Auto Communities in Recession and Transition

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Automotive Communities and Workforce Adjustment
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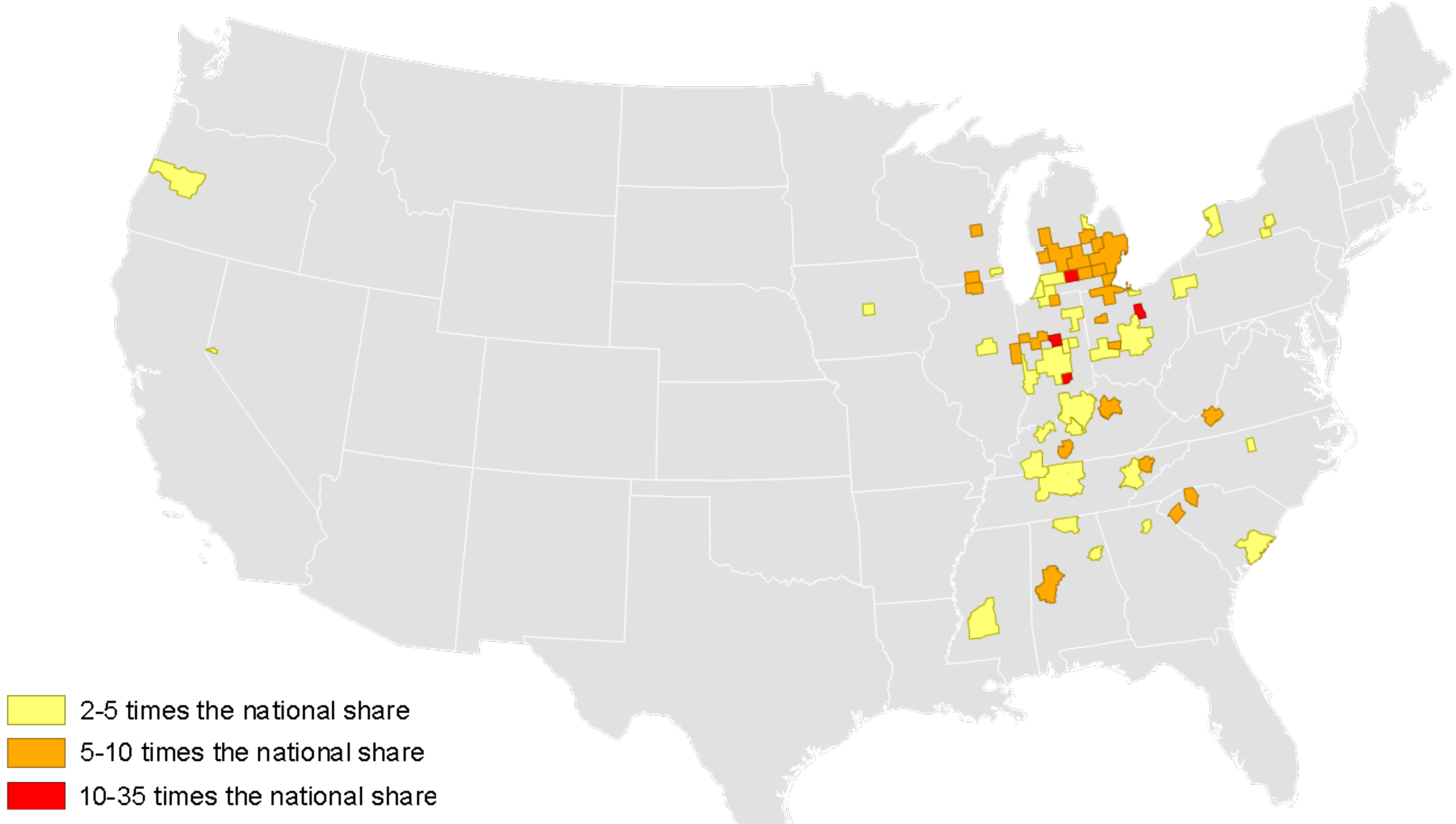
What has happened to U.S. auto communities?

- Where are these communities?
- How have they fared during the current recession?
- Which communities have experienced long-term losses of total employment and transportation equipment employment?
- What structural changes have occurred in their economies since the previous recession began?

At the start of the current nationwide recession, 62 metropolitan areas were highly ‘auto-dependent’

Metro area job concentration in motor vehicle and parts manufacturing, 4th quarter 2007



Note: The national share was 0.56 percent

Source: Author’s analysis of data supplied by Moody’s Economy.com

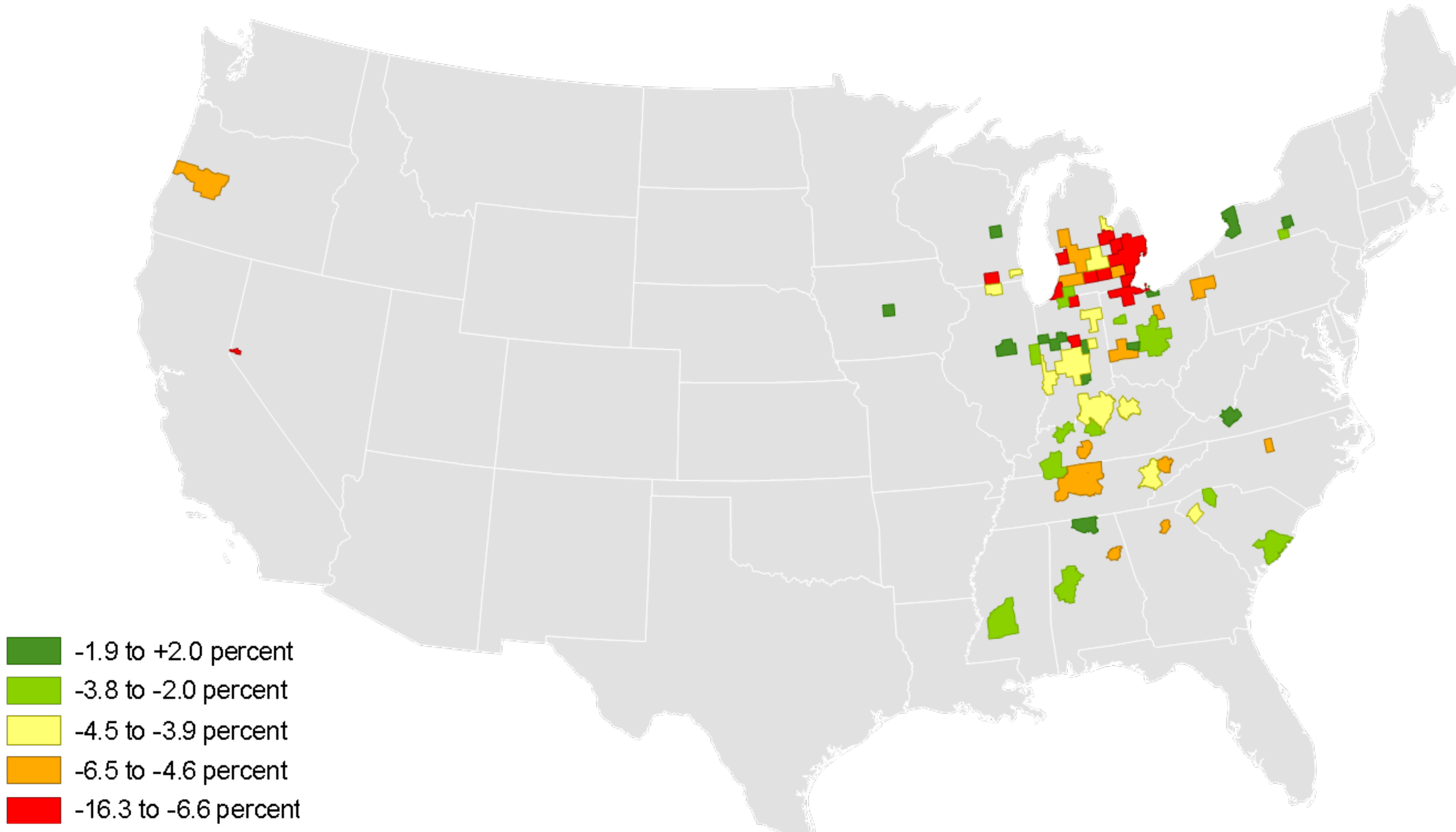
Many small metro areas have very high concentrations of jobs in motor vehicle and parts manufacturing

Metropolitan area	Share of jobs in motor vehicle and parts manufacturing, 4th quarter 2007	Metropolitan area	Share of jobs in motor vehicle and parts manufacturing, 4th quarter 2007
Kokomo, IN	19.6%	Elizabethtown, KY	2.4%
Columbus, IN	8.1%	South Bend-Mishawaka, IN-MI	2.3%
Battle Creek, MI	7.0%	Fort Wayne, IN	2.2%
Mansfield, OH	6.6%	Anderson, IN	2.2%
Morristown, TN	5.5%	Dayton, OH	2.1%
Detroit-Warren-Livonia, MI	5.3%	Terre Haute, IN	2.0%
Lafayette, IN	5.2%	Sandusky, OH	2.0%
Flint, MI	4.9%	Kalamazoo-Portage, MI	1.9%
Spartanburg, SC	4.8%	Owensboro, KY	1.9%
Oshkosh-Neenah, WI	4.5%	Nashville-Davidson--Murfreesboro--Franklin, TN	1.8%
Blacksburg-Christiansburg-Radford, VA	4.3%	Bloomington-Normal, IL	1.8%
Saginaw-Saginaw Township North, MI	4.2%	Knoxville, TN	1.8%
Janesville, WI	4.1%	Bay City, MI	1.7%
Holland-Grand Haven, MI	4.0%	Anniston-Oxford, AL	1.6%
Elkhart-Goshen, IN	4.0%	Niles-Benton Harbor, MI	1.6%
Jackson, MI	4.0%	Clarksville, TN-KY	1.6%
Anderson, SC	3.9%	Ames, IA	1.5%
Bowling Green, KY	3.6%	Jackson, MS	1.5%
Monroe, MI	3.6%	Louisville-Jefferson County, KY-IN	1.4%
Springfield, OH	3.5%	Ithaca, NY	1.4%
Danville, IL	3.4%	Carson City, NV	1.4%
Ann Arbor, MI	3.3%	Burlington, NC	1.4%
Tuscaloosa, AL	3.2%	Youngstown-Warren-Boardman, OH-PA	1.4%
Grand Rapids-Wyoming, MI	3.2%	Columbus, OH	1.3%
Lansing-East Lansing, MI	3.0%	Gainesville, GA	1.2%
Toledo, OH	3.0%	Elmira, NY	1.2%
Rockford, IL	2.9%	Indianapolis-Carmel, IN	1.2%
Lima, OH	2.9%	Charleston-North Charleston-Summerville, SC	1.2%
Lexington-Fayette, KY	2.9%	Racine, WI	1.2%
Huntsville, AL	2.7%	Eugene-Springfield, OR	1.1%
Muncie, IN	2.6%	Buffalo-Niagara Falls, NY	1.1%

Source: Author's analysis of data supplied by Moody's Economy.com

Job losses during the current recession vary by motor vehicle and parts employment share, region size, and ties to the Detroit three automakers

Percent job change from the 4th quarter of 2007 to the 2nd quarter of 2009



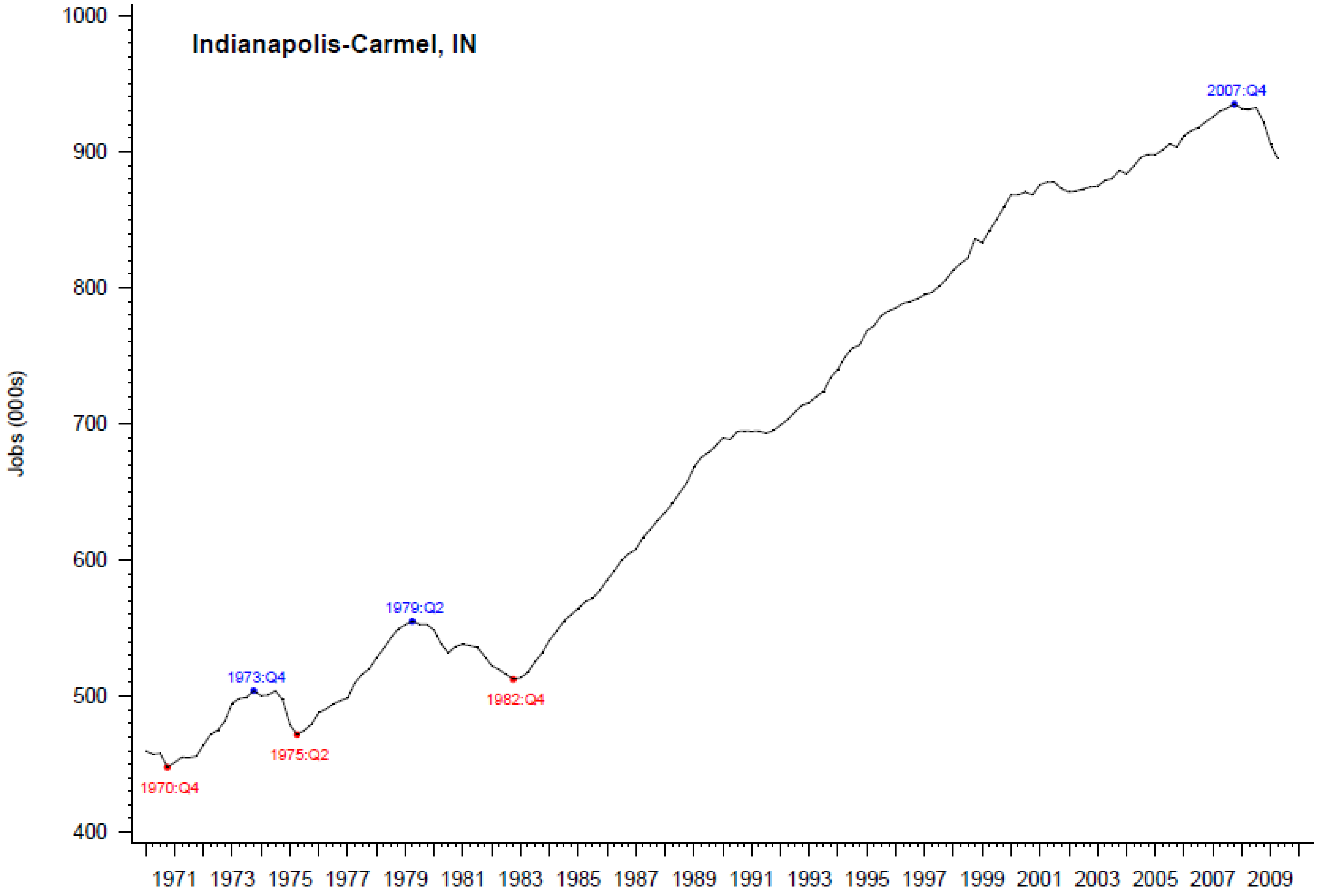
Source: Author's analysis of data supplied by Moody's Economy.com

Job losses from the 4th quarter of 2007 to the 2nd quarter of 2009 range from -16.3 percent in Elkhart, IN to +2.0 percent in Sandusky, OH

Metropolitan area	Percent change in total employment, 4th quarter 2007 to 2nd quarter 2009	Metropolitan area	Percent change in total employment, 4th quarter 2007 to 2nd quarter 2009
Sandusky, OH	2.0%	Indianapolis-Carmel, IN	-4.2%
Lafayette, IN	1.4%	Racine, WI	-4.3%
Ames, IA	1.0%	Bay City, MI	-4.3%
Bloomington-Normal, IL	0.9%	Anderson, SC	-4.5%
Ithaca, NY	0.0%	Lansing-East Lansing, MI	-4.5%
Anderson, IN	-0.5%	Dayton, OH	-4.6%
Blacksburg-Christiansburg-Radford, VA	-0.7%	Gainesville, GA	-4.7%
Oshkosh-Neenah, WI	-1.1%	Nashville-Davidson--Murfreesboro--Franklin, TN	-4.7%
Columbus, IN	-1.2%	Anniston-Oxford, AL	-4.8%
Huntsville, AL	-1.3%	Morristown, TN	-5.1%
Springfield, OH	-1.8%	Kalamazoo-Portage, MI	-5.3%
Buffalo-Niagara Falls, NY	-1.9%	Ann Arbor, MI	-5.3%
Columbus, OH	-2.0%	Mansfield, OH	-5.6%
Charleston-North Charleston-Summerville, SC	-2.1%	Bowling Green, KY	-5.7%
Jackson, MS	-2.2%	Burlington, NC	-5.8%
Elmira, NY	-2.3%	Youngstown-Warren-Boardman, OH-PA	-6.1%
Owensboro, KY	-2.4%	Grand Rapids-Wyoming, MI	-6.2%
Clarksville, TN-KY	-2.7%	Eugene-Springfield, OR	-6.3%
South Bend-Mishawaka, IN-MI	-3.0%	Jackson, MI	-6.6%
Spartanburg, SC	-3.0%	Niles-Benton Harbor, MI	-6.6%
Danville, IL	-3.2%	Carson City, NV	-6.8%
Tuscaloosa, AL	-3.5%	Battle Creek, MI	-7.1%
Lima, OH	-3.5%	Saginaw-Saginaw Township North, MI	-7.2%
Elizabethtown, KY	-3.6%	Toledo, OH	-7.3%
Knoxville, TN	-3.9%	Janesville, WI	-7.4%
Lexington-Fayette, KY	-3.9%	Holland-Grand Haven, MI	-8.6%
Louisville-Jefferson County, KY-IN	-4.0%	Monroe, MI	-9.1%
Fort Wayne, IN	-4.0%	Detroit-Warren-Livonia, MI	-10.0%
Terre Haute, IN	-4.1%	Flint, MI	-10.1%
Rockford, IL	-4.1%	Kokomo, IN	-13.5%
Muncie, IN	-4.2%	Elkhart-Goshen, IN	-16.3%

Source: Author’s analysis of data supplied by Moody’s Economy.com

Six of the auto-dependent regions—Charleston, SC; Gainesville, GA; Huntsville, AL; Indianapolis, IN; Ithaca, NY; and Knoxville, TN—have had persistent gains in total employment until only recently



Source: Author's analysis of data supplied by Moody's Economy.com

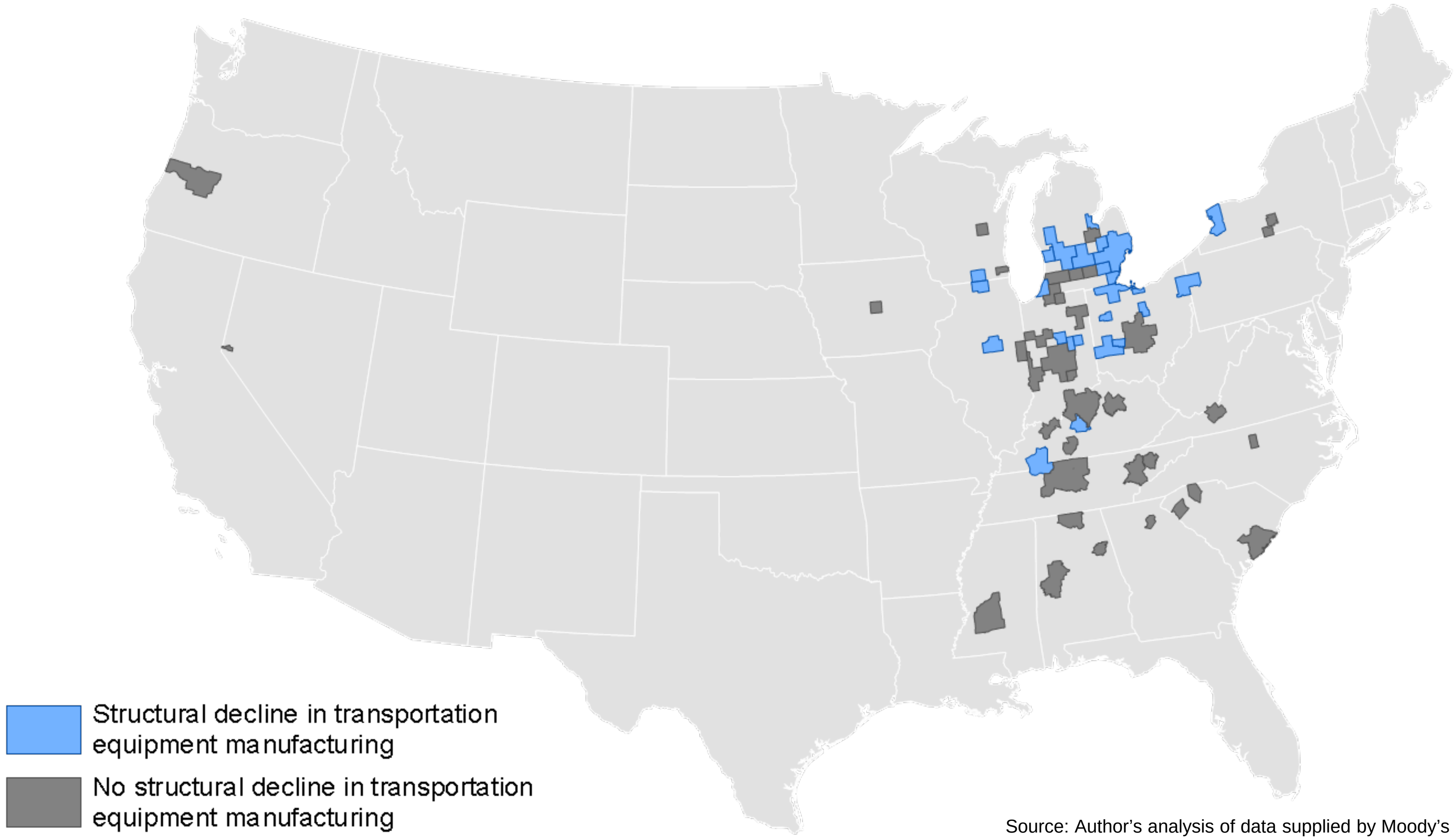
And of the these 56 metros, 25 have experienced structural declines in transportation equipment manufacturing

Structural Decline:

- If employment in transportation equipment manufacturing declined during the current and previous cyclical downturns in total employment and the intervening upturn in the metropolitan area
- Or, if there was no upturn in the metropolitan area, employment in transportation equipment manufacturing declined from the 1st quarter of 2001 to the 2nd quarter of 2009.

The 25 that have experienced structural decline in transportation equipment manufacturing are the places that require the most attention to industrial retention and growth strategies

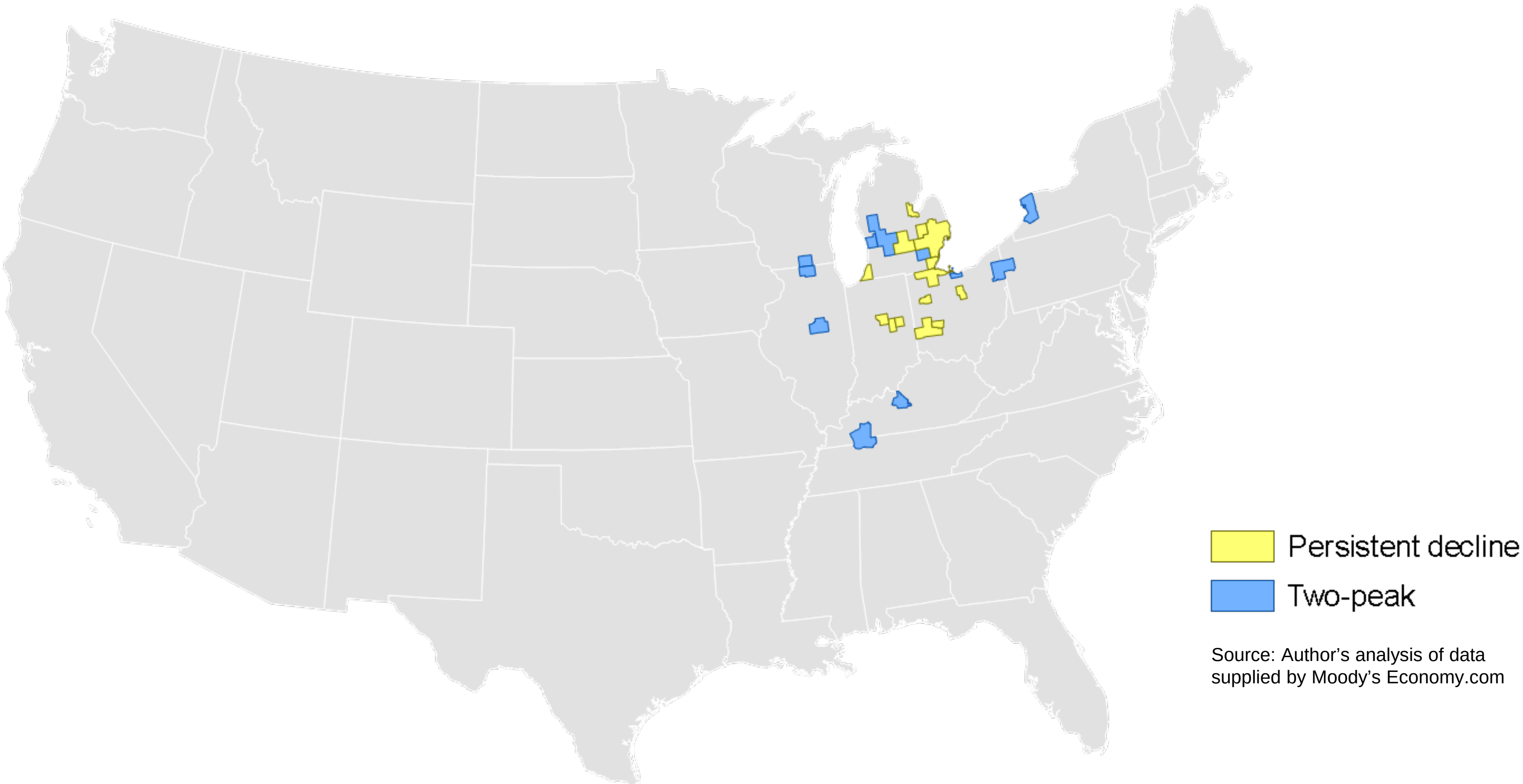
Presence of structural decline in transportation equipment manufacturing



Source: Author’s analysis of data supplied by Moody’s Economy.com

Of these 25 auto-dependent metropolitan areas, there are generally two types

1. Places with two recent (since 1997) employment peaks
2. Places without two recent peaks that have had persistent employment declines since the early 2000 recession or before



Source: Author's analysis of data supplied by Moody's Economy.com

Patterns of structurally changing industries in the 11 two-peak metro areas

Industries with frequent patterns of structural decline	**Frequency**
Transportation Equipment Manufacturing	11 metro areas
Leather and Allied Product Manufacturing	10
Textile Mills	10
Petroleum and Coal Products Manufacturing	9
Furniture and Related Product Manufacturing	8
Apparel Manufacturing	7
Electrical Equipment, Appliance, and Component Manufacturing	7
Beverage and Tobacco Product Manufacturing	6
Computer and Electronic Product Manufacturing	6
Motor Vehicle and Parts Dealers	6
Paper Manufacturing	6
Fabricated Metal Product Manufacturing	5
Food and Beverage Stores	5
Plastics and Rubber Products Manufacturing	5

Industries with frequent patterns of structural growth	**Frequency**
Ambulatory Health Care Services	8 metro areas
Hospitals	5
Nursing and Residential Care Facilities	5
Social Assistance	5
Warehousing and Storage	5

Source: Author's analysis of data supplied by Moody's Economy.com

There are many structurally declining industries in the 14 persistently declining metro areas

Industries with frequent patterns of structural decline	Frequency
Beverage and Tobacco Product Manufacturing	14 metros
Farms	14
Leather and Allied Product Manufacturing	14
Machinery Manufacturing	14
Military Personnel	14
Miscellaneous Manufacturing	14
Miscellaneous Store Retailers	14
Motor Vehicle and Parts Dealers	14
Specialty Trade Contractors	14
Transportation Equipment Manufacturing	14
Accommodation	13
Broadcasting (except Internet)	13
Construction of Buildings	13
Food and Beverage Stores	13
Furniture and Home Furnishings Stores	13
Furniture and Related Product Manufacturing	13
Gasoline Stations	13
General Merchandise Stores	13
Nonmetallic Mineral Product Manufacturing	13
Paper Manufacturing	13
Plastics and Rubber Products Manufacturing	13
Textile Mills	13
Textile Product Mills	13
Wood Product Manufacturing	13
Apparel Manufacturing	12
Computer and Electronic Product Manufacturing	12
Electrical Equipment, Appliance, and Component Manufacturing	12
Fabricated Metal Product Manufacturing	12

Industries with frequent patterns of structural decline (cont.)	Frequency
Fishing, Hunting, Etc.	12 metros
Heavy and Civil Engineering Construction	12
Petroleum and Coal Products Manufacturing	12
Primary Metal Manufacturing	12
Printing and Related Support Activities	12
Publishing Industries (except Internet)	12
Amusement, Gambling, and Recreation Industries	11
Federal Government	11
Merchant Wholesalers, Nondurable Goods	11
Mining (except Oil and Gas)	11
Motion Picture and Sound Recording Industries	11
Oil and Gas Extraction	11
Utilities	11
Administrative and Support Services	10
Building Material and Garden Equipment and Supplies Dealers	10
Couriers and Messengers	10
Food Manufacturing	10
Internet Service Providers, Web Search Portals, and Data	10
Lessors of Nonfinancial Intangible Assets (except Copyrighted	10
Local Government	10
Nonstore Retailers	10
Other Information Services	10
Private Household Workers	10
Real Estate	10
Repair and Maintenance	10
Sporting Goods, Hobby, Book, and Music Stores	10
Support Activities for Mining	10

Source: Author’s analysis of data supplied by Moody’s Economy.com

Patterns of structurally growing industries in the 14 persistently declining metro areas

Industries with frequent patterns of structural growth	Frequency
Social Assistance	14 metros
Ambulatory Health Care Services	13
Hospitals	13
Nursing and Residential Care Facilities	13
Educational Services	12
Credit Intermediation and Related Activities	8
Museums, Historical Sites, and Similar Institutions	8
Support Activities for Transportation	8
Transit and Ground Passenger Transportation	8
Funds, Trusts, and Other Financial Vehicles	7
Performing Arts, Spectator Sports, and Related Industries	7
Rail Transportation	7
Religious, Grantmaking, Civic, Professional, and Similar Organizations	7
Securities, Commodity Contracts, and Other Financial Investments and Related Activities	7
State Government	7
Truck Transportation	7
Warehousing and Storage	7
Air Transportation	6
Clothing and Clothing Accessories Stores	6
Food Services and Drinking Places	6
Insurance Carriers and Related Activities	6
Monetary Authorities - Central Bank	6
Rental and Leasing Services	6
Telecommunications	6
Waste Management and Remediation Services	6

Source: Author’s analysis of data supplied by Moody’s Economy.com

Conclusions

Of the 62 most auto-dependent metro areas:

- 6 had persistent total job growth until recently
- 31 did not have structural decline in transportation equipment manufacturing
- The remaining 25 are those that require the most attention to industrial retention and growth strategies
- Of those 25, there are two kinds of places; each is potentially able to benefit from different types of strategies
- Smaller places and those that are most dependent on motor vehicle and parts manufacturing and the Detroit 3 have suffered more during the current recession and structurally