouse

1860-1960
Industry and
Immigration

Source: Youngstown
State University,
Center for Urban
and Regional
Studies, 2005

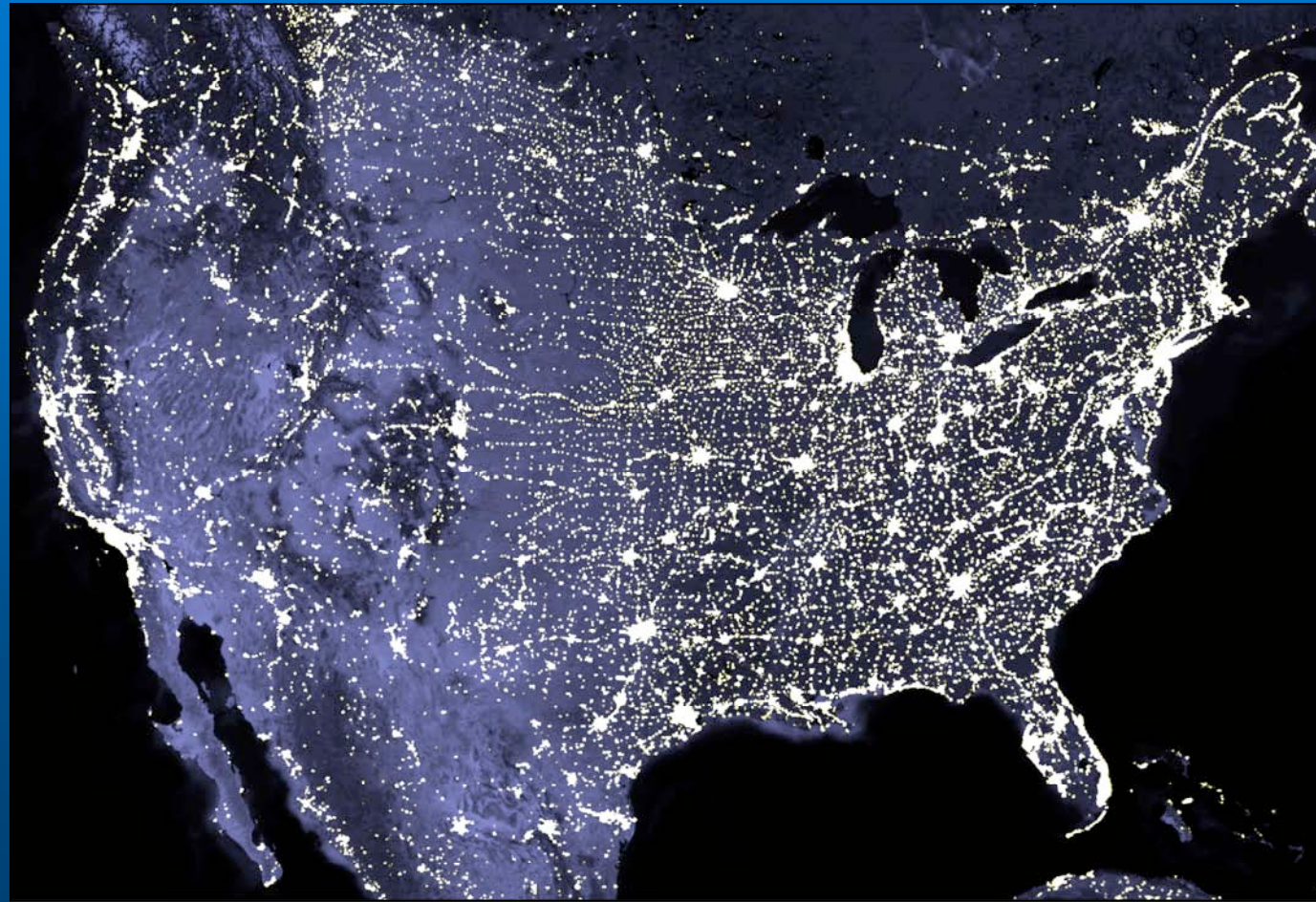




Today an arc of development rings the Great Lakes

United
States at
Night

Source:
S. Swan, UM
CSCAR, 2003

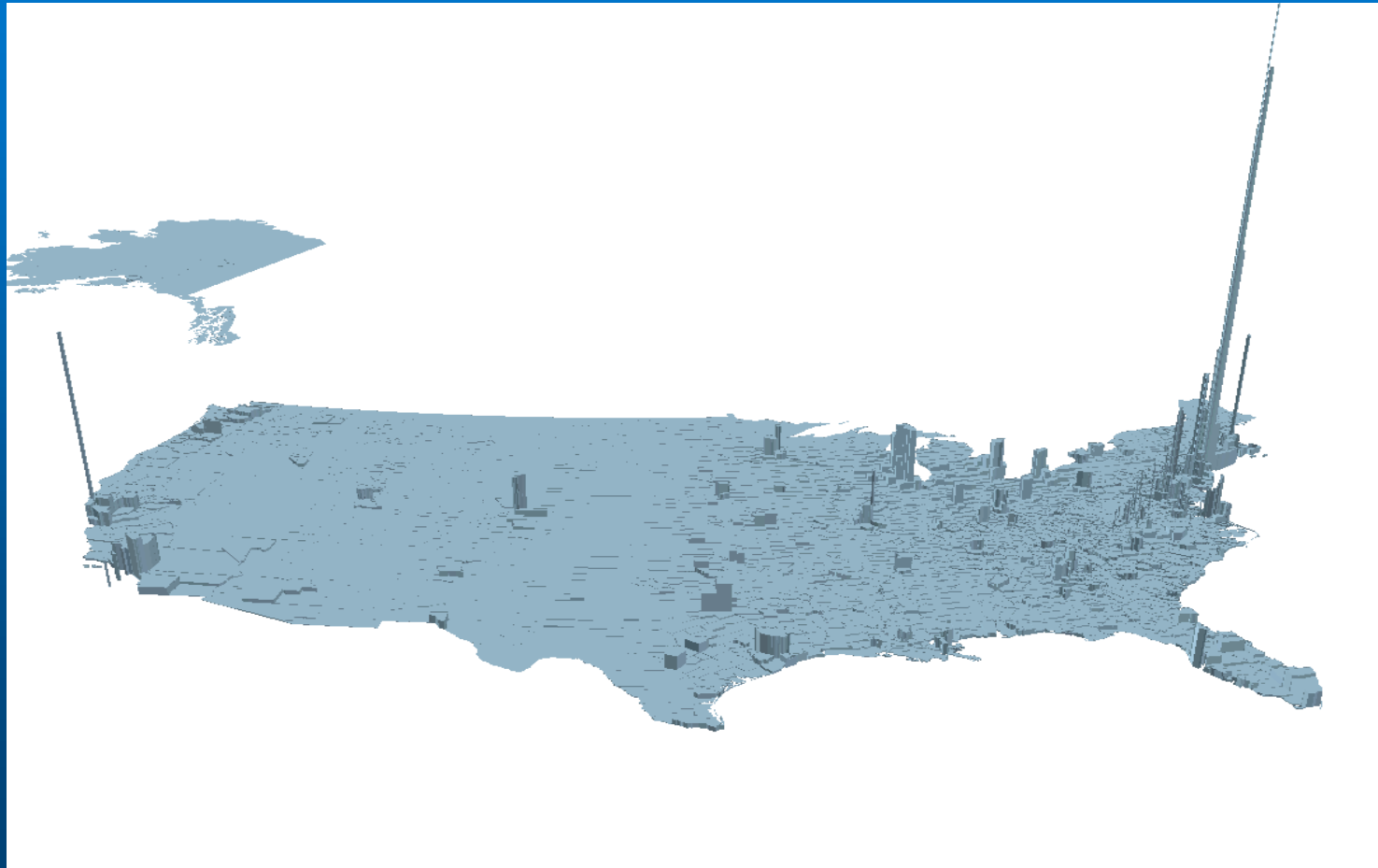




The region has significant concentrations of population,
and is growing...

Population
Density per
Square Mile

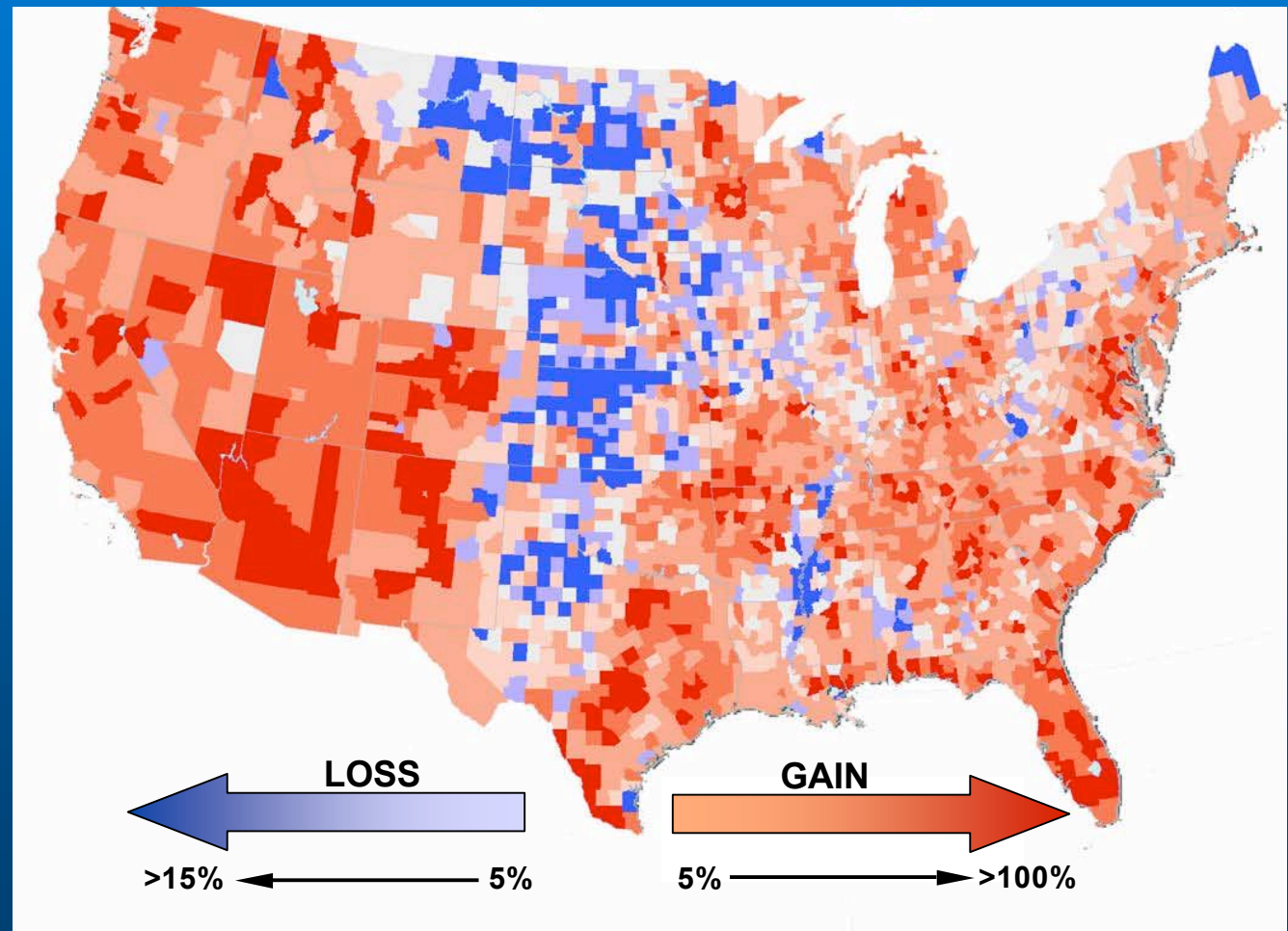
Source:
S. Swan, UM
CSCAR, 2003



The region is growing in population, although more slowly than the South or West

Population
Change, 2000-2050

Source: Woods &
Poole 2002, ESRI

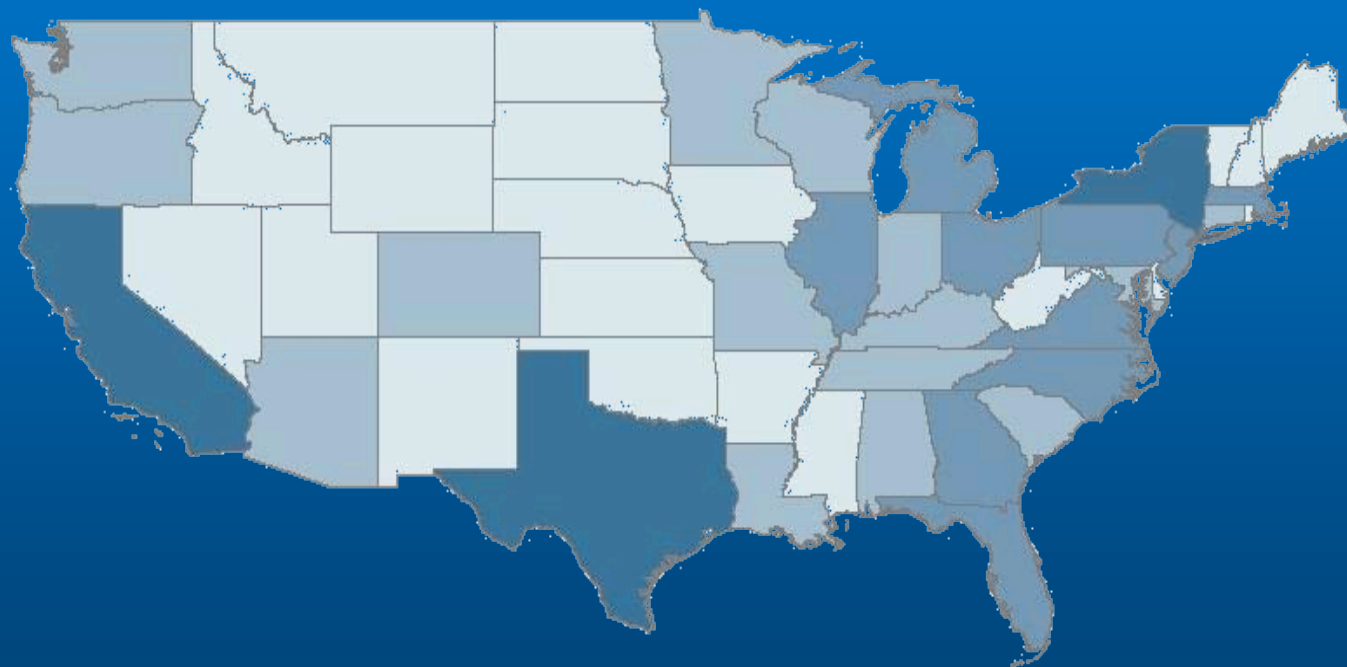




...and is still an economic engine...

Gross State Product

Scale from light blue (lowest quadrant) to dark blue (highest quadrant)

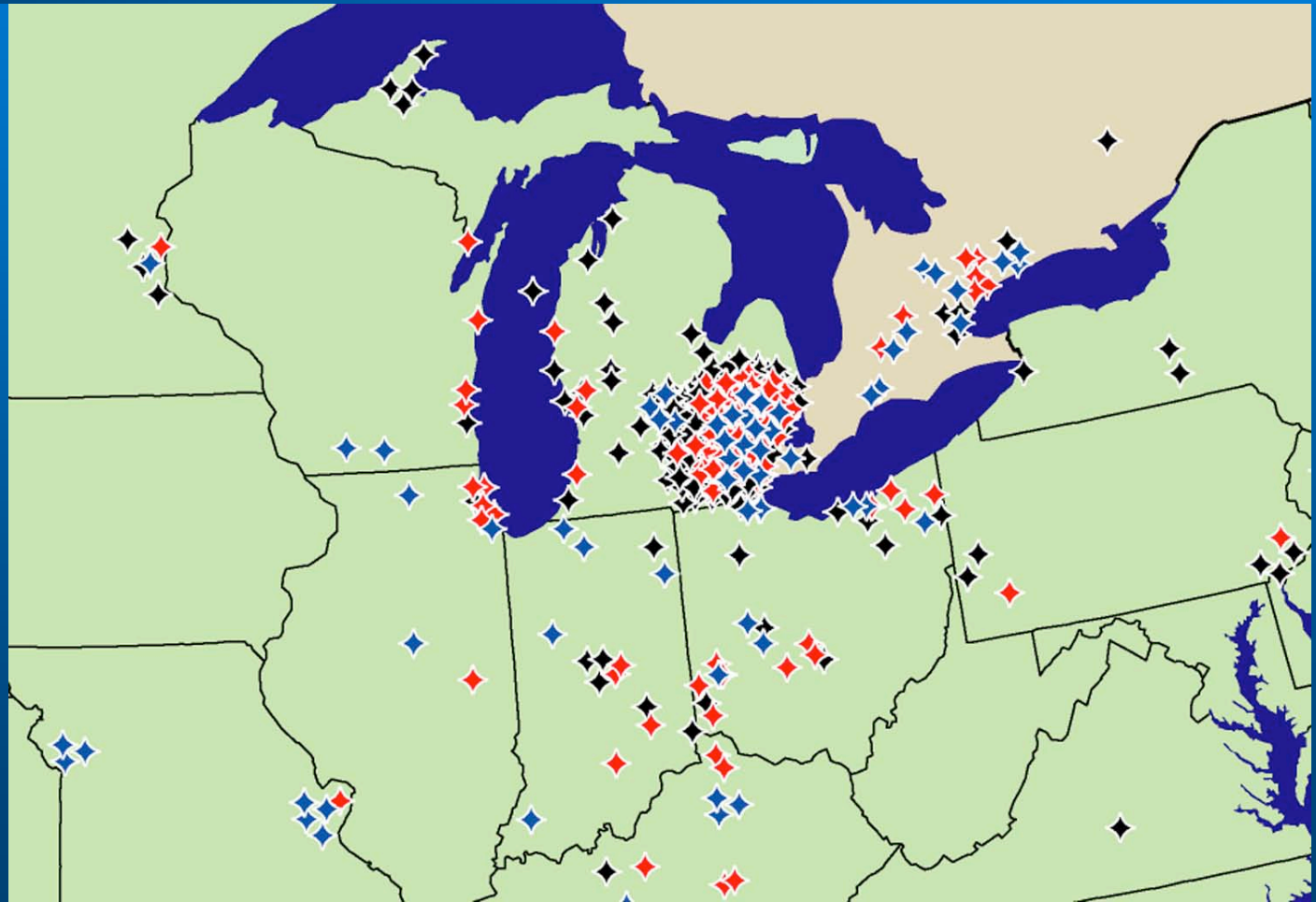




And there is regional agglomeration in key sectors, such as autos

Great Lakes Region

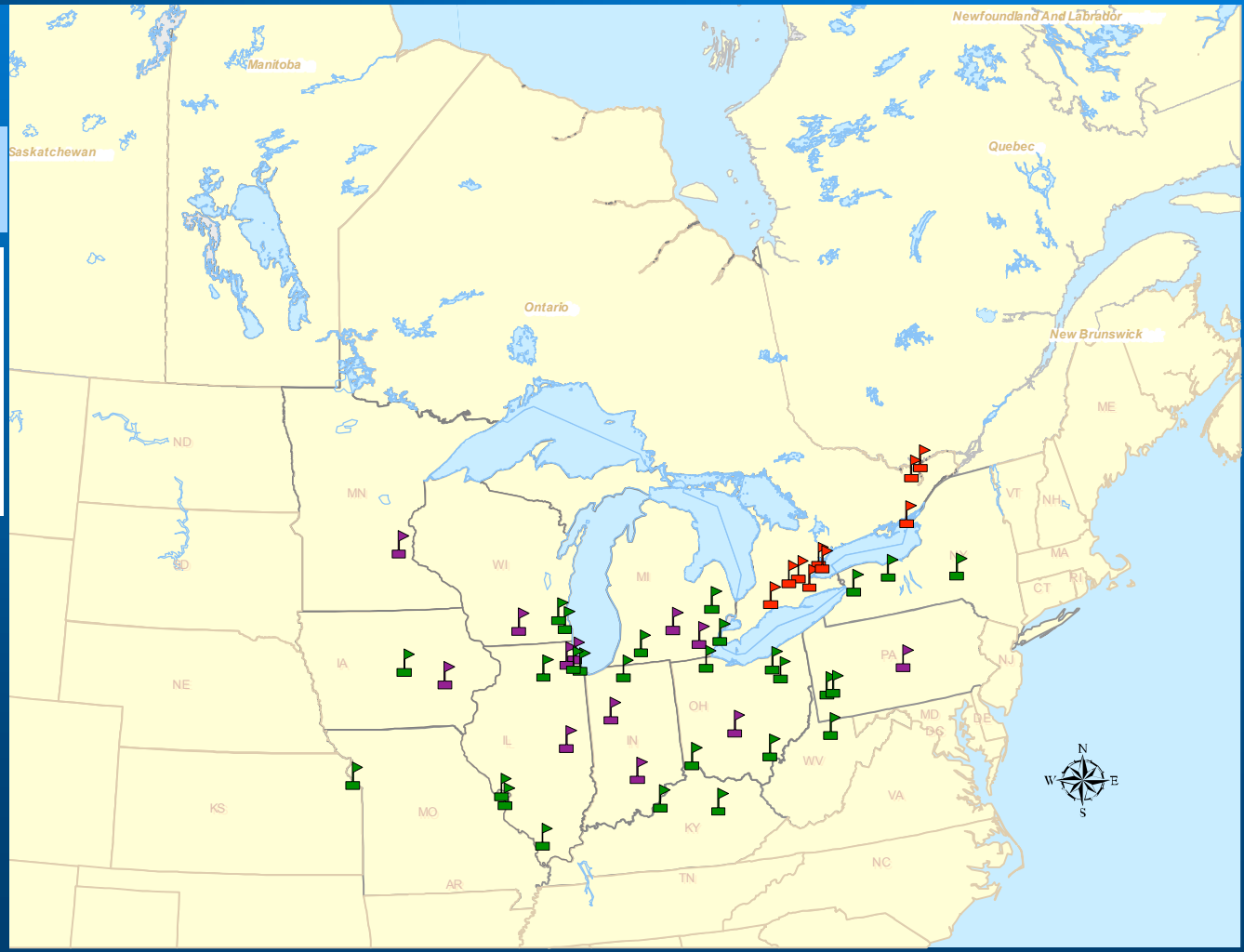
Blue: Assembly
Red: Suppliers
Black: R&D



The world's greatest concentration of research universities...

Research Universities

- ▲ Canadian Research Universities
- ▲ Research-Extensive Universities
- ▲ CIC Universities

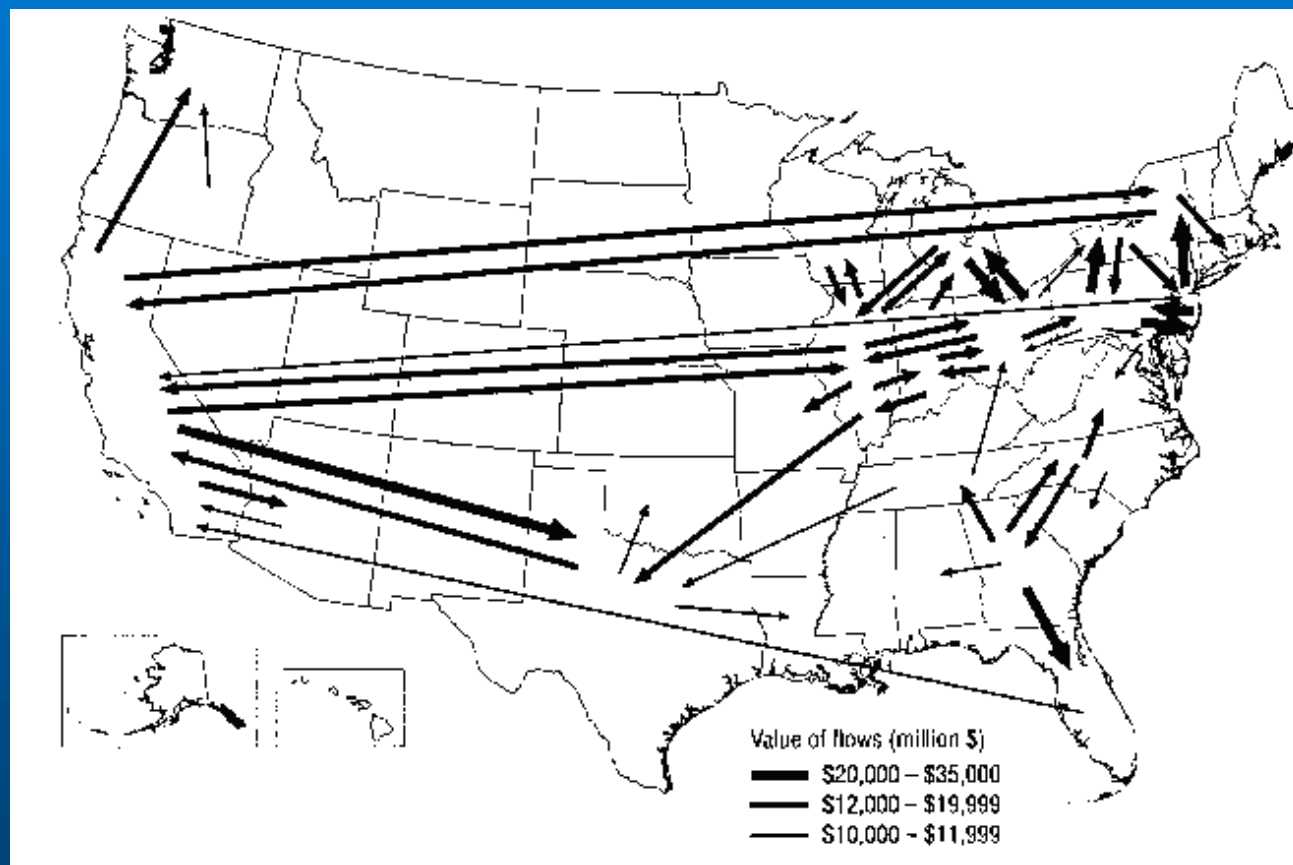


Source: S. Swan & B. Affolter-Caine, July, 2005

A Highly Integrated Economy

Trade Flows In- Out of Illinois and Midwest 1996

Source: Regional
Economics Applications
Laboratory, 2005; U.S.
Department of
Commerce, Bureau of
the Census,
Commodity Flow Survey
Data 1996



The Great Lakes: A Globally Unique Freshwater Resource

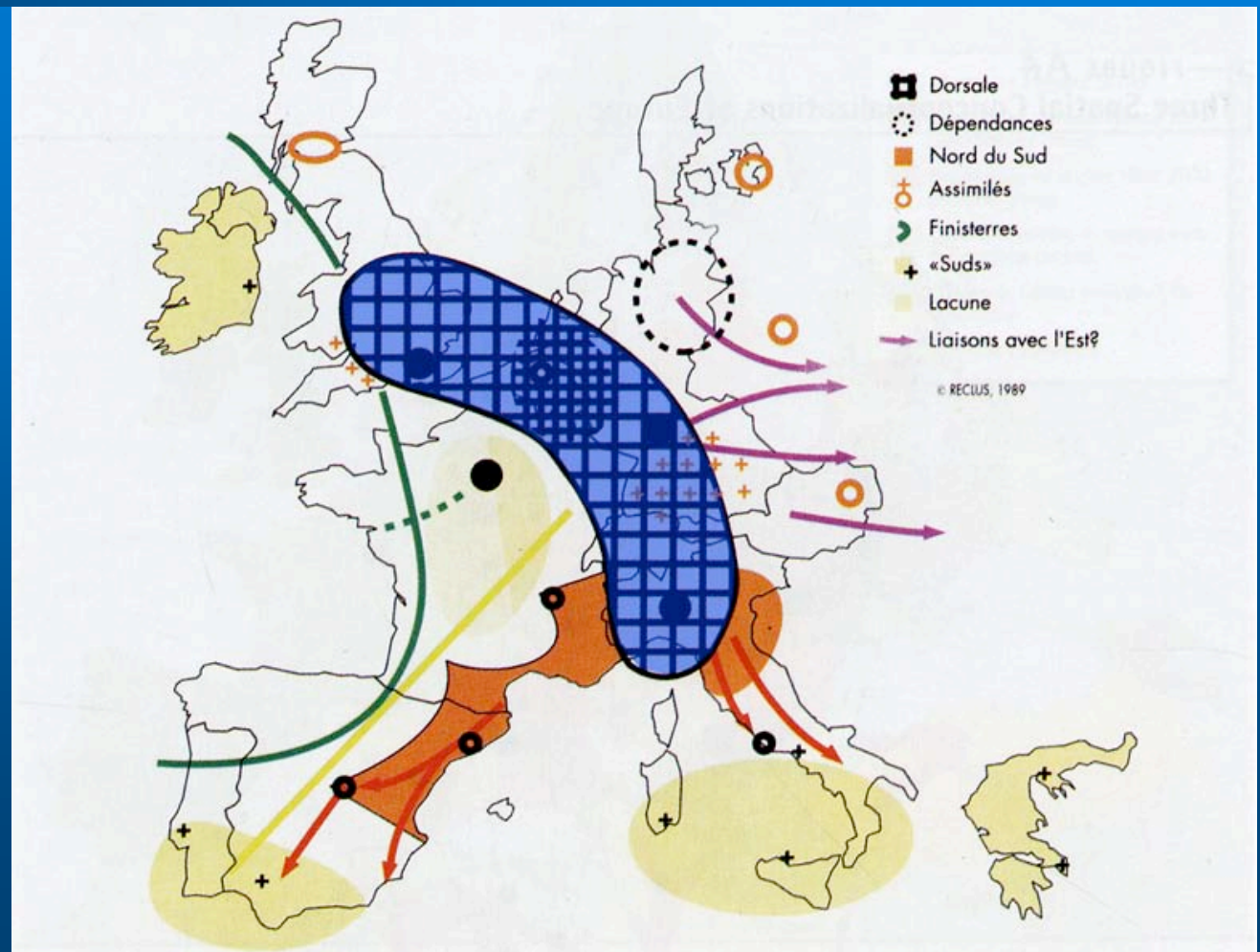
Satellite View of
Great Lakes



How Europe Conceptualizes Populations and Economies

The Blue Banana –
Indicating the (Core)
Area with Most Cities
Larger than 200,000
Inhabitants

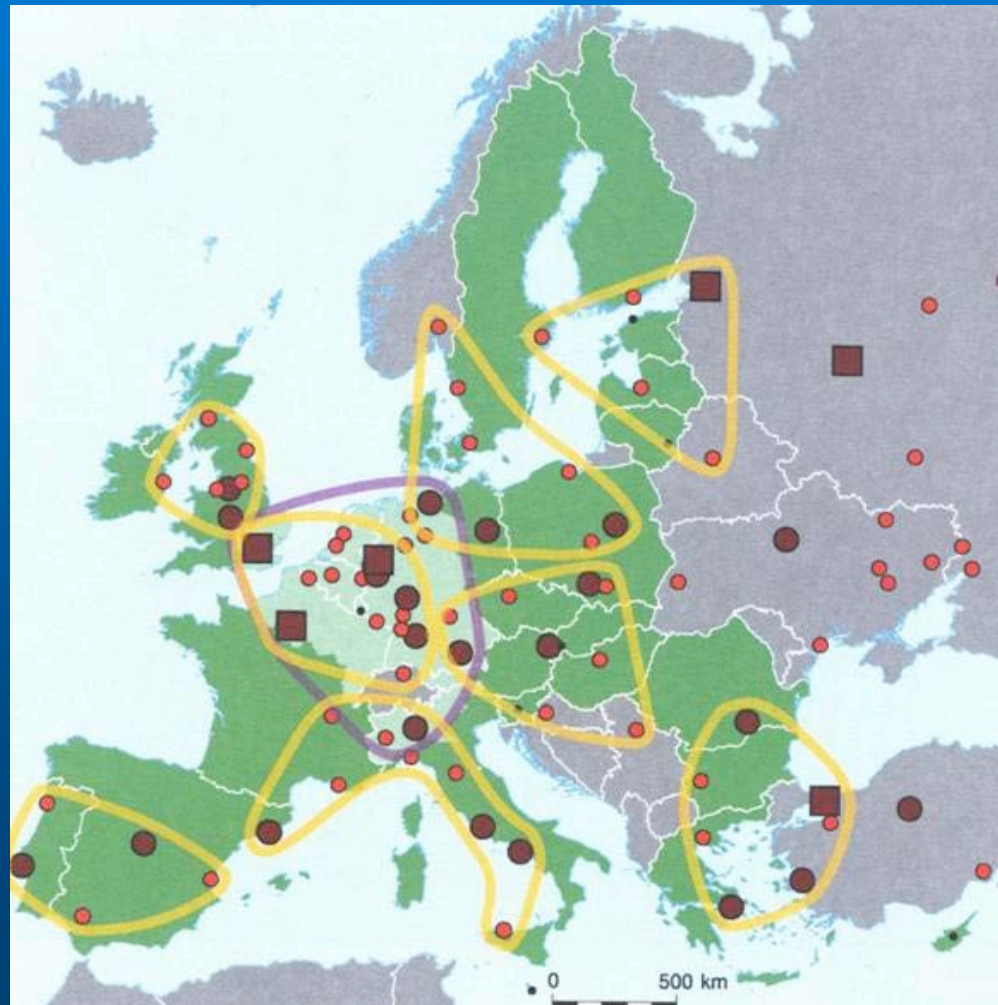
Source: Yaro, *America
2050*, Regional Plan
Association



European Mega-Regions

The Major Meta-Regions in Europe

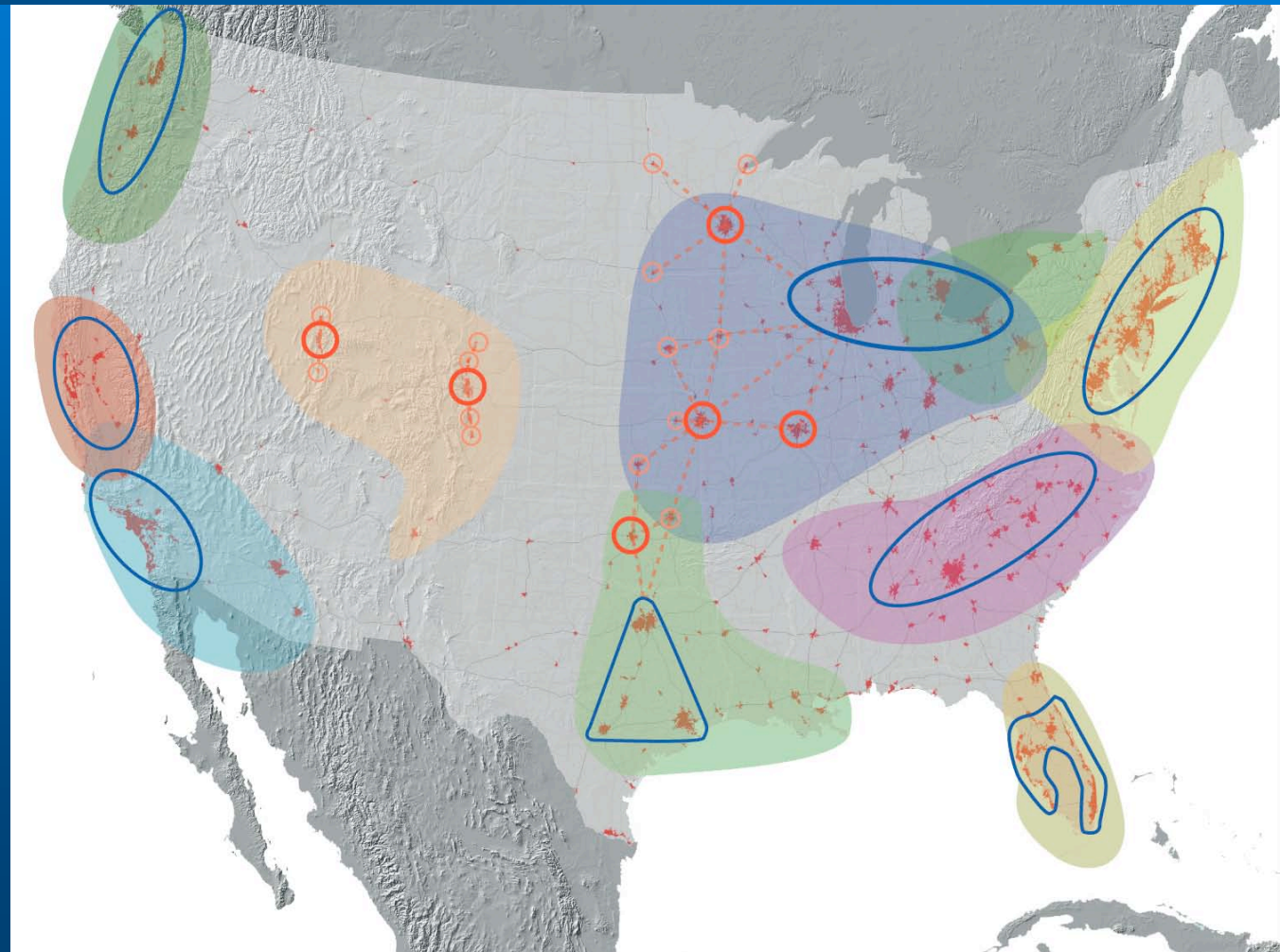
Source: Lincoln Institute of Land Policy



Applying Meta-Region Concept to the U.S.

Emerging U.S. Mega-Regions

Credit: University of Pennsylvania
Source: Yaro, *America 2050*, Regional Plan Association

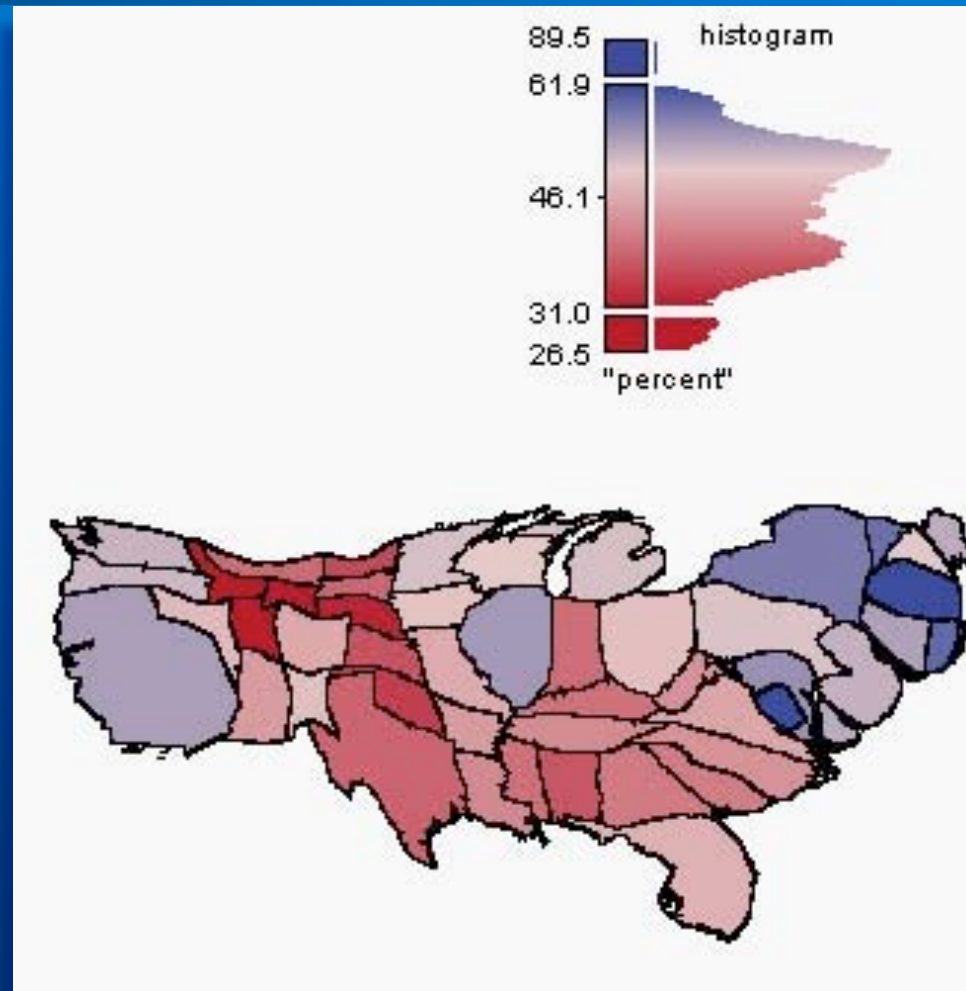




Politically Significant in National Electoral Politics

Shades of Red (Bush) and Blue (Kerry) in the 2004 Presidential Election

© Source: Sara I. Fabrikant, 2004





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What matters for Great Lakes growth in today's flat world that we can influence? How are we doing?

- *Market Foundations*
- *Innovation and Culture of Innovation*
- *Human Capital*
- *Infrastructure*
- *Metros/Cities*
- *Clusters/Sectors*
- *Place Quality*
- *Immigration and Migration*
- *A Meta-region*



Market Foundations Matter



Markets are constructs of public policy



Functioning markets conducive to growth in goods, services and capital include features:

- rule of law

- property rights

- free trade

- information exchange

- well regulated (e.g., protection of intellectual property, fraud)

- free labor – in context of regional business/labor history

- balanced tax/regulatory framework



Tax Burden Comparison

Great Lakes Region
Local and State Tax
Burden Relative to
Nation

Source: Bureau of
Economic Analysis,
Department of
Commerce, and Tax
Foundation

Rank	State	Percent State and Local Tax Burden
2	New York	12.0%
5	Wisconsin	11.4%
7	Ohio	11.0%
10	Minnesota	10.7%
13	West Virginia	10.5%
15	Kansas	10.4%
18	Indiana	10.3%
19	Kentucky	10.3%
22	Michigan	10.1%
25	Iowa	10.0%
30	Illinois	9.8%
35	Pennsylvania	9.7%
41	Missouri	9.4%



Innovation & Culture of Innovation Matters

Scientific Citations and Patents

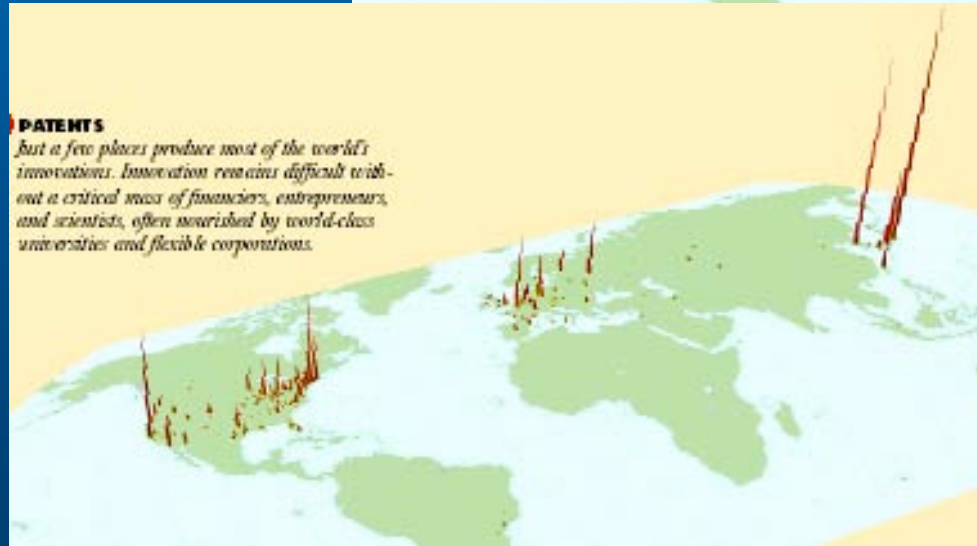
SCIENTIFIC CITATIONS

The world's most prolific and influential scientific researchers overwhelmingly reside in U.S. and European cities.



PATENTS

Just a few places produce most of the world's innovations. Innovation remains difficult without a critical mass of financiers, entrepreneurs, and scientists, often nourished by world-class universities and flexible corporations.



© Source: Richard Florida, October 2005, "The World is Spiky," *Atlantic Monthly*

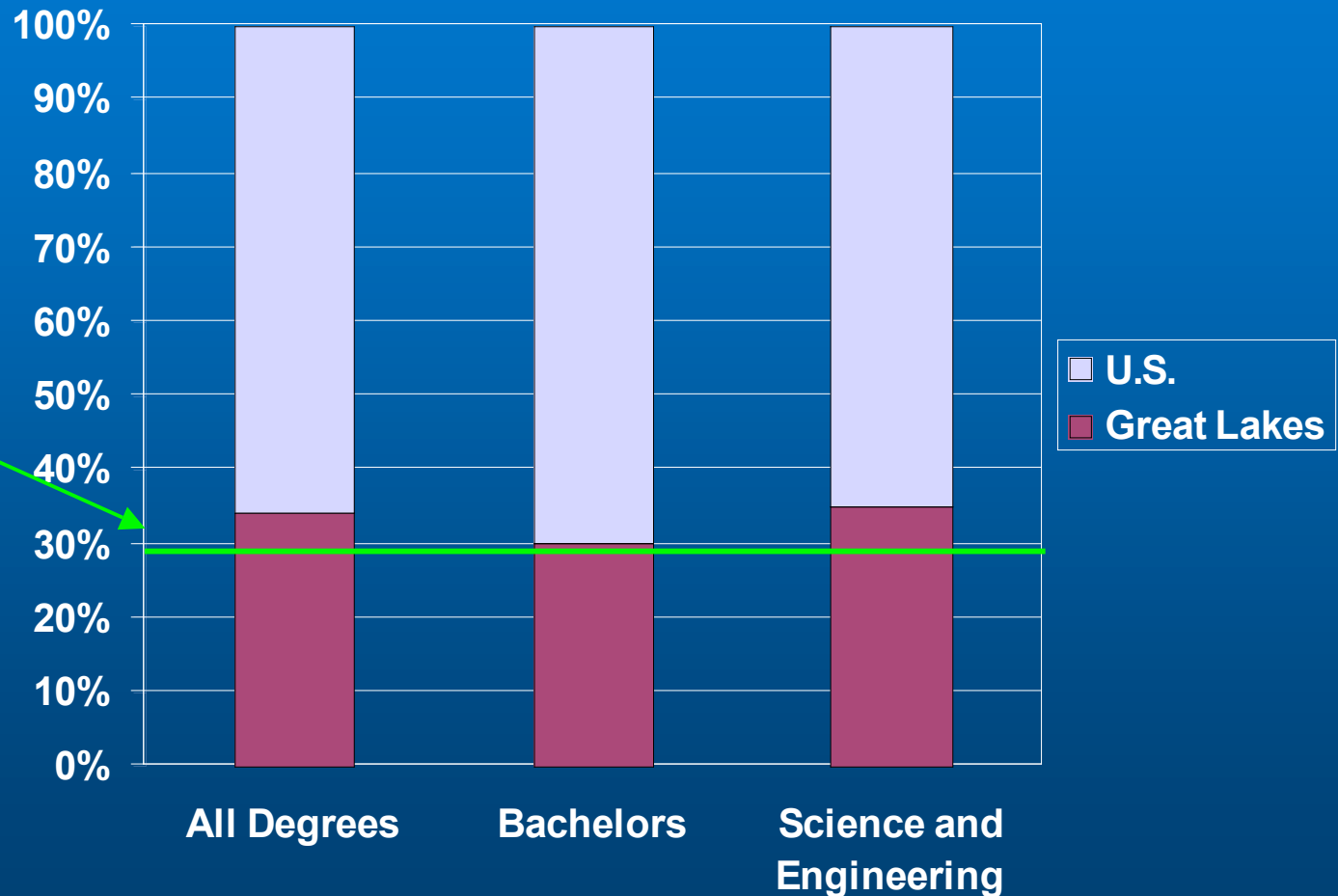


The region overall is a talent producer...

Share of U.S. degrees awarded in the Great Lakes

Great Lakes share of U.S. population

Source: National Science Foundation, *Science and Engineering Indicators Report 2004*; U.S. Department of Education, National Center for Education Statistics;

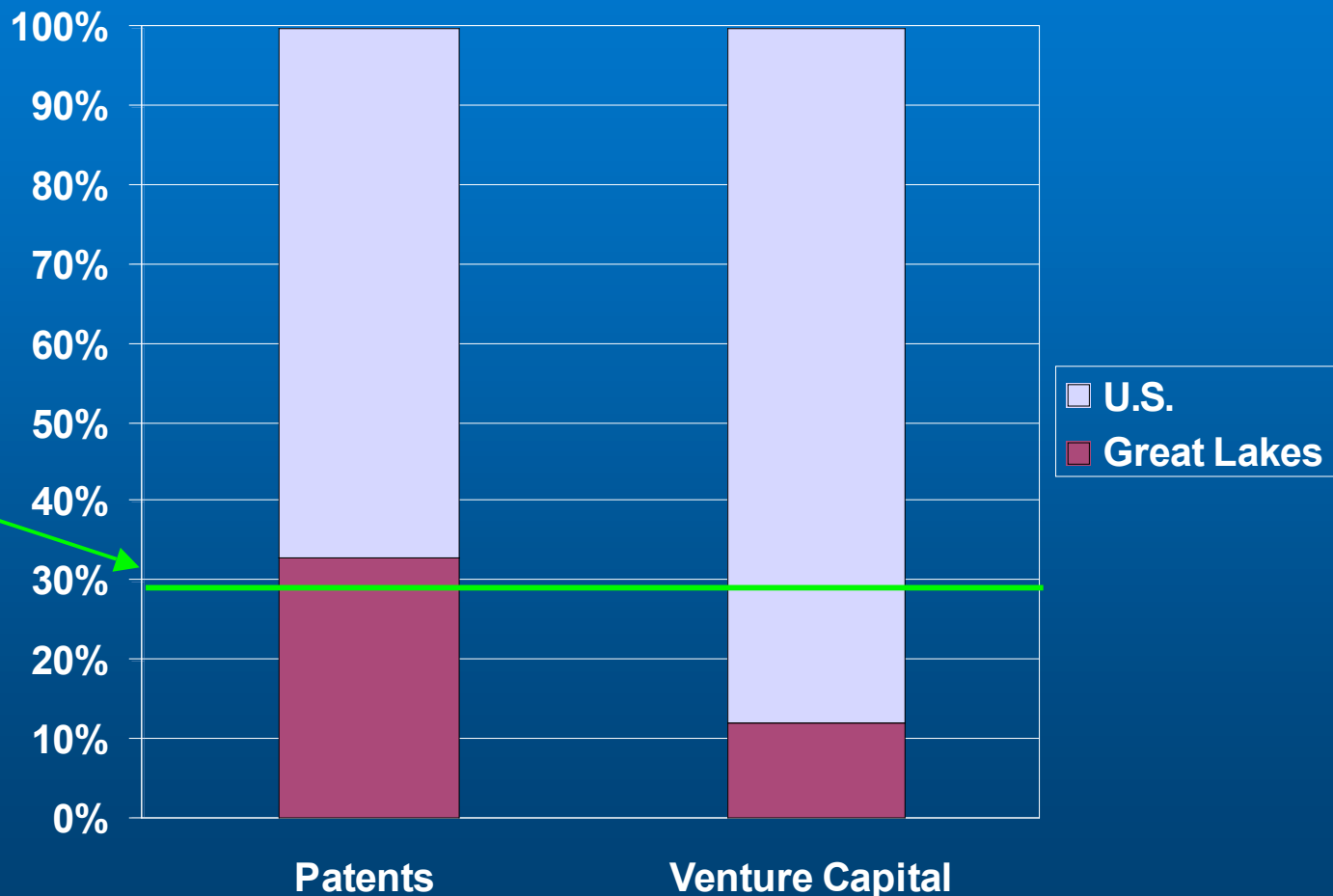




But while the region creates knowledge, it lags in commercialization

Great Lakes share of patents and venture capital

Great Lakes share of U.S. population



Source: National Science Foundation, *Science and Engineering Indicators Report 2004*



And many cities rank low in new business starts

Rank of new business starts for the 100 largest metros, 2001

Rank	Metro	New business starts per 1000 in labor force
86	Youngstown, OH	2.6
87	Milwaukee, WI	2.6
88	Canton, OH	2.6
94	Grand Rapids, MI	2.5
95	Erie, PA	2.5
96	South Bend, IN	2.4
97	Buffalo, NY	2.3
98	Syracuse, NY	2.3
99	Toledo, OH	2.3
100	Dayton, OH	2.2

Source:
Advanced Research
Technologies, 2004



... income growth lags knowledge economy leaders

Per Capita
Income (2001)
and Per Capita
Income Growth
(1969-2001)

Below Avg. Per Capita
Income Growth (1969-2001)

Above Avg. Per Capita Income (2001)

Washington
New York
Illinois
California
Delaware
Alaska

District of Columbia
Massachusetts
Colorado
Connecticut
Virginia
New Hampshire

New Jersey
Minnesota
Maryland

Above Avg. Per Capita
Income Growth (1969-2001)

Pennsylvania
Oklahoma
Utah
Wisconsin
Missouri
Rhode Island
Oregon
Idaho
Arizona
Indiana
Iowa
Montana

Ohio
Michigan
Nevada
Hawaii

Georgia
Tennessee
North Carolina
Alabama
Mississippi
South Dakota
South Carolina
Arkansas
Maine
Texas
Vermont
Wyoming

Louisiana
Kentucky
North Dakota
West Virginia
New Mexico
Nebraska
Kansas
Florida

Below Avg. Per Capita Income (2001)

Source: Glazer and
Grimes, 2004



Innovation Economy Lags

Michigan
Entrepreneurship
Scorecard
2004-2005

Source: Toft, SBAM,
2004

State (Partial)	2004
New York	B-
Kentucky	C
Kansas	C-
Pennsylvania	C-
Missouri	D
Iowa	D
West Virginia	D-

*Entrepreneurial
Index*

← Worst Grade

State (Core)	2004
Minnesota	C
Wisconsin	C-
Illinois	C-
Ohio	D+
Indiana	D
Michigan	D

Michigan's
Overall
Performance

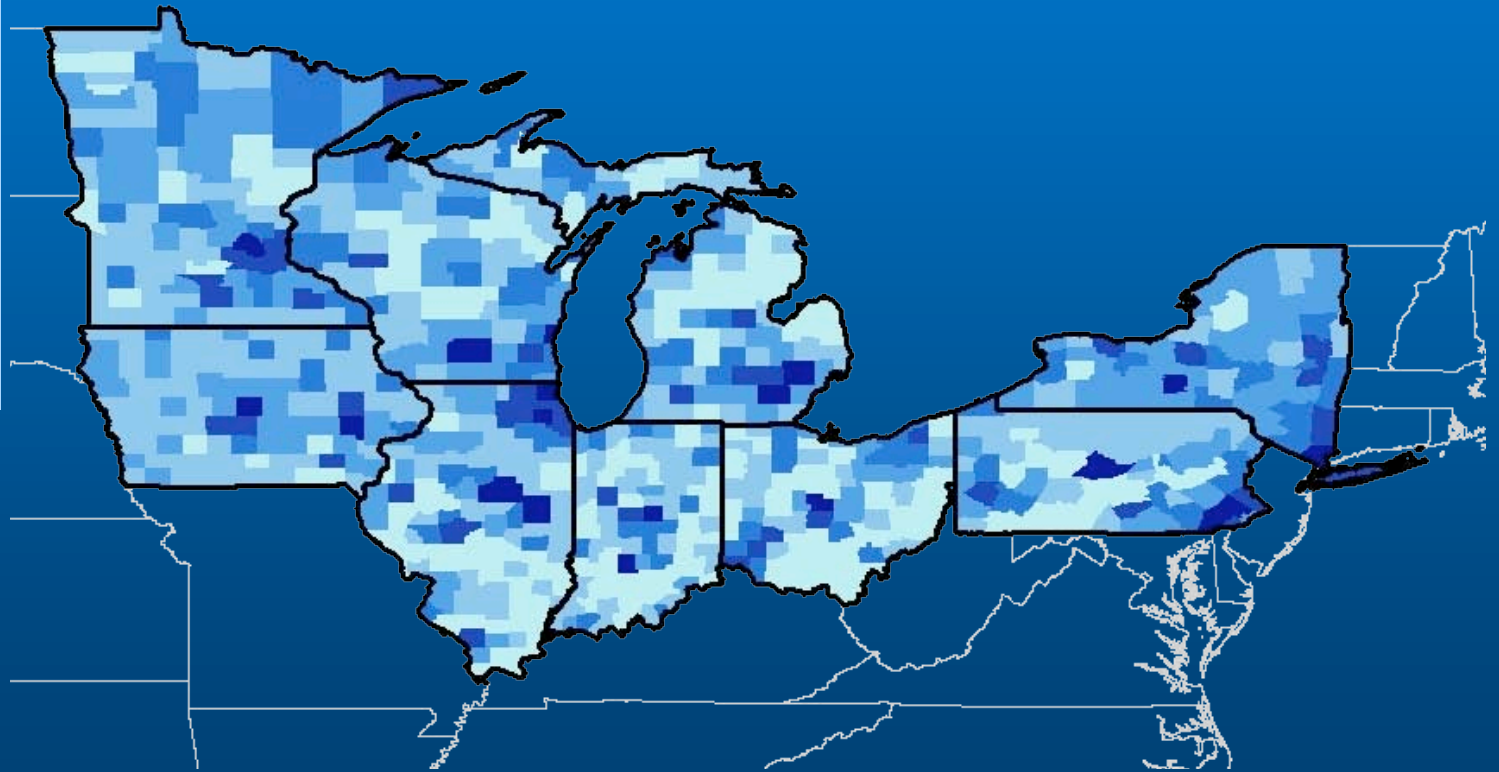
OVERALL	C-	<i>Second Order Drivers:</i>	
Entrepreneurial Dynamism	F	Education and Workforce Development	B-
<i>First Order Drivers:</i>		Business Costs and Productivity	C
Small Business and Entrepreneurial Activity	D	Government and Regulatory Environment	B-
Entrepreneurial Climate/Institutional Environment	C	Infrastructure	F
Entrepreneurial Index	D	Quality of Life	C



Human Capital Matters – Educated communities are “compounding” – attracting more talent

Educational Attainment 2000, Talent agglomeration is compounding in relatively few metros and college towns

Scale from light blue (lowest fifth) to dark blue (highest fifth)

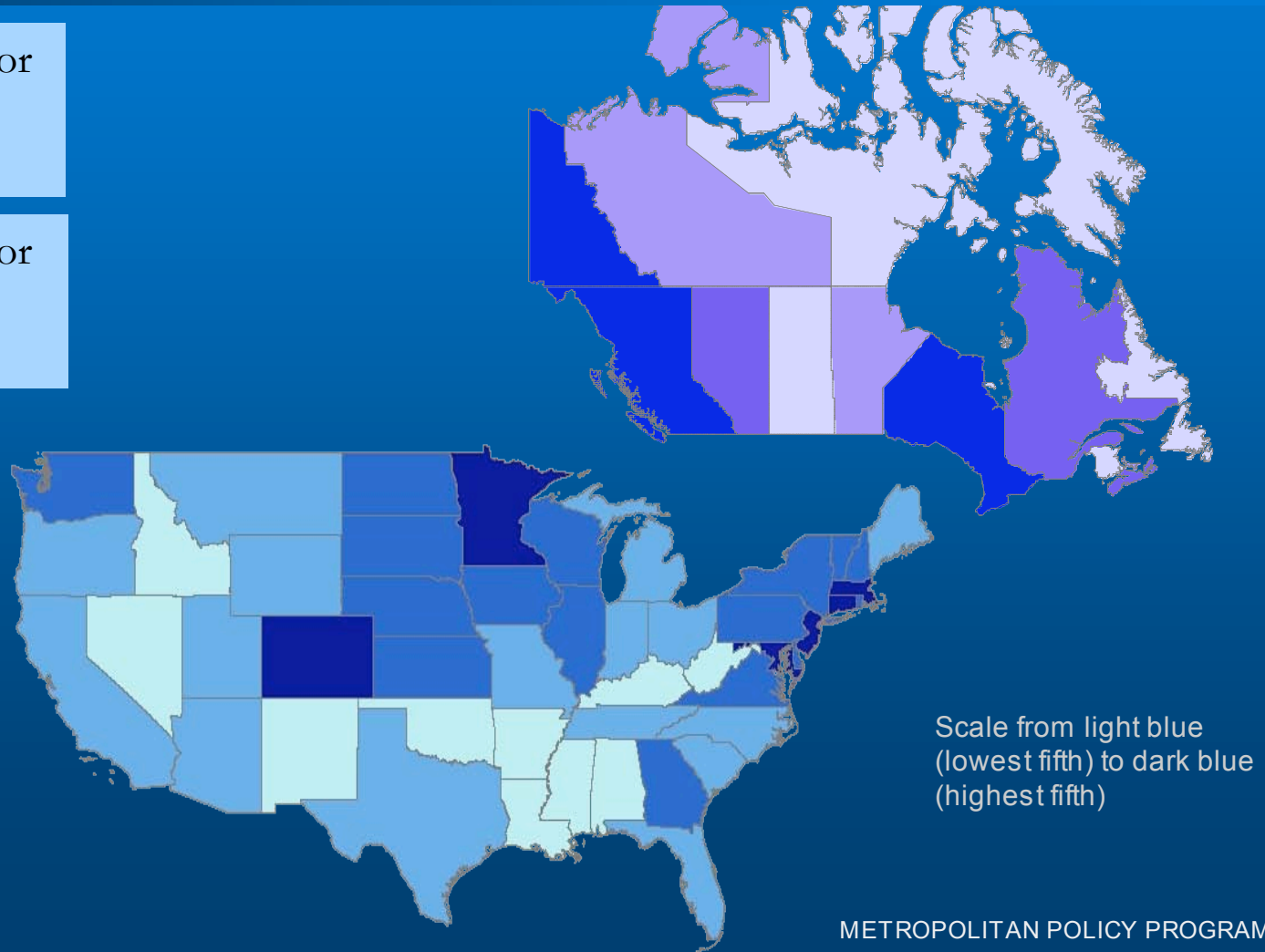




Educational attainment is mixed in the region

Educational Attainment for
Persons 15 Years of Age
and Older, 2001 (Canada)

Educational Attainment for
Persons 25 Years of Age
and Older, 2000 (U.S.)



Source:
S. Swan & B. Affolter-Caine,
July, 2003



Infrastructure Matters

Human Transportation Infrastructure

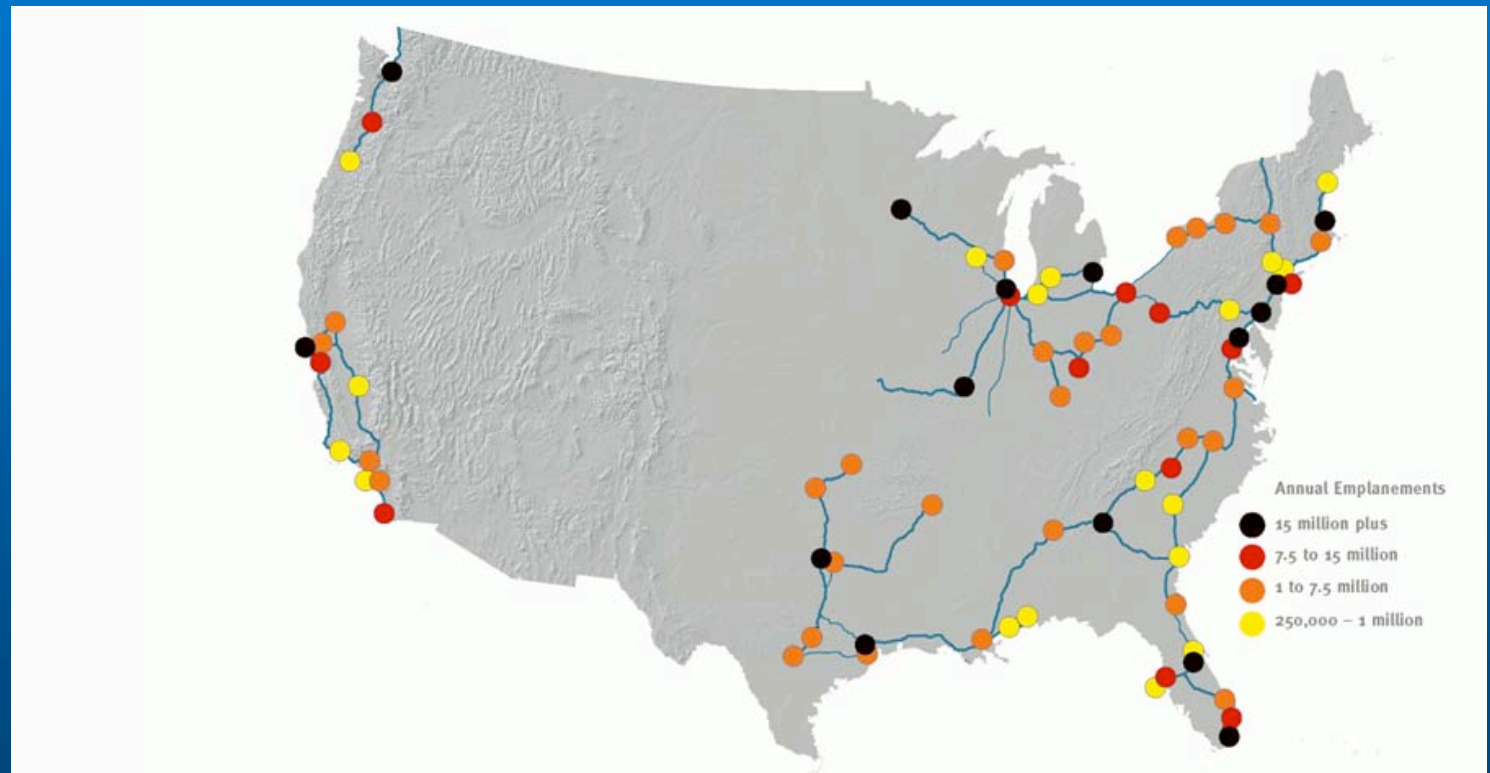
Source:
S. Swan & B.
Affolter-Caine, July,
2005



Shared Infrastructure Allows for Intermodal Transportation within “Supercities”

Airports Within
10 Miles of
Planned or
Potential HSR

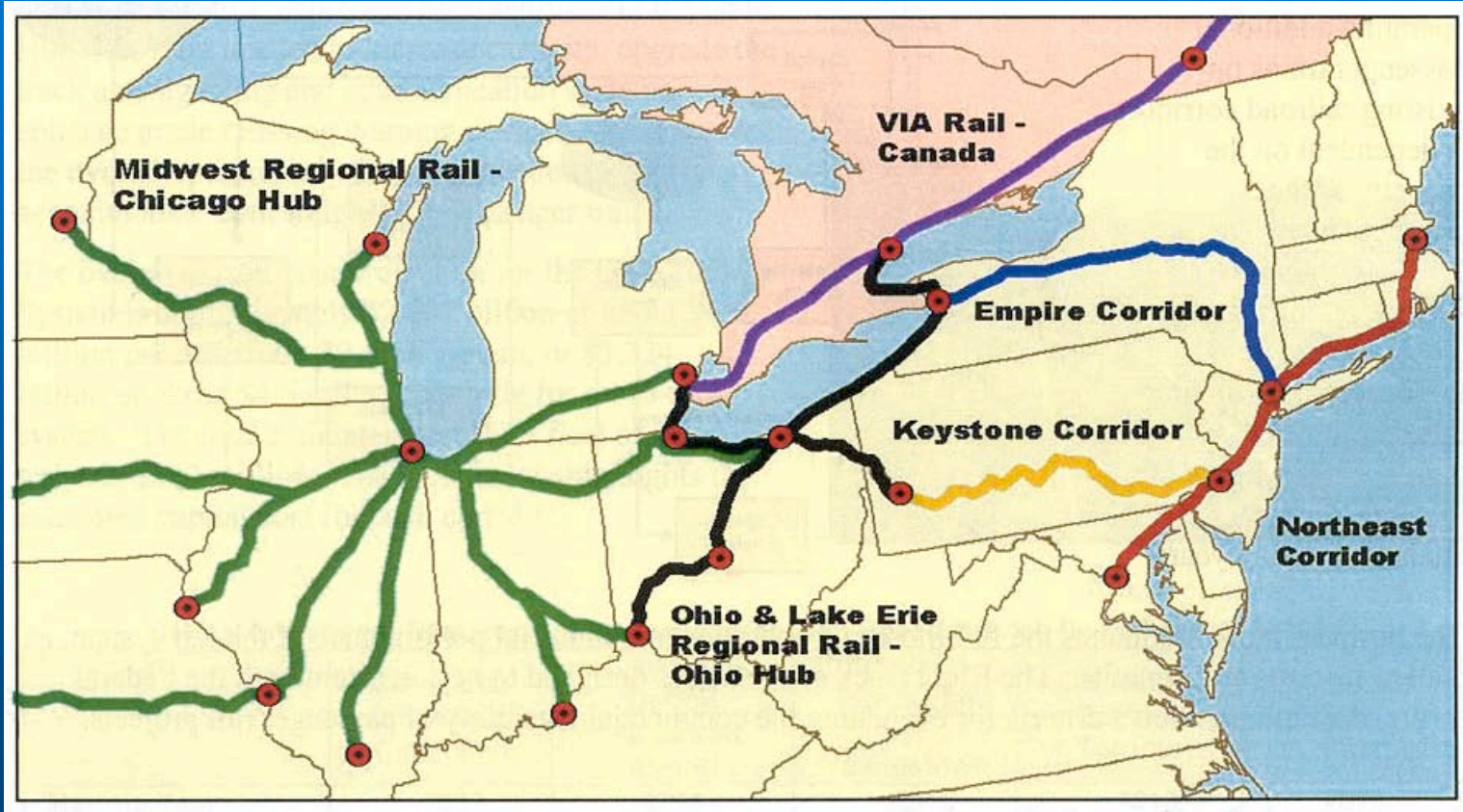
Source: Yaro, *America
2050*, Regional Plan
Association



Shared Future – Human Transportation Potential

Midwest Rail Initiative

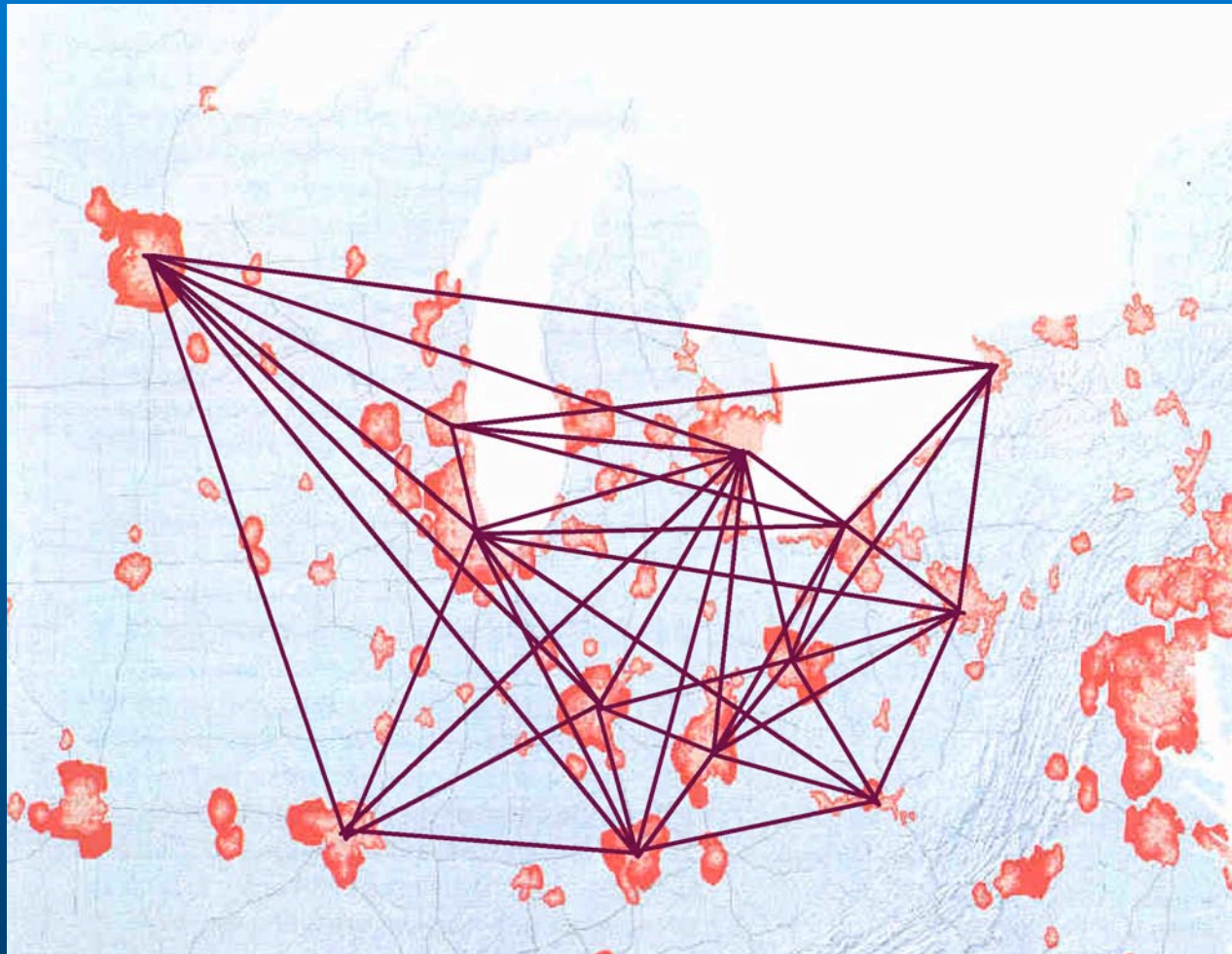
Source: Youngstown State University, Center for Urban and Regional Studies, 2005



Shared Future – Information Technology Potential

A Networked Region

Source: Youngstown State University, Center for Urban and Regional Studies, 2005

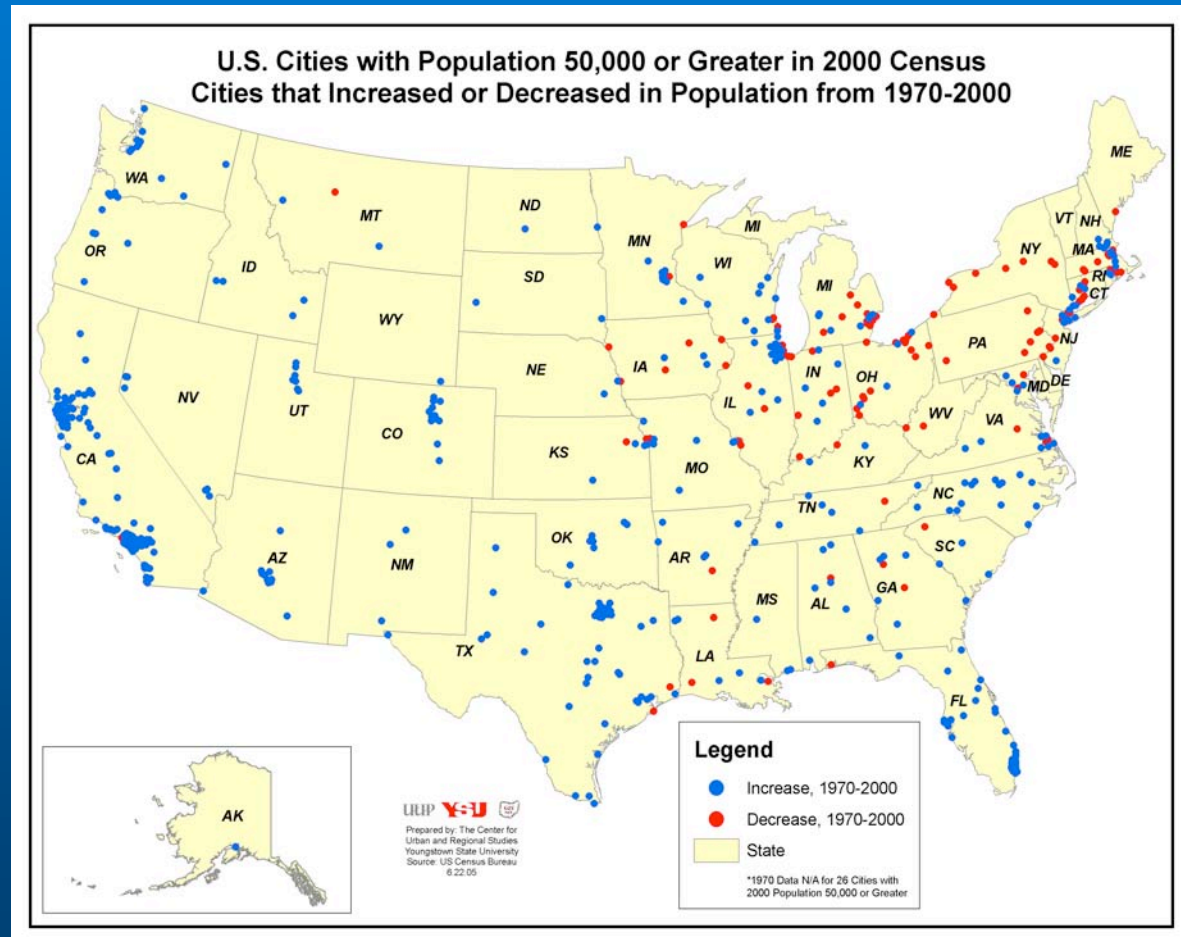




Immigration/Migration Matters

1970 -2000
Disinvestment
and Decline

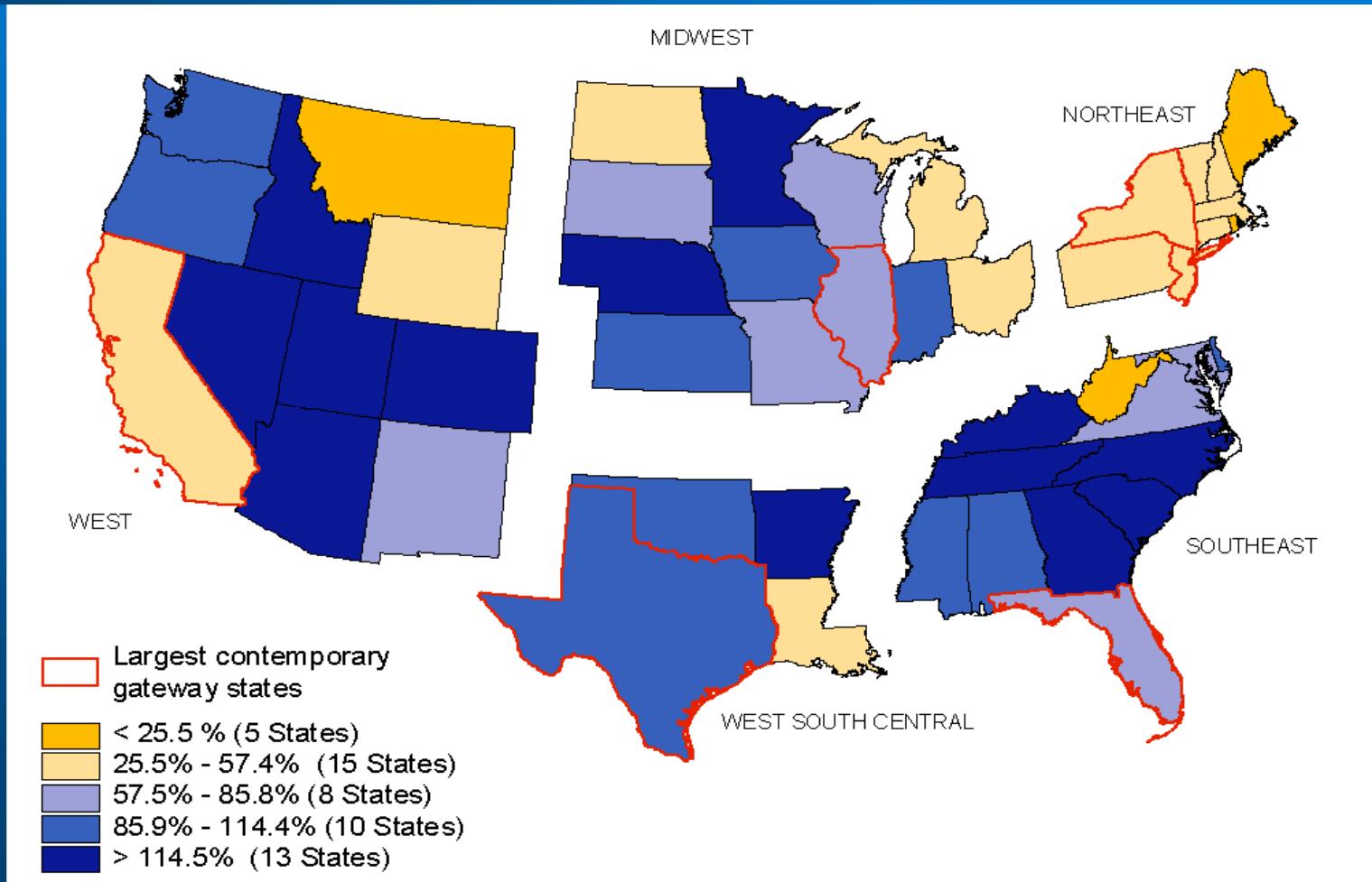
Source: Youngstown
State University,
Center for Urban
and Regional
Studies, 2005





Few of the US Heartland states are immigrant gateways...

Percent change in foreign-born population by states



Source: Brookings



...nor are many US Heartland cities serving as immigrant gateways

Based on Foreign-born Population



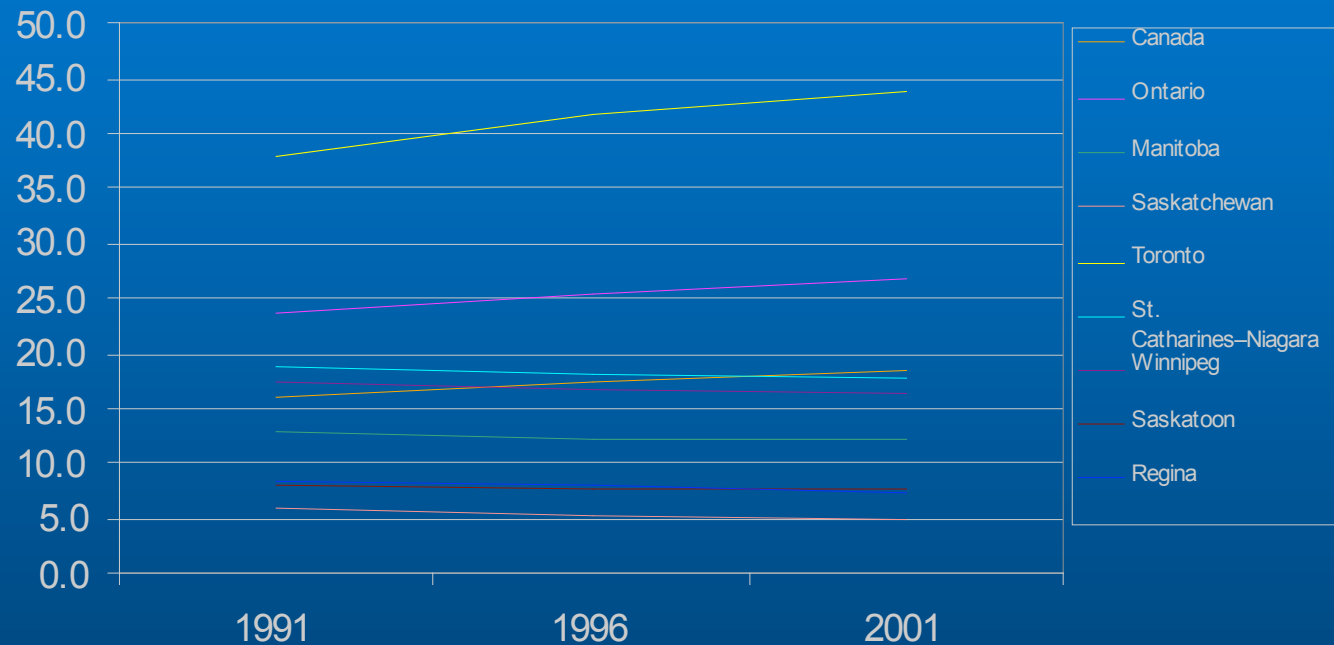
Immigrant Gateway Classifications

Source:
The Brookings
Institution



A key driver to Canada's growth is immigration

Foreign-born
Canadian
residents as
proportion of
population

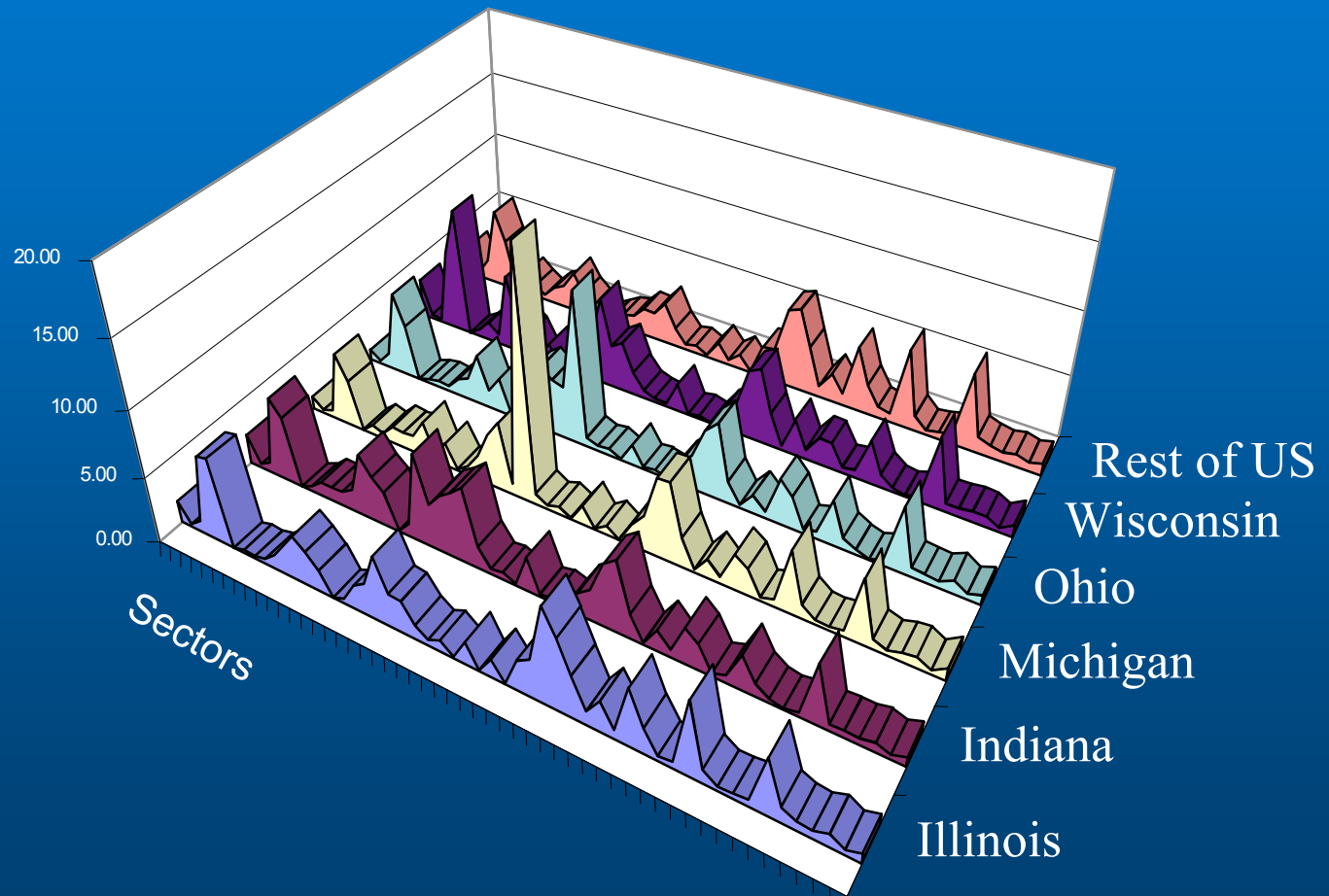


Source:
Statistics Canada



Sectors/Clusters Matter – Parts of region mfg. reliant

Shares of State
GSP by 2-Digit
Industry



Source: Regional
Economics
Applications Laboratory



Energy Industry is potentially huge

Net Energy
Generation and
Consumption, 2002

The greater Great Lakes Region
generates 38% of the nation's net
industry electricity...

State	Primary Source	Net Generation		Consumption	
		(MWh)	Rank	(MWh)	Rank
Pennsylvania	Other	204,122,080	2	140,786,670	6
Illinois	Nuclear	187,814,268	4	137,665,583	7
Ohio	Coal	146,863,692	6	155,999,230	4
New York	Other	139,221,428	7	143,563,666	5
Indiana	Coal	125,525,338	10	101,428,550	11
Michigan	Coal	117,063,685	12	107,310,696	10
West Virginia	Coal	94,714,418	17	28,463,122	35
Kentucky	Coal	92,078,359	19	87,266,835	14
Missouri	Coal	81,916,661	20	75,000,629	19
Wisconsin	Coal	58,009,442	24	66,999,296	21
Minnesota	Coal	52,162,033	25	62,162,361	24
Kansas	Coal	46,940,923	29	36,713,540	32
Iowa	Coal	42,419,062	33	40,897,543	31

Source: EIA
State Energy
Data, 2004
Report



Photo: *Spirit of the Flame*,
1997 Kerry Mitchell

...and consumes
34% of the
nation's total
electricity
consumption



Health Industry Sector – region could lead in health products

2005 Hospital
Rankings by *U.S.
News and World
Report*

*The Great Lakes
Region is Home to
Six Top Research
Hospitals in America*



Photo: University of Michigan Hospitals

These hospitals
boast a
combined 61
specialties,
*many ranking
in the top ten* of
their respective
areas



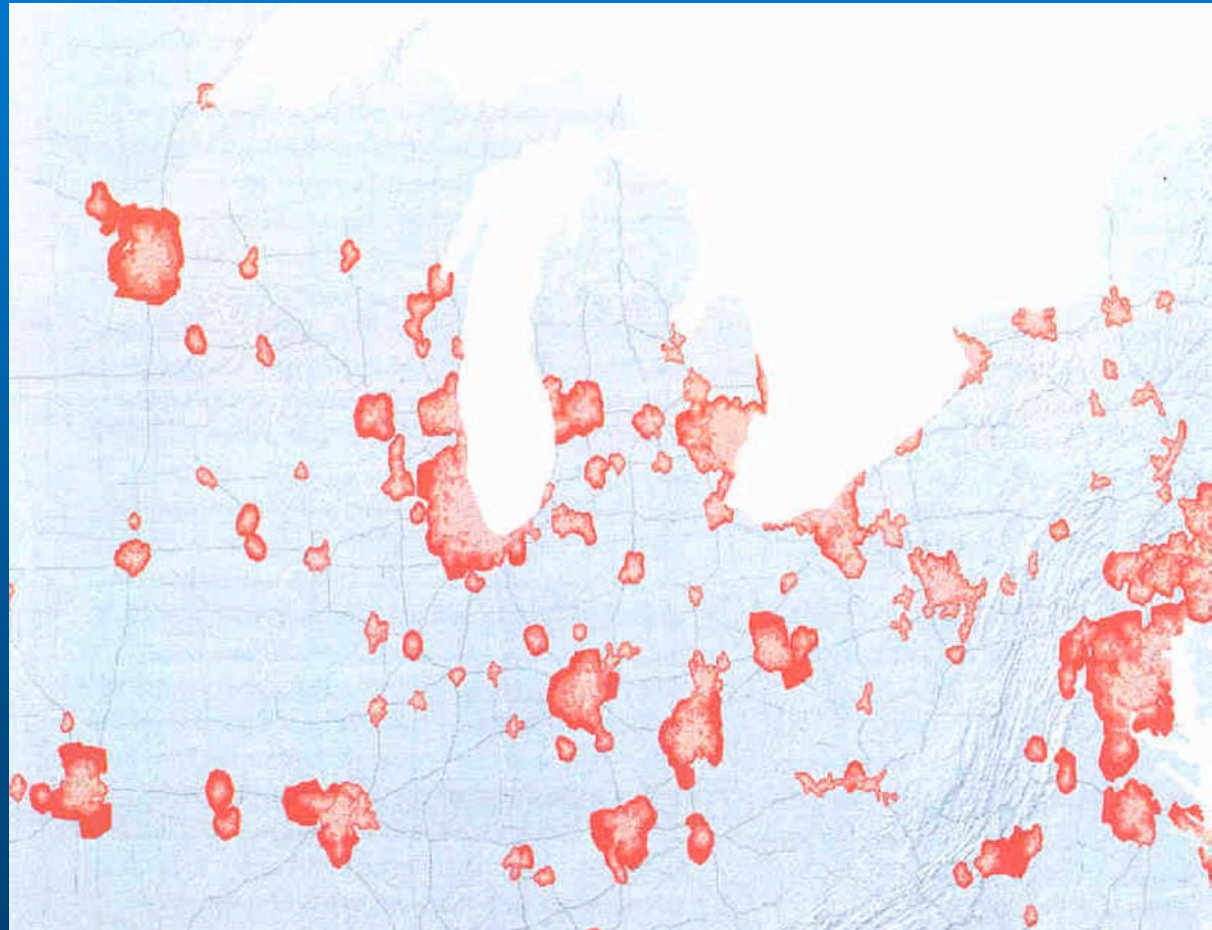
Specialty	Number in the Top Ten
Cancer	4
Digestion	3
ENT	5
Heart	4
Neurology	4
Pediatrics	3
Respiratory	3



Cities/Metros Matter – urbanized areas are places growing

Metro Growth
2002-2025

Source: Youngstown
State University,
Center for Urban
and Regional
Studies, 2005

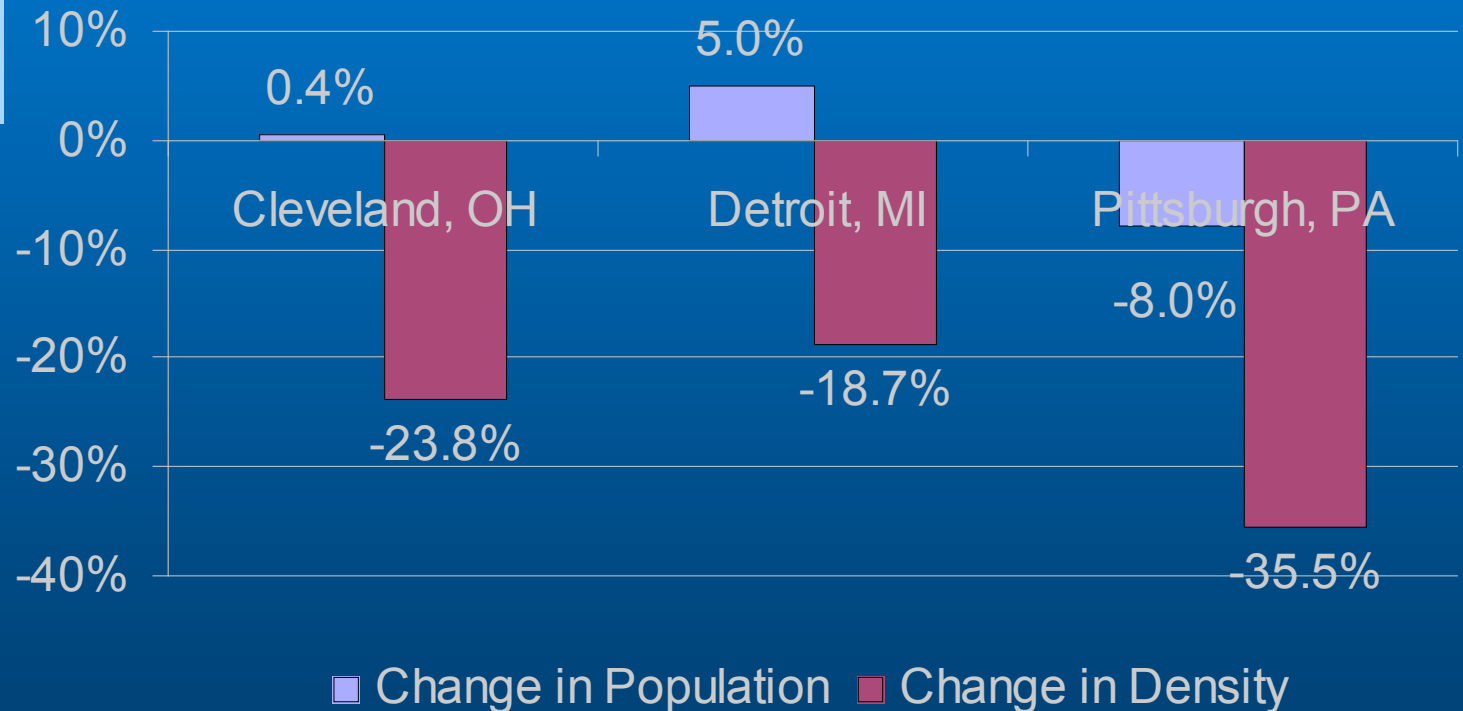




Density Matters...several Great Lakes metros are losing density while experiencing little or no population growth

Change in population and density, 1982-1997

Source:
Fulton et al, 2001





The region is highly segregated by race

Five Metrics of Segregation:

- Dissimilarity (evenness)
 - Isolation (exposure)
 - Delta (concentration)
 - Absolute Centralization
 - Spatial proximity (clustering)
- (Lower values indicate less segregation)

Region	Dissimilarity		Isolation		Delta		Centralization		Spatial	
	Black	Latino	Black	Latino	Black	Latino	Black	Latino	Black	Latino
Northwest	.750	.606	.800	.685	.585	.570	.266	.299	1.35	1.26
Midwest	.674	.531	.762	.519	.470	.571	.205	.327	1.32	1.19
South	.610	.455	.702	.658	.493	.468	.276	.327	1.27	1.16
West	.477	.471	.457	.634	.517	.482	.230	.242	1.19	1.18

Some Quick Census Facts...

Source: U.S. Census Bureau; W. E. Upjohn Institute for Employment Research

→ The Midwest had the highest level of segregation – 4 of 5 indicators

→ The 10 most segregated large metros for Blacks are in the old “Rust Belt”: Milwaukee, Detroit, Cleveland, St. Louis, Newark, Cincinnati, Buffalo, New York, Chicago, and Philadelphia

→ Cities with the greatest level of segregation in 1980 continued to be so in 1990 and 2000



Quality of Place Matters

“Bright Flight”
Richard Florida’s
Flight of the
Creative Class



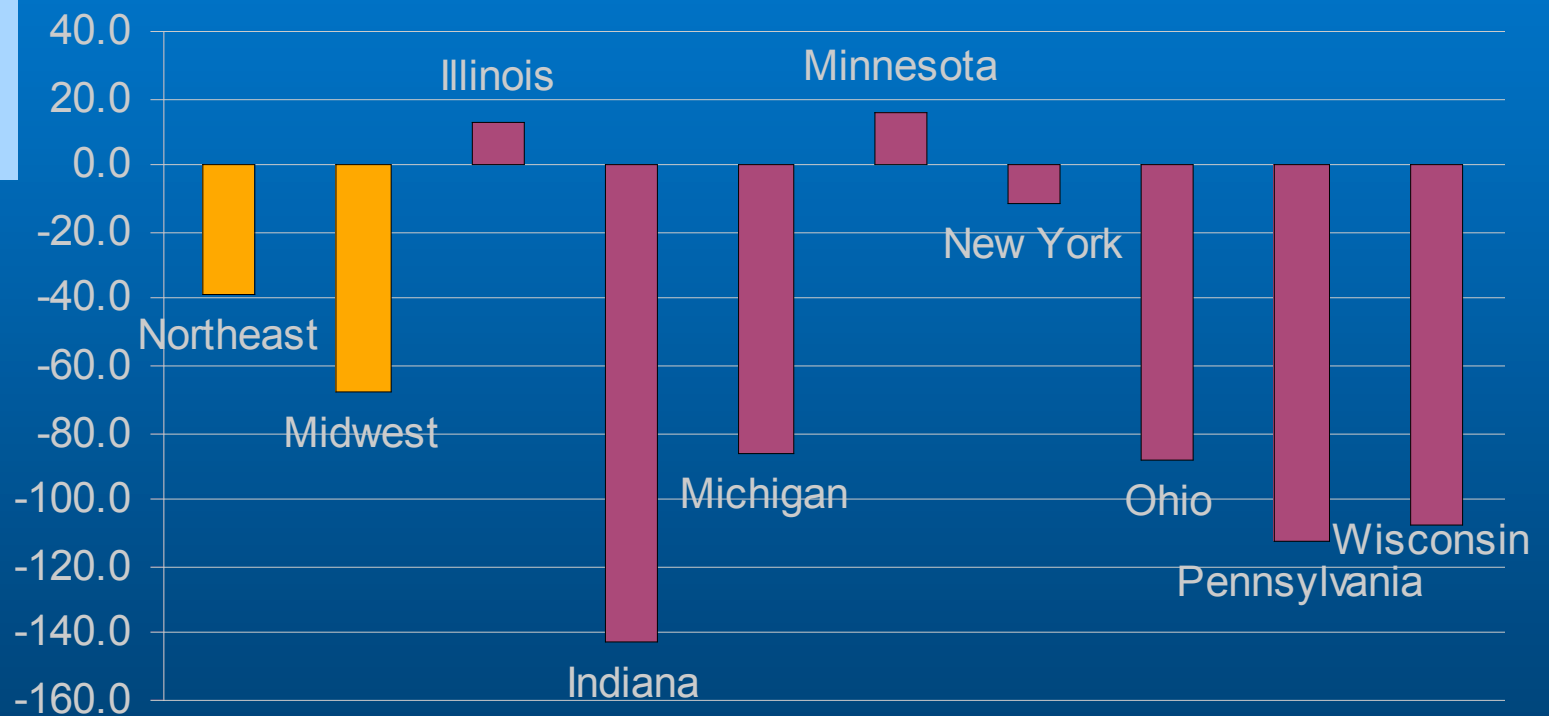
Source: *Boston Globe*
Photo



....most Great Lakes states are experiencing exceptional domestic out-migration of young, single, educated workers

Net Migration Rates, 1995-2000

Source: U.S. Census, 2000





Besides university cities, many Great Lakes cities rank low in the share of young workers

Rank of 100 largest cities by share of population 25-34, 2000

Source:
U.S. Census Bureau

Rank	City	Total Population	Population 25-34	Share
6	Minneapolis, MN	382452	78660	20.6%
10	Columbus, OH	711644	139327	19.6%
20	Madison, WI	207525	37394	18.0%
32	Rochester, NY	219766	37303	17.0%
35	Grand Rapids, MI	197846	33380	16.9%
42	Indianapolis, IN	782414	129047	16.5%
50	Milwaukee, WI	596956	93683	15.7%
64	Fort Wayne, IN	205941	31504	15.3%
65	Akron, OH	217088	33163	15.3%
68	Cleveland, OH	478393	72004	15.1%
69	Detroit, MI	951270	142834	15.0%
72	Toledo, OH	313587	46962	15.0%
83	Pittsburgh, PA	334563	48539	14.5%
91	Buffalo, NY	292648	41507	14.2%



Of the nations largest metros, only one Great Lakes metro is among the most creative, while five are among the least creative

Rank of 49 regions with over 1 million people	Creativity Index Rank	> 1 million	Creativity Index Rank	< 1 million
		7	Minneapolis, MN	8
	38	Columbus, OH	18	Des Moines, IA
	39	Chicago, IL	21	Iowa City, IA
	68	Cincinnati, OH	24	Lansing, MI
	98	Indianapolis, IN	36	Champaign-Urbana, IL
	113	Detroit, MI	47	Cedar Rapids, IA
	118	Cleveland, OH	62	Fargo, ND
	124	Milwaukee, WI	106	Rochester, MN
			109	Lawrence, KS
			149	Sioux Falls, SD
			191	Fort Wayne, IN

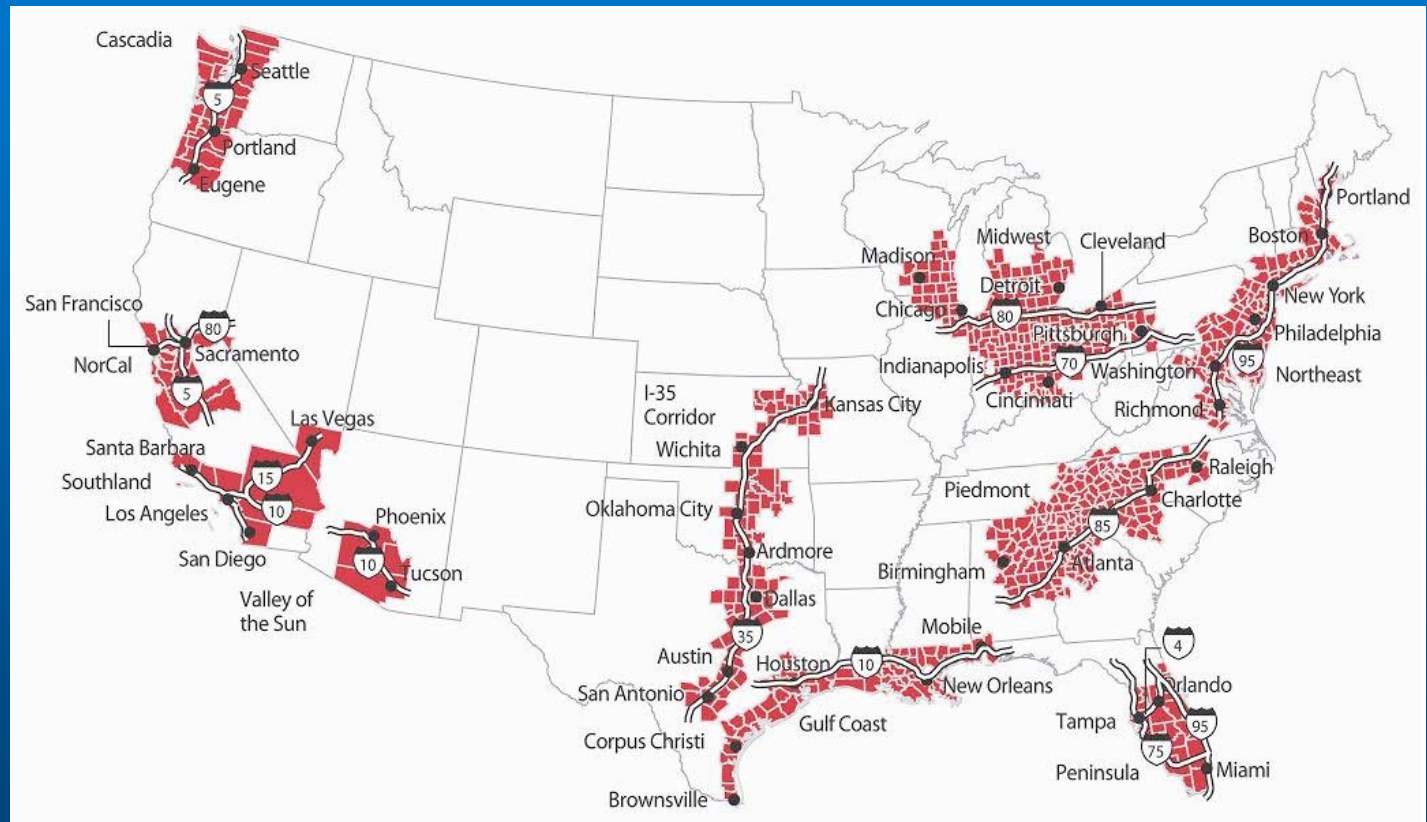
Source:
Florida, 2002



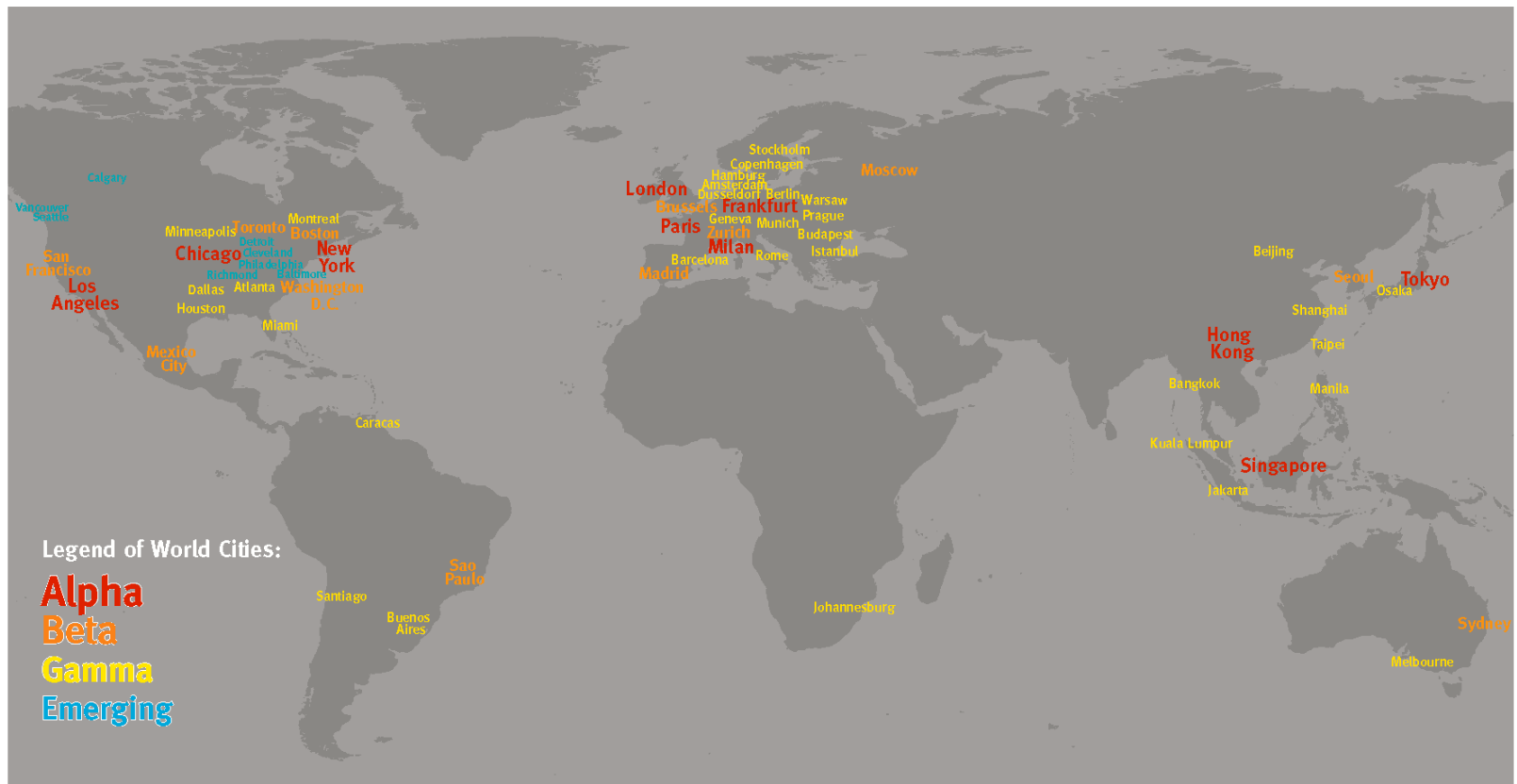
Meta-Region Matters – competitive unit in world economy

Megapolitan Areas

Source: Robert E. Lang, Metropolitan Institute at Virginia Tech 2005



World Cities Network



Source: Yaro, *America 2050*, Regional Plan Association



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The Great Lakes states are linked by common challenges and assets...

Challenges

- Manufacturing restructuring
- Backward-looking economic culture
- Low Education levels (with some talent magnets)
- Lag in knowledge work
- Brain drain
- Aging population
- Health care expenses
- Segregated metros
- Expensive growth patterns

Assets

- Economic/population size
- Research, knowledge, talent producer
- Location + Great Lakes
- World cities -agglomeration centers
- Decision and R&D center for key sectors
- Political/economic history & importance
- Infrastructure for sustainable growth



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Likely are several major lines to support growth among every State and metro in the region

- Capitalize on Great Lakes - location
- Nurture higher education R&D, talent centers
- Accelerate key sectors : new energy, green/water, transportation, life sciences
- Culture change: innovation, entrepreneurship, risk
- Expand venture capital
- Human capital building
- Fiscal, tax, intellectual property policy supporting growth
- Quality of place - dynamic/diverse urban metros
- Knowledge communications, transportation infrastructure
- Encourage immigration



Consider Big Approaches to:

- Large scale regional research funding in new technologies
- Regional venture capital market/fund
- Enhance education/higher education compacts - portability
- Intermodal infrastructure to support corridors
- Global universities anchored in the Midwest
- Communications/learning infrastructure enhance
- Incentives for talent in-migration – retention
- Quality of Place/Urban strategies for mixed use/income
- Environment/Water assets development: “Third Coast”



What We Are Going To Do – Where We Want Your Help

A vision and narrative about the region that tells an accurate and compelling story of what we are, where we stand, and what we might do:

- Informed by more research
- Including clear analysis of the comparative advantage and assets of region
- Viable strategies for building on strengths and dealing with deficiencies
- Published and promoted in 2006 to inform discussion



Further elaboration of key strategies

Identification, analysis and propositions around major strategies for economic growth that grow out of narrative; such as:

- Water/Energy
- Higher Education infrastructure
- Human Capital
- Migration
- Infrastructure
- Regional metro issues, patterns of development



Products :

- **Ideas and answers of “what to do” for policy makers, shapers and opinion leaders (public/private/media)**
- **A process for dissemination, communication, adaptation for target audiences**
- **Ongoing catalytic work, a catalytic organization that supports this agenda**

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July 1, 2004

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METROPOLITAN POLICY PROGRAM

Brookings > Metropolitan Policy

Redefining the challenges facing metropolitan America and promoting innovative solutions to help communities grow in more inclusive, competitive, and sustainable ways.

ANNOUNCEMENT

Urban Center Becomes Metropolitan Program

In a major promotion, the Center on Urban and Metropolitan Policy this month became the Brookings Metropolitan Policy Program—and the first new Brookings department established since 1948. The new status reflects the rising importance of metropolitan issues to the domestic and global challenges Brookings seeks to address.

▶ read an open letter from Brookings President Strobe Talbott

METROVIEW
Deficits by Design Plague Metro
by Robert Puentes
The Washington Times
June 21, 2004

[News Index](#)

METROPOLITAN GROWTH

Mechanisms for Market-Based Land Use Control

Using case studies and a national survey, this paper examines transfers of development rights (TDRs) and other market-based land preservation techniques like mitigation banking and density transfer fees.

IMMIGRATION

Washington Goes Polyglot

Metro Washington's "limited English proficient" (LEP) population

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