

***Recent Research on the Northeast Ohio Economy:
An Annotated Bibliography***
By Sara Bencic, August 2009

Approximately six years ago, at the outset of the Fund for Our Economic Future's work, Fund members determined that sponsorship of research on the regional economy was equal in importance to its grant-making and community outreach for the betterment of the regional economy. This annotated bibliography documents the substantial thinking about and measurement of economic activity in Northeast Ohio. In assembling this annotated bibliography a systematic culling of Fund materials, Internet searches, and interviews with key participants in the region's research community were conducted. Though considerable efforts have been made, in all likelihood, not every piece of important work has been captured. Moreover, given the drive and curiosity of the region's research community, research and inquiry will continue so this bibliography, by its nature, is forever a work in progress.

The reader will note that categorization of research has been influenced by the construct of the Dashboard of Regional Economic Indicators and the development agenda known as Advance Northeast Ohio. Entries are made chronologically with most recent documents first and entries are then ordered alphabetically by author within each year.

1. FUND-SPONSORED FRAMING RESEARCH ON NORTHEAST OHIO
REGIONAL ECONOMY

a. DASHBOARD OF REGIONAL ECONOMIC INDICATORS

Austrian, Ziona, Afia Yamoah, and Candice Clouse. [*Regional Dashboard of Economic Indicators 2009: Comparative Performance of Leading, Midwest, and Northeast Ohio Metropolitan Areas*](#). Cleveland State University Center for Economic Development: July 2009. Between 2004 and 2007, the four Northeast Ohio Metropolitan areas improved their ranks in 3-year growth rates. In contrast, employment in Northeast Ohio is not growing- none of the metropolitan areas improved in rank from 2004 to 2007.

Austrian, Ziona, Afia Yamoah, and Iryna Lendel. [*Regional Dashboard of Economic Indicators 2008*](#). Cleveland State University Center for Economic Development: September 2008. The Dashboard of Economic Indicators monitors the performance of the Northeast Ohio (NEO) metropolitan areas (Akron, Canton-Massillon, Cleveland-Elyria-Mentor, and Youngstown-Warren-Boardman) compared to other metropolitan areas throughout the United States. All four MSAs are located in the fourth quartile due to slow gross metropolitan product growth.

Austrian, Ziona, Afia Yamoah, and Iryna Lendel. [*An Update of the Regional Growth Model for Large and Mid-Size U.S. Metropolitan Areas: Northeast Ohio Dashboard Indicators*](#). Cleveland State University Center for Economic Development: August 2007. This report found that Northeast Ohio metropolitan areas grew at modest rates

for all four measures and always below the sample average. Between 1995 and 2004, the Cleveland metro per capita income grew at 8.9 percent while the sample average growth rate was nearly 14 percent.

Thompson, Chris. [*Lessons of the Dashboard*](#). The Fund for Our Economic Future: 2007. <http://www.futurefundneo.org>. While there is no single solution to solving Northeast Ohio's problems, the Dashboard can help policy makers focus on the most important areas of economic development. There are four lessons to take away from the Dashboard: *No Silver Bullets*; *History Shapes Our Present, Not Our Future*; *Focus on What Matters*; and *Set Regional Goals*.

Eberts, Randall, George Erickcek, and Jack Kleinhenz. [*Dashboard Indicators for the Northeast Ohio Economy: Prepared for the Fund for Our Economic Future*](#). Federal Reserve Bank of Cleveland: April 2006. This original Dashboard report introduces the four areas of economic activity: employment, output, per capita income, and productivity. There are eight Dashboard indicators that are highly correlated with the four areas: Skilled Workforce, Urban Assimilation, Racial Inclusion, Legacy of Place, Income Inequality, Locational Amenities, Business Dynamics, and Urbanization/Metro Structure.

b. VOICES AND CHOICES

Davis, Shara. [*Framing Conversations for Northeast Ohio: Diagnostic Paper*](#). Public Services Institute & Joint Center for Policy Research, Lorain Community College. February 2004. This diagnostic paper is based on conversations with Northeast Ohio residents, interviews with regional leaders, and a summary of existing research. It identifies four areas that are critical to moving the region forward: Innovative Economy, Livable Community, Social Inclusion, and Collaborative Government.

Voices & Choices. *Northeast Ohio Speaks! Results of the 11 Leadership Workshops and the Regional Town Meeting*. January 2006. A total of 1,058 leaders participated in the Leadership Workshops in August and September 2005, and a total of 1,058 leaders participated in the Leadership Workshops in August and September 2005. Most Town Meeting participants said that they wanted Northeast Ohio to be known around the world for its renowned quality healthcare.

The Fund for Our Economic Future. [*Voices and Choices: Report on the Public's Priorities for Northeast Ohio's Future*](#). November 2006. Voices and Choices was created by the Fund for Our Economic Future to increase awareness about the challenges that the Northeast Ohio region faces. After interviewing thousands of Northeast Ohio residents, the Fund developed a plan that included the areas of concern.

c. BAROMETER OF ECONOMIC ATTITUDES

Maxine Goodman Levin College of Urban Affairs and the Gallup Organization. [2006 Northeast Ohio Barometer of Economic Attitudes](#). May 2006. The Barometer is an annual opinion survey of Northeast Ohio residents that tracks the public's opinion on the region's economic development performance, regionalism, and economic development initiatives. Ninety-seven percent of participants considered their county to be part of Northeast Ohio. Fifty-four percent of residents were likely to stay in Northeast Ohio but only 24 percent were extremely likely to recommend NEO as a place to live.

Hexter, Kathryn Wertheim, Molly Schnoke, and John Brennan. [2008 Northeast Ohio Barometer of Economic Attitudes](#). Cleveland State University Levin College of Urban Affairs. The 2008 Barometer is a continuation from previous studies done in 2004, 2005, and 2006. 85 percent of Northeast Ohio residents are likely to continue living in NEO, and 69 percent would recommend NEO as a place to live, up from 48 percent in 2006.

d. ADVANCE NORTHEAST OHIO

Advance Northeast Ohio. [Our Region's Economic Action Plan](#). This action plan grew out of the input from Voices & Choices and hopes to help the economy grow, as well as work on a more collaborative government. There are four action areas: Business Growth and Attraction, Talent Development, Racial and Economic Inclusion, and Government Collaboration and Efficiency.

2. BUSINESS GROWTH AND ATTRACTION

Lendel, Iryna and Ziona Austrian. [Northeast Ohio High-Tech Economy Report](#). Cleveland State University Center for Economic Development: February 2009. This study examines the high-tech industry and bioscience sector in Northeast Ohio. Northeast Ohio high-tech employment is growing at a greater rate than the Midwest average, but at a slower rate than the U.S. average.

Team NEO. [Cleveland Plus Economic Review: Biomedical Industry a Driving Force in Northeast Ohio](#). March 2009. The biomedical industry in Northeast Ohio has increased by 30 percent in the past 5 years, and Northeast Ohio is now home to 600 biomedical companies. The biomedical industry's share has increased to 2.8 percent of total GRP.

Austrian, Ziona, Candice Clouse, Eric J. Mundy, Frank Akpadock, Thomas Finnerty, Jr., and John Bralich. [The Role of Northeast Ohio Central Cities in the Regional Economy, 2000-2007](#). Ohio Urban University Program: November 2008. This report examines the four central cities of Northeast Ohio (Akron, Canton, Cleveland, and Youngstown) and the important role each city plays in the regional economy. The three largest industries in the region are *Health Care and Social Assistance*, *Manufacturing*, and *Retail Trade*.

Hauser, Bill and AnneMarie Scarisbrick-Hauser. [*Is the Glass Half Empty of Half Full?*](#) The University of Akron: November 2008. <http://www.neotec.org>. Over 23,000 firms in the region are engaged in some sort of international business activity that generated \$37.4 billion in output in 2006. Access to markets makes Northeast Ohio a key region for doing international business.

Taylor, Jill. [*Manufacturing Brief*](#). Cleveland State University Center for Economic Development: May 2008. This report examines trends in employment, output, and wages for manufacturing industries in Northeast Ohio. Manufacturing remains an important industry in Northeast Ohio; it provides almost 300,000 jobs and accounts for 15.6 percent of total employment.

Team NEO. [*Northeast Ohio Economic Review: Regional Strength in Headquarters*](#). December 2008. Northeast Ohio ranks 4th in the nation in Headquarters Employment Share. Vacancy rates are at their lowest point in the past five years at 7.5 percent, and occupied industrial spaces is higher than at any point in the past five years.

Cirillo, Patricia Ph.D., Jill S. Taylor, and Ziona Austrian, Ph.D. [*International Business in Northeast Ohio*](#). Cleveland State University and Cypress Research Group: May 2007. This project was designed to examine the international activity of business and law firms in Northeast Ohio. Of the 520 surveyed businesses, roughly two-thirds had engaged in international business activity. After gathering data from the surveys, this project estimates that \$21.96 billion of net revenues from these international activities enter Northeast Ohio.

Akpadock, Frank and Hunter Morrison. [*The Mahoning Valley Advanced Manufacturing Initiative*](#). Youngstown State University: May 2006. The goal of this report was to assess the types of firms in the Mahoning-Shenango Valley that used advanced technology. With the creation of the Advanced Manufacturing Council, the industry clusters hope to become more powerful in the New Economy.

3. ENTREPRENEURSHIP AND INNOVATION

Austrian, Ziona and Afia Yamoah. [*JumpStart Inc.: Economic Impact on and Contribution to Northeast Ohio, 2008*](#). Cleveland State University Center for Economic Development: April 2009. This study examined the economic impact of JumpStart investments in start-up companies in Northeast Ohio in 2008. JumpStart affected output by \$75.7 million, income by \$20.9 million, employment by 502 jobs, and taxes by \$8.3 million.

Dever, Steven and Gregory Zucca. [*Great Lakes Wind Energy Final Feasibility Study-Fact Sheet*](#). 2008. <http://development.cuyahogacounty.us/en-US/Wind-Turbine-Feasibility-Study.aspx>. Cuyahoga County is trying to build the world's first offshore wind turbine in fresh water; this would make the county a primary hub for wind

energy in North America. The Pilot Project is estimated to cost between \$77.2 million and \$92.7 million, but it would produce approximately 37,500 to 55,000 MWh per year.

Hill, Edward, Joel Elvery, Daila Shimek, Ziona Austrian, Claudette Robey, Kevin O'Brien, et al. [*The Likely Impact of Mandated Paid Sick and Family-Care Leave on the Economy and Economic Development Prospects of the State of Ohio*](#). Cleveland State University: September 26, 2008. This study found that there would be a net cost associated with the paid sick leave and family-care initiative proposed in Ohio: the short run lower-bound estimate for the cost is \$102.9 million, while the upper bound estimate is \$420 million per year. An estimate 1.6 million workers would have gained paid sick and family care leave if the initiative were enacted.

Jumpstart, NorTech, and Bioenterprise. [*The 2008 Venture Capital Report*](#). Venture investments financed more companies in 2008 than in the previous years from 2004 to 2007. There were also more seed companies financed in 2008 than ever before. The Ohio Capital Fund has committed over \$98 million to eighteen venture funds to date.

Kasdan, David O. [*Northeast Ohio Entrepreneurship Confidence Survey: Third-Year Findings*](#). Cleveland State University Center for Economic Development: September 2008. The Entrepreneurship Confidence Survey assesses the entrepreneurial climate and entrepreneurs' confidence in their ability to start and sustain a business in Northeast Ohio. Entrepreneurs were confident about their ability to do business in the region, and they had positive perceptions of available resources and quality of life. However, most respondents were negative toward the overall economic health of the region.

Lendel, Iryna and Songpyo Kim. [*Patenting By Cleveland's Inventors: Critical Areas and Knowledge Flows*](#). Cleveland State University: May 2008. This report studies the patenting fields and knowledge spillovers in the critical product fields in the Cleveland-Elyria-Mentor MSA. Information on growing product fields and patent activity may be useful for public policy designed to promote innovation in the region.

Lendel, Iryna Ph.D. [*The NASA Glenn Research Center: An Economic Impact Study Fiscal Year 2007*](#). Cleveland State University Center for Economic Development: September 2008. NASA Glenn impacts Northeast Ohio through the programs and projects related to NASA's missions: Exploration, Science, Space Operation, and Aeronautics Research. NASA Glenn's economic impact on Northeast Ohio for fiscal year 2007 was the following: output by \$1.045 billion, employment by 6, 407 jobs, and household earnings by \$333.7 million.

Nelson Michael A. *An Economic Impact Analysis of Marathon Petroleum Company(MPC)LLC Refinery in Canton, Ohio, March 2008*. University of Akron. The total economic impact of the MPC Canton refinery on the Northeast Ohio economy is estimated to be 1,634 jobs and earnings of \$81.4 million in 2007.

Akpadock, Frank and Hunter Morrison. [*A Comparative Evaluation of Business and Innovation Climate Indicators in the Youngstown-Warren-Boardman, MSA.*](#) Youngstown State University: June 2007. Data from eleven metropolitan statistical areas (MSAs) across the Midwest were compared with data from the Youngstown-Warren-Boardman MSA. The Flint, MI MSA ranked first overall when all the scores were normalized, aggregated and ranked. The Youngstown-Warren-Boardman MSA placed last.

The Center for Public Management. [*The Economic Impact of the Arts and Culture \(ACE\) as Economic Development Grant Program on the Greater Cleveland Regional Economy.*](#) Cleveland State University Maxine Goodman Levin College of Urban Affairs: June 2007. The 2006 Cuyahoga County Arts and Culture as Economic Development Grant Program expanded Gross Regional Product and benefited Cleveland, as well as all of Cuyahoga Country. Output increased by \$11.5 million and GRP by \$6.92 million. Of this increased output, about \$9.65 million went to the city of Cleveland.

Policy Research and Strategic Planning. [*Ohio's Innovation Economy.*](#) Ohio Department of Development. This report is a breakdown of the state of Ohio's economy. While most industries lost jobs between 2001 and 2006, *Managing of companies and enterprises* gained 21,400 jobs and *R&D services* gained 3,000 jobs. Approximately 77 percent of industry-performed R&D in Ohio is done by manufacturing companies with a focus on basic chemicals, primary and fabricated metals, appliances, machinery, and more.

Shane, Scott. [*White Paper on Economic Growth through Business Formation.*](#) Case Western Reserve University. This report, commissioned by the Fund for Our Economic Future, examines why policy makers seeking to encourage entrepreneurship need to do more than just promote start-up companies. The seventeen categories of interventions include interventions to change the industrial composition of the region, its stock of human and financial capital, its research and technology base, and its political and cultural environment.

4. TALENT DEVELOPMENT AND EDUCATION ATTAINMENT

Education Works Leadership Council. [*Education Works: Preparing the Region's Learners for the 21st Century.*](#) Advance Northeast Ohio: December 9, 2008. <http://www.advancenortheastohio.org/node/523>. The goal of Education Works is to change the education standards so that children are able to attain higher levels of education and be more prepared for the 21st century workforce.

Salling, Mark. [*Changes in Poverty and Educational Attainment, 2000 to 2007 Poverty Rates Increasing for those with College Education, Too.*](#) Cleveland State University Maxine Goodman Levin College of Urban Affairs: September 2, 2008. Between 2000 and 2007 in Ohio, the poverty rate for persons

with some college or Associate's degree has increased by more than 50 percent. In Cuyahoga County, the poverty rate for persons with some college or Associate's degree increased by 39.2 percent (from 7.2 percent to 10 percent).

Salling, Mark. [More Persons Attending College and Getting Degrees, 2000 to 2007](#) [The Cleveland-Akron-Elyria Region Doing Well](#). Cleveland State University Maxine Goodman Levin College of Urban Affairs: September 23, 2008. In 2007, an estimated 193,500 persons were enrolled in college or graduate school in the Cleveland-Akron-Elyria CSA. This increase of 22 percent (35,000) surpasses the Ohio and national averages (20% and 19%, respectively).

The Center for Public Management. [An Examination of the Quality of Supply and Demand Issues of Northeast Ohio's Information and Communications Technology Workforce \(Phase II\)](#). Cleveland State University: June 2007. This purpose of this study was to gain an understanding of the relationship between supply and demand sides of Northeast Ohio's Information, Communications, and Technology market. The results showed that there is a greater need for collaboration among the ICT industry and higher education institutions, as well as a greater effort to publicize the full range of job opportunities.

The Public Services Institute and Joint Center for Policy Research. [Northeast Ohio Information Technology Workforce Report](#). Lorain County Community College: December 2007. This report, prepared for NorTech, examines the Information Technology industry in Northeast Ohio. There are an estimated 96,000 IT professionals working in Northeast Ohio.

Team NEO. [Northeast Ohio Economic Review: Talent and Cost of Living Comparison](#). December 2007. Northeast Ohio's cost of living is above 10 percent lower than the national average. Real GDP has grown by \$41 billion (31 percent) from 1992-2007.

The Federal Reserve Bank of Cleveland. [Can Economics Help Save Our Schools?](#) 2004 Annual Report. The Fed uses economic analysis to study education in order to formulate better public policies that would most efficiently use available resources. Educated people help drive innovation and thus economic growth so it is important to view education as a necessary investment. The quality of teachers can positively affect students' performances in school.

5. RACIAL AND ECONOMIC INCLUSION

McShepard, Randell and Mark C. Batson. [Hope for Urban America](#). Policy Bridge: January 2009. With Barak Obama's election as President there is hope that he can help revive urban America. Any policy will require a comprehensive, collaborative effort among federal and state departments.

McShepard, Randell and Mark C. Batson. [The Job Prescription](#). Policy Bridge: July 2008. The 2006 rate of joblessness for black men in Cleveland was 38 percent as

opposed to 23 percent for white men. The unemployment rate for African American men in their prime as more than doubled in Cleveland since 2000.

Powell, John A., Angela Glover Blackwell, Robert D. Bullard, and Deeohn Ferris. [*Regionalism: Growing Together to Expand Opportunity to All*](#). The Kirwan Institute for the Study of Race and Ethnicity: June 2007. <http://kirwaninstitute.org>. The purpose of this study was to determine how regionalism would impact the African American community. In order to create an economically sustainable region, Cleveland should strive to use policies that will improve the health and welfare of all communities, including ones that reform education, housing and development, transportation, public health, and more.

Schweitzer, Mark and Brian Rudick. [*A Closer Look at Cleveland's Latest Poverty Ranking*](#). Federal Reserve Bank of Cleveland: February 15, 2007. Cleveland was found to be the poorest big city in the United States, with almost one third of its residents living in poverty. Most of the poor residents are concentrated in the city; the total number of poor residents in the city of Cleveland has increased by approximately twenty thousand since 2000.

McShepard, Randell, Tim D. Goler and Mark C. Batson. [*Untapped Potential*](#). Policy Bridge: December 2005. African-American males are an underutilized force in Northeast Ohio as they are unemployed twice as much as the total male population of NEO, and often for longer periods. If African-American men are given greater economic opportunities in Northeast Ohio, it will not come without benefits to the regional economy. These benefits will include increased consumer buying power, increased income and property taxes, increased civic engagement, and renewed economic growth.

Powell, John A., Julie Nielsen, Jason Reece, Roger A. Clay, Jr. and Tim Lohrentz. [*A Minority Business Development Framework for the Cleveland Foundation*](#). The Kirwan Institute for the Study of Race and Ethnicity: October 2005. The purpose of this report was to assist the Cleveland Foundation with its minority business development approach. Between 1992 and 1997, sales and receipts of African-American owned businesses in Cleveland grew by 284 percent. Cleveland ranked twelfth out of the twenty cities on the African American-owned business index, placing it in the middle.

6. GOVERNMENT COLLABORATION AND EFFICIENCY

The Center for Public Management. [*An Analysis of the Feasibility of a Joint Economic Development District between the City of Brunswick and Hinckley Township*](#). Cleveland State University Maxine Goodman Levin College of Urban Affairs: June 2008. A Joint Economic Development District provides increased revenues and more extensive and effective services to residents of municipal corporations and townships.

The city of Brunswick and Hinckley Township have both the land and the infrastructure to support such a development.

Davis, Shara L., James P. Trakas, Myron Orfield, and Thomas Luce. [*Northeast Ohio Economic Review Study*](#). Lorain Community College and Ameregis: May 2008. The Regional Economic Review Study explores region-wide planning and revenue sharing among the 16-county Northeast Ohio region. Revenue sharing could decrease unhealthy economic competition that led to Northeast Ohio's real person income growth and job growth from 1990-2005 being lower than nine other large Midwestern Metropolitan areas.

Zetteck Jr., Charles. [*A Cost of Government Study for Northeast Ohio*](#). Center for Governmental Research: June 2008. This report explains the cost and revenue database developed for each of the 16 Northeast Ohio counties. There are 656 governmental entities in Northeast Ohio that spent \$15.88 billion in 2002. Between 1992 and 2002, total expenditures per capita for NEO local governments increased by 68 percent while the Consumer Price Index for the Midwest only increased 29 percent.

7. OTHERS

Brennan, John. [*Northeast Ohio Economic Brief*](#). Cleveland State University: June 2009. Between 2007 and 2008, Northeast Ohio gross product increased by 0.4 percent. Between 2006 and 2008, *Health Care* and *Manufacturing* were reported to be the largest sectors in Northeast Ohio.

Elvery, Joel. [*Employment and Wage Trends of Healthcare Occupations in the Cleveland-Elyria PMSA*](#). Cleveland State University: March 19, 2009. Several occupations in the local Healthcare industry appear to be pain-points (open positions that are hard to fill): Registered Nurses, Cardiovascular Technologists and Technicians, Diagnostic Medical Sonographers, Physical Therapists, and Occupational Therapists. These occupations saw either strong employment and wage growth or both.

Fee, Kyle. [*Employment Loss in Ohio's Manufacturing Industry*](#). The Federal Reserve Bank of Cleveland: March 2009. Ohio's manufacturing industry has been declining since the 1980's and its share of employment has decreased from 21.7 percent of workers in 1990 to 14.2 percent of workers in 2007. Since December 2007, Ohio has seen employment losses of 13.5 percent, while the nation saw losses of 9.5 percent.

Erikcek, George, Kevin O'Brien, Jim Robey, et al. [*Comprehensive Study of Regionalism: Tools for Comparison and Evaluation*](#). W.E. Upjohn Institute for Employment Research, Cleveland State University, and TeamNEO: May 2008. This study looks at the potentials of combining academic research in the regional economic development field with knowledge of local leadership to determine an economic development project's success. The authors found that the development projects that were most

successful tended to incorporate the region's strengths, such as its workers' skill level, its education and training institutions, and its industrial base.

The Office of Corporate and Community Services. [*The Northeast Ohio 2008 Starting Wage and Benefit Survey*](#). Kent State University Stark Campus: April 2008. This report is an update of the 2006 starting wage survey. Organizations within the manufacturing sector responded in the highest numbers. Medical scientists had the highest mean annual wage with \$105,000 while home health aides had the lowest mean annual wage of \$15,808.

Taylor, Jill. [*Economic Brief*](#). Cleveland State University Center for Economic Development: April 2008. This report provides a brief summary of employment and wage trends in Northeast Ohio using data from 2007. Gross product increased by 1.2 percent between 2006 and 2007, which suggest increased productivity.

Team NEO. [*Northeast Ohio Economic Review: Focus on Industrial Real Estate*](#). June 2008. Cleveland ranks as the ninth largest area of industrial space. The 16-county Cleveland Plus region is ranked as the sixth largest industrial market in North America.

Team NEO. [*Northeast Ohio Economic Review: Focus on Office Real Estate*](#). September 2008. There is more occupied space in Q2 2008 than anytime in the past five years as occupied space has increase to almost 112 million square feet. The Real Estate Research Corporation lists Cleveland as one of the top five office markets to watch in 2008.

The Office of Corporate and Community Services. [*The Northeast Ohio Starting Wage and Benefit Survey*](#). Kent State University Stark Campus: October 2006. The authors, with the help of TeamNEO, conducted a starting wage survey of establishments in Northeast Ohio's 13 counties. Organizations within the manufacturing sector responded in the highest numbers. The occupation with the highest overall mean wage was compensation and benefits manager in the management industry.

Rosentraub, Mark. ["The Local Context of a Sports Strategy for Economic Development."](#) *Economic Development Quarterly* 20.3 (2006): 278-291. <http://journals.ohiolink.edu>. Despite existing assumptions about the value of professional sports teams, three new strains of research show that these sports teams can provide an intangible benefit to fans. In the 1990's, Cleveland built three sports stadiums that cost millions of dollars but also generates revenues from the amusement tax that would be nonexistent if new stadiums had not been built. The new stadiums may have changed the negative image of downtown Cleveland and encouraged the building of new apartments and condominiums.

Venkatu, Guhan. [*Cleveland \(on the\) Rocks*](#). Federal Reserve Bank of Cleveland: February 1, 2006. While many people like to blame Cleveland's employment problems on the decline of manufacturing industries, the above-average participation in these

industries was not Cleveland's main problem. Non-manufacturing sectors failed to grow as fast as the national average.

Team NEO and the Cleveland State University Center for Public Management.

[*Estimating the Value of a FirstEnergy Investment: Habitat for Humanity.*](#) May 2005. Between 2001 and 2004, FirstEnergy invested \$9 million in the Habitat for Humanity program to build houses around the state of Ohio. Habitat built 150 homes in Ohio during this time. The estimated economic impacts were 119 jobs, an increase in Gross State Product by \$8.3 million, an rise in Ohio disposable income by \$4 million, and an growth in state and local revenues by \$1 million.

8. HISTORIC FOUNDATIONS OF CURRENT NEO ECONOMIC RESEARCH

Austrian, Ziona. *Regional and Local Economic Development Studies: Summaries.*

Cleveland State University: January 6, 2005. This document, prepared for the Fund for Our Economic Future, includes summaries of selected studies of regional and local economic development studies conducted in Northeast Ohio. Some important studies include the Clusters Project, the Northeast Ohio Regional Competitiveness Initiative, Industrial Activity in Cleveland, and Summit 2010 (Quality of Life Project).

Fogarty, Michael et al. [*Cleveland from Start Up to Present – Innovation and Entrepreneurship in the 19th and Early 20th Century.*](#) Center for Regional Economic Issues, Weatherhead School of Management. 2002. Cleveland's economy has struggled since the decline of the anchor "Rust Belt" industries in the 1970s and 1980s. However, Cleveland has a rich history of growth and innovation since the end of the Civil War due to many patents, entrepreneurs, and investors with strong national and local connections.

Austrian, Ziona. [*"Cluster Case Studies: The Marriage of Quantitative and Qualitative Information for Action."*](#) *Economic Development Quarterly* 14.1 (2000): 97-110. <http://journals.ohiolink.edu>. This article examines the use of qualitative data in cluster analysis, as well as reviews several types of cluster maps. It is based on the Northeast Ohio Clusters Project. The author found that the best type of cluster map combined an aspect of all of the previous five maps.

Fagan, Jocelyn. [*"Do Northeast Ohio's Drivers Derive Competitive Advantage From Shared Labor?"*](#) *Economic Development Quarterly* 14.1 (2000): 111-125. <http://journals.ohiolink.edu>. The author's purpose was to discover whether the Cleveland-Akron MSA's driver industries were due to competitive advantage from labor market externalities. The data showed that the industries in the MSA can be grouped by like occupational distributions and that the industries therefore derive agglomeration economies in shared labor.

Hill, Edward W. and John Brennan. [*"A Methodology for Identifying the Drivers of Industrial Clusters: The Foundation of Regional Competitive Advantage."*](#) *Economic*

Development Quarterly 14.1 (2000): 65-96. <http://journals.ohiolink.edu>. This article gives a theoretically based method for identifying clusters (driver industries) in which a region has a competitive advantage. The authors applied this method to the Cleveland-Akron Consolidated MSA and found that the clusters pointed towards the region having a strong competency for materials.

Kleinhenz, Jack. "[An Introduction to the Northeast Ohio Clusters Project.](#)" *Economic Development Quarterly* 14.1 (2000): 63-64. <http://journals.ohiolink.edu>. The Northeast Ohio Clusters Project was funded by the Cleveland and George Gund Foundations at the initiative of the Akron Regional Development Board, Cleveland Tomorrow, and the Greater Cleveland Growth Association. The research sought to find the region's driving industries and identified metalworking, plastic products, chemicals, motor vehicles and parts, and insurance as the most competitive clusters of economic activity.

Porter, Michael E. "[Location, Competition, and Economic Development: Local Clusters in a Global Economy.](#)" *Economic Development Quarterly* 14.1 (2000): 15-34. <http://journals.ohiolink.edu>. The author explains that clusters provide a new way of thinking about competitive advantage and the health of an economy. Clusters, as a broad categorization, capture important linkages, complementarities, and spillovers in terms of technology, skills, information, marketing, and customer needs that cut across firms and industries. These externalities create a possible rationale for collective action and a role for government.

Kleinhenz, Jack, and Edward Hill. *Northeast Ohio Regional Economic Development Strategies Initiative: Industry Clusters Project*. June 1998. This project, sponsored by the Akron Regional Development Board, Cleveland Tomorrow, and the Greater Cleveland Growth Association, was designed to identify the region's most competitive clusters of industries. The research identified metalworking, plastic products, chemicals, motor vehicles and parts, and insurance as competitive clusters of economic activity.

Gurwitz, Aaron S. and G. Thomas Kingsley. *The Cleveland Metropolitan Economy: An Initial Assessment*. The Rand Corporation: March 1982. Prepared for the Cleveland Foundation. During this time, the most important industry in Cleveland was durable goods manufacturing. Growing non-manufacturing industries were still closely linked with manufacturing industries- trucking and warehousing, etc. However, this study found that there was a movement toward the service industry. This study is important to the region's intellectual history because it was the first time research captured the stagnant state of the economy and made an attempt to help the region grow.

Sara Bencic prepared this annotated bibliography as a staff intern with the Fund for Our Economic Future during the summer 2009. She is a rising junior at Denison University majoring in economics. Supervision for this work was given by Robert Jaquay, Associate Director of the George Gund Foundation.