

‘The Vital Center’



Revitalizing the Great Lakes Region Economic Change and Opportunity in the Midwest

Midwest Natural Resources Group

Bloomington, MN

November 28, 2007

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Blueprint for Prosperity

www.brookings.edu/projects/blueprint.aspx

- Metropolitan regions are competitive units of the economy
- Municipalities and economic prospects are shaped by state and federal policies
- Vitality of metropolitan communities determines states' – region's economic future
- Special attention to the unique economic opportunities and challenges of Great Lakes region

Great Lakes Economic Initiative: Project Overview

A map of the United States and Canada with a large circle highlighting the Great Lakes region. The map shows state and provincial boundaries, major cities, and the Great Lakes themselves. The highlighted area includes parts of Minnesota, Wisconsin, Illinois, Indiana, Michigan, Ohio, and Ontario, Canada.

Great Lakes Region is in transition from industrial to knowledge economy leadership

Great Lakes region has a central role in US-Canadian economic competitiveness

Great Lakes regional leadership can advance a winning economic strategy



The Great Lakes region created and dominated the agro-industrial era, also launched the knowledge economy...large, dynamic, highly interdependent economy

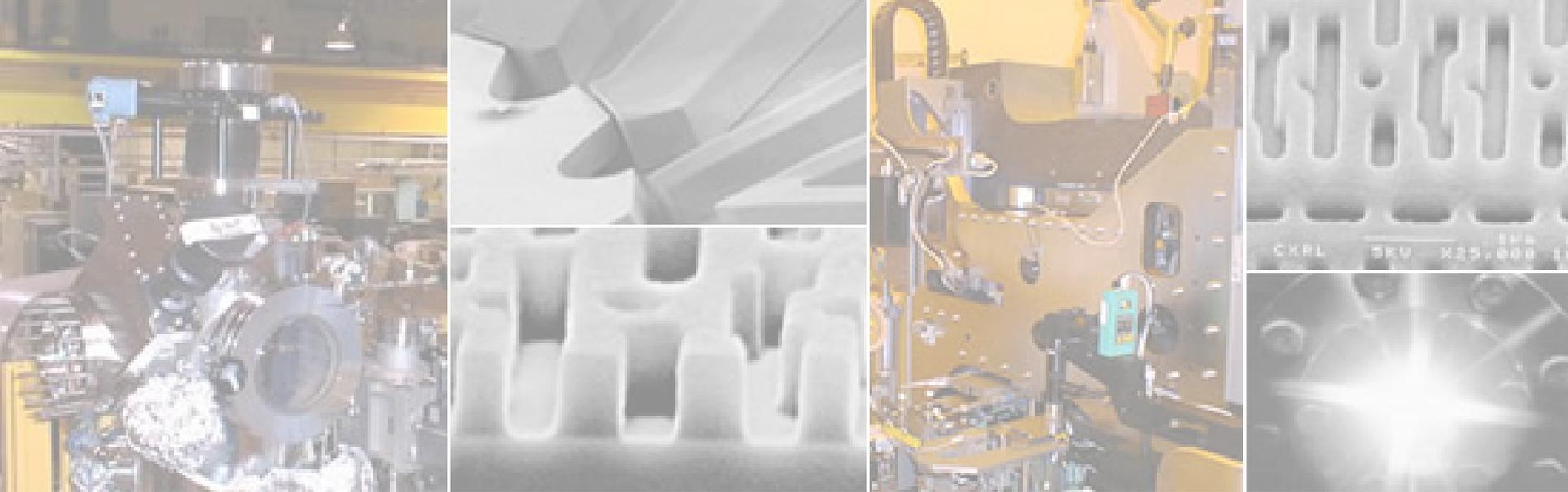
Great Enterprise:

- Armour
- Ford
- Rockefeller
- Sears
- Heinz
- Carnegie
- Dow
- Pillsbury

Great Innovation:

- Assembly Line
- The skyscraper
- Land grant university
- The airplane
- The Internet



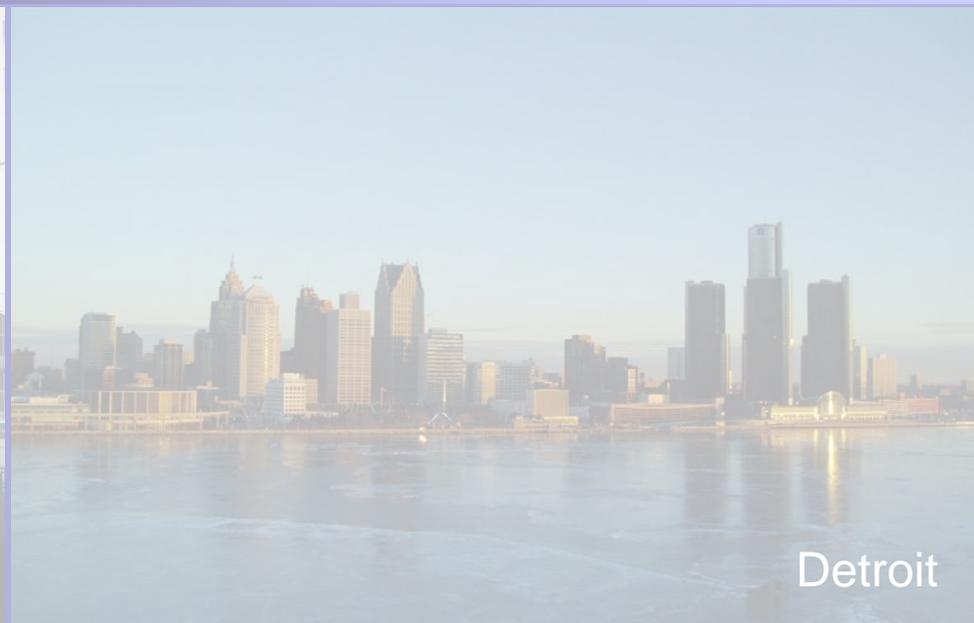
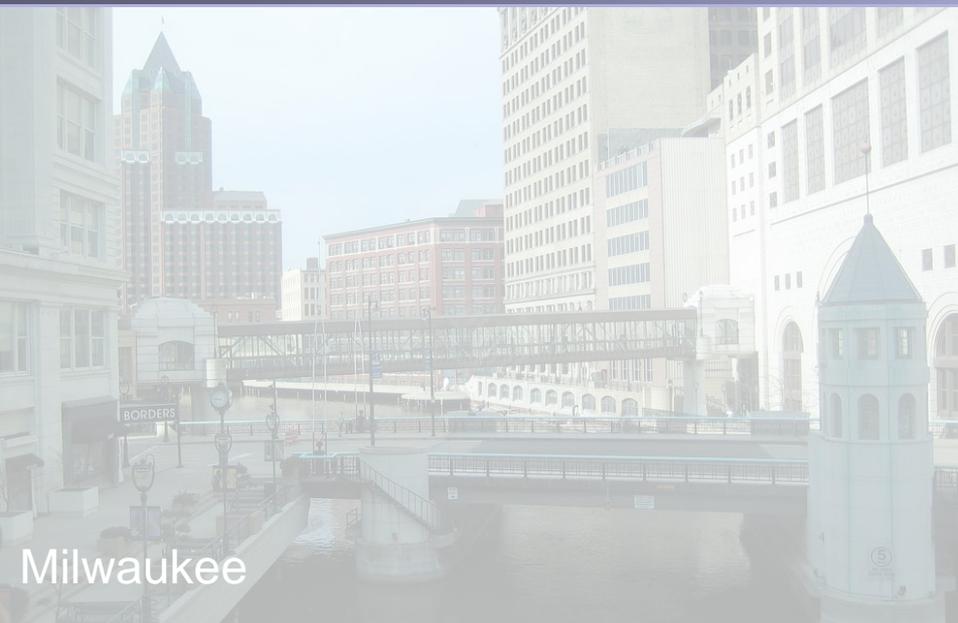


To “Tech Belt”





To “Freshwater Coast”



A photograph of an industrial facility, likely a steel mill or refinery, featuring several tall smokestacks, large buildings, and complex piping. The sky is overcast with grey clouds. In the foreground, there are railroad tracks and a large black cylindrical tank. The image has a slightly desaturated, blue-tinted appearance.

Great Lakes Region has significant and unique economic challenges – legacies of industrial economy leadership

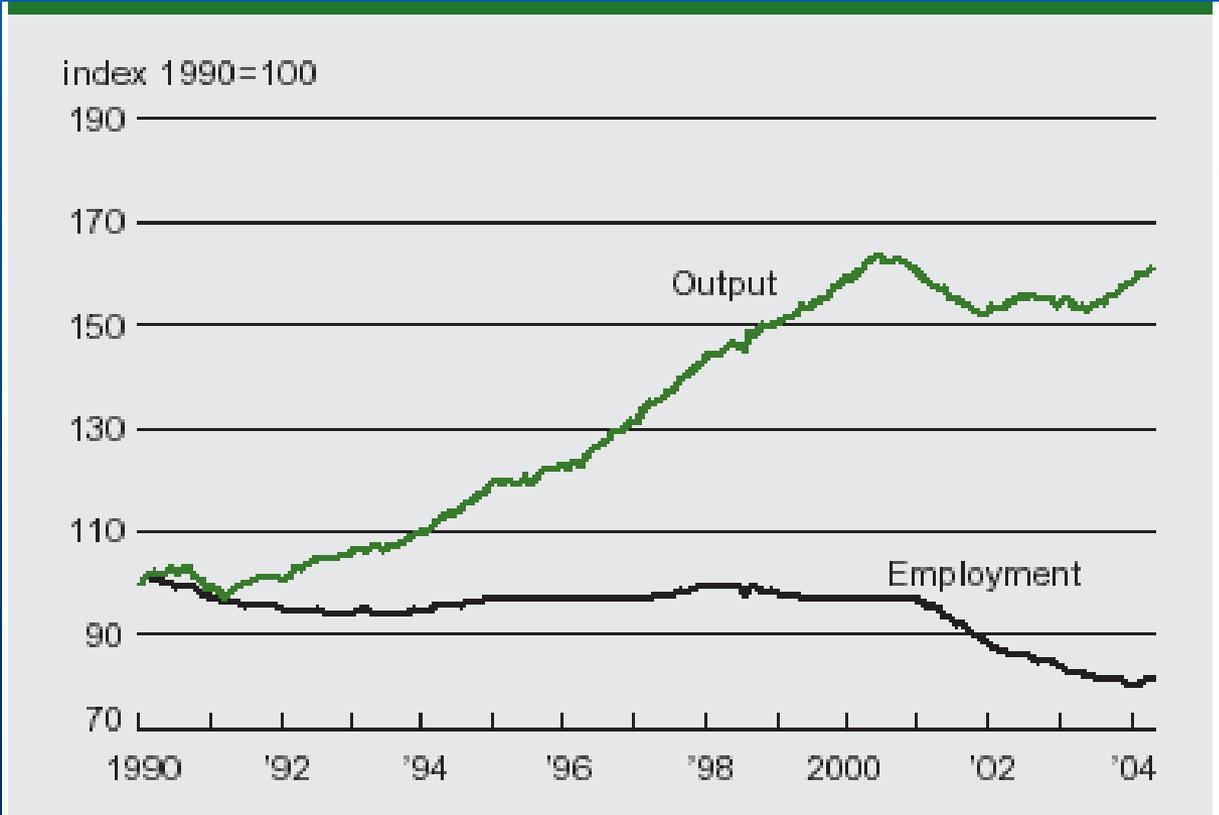
Among these are the largest concentrations of older industrial areas, many blocking valuable waterfront and urban land



Reliance on manufacturing sector – which for generations provided good jobs with little education. The sector is still very productive, but directly produces fewer jobs

Manufacturing Output and Employment

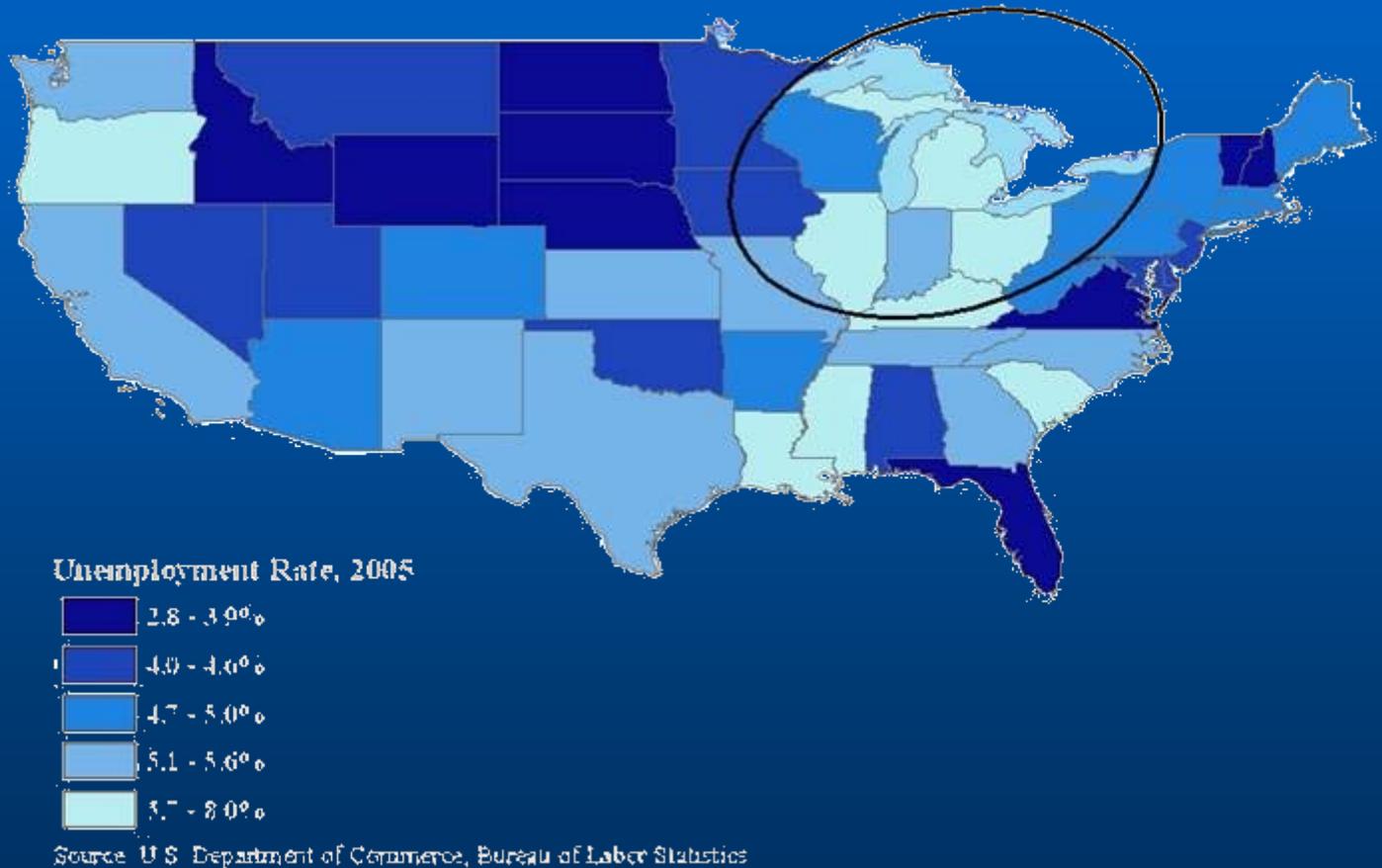
Data Source: U.S. Department of Labor, Bureau of Labor Statistics
Graph Source: William Testa, Chicago Federal Reserve Letter Challenges and Prospects Report, 2004





Economic restructuring means unemployment is high in the region, and many need new jobs and skills

Unemployment Rate, 2005

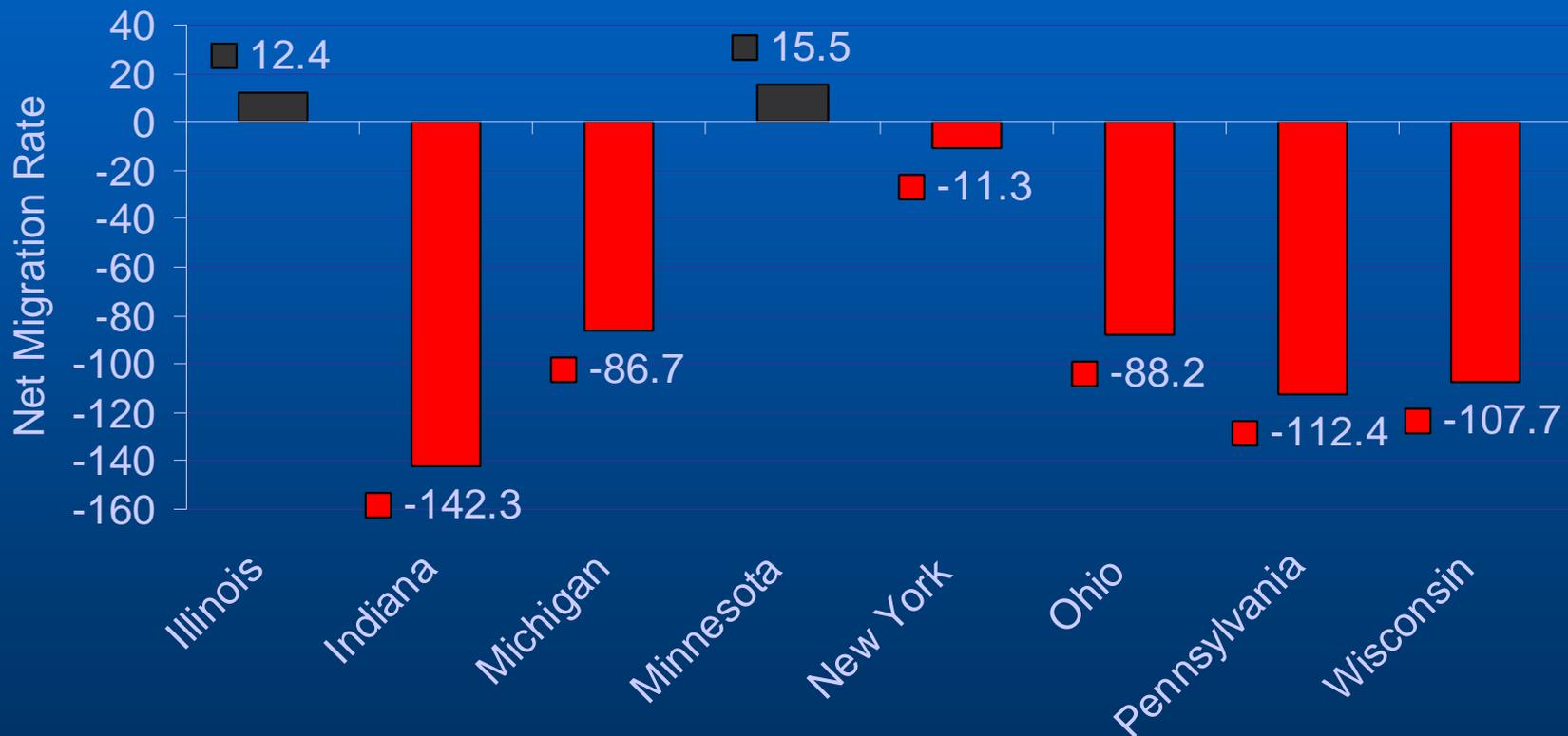


Map Source: B. Affolter © 2006



Among the states in the region, only two states escaping the “brain-drain” of college educated 25-39 year olds...

Net
Migration
Rate,
1995-2000



Source: U. S. Census Bureau, Census 2000, special tabulation.. The young are those who were aged 25 to 39 in 2000; the single are those who were never married, or were widowed or divorced in 2000; and the college educated are those who had at least a bachelor's degree in 2000.

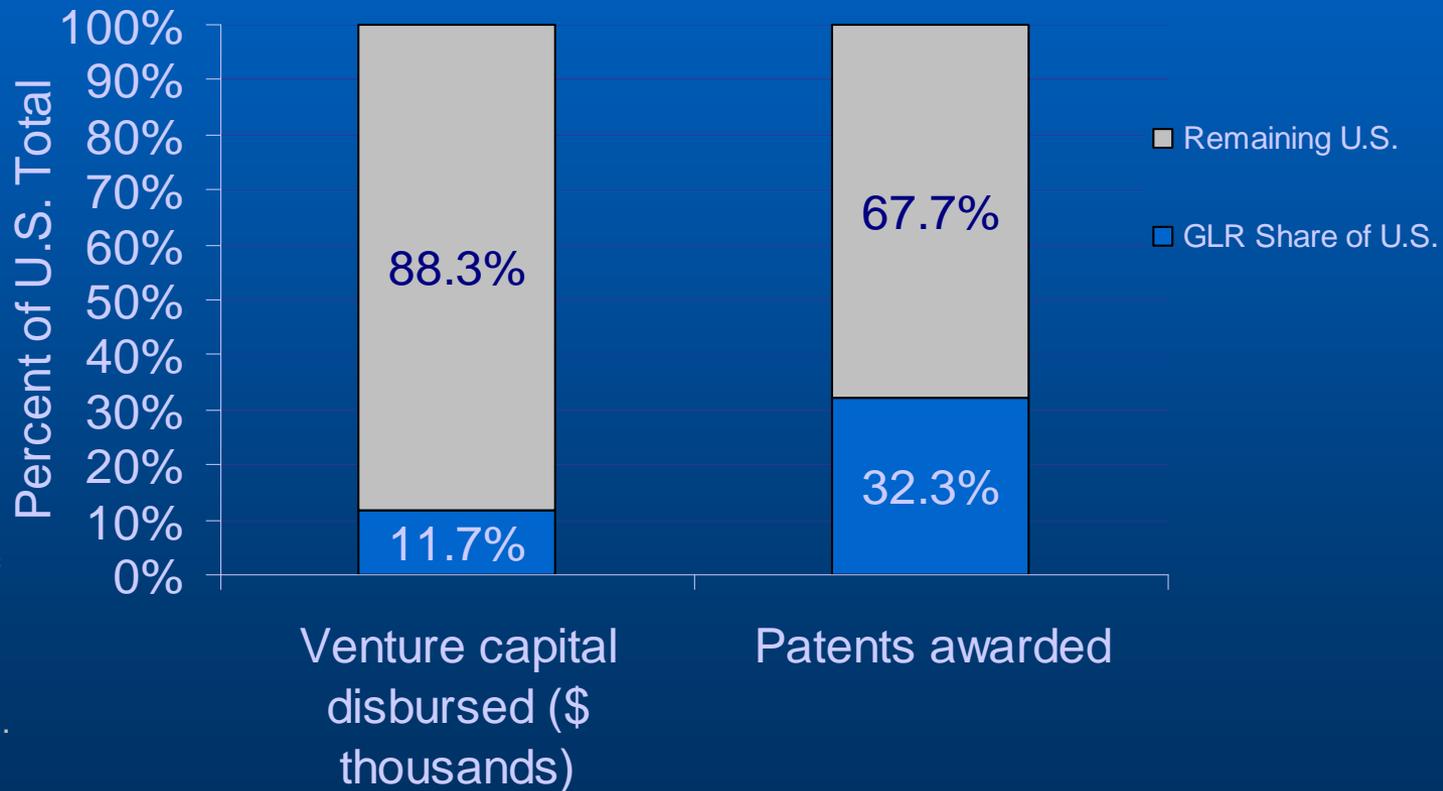


And the region lacks culture and capital to commercialize the large number of new ideas generated in the region

Great Lakes Share of Venture Capital and Awarded Patents Compared to U.S.

Source: U.S. Census Bureau, 2000 and 2005 American Community Survey

Notes: Patents issued include utility patents and other types of U.S. documents (i.e., design patents, plant patents, reissues, defensive publications, and statutory invention registrations). Origin of patent determined by residence of first named inventor.





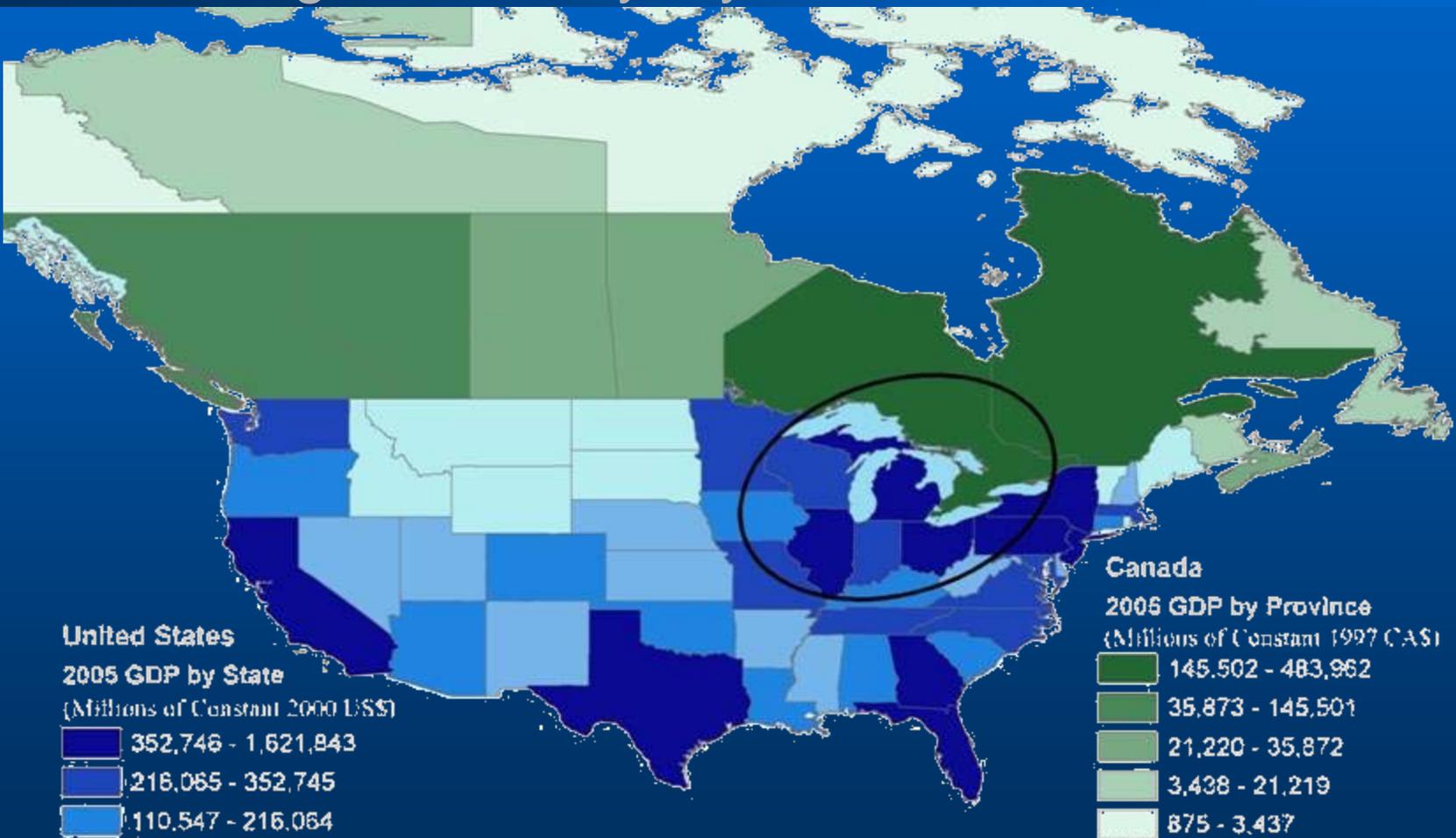
Great Lakes Region has unique assets to leverage -- innovation, education, physical, and natural infrastructure for economic vitality and high quality of life

“The opportunity for the Great Lakes region to thrive economically, as a center of innovation and as an environmentally sustainable, ‘clean-green’ playground for our nation’s people to live and work is unrivaled”

Ned Gramlich, Former Federal Reserve Board Governor



Huge marketplace and economic engine --with highly integrated economy of Ontario/Quebec, Great Lakes region is second largest "country" by GDP in world...



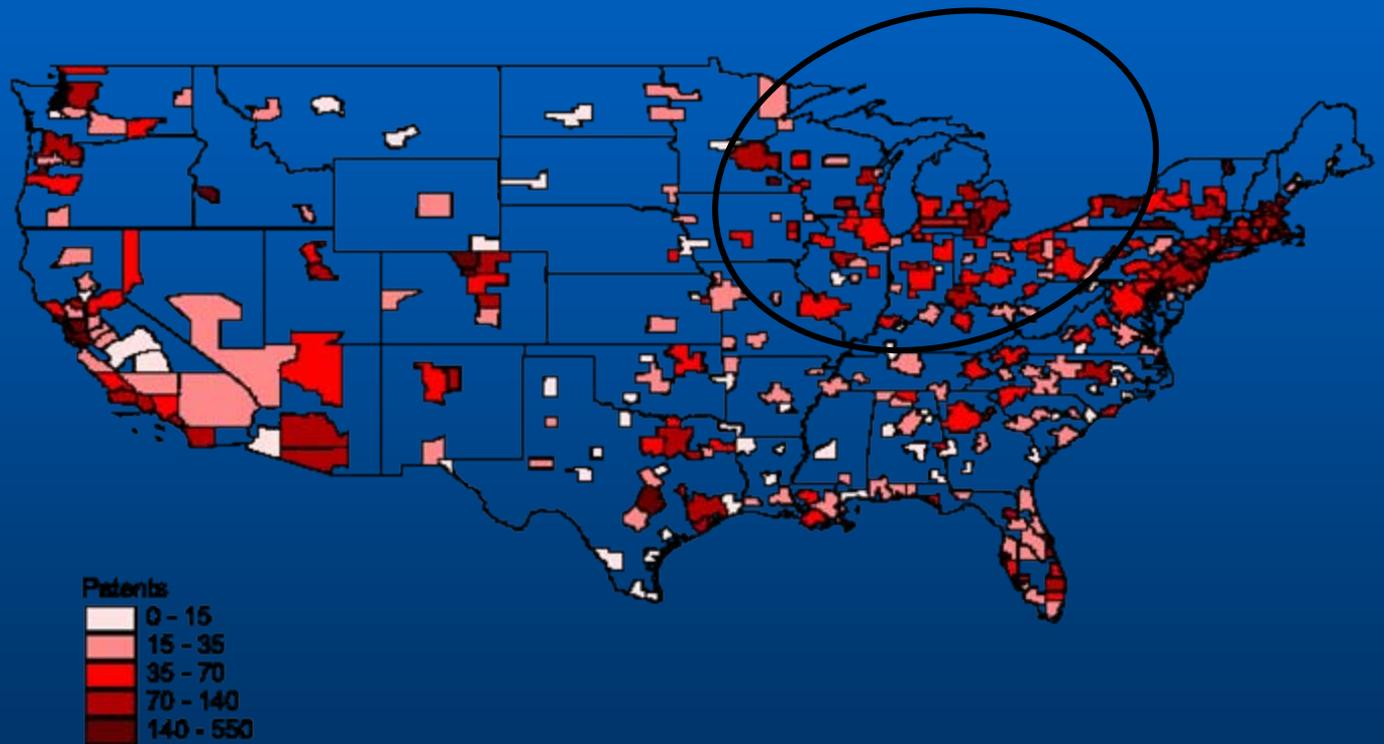
Map Source: B. Affolter. Cite: 2007



The Great Lakes region is a world center for developing new technologies and ideas – generating one-third of the nation's new intellectual property...

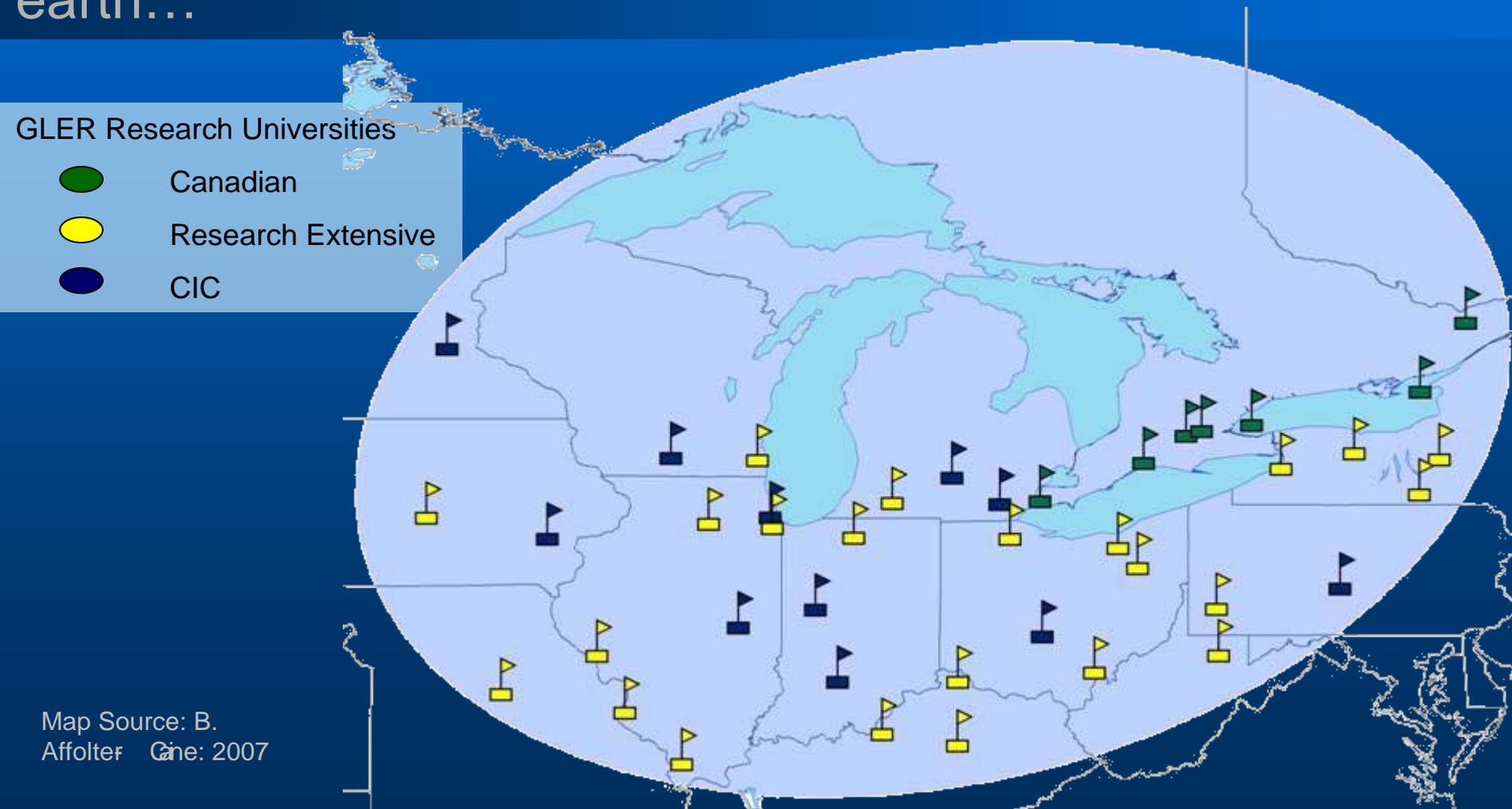
Patents per
100,000 Jobs,
1999

Source: A. Reamer, L. Icerman and J. Youtie,
*Technology Transfer
and Commercialization:
Their Role in Economic
Development, 2003*





Region is also home to the largest network of learning institutions and most powerful educational infrastructure on earth...





Including 20 of 100 top-ranked universities in the world,
more than any other region...

Great Lakes' Top
100 Ranked
Universities in
the World

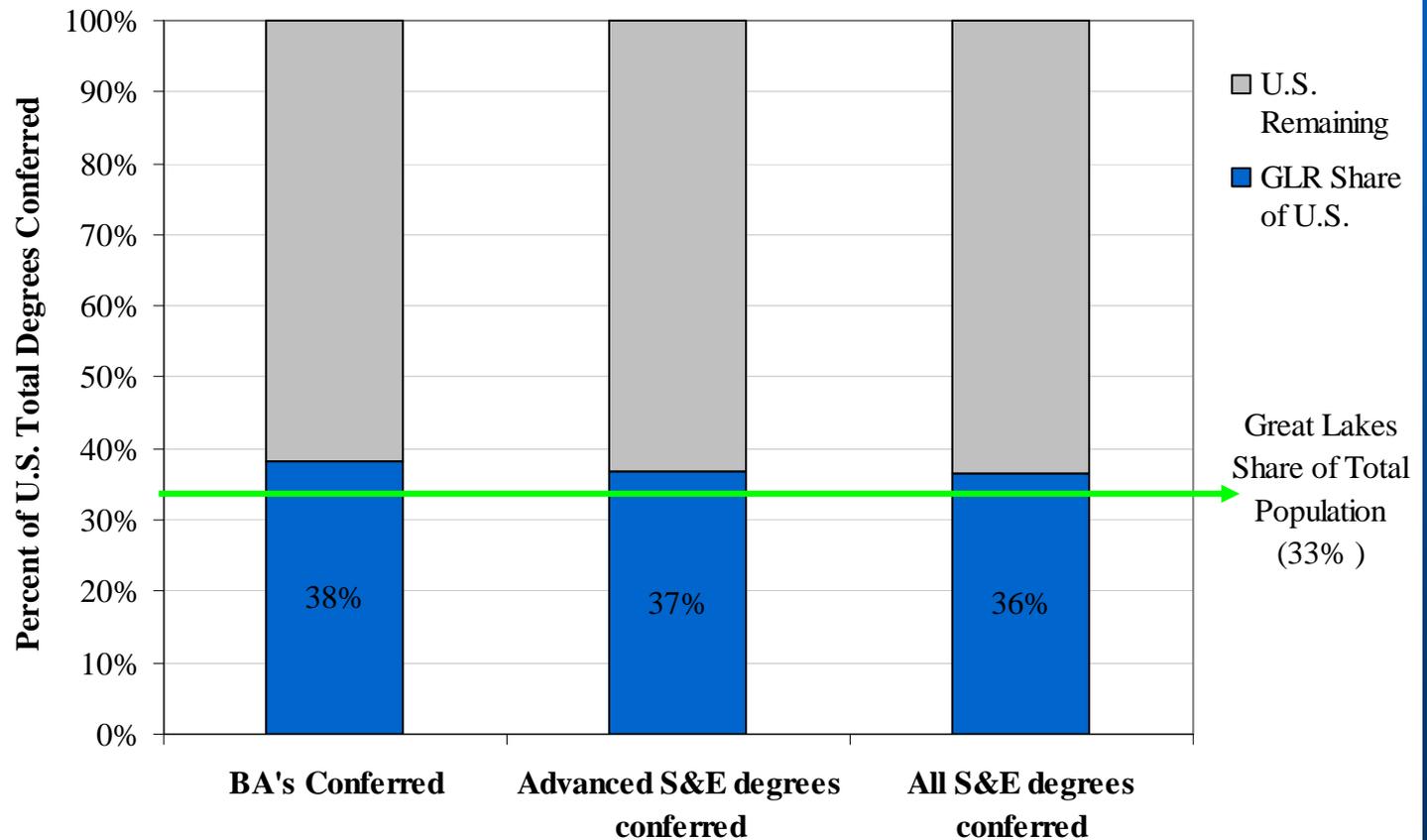
Institution	Location	Rank
University of Chicago	Chicago, Illinois	9
Cornell University	Ithaca, New York	12
University of Wisconsin - Madison	Madison, Wisconsin	16
University of Michigan	Ann Arbor, Michigan	21
University of Toronto	Toronto, Ontario	24
University of Illinois - Urbana Champaign	Urbana-Champaign, Illinois	25
Washington University	St. Louis, Missouri	28
Northwestern University	Evanston, Illinois	31
University of Minnesota	Minneapolis-St. Paul, Minnesota	32
Pennsylvania State University	University Park, Pennsylvania	39
University of Pittsburgh	Pittsburgh, Pennsylvania	43
Carnegie Mellon University	Pittsburgh, Pennsylvania	54
McGill University	Montreal, Quebec	62
Ohio State University	Columbus, Ohio	63
University of Rochester	Rochester, New York	65
Case Western Reserve University	Cleveland, Ohio	69
Purdue University	West Lafayette, Indiana	75
Michigan State University	Lansing, Michigan	77
Indiana University	Bloomington, Indiana	87
McMaster University	Hamilton, Ontario	90

Source: Institute
of Higher
Education,
Shanghai Jiao
Tong University,
2005



...that produce a huge amount of talent, particularly in the sciences and engineering

Great Lakes
Regional Share
of Degrees
Conferred of
Total U.S.

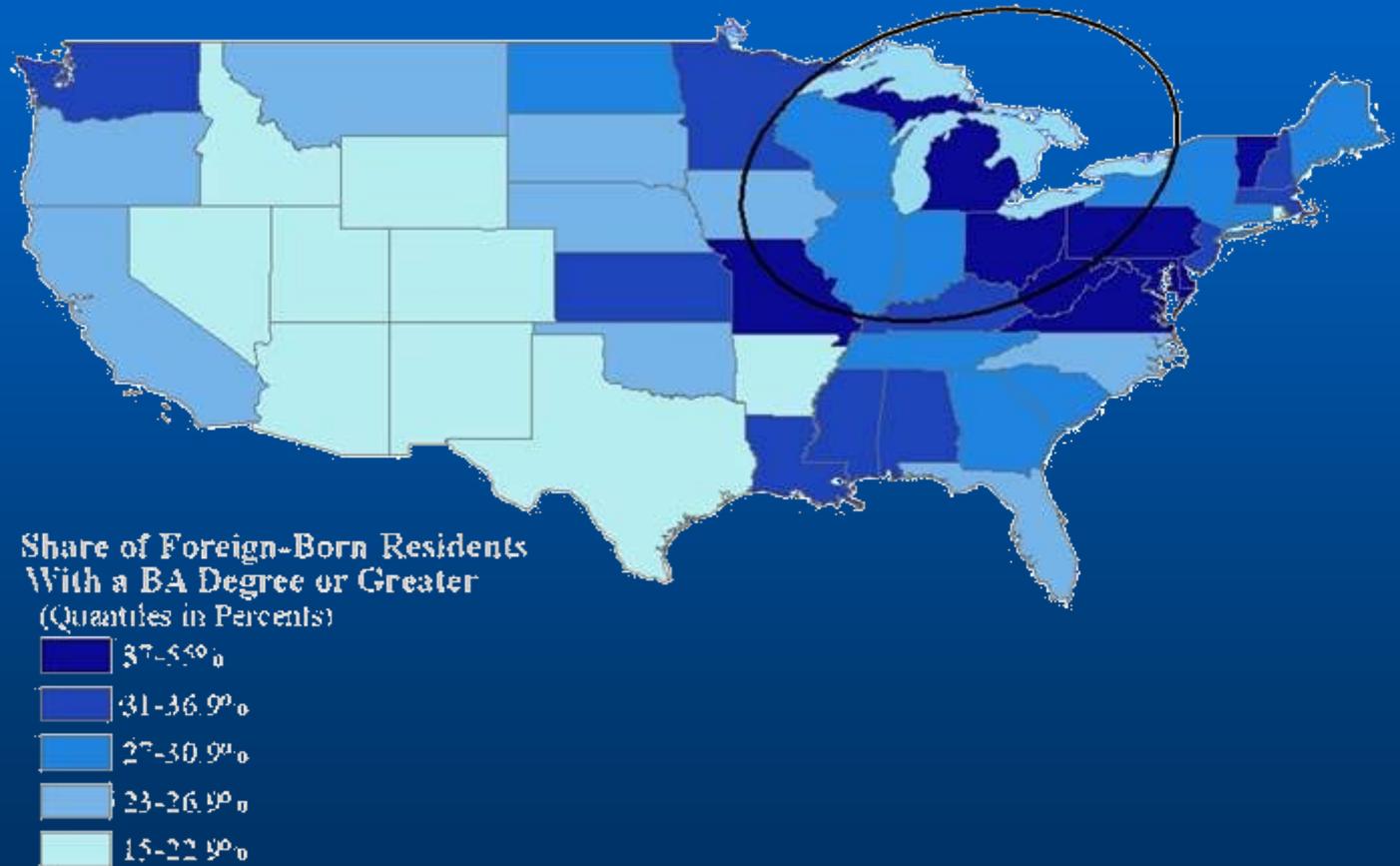


Source: U.S. Census Bureau, 2000 and 2005 American Community Surveys



Foreign born immigrants have offset some domestic population losses, and are relatively well-educated

Share of Foreign-Born Residents with a BA Degree or Greater, 2005



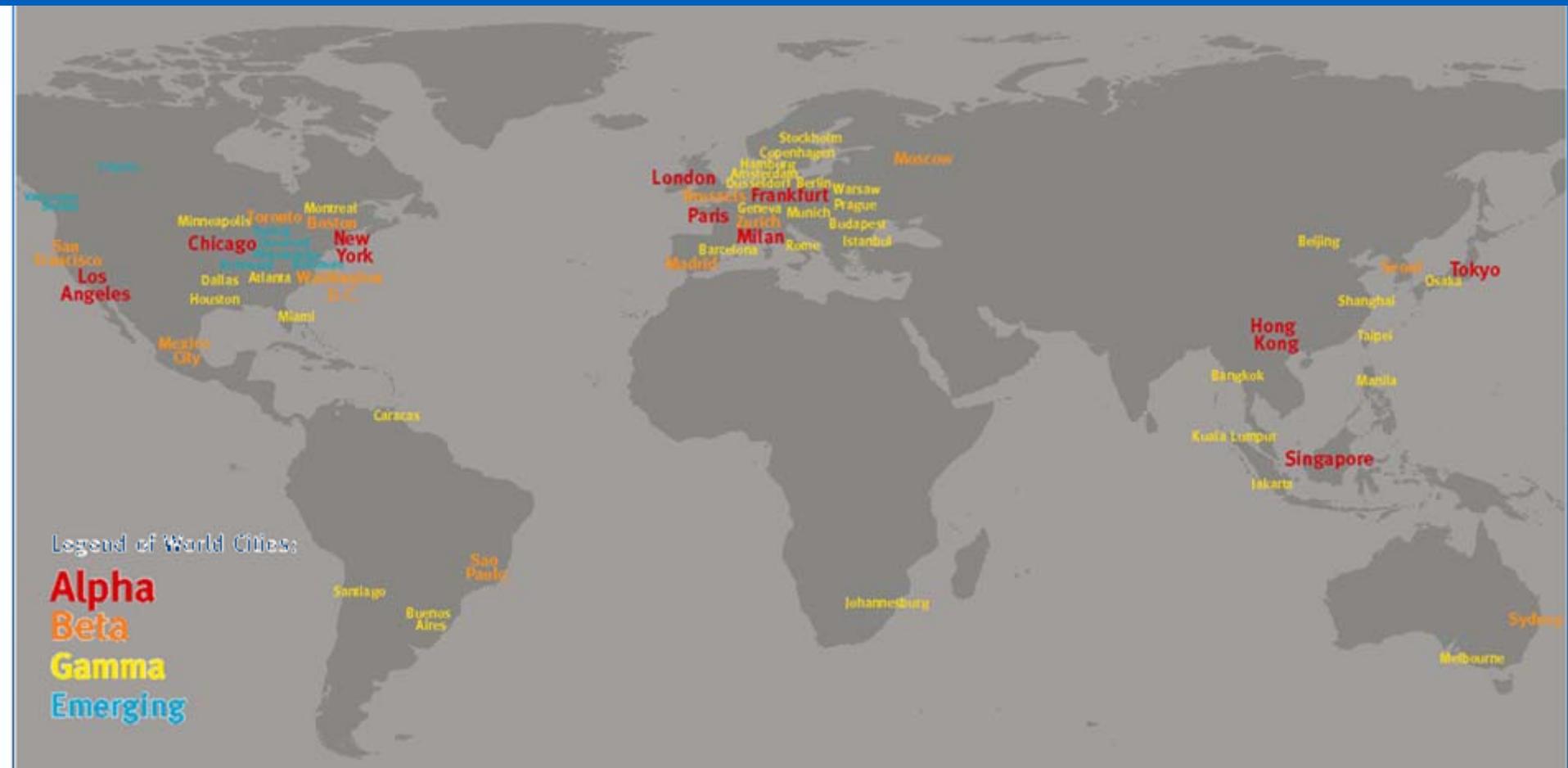
Share of Foreign-Born Residents With a BA Degree or Greater (Quantiles in Percents)



Source: U.S. Census Bureau, American Community Survey, 2005



Great Lakes Region is home to global cities with international reach -- business, commerce, people



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

A photograph of a city street scene featuring a canal. In the foreground, there's a paved walkway with a sign that says "BORDERS". A modern transit structure with a glass and metal canopy spans across the canal. The background is filled with various city buildings, including a prominent white building with a blue-tiled tower on the right. The text is overlaid in a blue, italicized font.

Region's cities have valuable infrastructure and new economy assets in place.

- Waterfronts
- Transit/Transport
- Sewer, Water and Electricity
- Historic Buildings
- Urban Streets
- Civic and Cultural Institutions

The Great Lakes Region has natural infrastructure central to sustainable economic growth in North America

1/5 World's Freshwater

**Rich Natural Amenities:
Forests, Rivers and Lakes**

**Environmental and Historical
Recreation/Tourism**

**Opportunities for Water-
Based Development**

**Potential to lead in “Clean-Green Technologies”:
Energy, new fuels, transport and clean water**



Trends are generally meaning fewer, bigger places are economic Centers -- from farms to factories to dense and diverse urban communities that are the world's economic activity centers

Population
Density per
Square Mile

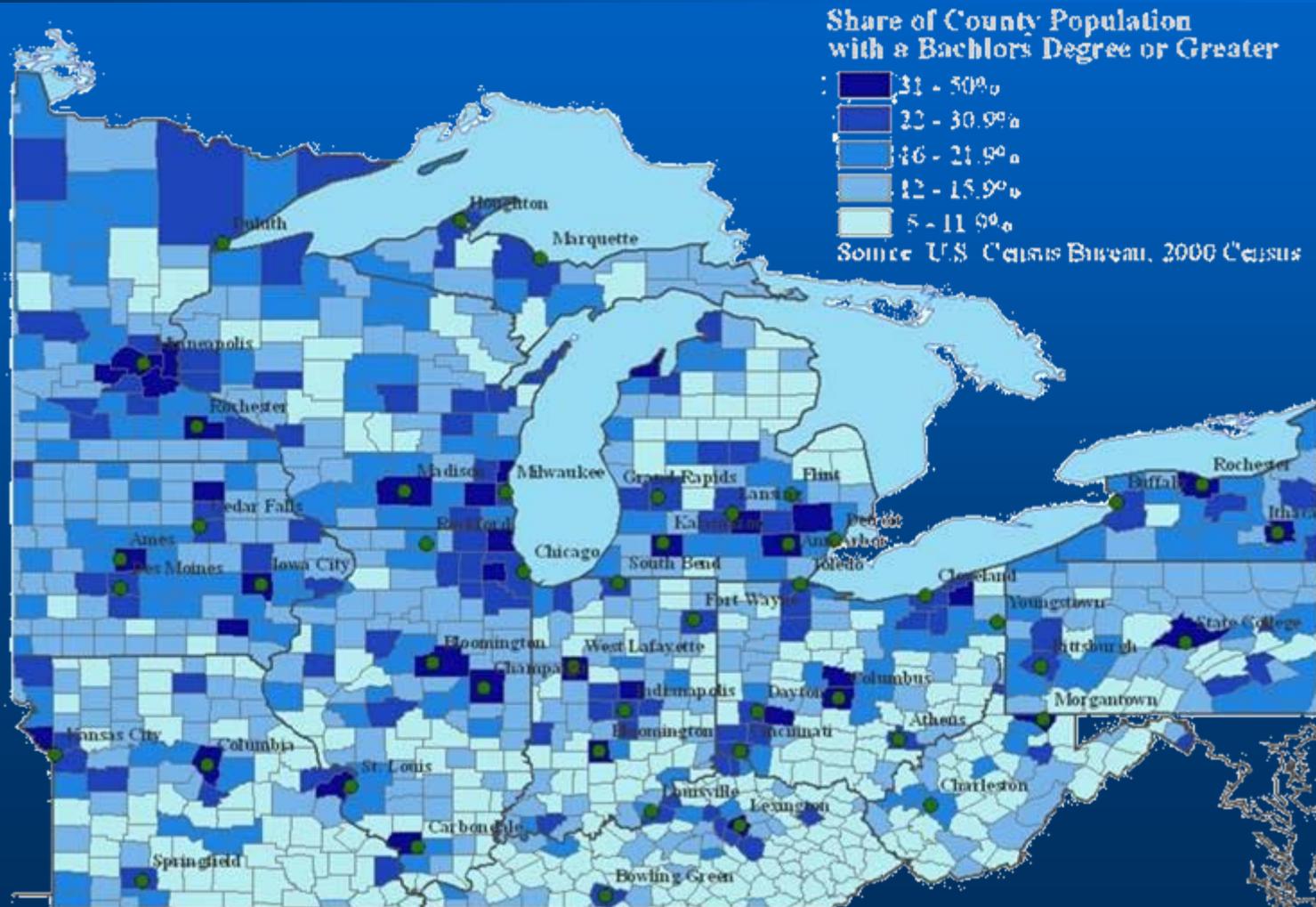
Source:
S. Swan, UM
CSCAR, 2003





Major metros, university towns and places with special quality of life are the talent magnets and activity centers

Share of County Population with a Bachelors' Degree or Greater, 2000

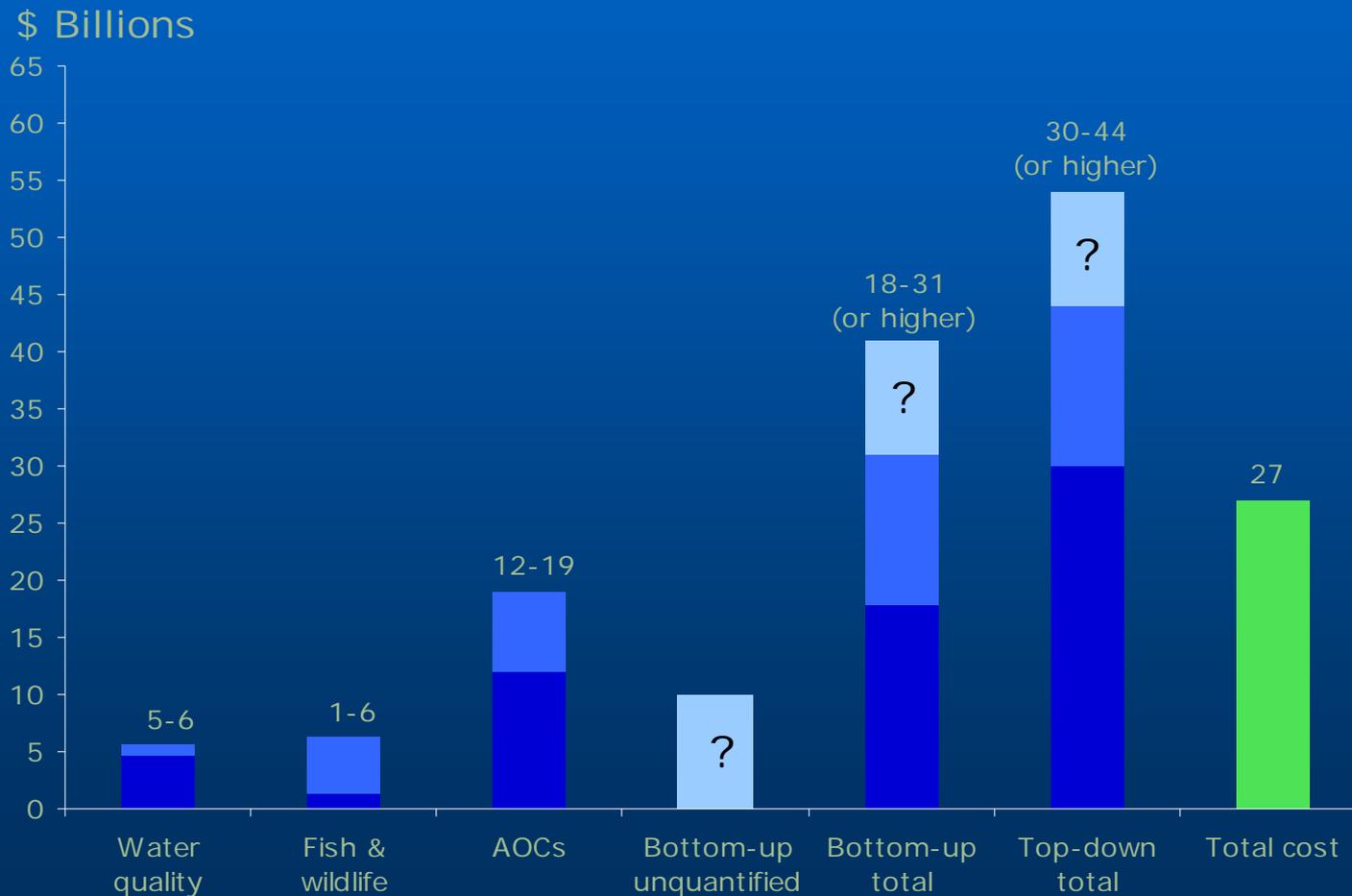


Map Source: B. Affolter © 2006

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- **“Healthy Water, Strong Economy” Report**
 - **Brookings – GLEI Commissioned leading economists to take hard-headed look at the true economic benefits of cleaning, maintaining special qualities of Great Lakes - \$ value of water quality, recreation/tourism, property value enhancement, fish and wildlife**
 - **Solid and conservative analysis of economic impact of Great Lakes restoration plan**
 - **Confirms that the water, natural features and special quality of life made possible by the “freshwater coast” can be huge engine for economic growth & opportunity**



\$ 80-100 Billion Economic Benefits for \$26 Billion Cost



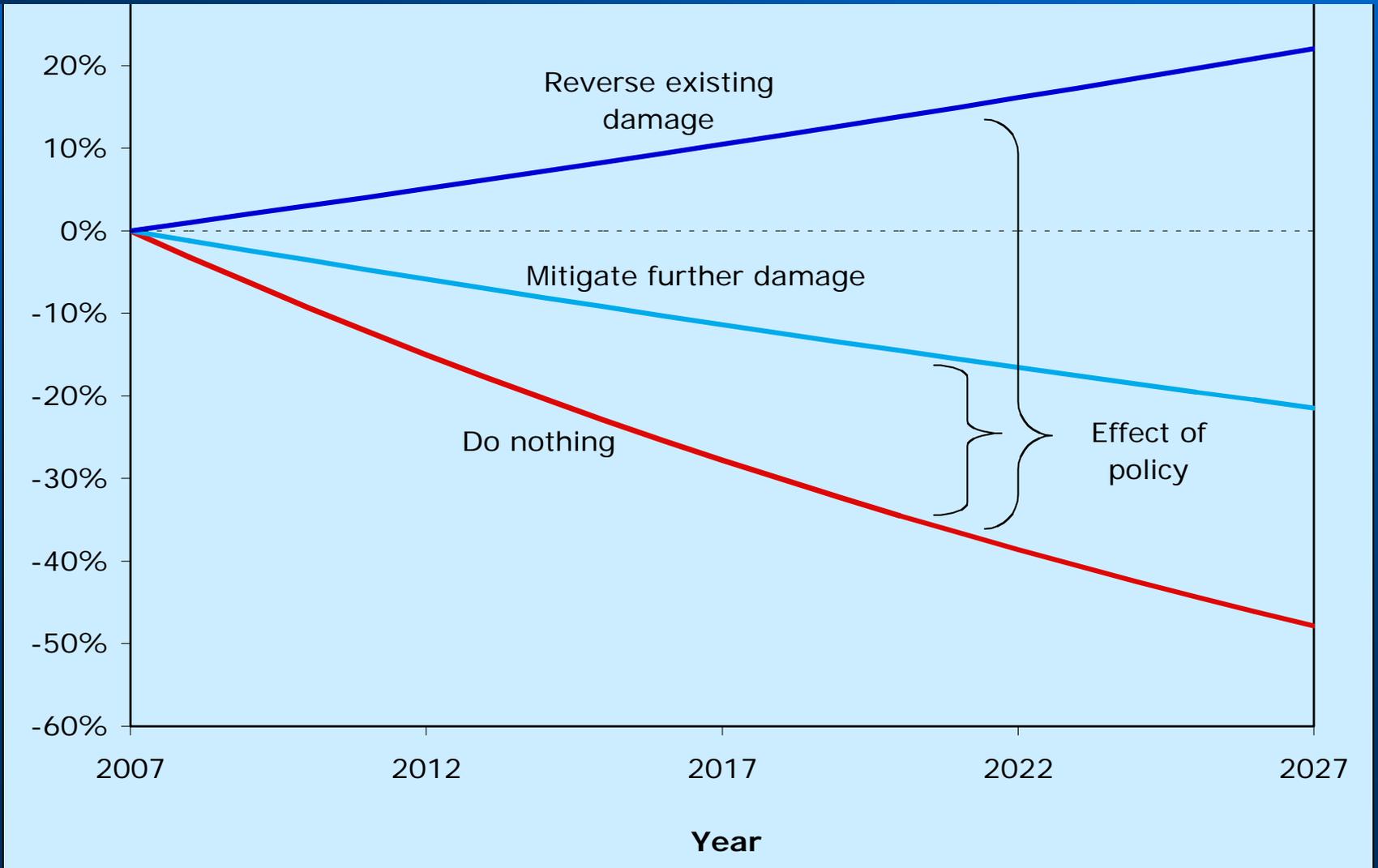
An aerial photograph of a river delta, likely the Mississippi River Delta, showing a complex network of waterways and land. The text is overlaid on the left side of the image.

Additional non-quantifiable, but real benefits

- Lower fish contamination levels - Species health & survival
- Invasives & nuisance species - avoided invasive costs
- Ecosystem resilience to invaders & climate change
- Fewer algae blooms
- Human health, less sickness, life-spans
- Avoided engineering costs, Sediment dredging, removal, & disposal
- Less erosion and less severe flooding
- Enhanced groundwater supply
- Freshwater Technology jobs and business development
- Quality of life enhancement value
- Nonuse Values



Benefits flow from reversing damage, enhancing assets



Blueprint for Renewing GLER

Cleveland

Fuel and Focus the Engines of Innovation

- Education the Talent Nation Needs to Compete
- Do the R&D in emerging New Technologies – Energy, IT, Health-Bio, Freshwater

Minnesota

Sustainable development of the “Freshwater Coast”

- Freshwater Coast water-based economic development
- Follow through on Great Lakes Restoration plan

Commercialize Innovation in Great Lakes

- Develop critical mass of capital and talent to
- Enhance-extend, venture and related capital pools
- Elevate U.S.-Canada Dialogue and Development

Remake Employee-Benefits Compact

- Portable & Universal State/Regional Pensions and Health Care
- Training & Education to Encourage Labor Adaptability

Milwaukee

Detroit

Great Lakes Economic Initiative: Next Steps

- Network/leadership Building in Region
- Further Policy Development – Make real the recommendations (like Great Lakes Restoration)
 - U.S. – Canada Bi-national Economy and Policy Implications
 - Global Center for Freshwater Research, Education & Tech.
 - National Energy Technology Strategy
 - New GI Bill – Kalamazoo “Promise” replication
 - Great Lakes Regional Venture Capital Strategy
- Policy Advancement – Opportunity ‘08



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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](#)

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

METROVIEW

Deficits by Design Plague Metro

by Robert Puentes
The Washington Times
June 21, 2004

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