



2016

**Comprehensive Economic Development Strategy
Annual Performance Report**



\$5.1 Million Crane and Conveyor System—Wellsville Intermodal Facility



Table of Contents

Directors and Officers

Executive Board & Membership

CEDS Committee

Staff and Job Responsibilities

Component One: **Adjustment to the Strategy**

Component Two: **Report on Economic Development Activities**

Component Three: **Evaluation of Progress on Implementation Plan and Goals**

Component Four: **Schedule for Next Year**

Appendix A: **County Profiles**

Appendix B: **POWER Initiative Core Project Narrative**

Ohio Mid-Eastern Governments Association
326 Highland Avenue – Suite B
Cambridge, OH 43725

(740) 439-4471
www.omegadistrict.org



Officers and Director



L to R: Mayor of Steubenville, Domenick Mucci – Vice President; Chief of Staff, Ohio Development Services Agency, Andrew Pusateri (keynote speaker at OMEGA meeting); OMEGA Executive Director, Jeannette Wierzbicki, P.E.; Tuscarawas County Commissioner, Chris Abbuhl – Secretary; Executive Director of the Coshocton County Port Authority, Dorothy Skowrunski – Treasurer; Holmes County Commissioner, Ray Eyler – President; and Director of the Governor’s Office of Appalachia, Jason Wilson (special guest at OMEGA meeting)

OMEGA FY 2016 Executive Board

COUNTY	NAME	TITLE	EMPLOYER
<i>BELMONT</i>	Ginny Favede	Commissioner	Belmont County
<i>CARROLL</i>	Robert Wirkner	Commissioner	Carroll County
<i>COLUMBIANA</i>	Mike Halleck	Commissioner	Columbiana County
<i>COSHOCTON</i>	Dorothy Skowrunski	Executive Director	Coshocton Port Authority
<i>GUERNSEY</i>	Skip Gardner	Commissioner	Guernsey County
<i>HARRISON</i>	Bill Host	Commissioner	Harrison County
<i>HOLMES</i>	Ray Eyler	Commissioner	Holmes County
<i>JEFFERSON</i>	Evan Scurti	Executive Director	Jefferson County
<i>MUSKINGUM</i>	Jerry Lavy	Commissioner	Muskingum County
<i>TUSCARAWAS</i>	Chris Abbuhl	Commissioner	Tuscarawas County
CITIES			
<i>CAMBRIDGE</i>	Thomas Orr	Mayor	City of Cambridge
<i>COSHOCTON</i>	Steve Mercer	Mayor	City of Coshocton
<i>DOVER</i>	Richard Homrighausen	Mayor	City of Dover
<i>EAST LIVERPOOL</i>	Bill Cowan	Director of Planning	City of East Liverpool
<i>MARTINS FERRY</i>	Robert Krajnyak	Mayor	City of Martins Ferry
<i>NEW PHILADELPHIA</i>	Joel Day	Mayor	City of New Philadelphia
<i>STEUBENVILLE</i>	Domenick Mucci	Mayor	City of Steubenville
<i>TORONTO</i>	John Parker	Mayor	City of Toronto
<i>UHRICHSVILLE</i>	Rick Dorland	Mayor	City of Uhrichsville
<i>ZANESVILLE</i>	Jeff Tilton	Mayor	City of Zanesville
<i>SALEM</i>	John C. Berlin	Mayor	City of Salem

2016 OMEGA MEMBERSHIP

BELMONT COUNTY (6)

Ginny Favede Belmont County Commissioner	Membership Executive	101 West Main Street St. Clairsville	43950	740.699.2155 Fax: 740.699.2155 ginny.favede@co.belmont.oh.us
Matt Coffland Belmont County Commissioner	Membership Executive - Alternate	101 West Main Street St. Clairsville	43950	740.699.2155 Fax: 740.699.2155 matt.coffland@co.belmont.oh.us
Andy Sutak Belmont County Auditor	Membership	101 West Main Street St. Clairsville	43950	740.699.2130 czeno@belmontcountyohio.org
Sue Douglass Director of Belmont County CIC/DOD	Membership	117 East Main Street St. Clairsville	43950	740.695.9678 suedouglass.belmontcounty@comcast.net
Mark A. Thomas Belmont County Commissioner	Membership	101 West Main Street St. Clairsville	43950	740.699.2155 Fax: 740.699.2155 mark.thomas@co.belmont.oh.us
Larry Merry Director of Belmont County Port Authority	Membership	101 N Market St. Suite J St. Clairsville	43950	740.695.4397 larry.merry@co.belmont.oh.us

CITY OF MARTINS FERRY (BELMONT) -- (1) [MIN. + ALT.]

Robert Krajnyak Mayor	Membership Executive	35 South Fifth Street Martins Ferry	43935	740.633.2876 rtkrajnyak@gmail.com
Chris Cleary Service Director	Membership - Alternate Executive - Alternate	35 South Fifth Street Martins Ferry	43935	740.633.2862 servicedirectorcleary@gmail.com

CARROLL COUNTY (3) [MIN. + ALT.]

Robert Wirkner Carroll County Commissioner	Membership Executive	119 S. Lisbon St. - Ste. 201 Carrollton	44615	330.627.4869 Fax: 330.627.6656 rwirkner@carrollcountyohio.us
Thomas R. White Carroll County Commissioner	Membership	119 S. Lisbon St. - Ste. 201 Carrollton	44615	330.627.4869 Fax: 330.627.6656 twhite@carrollcountyohio.us
Jeffrey Ohler, President Carroll County Commissioner	Membership Executive - Alternate	119 S. Lisbon St. - Ste. 201 Carrollton	44615	330.627.4869 Fax: 330.627.6656 johler@carrollcountyohio.us
Glenn Enslen Director of Economic Development	Membership - Alternate	POB 277 Carrollton	44615	330.627.5500 genslen@choosecarrollcounty.com

COLUMBIANA COUNTY -- (9)

Mike Halleck, Chairman Columbiana County Commissioner	Membership Executive	105 S. Market Street Lisbon	44432	330.424.9511 Fax: 330.424.5067 mhalleck@cccommissioners.org
Tim Weigle, Vice-President Columbiana County Commissioner	Membership Executive - Alternate	105 S. Market Street Lisbon	44432	330.424.9511 Fax: 330.424.5067 tweigle@cccommissioners.org
Jim Hoppel, President Columbiana County Commissioner	Membership	105 S. Market Street Lisbon	44432	330.424.9511 Fax: 330.424.5067 jhoppel@cccommissioners.org
Shane Patrone Mayor of New Waterford	Membership	3760 Village Park Dr P.O. Box 287 New Waterford	44445	330.853.5160 spatrone@ccclerk.org
Bert Dawson	Membership	235 S. Market St.		330.424.1740

2016 OMEGA MEMBERSHIP

Engineer	Lisbon	44432	engineer@cceng.org
----------	--------	-------	--

Pete Monteleone	Membership	144 N Market St POB 231	330.426.4367
East Palestine City Manager		East Palestine	44413 ep-council@comcast.net

COLUMBIANA COUNTY (9) (continued)

Nancy Murray	Membership	1200 Main Street	330.532.2524, ext. 10
Mayor of Wellsville		Wellsville	43968 mayor@wellsvilleohio.net
Lance Willard	Membership	28 W. Friend Street	330.482.2173
City Manager, City of Columbiana		Columbiana	44408 lwillard@columbianaohio.gov
Paul Lease	Membership	2075 Slater Road	330.565.7114
Butler Township Trustee		Salem	paullease906@gmail.com

CITY OF EAST LIVERPOOL (COLUMBIANA) -- (1) [MIN. + ALT.]

Ryan Stovall	Membership - Alternate	126 West Sixth Street	330.385.3381 Fax: 330.385.3955
Mayor of East Liverpool	Executive - Alternate	East Liverpool	43920 mayor.eastliverpool@gmail.com
William Cowan	Membership	126 West Sixth Street	330.385.5394
Director of Planning/City Engineer	Executive	East Liverpool	43920 elcowan@gmail.com

CITY OF SALEM (COLUMBIANA) -- (1) [MIN. + ALT.]

John C. Berlin	Membership	231 S. Broadway Ave.	330.332.4241
Mayor of Salem	Executive	Salem	44460 mayor@cityofsalemohio.org
Mike Mancuso	Membership - Alternate	2525 Southeast Boulevard	330.337.7669
Sustainable Opportunity Develop. Center	Executive - Alternate	Salem	44460 mike.mancuso@concepts2companies.org

COSHOCTON COUNTY (3) [MIN. + ALT.]

Dorothy Skowrunski - OMEGA Treasurer	Membership	106 South Fourth Street	740.622.7005
Director, Coshocton County Port Authority	Executive	Coshocton	43812 dorothyskowrunski@coshoctoncounty.net

COSHOCTON COUNTY (3) [MIN. + ALT.] (continued)

Dane Shryock, President	Membership	401 1/2 Main Street	740.622.1753
Coshocton County Commissioner	Executive - Alternate	Coshocton	43812 daneshryock@coshoctoncounty.net
D. Curtis Lee	Membership	401 1/2 Main Street	740.622.1753
Coshocton County Commissioner		Coshocton	43812 curtislee@coshoctoncounty.net
Gary Fischer	Membership - Alternate	401 1/2 Main Street	740.622.1753
Coshocton County Commissioner		Coshocton	43812 garyfischer@coshoctoncounty.net

CITY OF COSHOCTON (COSHOCTON) -- (1) [MIN. + ALT.]

Steve Mercer	Membership	760 Chestnut Street	740.622.1465 Fax: 740.622.5933
Mayor of Coshocton	Executive	Coshocton	43812 steve.mercer@cityofcoshocton.com
Jerry Stenner	Membership - Alternate	760 Chestnut Street	740.622.1465
Service Director	Executive - Alternate	Coshocton	43812 jerry.stenner@cityofcoshocton.com

GUERNSEY COUNTY (3) [MIN. + ALT.]

Ernest (Skip) Gardner, President	Membership	627 Wheeling Ave. - Ste. 300	740.432.9200 Fax: 740.432.9359
Guernsey County Commissioner	Executive	Cambridge	43725 sgardner@guernseycounty.org
David L. Wilson	Membership	627 Wheeling Ave. - Ste. 300	740.432.9200 Fax: 740.432.9359

2016 OMEGA MEMBERSHIP

Guernsey County Commissioner		Cambridge	43725	dwilson@guernseycounty.org
------------------------------	--	-----------	-------	--

Dave Saft Guernsey County Commissioner	Membership - Alternate	627 Wheeling Ave. - Ste. 300 Cambridge	740.432.9200 Fax: 740.432.9359 43725	dsaft@guernseycounty.org
--	------------------------	---	---	--

Norm Blanchard Director, Cambridge-Guernsey Co. CIC	Membership Executive - Alternate	806 Cochran Avenue Cambridge	740.432.1881 43725	cgccic@frontier.com
---	-------------------------------------	---------------------------------	-----------------------	--

CITY OF CAMBRIDGE (GUERNSEY) -- (1) [MIN. + ALT.]

Thomas Orr Mayor of Cambridge	Membership Executive	1131 Steubenville Avenue Cambridge	740.439.1050 Fax: 740.432.1754 43725	camb-mayor@cambridgeoh.org
---	-------------------------	---------------------------------------	---	--

Kim Haught Director of Economic/Community Development	Membership - Alternate Executive - Alternate	1131 Steubenville Avenue Cambridge	740.432.4882 43725	khaught@cambridgeoh.org
---	---	---------------------------------------	-----------------------	--

HARRISON COUNTY (3) [MIN. + ALT.]

Don Bethel Harrison County Commissioner	Membership	100 W. Market Street Cadiz	740.942.4623 Fax: 740.942.4090 43907	dbethel@harrisoncountyohio.org donrbethel@aol.com
---	------------	-------------------------------	---	--

Dale Norris Harrison County Commissioner	Membership Executive - Alternate	100 W. Market Street Cadiz	740.942.4623 Fax: 740.942.4090 43907	dnorris@harrisoncountyohio.org dnorris21@frontier.com
--	-------------------------------------	-------------------------------	---	--

Bill Host Harrison County Commissioner	Membership Executive	100 W. Market Street Cadiz	740.942.4623 Fax: 740.942.4090 43907	bsimmons@harrisoncountyohio.org commissioners@harrisoncountyohio.org
--	-------------------------	-------------------------------	---	--

Robert Sterling Harrison County Engineer	Membership - Alternate	100 W. Market Street Cadiz	740.942.8867 43907	rsterling@harrisoncountyohio.org
--	------------------------	-------------------------------	-----------------------	--

HOLMES COUNTY (4)

Raymond Eyer - OMEGA President Holmes County Commissioner	Membership Executive	2 Court St., Suite 14 Millersburg	330.674.0286 Fax: 330.674.0566 44654	revler@co.holmes.oh.us
---	-------------------------	--------------------------------------	---	--

Joe Miller Holmes County Commissioner	Membership	2 Court St., Suite 14 Millersburg	330.674.0286 Fax: 330.674.0566 44654	jmiller@co.holmes.oh.us
---	------------	--------------------------------------	---	--

Rob Ault, President Holmes County Commissioner	Membership	2 Court St., Suite 14 Millersburg	330.674.0286 Fax: 330.674.0566 44654	rault@co.holmes.oh.us
--	------------	--------------------------------------	---	--

Arnie Oliver Director, Planning Commission	Membership Executive - Alternate	2 Court St., Suite 21 Millersburg	330.674.8625 Fax: 330.674.1582 44654	aoliver@co.holmes.oh.us
--	-------------------------------------	--------------------------------------	---	--

JEFFERSON COUNTY (5)

Thomas Gentile Jefferson County Commissioner	Membership	301 Market St. Steubenville	740.283.8500 Fax: 740.283.8599 43952	commissioners@jeffersoncountyoh.com
--	------------	--------------------------------	---	--

David Maple, Jr. Jefferson County Commissioner	Membership	301 Market St. Steubenville	740.283.8500 Fax: 740.283.8599 43952	commissioners@jeffersoncountyoh.com
--	------------	--------------------------------	---	--

Dr. Thomas Graham, President Jefferson County Commissioner	Membership	301 Market St. Steubenville	740.283.8500 Fax: 740.283.8599 43952	commissioners@jeffersoncountyoh.com
--	------------	--------------------------------	---	--

Evan Scurti Director, Jefferson County Port Authority	Membership Executive	600 Airpark Drive Wintersville	740.283.2476 43953	evan@jcport.com
---	-------------------------	-----------------------------------	-----------------------	--

Michael Eroshevich Jefferson County Water and Sewer Dept.	Membership Executive - Alternate	596 State Route 43 Steubenville	740.283.8577 43952	meroshevich@jcwatersewer.com
---	-------------------------------------	------------------------------------	-----------------------	--

CITY OF STEUBENVILLE (JEFFERSON) -- (2)

Domenick Mucci - OMEGA Vice President Mayor of Steubenville	Membership Executive	115 S. Third Street Steubenville	740.283.6000 x. 1100 Fax: 740.283.6165 43952	mayor@cityofsteubenville.us
---	-------------------------	-------------------------------------	---	--

2016 OMEGA MEMBERSHIP

James S. Mavromatis City Manager	Membership Executive - Alternate	115 S. Third Street Steubenville	43952	740.283.6000 Fax: 740.283.6165 citymanager@cityofsteubenville.us
--	-------------------------------------	-------------------------------------	-------	--

CITY OF TORONTO (JEFFERSON) -- (1) [MIN. + ALT.]

John Parker Mayor of Toronto	Membership Executive	416 Clark Street - POB 189 Toronto	43964	740.537.3743 ts@brdband.com
Blaner, Dorothy Council - Ward 2 Jefferson County Vocational School	Membership - Alternate Executive - Alternate	714 Jefferson Street Toronto	43964	740.264.5545 Ext. 104 dblaner@jeffjvs.com

MUSKINGUM COUNTY -- (6)

Jerry Lavy Muskingum County Commissioner	Membership Executive	401 Main Street Zanesville	43701	740.455.7100 Fax: 740.455.3785 jlavy@muskingumcounty.org
Cindy Cameron Muskingum County Commissioner	Membership	401 Main Street Zanesville	43701	740.455.7100 Fax: 740.455.3785 cscameron@muskingumcounty.org
James Porter, President Muskingum County Commissioner	Membership Executive - Alternate	401 Main Street Zanesville	43701	740.455.7100 Fax: 740.455.3785 jwporter@muskingumcounty.org
Sheila Samson CDBG Administrator	Membership	401 Main Street Zanesville	43701	740.455.7100 sisamson@muskingumcounty.org
Mike Emmert Anchor Glass Container	Membership	2446 Center Drive Zanesville	43701	740.452.2746 memmert@columbus.rr.com
Donald Madden Projects Coordinator	Membership	401 Main Street 3rd Floor Zanesville	43701	740.588.4389 ddmadden@muskingumcounty.org

CITY OF ZANESVILLE (MUSKINGUM) -- (3)

Jeff Tilton Mayor of Zanesville	Membership Executive	401 Market Street Zanesville	43701	740.455.0601, ext. 126 Fax: 740.455.0744 mayor@coz.org
Jay Bennett Director of Community Development and Public Services	Membership Executive - Alternate	401 Market Street Zanesville	43701	740.455.0601, ext. 103 jay.bennett@coz.org
Mike Bennett Resident	Membership	Zanesville	43701	740.624.9572 mikebennett@columbus.rr.com

TUSCARAWAS COUNTY -- (6)

Chris Abbuhl - OMEGA Secretary Tuscarawas County Commissioner	Membership Executive	125 E. High Ave., Room 205 New Philadelphia	44663	330.365.3240 Fax: 330.602.7483 abbuhl@co.tuscarawas.oh.us
Belle Everett, President Tuscarawas County Commissioner	Membership Executive - Alternate	125 E. High Ave., Room 205 New Philadelphia	44663	330.365.3240 Fax: 330.602.7483 everettB@co.tuscarawas.oh.us
Kerry Metzger Commissioner	Membership	125 E. High Ave., Room 205 New Philadelphia	44663	330.365.3240 Fax: 330.602.7483 metzger@co.tuscarawas.oh.us
Scott Reynolds Economic Development Director	Membership	125 E. High Ave., Room 212 New Philadelphia	44663	330.365.3219 reynolds@co.tuscarawas.oh.us
Gary Little Director, Tuscarawas Co. CIC	Membership	330 University Drive, NE New Philadelphia	44663	330.308.7524 garylittle@tusccic.com

2016 OMEGA MEMBERSHIP

Joe Bachman County Engineer	Membership	832 Front Avenue SW New Philadelphia	330.339.6648 engineer@co.tuscarawas.oh.us
---------------------------------------	------------	---	--

CITY OF DOVER (TUSCARAWAS) -- (1) [MIN. + ALT.]

Richard Homrighausen Mayor of Dover	Membership	110 E. Third Street		330.343.6726 Fax: 330.340.7336
	Executive	Dover	44622	mayor.homrighausen@doverohio.com
Matt Arnett Telecommunications Director	Membership - Alternate	110 E. Third Street		330.343.6663
	Executive - Alternate	Dover	44622	matt.arnett@doverohio.com

CITY OF NEW PHILADELPHIA (TUSCARAWAS) -- (2)

Joel B. Day Mayor of New Philadelphia	Membership	150 E. High Ave., Ste 102		330.364.4491 x. 242
	Executive	New Philadelphia	44663	jday@newphilaoh.com
Ron McAbier Service Director	Membership	150 E. High Ave., Ste 102		330.364.4491, x. 240
	Executive - Alternate	New Philadelphia	44663	rmcabier@newphilaoh.com

CITY OF UHRICHSVILLE (TUSCARAWAS) -- (1) [MIN. + ALT]

Rick Dorland Mayor of Uhrichsville	Membership	305 E. Second Street		740.922.1242 Fax: 740.922.6668
	Executive	Uhrichsville	44683	xvmayor@att.net
Joe Bollon Director of City Services	Membership - Alternate	305 E. Second Street		740.922.1242
	Executive - Alternate	Uhrichsville	44683	J.MB52@yahoo.com

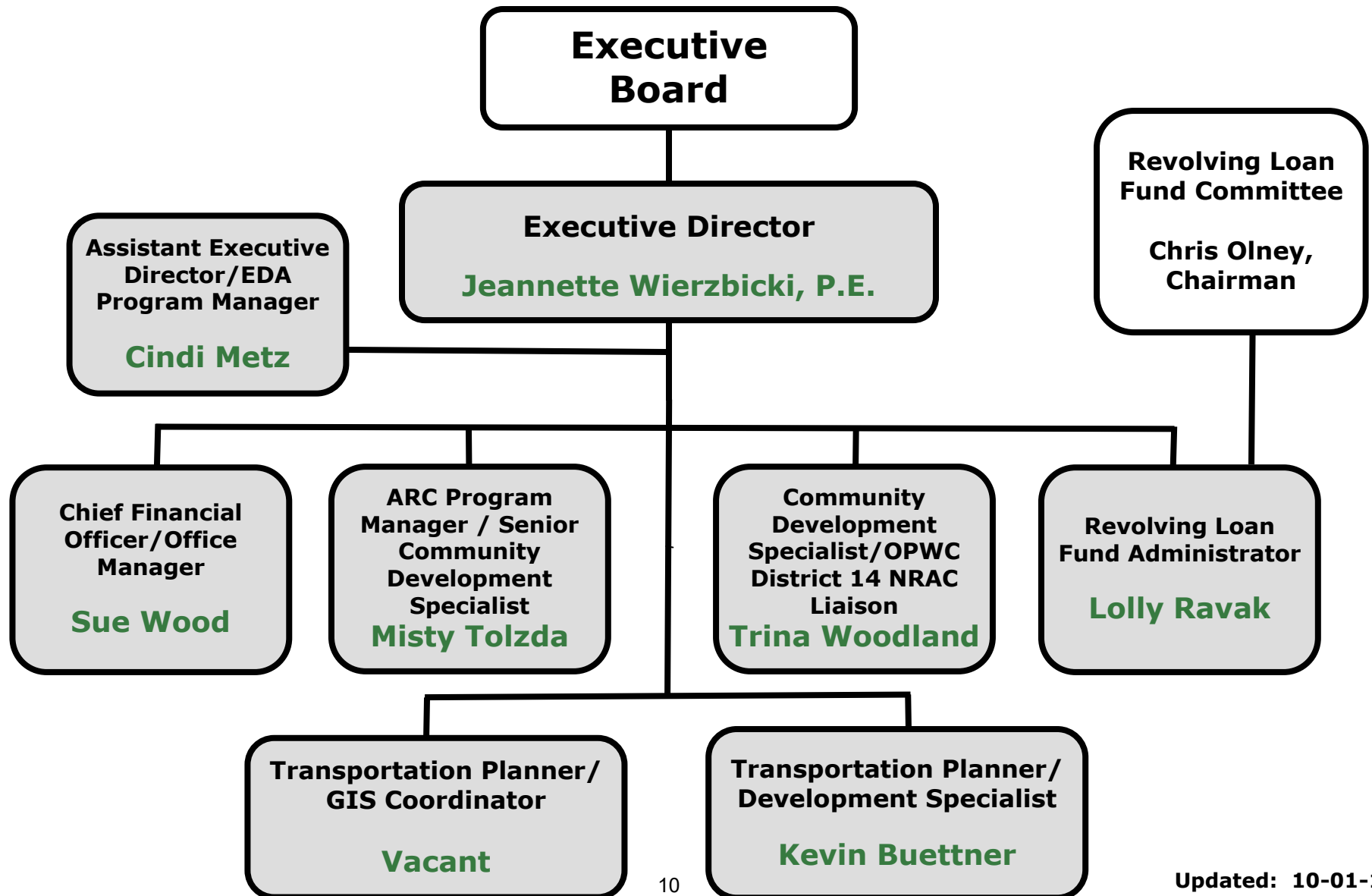
October 7, 2016



Comprehensive Economic Development Strategy (CEDS) Report

Committee Members

Glenn Enslen, Director	Economic Development Office	Carroll County
James Kacsmar, CPA	Kacsmar & Company	Belmont County
Mike Mancuso, Director	Salem Area Sustainable Opportunity Development Center	Columbiana County
Brian Kennedy	Port Authority & Business Owner	Columbiana County
Heinz Stucki, PhD	Professor and Retired Community Improvement Corporation Director	Coshocton County
Norm Blanchard, Director	Cambridge-Guernsey County Community Improvement Corporation	Guernsey County
Nick Homrighausen Director	Economic Development Office	Harrison County
Arnold Oliver, Director	Planning Commission	Holmes County
Evan Scurti, Director	Port Authority	Jefferson County
Anthony Adornetto Executive Director	Zane State College Institutional Advancement	Muskingum County
Gary Little, Director	Community Improvement Corp.	Tuscarawas County
Bill Beisel, Director	Kent State University at Tuscarawas Business and Community Services	Tuscarawas County





Staff Responsibilities

Staff members serving under the leadership of Jeannette Wierzbicki, P.E., Executive Director:

In addition to serving as Executive Director, Jeannette also manages the Transportation Program for OMEGA's Regional Transportation Planning Organization which includes Carroll, Columbiana, Coshocton, Guernsey, Harrison, Holmes, Muskingum, and Tuscarawas Counties. She also serves as OMEGA's representative on the Small Community Environmental Infrastructure Group and Appalachian Environmental Strategy Work Group. **E-mail:** jeannettew@omegadistrict.org

Cindi Metz, Assistant Executive Director / EDA Program Manager

Cindi works in conjunction with the Executive Director to further the mission of OMEGA and assumes the responsibilities of the Executive Director in her absence. Cindi is responsible for all areas of public relations and communication, including membership, media and the general public. She oversees the production and release of annual reports, newsletters, press notices and content of the OMEGA website. She is also the program manager of all Economic Development Administration (EDA) grant programs, including communication of program intent, eligibility criteria, funding availability, and leveraging requirements in addition to application preparation and funding administration. She also oversees the production of the OMEGA Comprehensive Economic Development Strategy (CEDS) Report.

E-mail: cindim@omegadistrict.org

Sue Wood, Chief Financial Officer / Office Manager

Sue administers the organization budget and prepares all financial reports. She works directly with the auditors to ensure compliance with all federal and state requirements. Sue also manages the daily operation of the office, including human resources, payroll, deposits, payments, and account reconciliation. She is cross-trained to assist the Revolving Loan Fund Administrator in a back-up capacity to post payments and deposits. **E-mail:** swood@omegadistrict.org

Lolly Ravak, Revolving Loan Fund Administrator

Lolly is responsible for all activities required to administer the Revolving Loan Fund (RLF) Program including coordination of business loan packages, analysis of loan applications, facilitation of loan closing and monitoring repayment throughout the term of each loan. She also performs on-site monitoring visits and conducts file audits on a regular basis. Lolly is cross-trained to assist the Fiscal Officer in a back-up capacity to post vouchers and process payroll. **E-mail:** lravak@omegadistrict.org

Misty Tolzda, ARC Program Manager / Senior Community Development Specialist

Misty is the program manager for Appalachian Regional Commission (ARC) and Governor's Office of Appalachia (GOA) programs and develops the OMEGA ARC/GOA Project Package on an annual basis. She provides technical assistance to applicants requesting ARC/GOA funding. Misty also provides assistance to local governments and non-profit organizations on the identification of other viable financing strategies for needed improvements. She facilitates meetings with local officials, community leaders and funding agencies. She also prepares funding applications, conducts environmental reviews, provides funding administration services, and provides guidance to communities and other development staff on the preparation of more competitive funding applications. E-mail: mistyt@omegadistrict.org

Trina Woodland, Community Development Specialist

Trina provides assistance to local governments and non-profit organizations on the identification of viable financing strategies for needed improvements. She also facilitates meetings with local officials, community leaders and funding agencies. She prepares funding applications, conducts environmental reviews, and provides funding administration services. Trina researches funding opportunities, provides program updates, and offers both individual and group training on funding opportunities and grant writing strategies for communities and non-profit organizations. Trina is also responsible for conducting the local review for the Intergovernmental Review (IGR) process for project applications submitted to state and federal agencies. She also serves as the liaison for the Ohio Public Works Commission Natural Resource Assistance Council for District 14. E-mail: trinaw@omegadistrict.org

Vacant - Transportation Planner / GIS Coordinator

The Transportation Planner/GIS Coordinator works in conjunction with the Executive Director and Transportation Planner/Development Specialist on the Transportation Program. Responsibilities under the Transportation Program include: development of the 4-year Transportation Improvement Plan; participation in statewide transportation planning activities; providing technical assistance (e.g. traffic counts, crash analysis, road safety audits); maintenance of transportation databases; conducting transportation related surveys; development of performance measures and targets, and revisions to the Regional Transportation Plan.

This staff member will also develop the Geographic Information Systems (GIS) needed to support transportation and other planning / economic development activities to include the Regional Transportation Plan, Comprehensive Economic Development Strategy, and other OMEGA activities. In addition, this staff member will also provide GIS services to communities within the OMEGA region as requested.

Kevin Buettner, Transportation Planner / Development Specialist

Kevin Buettner works with the Executive Director and Transportation Planner/GIS Specialist on the Transportation Program. Responsibilities under the Transportation Program include: development of the 4-year Transportation Improvement Plan; participation in statewide transportation planning activities; providing technical assistance (e.g. school travel plans, traffic counts, crash analysis, road safety audits, training); maintenance of transportation databases; conducting transportation related surveys; development of performance measures and targets, and revisions to the Regional

Transportation Plan. Kevin also facilitates the public involvement component of the Transportation Program and facilitates the Transit Work Group meetings.

Kevin also prepares funding applications for transportation and non-transportation projects, researches funding opportunities, and assists communities with project planning activities.

[E-mail: kevinb@omegadistrict.org](mailto:kevinb@omegadistrict.org)



2016 CEDS Annual Performance Report

Component One: Adjustment to the Strategy

As previously stated in the 2014 and 2015 OMEGA CEDS Annual Performance Reports, adjustments continue to be made to address the shale oil and gas industry developments that began in the region in 2010. It is anticipated that this will continue to be the case well into the next decade. Many of the adjustments have a common focus – *Avoiding the Boom to Bust Cycle* – as experienced almost a century ago with the coal mining industry and oil and gas boom in the 1960s and 1970s in the region. Included among these focused efforts is a three-year project partially funded by the Economic Development Administration (EDA). This is the third and final year of this phase of the project. The total project cost is \$400,000 with EDA contributing \$200,000. The project is entitled, **Building Sustainable Communities in Ohio's Shale Region: Leveraging Manufacturing Clusters and Local Assets with Strategic Planning**. This project consists of a twenty-five county region in eastern Ohio unified by their connection to the Marcellus and Utica shale development. According to the U.S. Census Bureau 2012 estimates, the twenty-five county region embodies a combined population of just over 2.5 million which represents 22% of the state's total population. Geographically the region covers nearly 1/3 of the state including more than 12,437 square miles, representing over 30% of Ohio's total land area. The counties in this project region were strategically and intentionally identified based on two factors including the increasing impacts of shale energy development and the demonstrated collaboration through established EDA regional organizations. The geographic boundary of the twenty-five county project region contains four Economic Development Districts – Ohio Mid-Eastern Governments Association (OMEGA), Buckeye Hills-Hocking Valley Regional Development District (Buckeye Hills), Eastgate Council of Governments (Eastgate), and Northeast Ohio Four County Regional Planning and Development Organization (NEFCO).

The challenge to the subject Ohio communities is to effectively manage the immediate impacts of shale development while leveraging the current economic boom to build a plan that strategically advances the growth or startup of small to medium manufacturing businesses that will support long-term economic viability and community sustainability. To achieve this, the project team will focus on five core objectives: 1) conducting an advanced industry cluster analysis, 2) industry capacity assessment, 3) asset mapping, 4) implementing a sustainable strategic shale energy planning process, and 5) establishing implementation strategies.

The region is at risk of experiencing a boom-bust cycle of a limited natural resource. This project is focusing on how the region can take advantage of increasing tax revenues, short-term employment opportunities, workforce training, and individual and community wealth management to proactively support the diversification of the regional economy and the advancement of new manufacturing which will foster a long-term sustainable benefit from the shale energy development. The project will leverage research based data to analyze the industry clusters that will foster the resurgence and growth of manufacturing beyond the shale energy sector, and to enhance the capacity of the region.

This project uniquely addresses all six of the priorities established by EDA.

Collaborative Regional Innovation: The project targets the shale industry sector within a 25-county region to align resources that will support the development and growth of a “shale industry” cluster through collaboration, workforce development and by supporting the growth of existing and emerging manufacturing businesses. The project engages stakeholders and facilitates collaboration among rural regional EDDs and counties within the southern and eastern tiers of Ohio to provide for long-term economic sustainability of this primarily rural region. The scope of work will include mapping the strengths and assets related to each of the shale development subsectors and how they interrelate. Regional strengths that work together to build the industry will be woven into a clearly defined industry cluster system.

Public/Private Partnerships: This project supports the priority to use investments that use both public and private sector resources. The scope of work supports innovation and job growth through collaboration between The Ohio State University and other educational

partners, businesses and communities to create a regional network that builds innovation capacity around shale development. A top priority for the Ohio State partners will be to assist the region in linking together financial assets and small business development resources, business partners, incubators, and workforce development programs to encourage companies, colleges, and secondary schools to grow an industry cluster that supports future enhanced shale and energy development. As a whole, the industry cluster will help the region define priorities, identify projects and establish plans for implementation and linkages with the shale development cluster network.

Economically Distressed and Under-served Communities: The project is intended to strengthen diverse communities that have suffered disproportionate economic job losses and/or are rebuilding to become more competitive in the global economy. The project will help communities affected by the shale development boom to develop sustainable strategies that leverage the boom, particularly through long-term growth of the manufacturing sector.

National Strategic Priorities: The project encourages job growth and business expansion related to shale development by encouraging and stimulating growth in small and medium-sized advance manufacturing firms to assist in growing a seamless industrial cluster, benefiting small communities severely impacted by automotive industry restructuring and/or the downturn in the economy.

Environmentally-Sustainable Development: The project will promote job creation and economic prosperity in part by enhancing environmental quality and by developing and implementing green products, processes, places and buildings as part of the green economy. This includes support for energy efficient green technologies.

Global Competitiveness: It is anticipated that this project will support high-growth businesses and innovation-based entrepreneurs to expand and compete in global markets, especially investments that expand U.S. exports, encourage foreign direct investment, and promote repatriation of jobs back to the U.S.

The **Building Sustainable Communities in Ohio's Shale Region: Leveraging Manufacturing Clusters and Local Assets with Strategic Planning** project began on January 1, 2014 and is scheduled to be completed by December 31, 2016. The following report was prepared as part of this three-year collaborative effort with a primary focus on economic development resiliency.

Following the Sustainable Communities report is a brief assessment and map of physical disaster resiliency in the OMEGA region.

Building Sustainable Communities in Ohio's Shale Region:

Leveraging Manufacturing Clusters and Local Assets with Strategic Planning



2015 Eastern Ohio 25 County Regional Report

Community and Energy Series Technical Report 16-01



THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

Acknowledgments

A special thank you to the following team members for their contributions to the development of this report.

Nancy Bowen, OSU Extension Field Specialist, Community Economics

Eric Romich, OSU Extension Field Specialist, Energy Development

David Civittolo, OSU Extension Field Specialist, Community Economics

Contents

EDA Shale Grant Project Overview.....	3
Ohio Oil and Gas Production.....	5
Demographic Trends.....	8
Economic Impact Analysis Methodology.....	9
Total 25 County EDA Region.....	12
Buckeye Hills Hocking Valley Region.....	14
Eastgate Regional Council of Government Region.....	16
Northeast Ohio Four County Regional Planning & Development Organization Region...	18
Ohio Mid-Eastern Governments Association Region.....	20
References.....	23

EDA Shale Energy Grant

Project Background and Overview

This Economic Development Administration (EDA) grant funded project is a collaborative initiative between Ohio State University Extension, Eastgate Regional Council of Governments, Northeast Ohio Four County Regional Planning and Development Organization, Ohio Mid-Eastern Governments Association, and the Buckeye Hills-Hocking Valley Regional Development District (Image 1). The project is designed to connect the four regional economic development stakeholders with economic research related to the current oil and gas boom in Ohio to inform the development of long term planning strategies that support long-term economic viability and community sustainability.

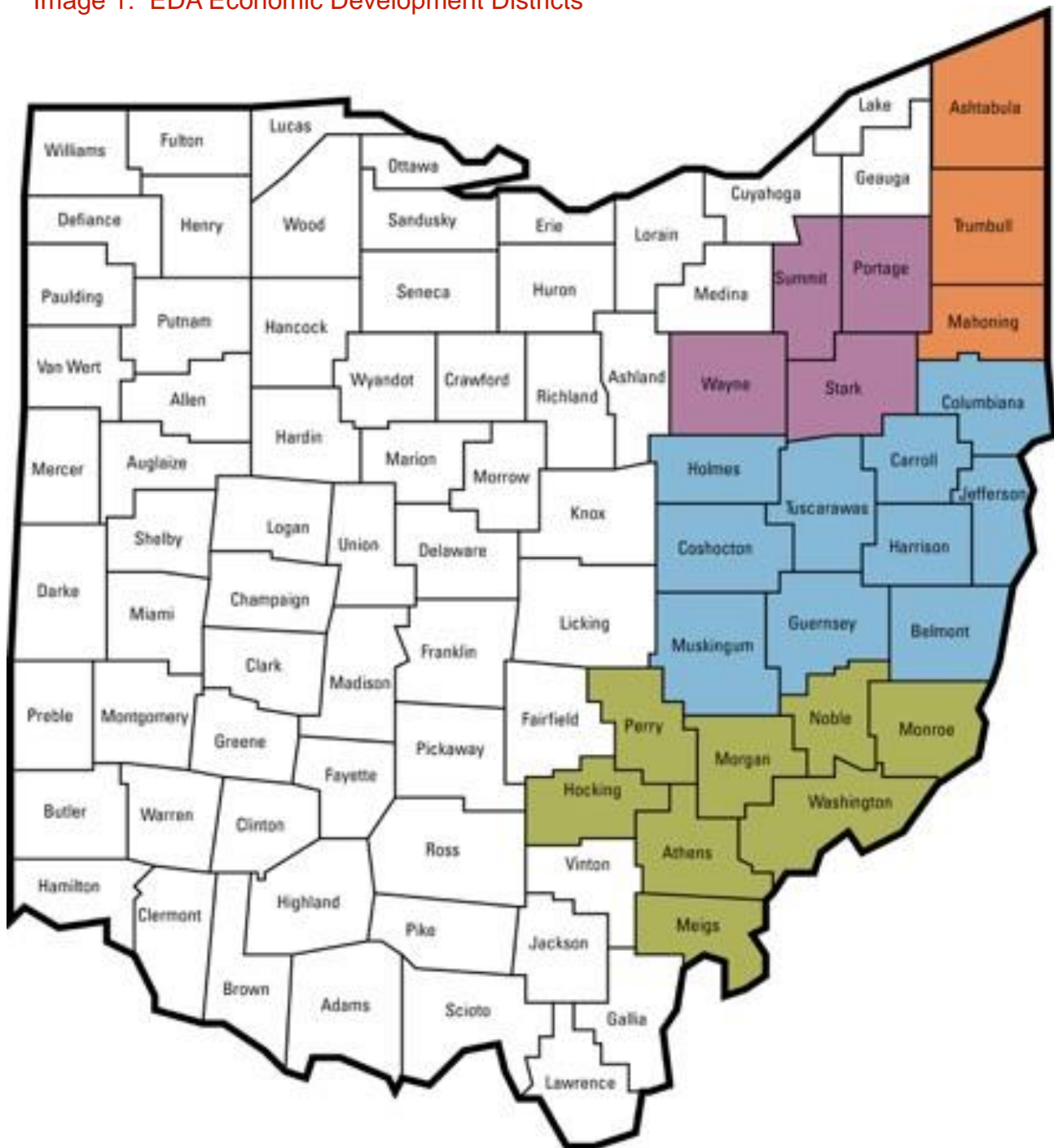
To achieve these goals, the project partners are focusing on the following objectives:

- 1) Developing a collaborative multi-disciplinary team of researchers and community stakeholders
- 2) Conducting research based on private and public data sources to measure change
- 3) Developing a replicable sustainable strategic shale energy planning process
- 4) Establishing implementation strategies

The primary objective of this research project is to promote long-term community sustainability and economic diversity. This can be accomplished by countering the permanent reduction of non-renewable natural resource (extraction) by proactively developing a sustainable plan to increase human capital, environmental capital, and infrastructure or built capital. This project will demonstrate a model, which leverages the advancement of innovation, entrepreneurship, cluster development, and sustainable strategic planning to promote economic diversity and viability.



Image 1: EDA Economic Development Districts

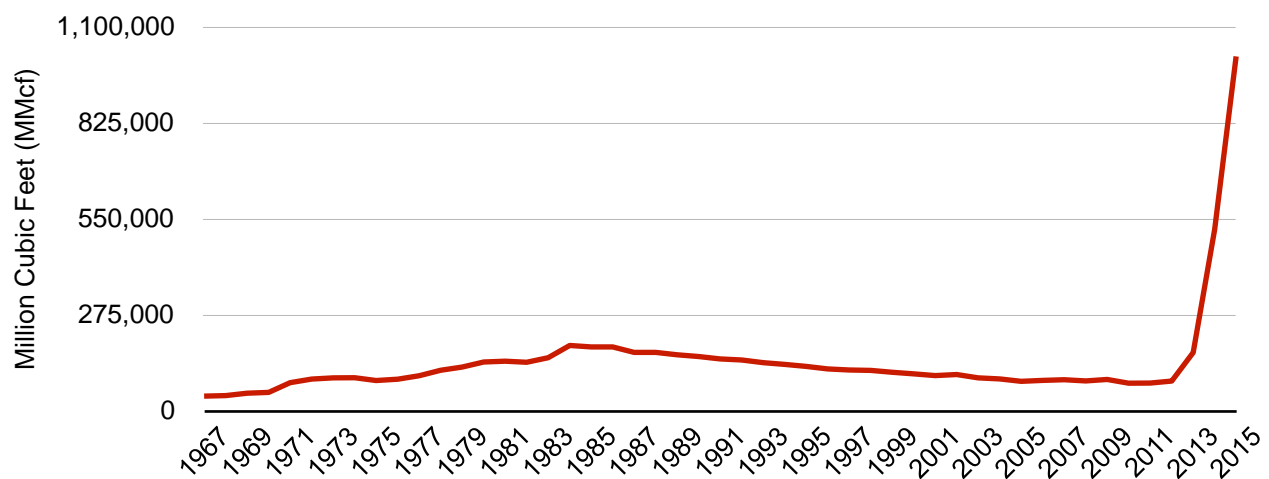


- Eastgate Regional Council of Government
- Northeast Ohio Four County Regional Planning and Development Organization
- Ohio Mid-Eastern Governments Association
- Buckeye Hills-Hocking Valley Regional Development District

Ohio Oil and Gas Production

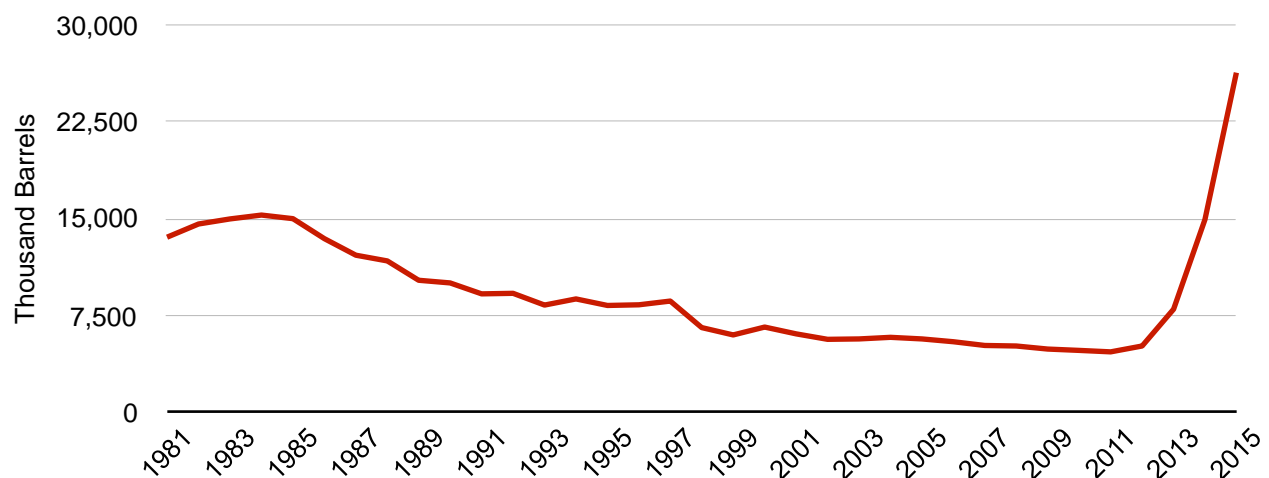
Oil and gas development in Ohio has been primarily concentrated on a narrow strip in eastern Ohio extending from Carroll County to Noble County. As wells were drilled, the region also experienced rapid development of midstream processing and fractionation plants designed to clean and remove the “wet” components from the rich gas found in the region. As these plants come on line, it is likely that more wells will be drilled and a network of pipelines will be installed throughout the region and across the state to move the product from the wellhead, to midstream operations, and ultimately the end use consumers. In 2014 and 2015, the state reported significant increases in the production of both crude oil and natural gas (Chart 1 and Chart 2).

Chart 1: Ohio Natural Gas Annual Gross Withdrawals



Source: U.S. DOE Energy Information Administration, 2/29/2016

Chart 2: Ohio Annual Field Production of Crude Oil



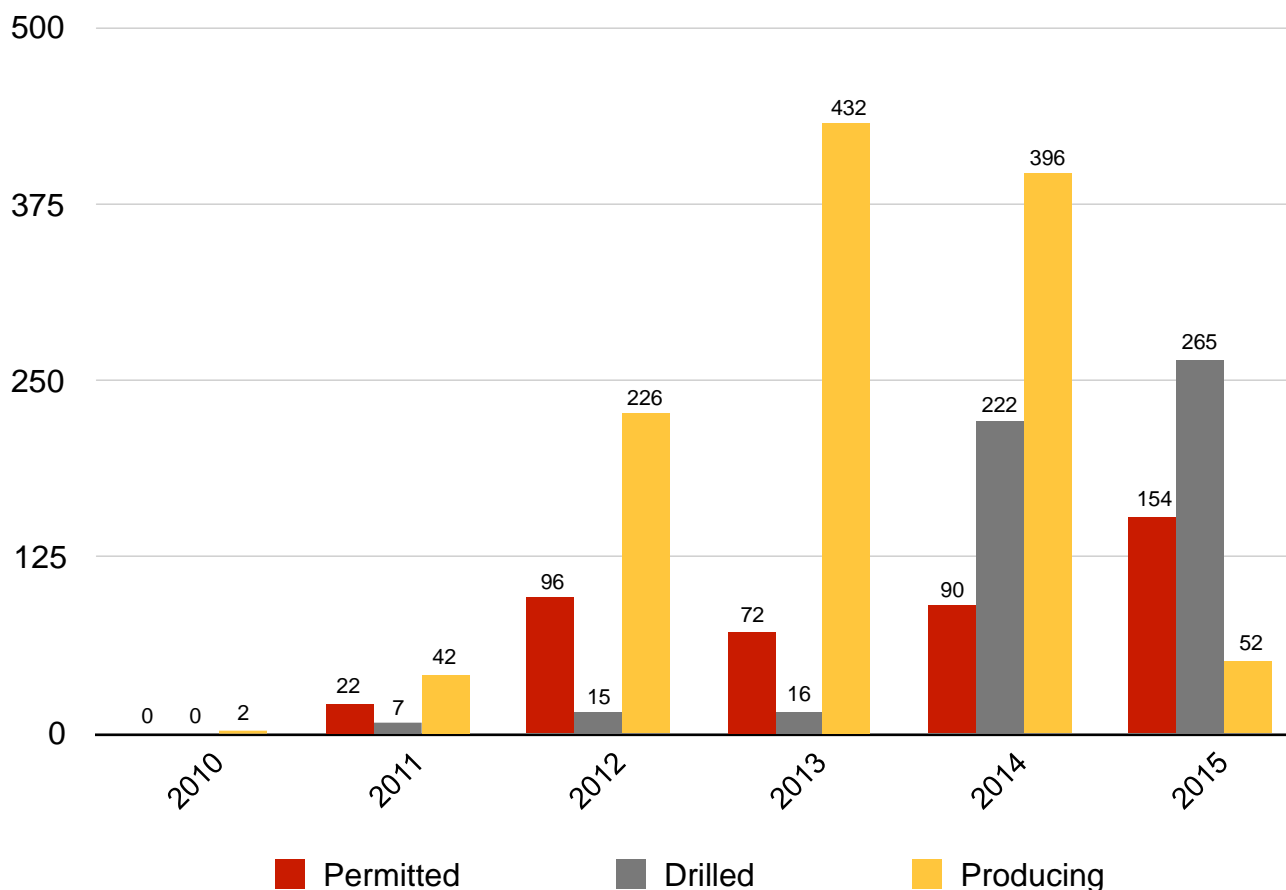
Source: U.S. DOE Energy Information Administration, 2/29/2016

Utica/Point Pleasant Shale

Development Overview

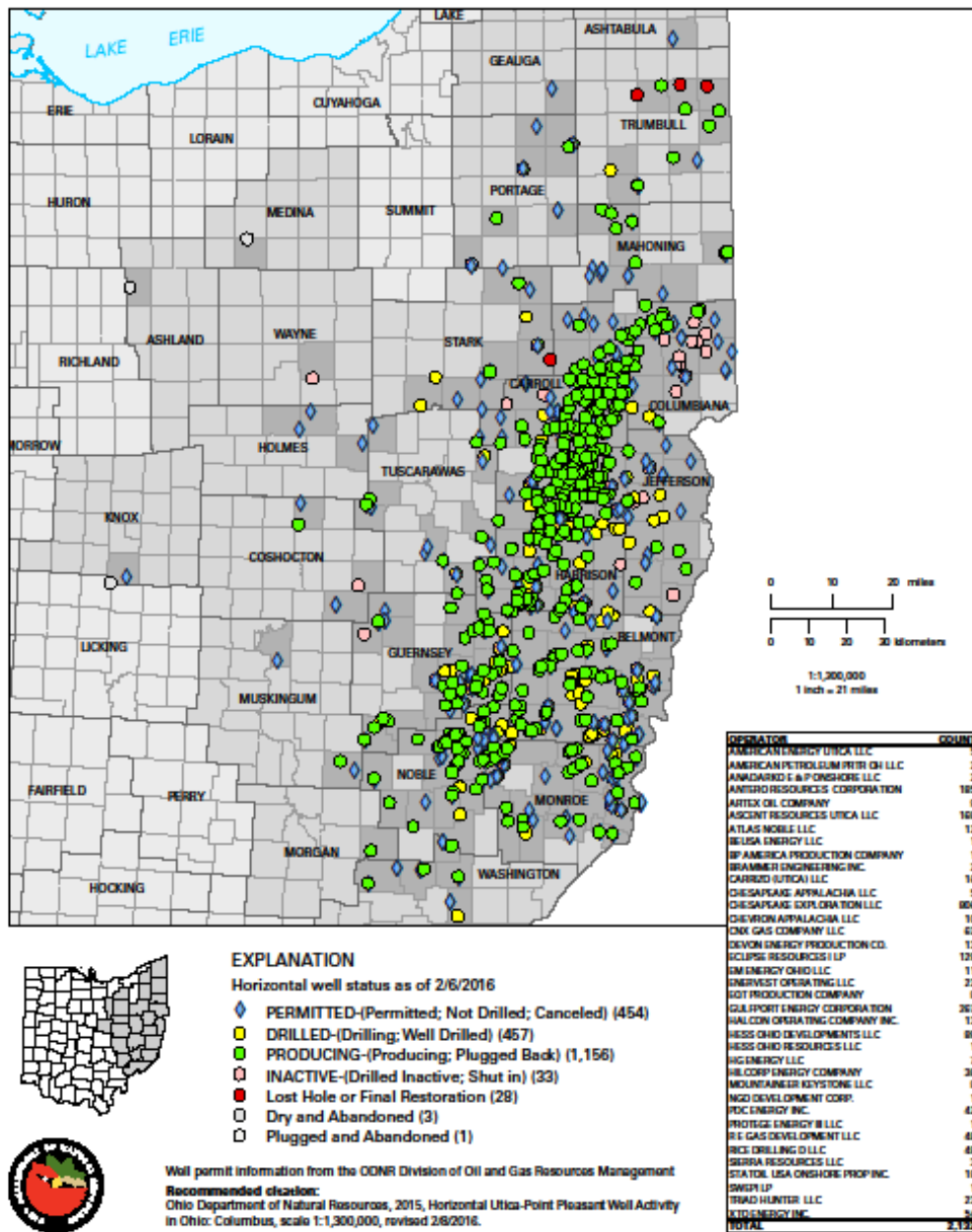
Starting in 2010, Ohio began to experience an increase in shale activity including well permits, drilling activity, and producing wells in the Utica/Point Pleasant formation. Chart 3 below summarizes the number of permits issued, wells drilled, and operating wells in the Utica/Point Pleasant by year. The total number of horizontal permits has increased from zero in 2010 to more than 2,133 in February 2016. Between 2010 and 2016 there has been a total of 1,678 horizontal wells drilled in Ohio. In 2013, Ohio experienced the highest annual number of producing horizontal wells with a total of 432 wells. By February 2016 the cumulative total of producing horizontal wells in Ohio reached 1,150.

Chart 3: Status of Utica/Point Pleasant Shale Wells by Year



Source: Ohio Department of Natural Resources, 2015, Horizontal Utica-Point Pleasant Well Activity in Ohio: Cumulative Permitting Activity Through 2/6/2016.

Image 2: Horizontal Utica - Pt. Pleasant Well Activity in Ohio



Demographic

Demographics for Table 1 below were obtained from STATS America for the 25 county region, the 4 respective regions (Buckeye, Eastgate, NEFCO, and OMEGA), and each county making up the 25 county region. Demographics researched included population, per capita income, poverty rate, and unemployment rate (Table 1).

Table 1: Ohio and Regional Demographic

County	Population		Per Capita Personal Income		Poverty Rate		Labor Force		Unemployment Rate (Seasonally Adjusted)	
	2014	2010	2014	2010	2014	2010	2014	2010	2014	2010 (Sept)
Ohio	11,570,808	11,536,503	41,049	38,799	0.159	0.098	5,765,704	5,340,860	0.074	0.105
25 County Region	2,575,298	2,594,677	38,193	27,294			1,124,012	1,305,298	0.054	0.104
Buckeye Region	257,465	260,084	32,128	21,957			111,992	119,930	0.061	0.113
Eastgate Region	537,554	550,627	36,717	26,869			246,243	269,642	0.059	0.13
NEFCO Region	1,195,098	1,193,306	41,685	30,118			608,411	628,889	0.05	0.105
OMEGA Region	585,181	590,660	35,086	24,369			271,749	281,776	0.055	0.119
Source: Stats America, March, 2016										



Demographic Trends

- In 2014, the 25 County Region total population of 2,575,298 was about 22.2% of the State of Ohio's total population (11,507,808).
- The NEFCO Region had the largest population at 1,195,098, followed by Omega (585,181) and Eastgate (537,554). The Buckeye Region had the least population at 257,465, which made up only 10% of the total population in the 25 county region in 2014.
- While the State of Ohio's population increased slightly between 2010 and 2014, the 25 County Region showed a slight decrease in terms of total population. Of the 4 Regions, only the NEFCO Region showed a slight increase in population. In terms of actual population numbers, the Eastgate Region lost the most population (from 550,627 in 2010 to 537,554 in 2014).
- While the per capita income in Ohio was \$41,049 in 2014, the 25 County Region had a per capita income of \$38,193, which was almost \$3,000 less than the State of Ohio's. Of the four regions, the NEFCO was the only region above the State of Ohio's per capita income. In 2014, the NEFCO Region had a per capita income of \$41,685, almost \$700 above the State of Ohio's per capita income. The Buckeye Region had the lowest per capita income in 2014 at \$32,198, almost \$9,000 less than the State of Ohio's.
- While the State of Ohio had a labor force of 5,765,704 in 2014, the 25 County Region had 1,124,012, which made up almost 20% of the total labor force in Ohio. While the labor force in Ohio actually increased between 2009 and 2014, the 25 County Region saw a decrease. For example, in the Eastgate Region, the labor force shrank by over 16,000 people between 2009 and 2014.
- The Unemployment Rate in the State of Ohio in 2014 was 7.4%. The 25 County Region had an unemployment rate of 5.4% during the same time frame. In fact, all 4 Regions were below that State Of Ohio's unemployment rate with the lowest found in the NEFCO region (5.0%), followed closely by OMEGA (5.5%) and Eastgate (5.9%).



Economic Impact Analysis



Methodology

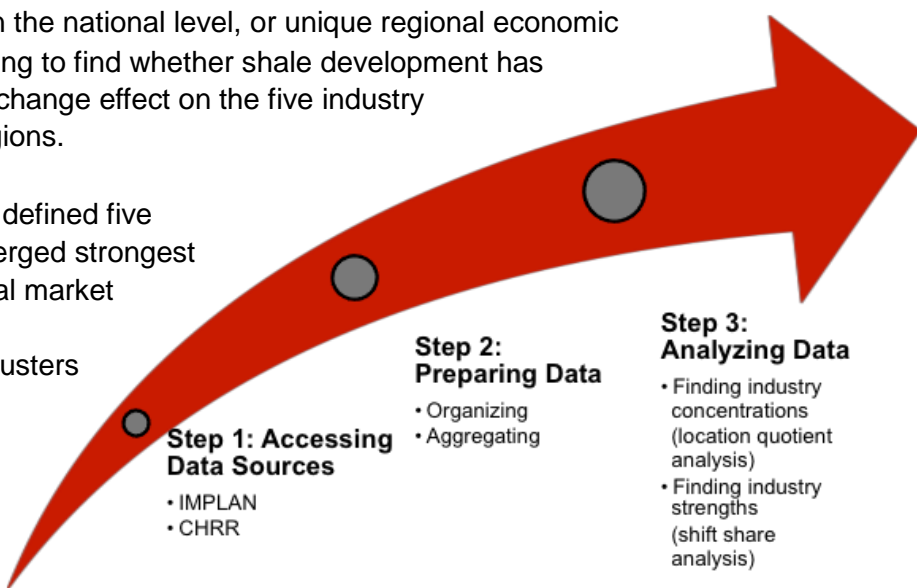
The research focused on the economy. It was a quantitative longitudinal study to track employment levels over time, measuring changes in the economy using employer enterprise data from the Quarterly Census of Employment and Wages (QCEW). This data was accessed through the Ohio Longitudinal Data Archive (OLDA), managed at the Ohio State University's Center for Human Resource Research (CHRR).

The QCEW data was aggregated for the top five industry clusters by change in employment for each region. The data was aggregated to the cluster level (with each cluster including many sectors), to ensure confidentiality to avoid disclosing the identity of employers.

Researchers focused on identifying the manufacturing sectors and occupations that are most impacted by the shale gas industry. The longitudinal approach, to track cluster changes over time, determined whether certain clusters increased, decreased or stayed relatively the same. Researchers conducted a Location Quotient (LQ) and Shift Share analyses to measure the relative concentration and strength in manufacturing sectors.

Shift Share is comprised of three components: 1) national share, 2) industrial mix, and 3) regional shift. While LQ measures the relative concentration of an industry, shift share explains the reason for the concentration, whether it is due to national economic growth, growth of the industry cluster on the national level, or unique regional economic changes. This analysis is seeking to find whether shale development has had a positive or negative jobs change effect on the five industry clusters within the four EDD regions.

Further aggregation of the data defined five manufacturing clusters that emerged strongest as a result of regional or national market confluences related to shale development. The five broad clusters were: 1) machinery, 2) metals, 3) chemicals, 4) energy, and 5) wood. The specific steps to assess, prepare and analyze the data are illustrated in the model on the right.



Occupational Clusters and Trends (OES)

Occupational clusters were explored using an online resource, StatsAmerica. For the 25 county region and each of the four subsequent economic development districts, the occupational concentration were highest in Metals Manufacturing and Chemicals and Chemical-Based Products. Despite the shale development in eastern Ohio, the energy concentration was the lowest in every region with the exception of the Buckeye Hills-Hocking Valley Region where the energy cluster ranked third with a concentration of 1.4 representing 4,353 jobs.

Table 2: Industry Cluster Employment Location Quotient (2012)

Area/Cluster	Concentration (LQ)	Employment
25-County Region		
Metals Manufacturing	4.18	34,114
Chemicals and Chemical-Based Products	2.04	28,274
Machinery Manufacturing	1.63	9,767
Wood and Forest Manufacturing	1.31	11,762
Energy	0.88	38,281
NEFCO		
Metals Manufacturing	3.66	19,971
Chemicals and Chemical-Based Products	2.11	15,308
Machinery Manufacturing	1.63	5,292
Wood and Forest Manufacturing	1.03	4,826
Energy	0.73	18,277
Eastgate		
Metals Manufacturing	4.9	6,529
Chemicals and Chemical-Based Products	1.33	3,796
Machinery Manufacturing	1.3	1,656
Wood and Forest Manufacturing	0.96	1,772
Energy	0.59	5,270
OMEGA		
Metals Manufacturing	5.1	6,547
Chemicals and Chemical-Based Products	2.27	6,301
Wood and Forest Manufacturing	2.46	4,422
Machinery Manufacturing	2.25	2,419
Energy	1.19	10,381
Buckeye Hills-Hocking Valley		
Metals Manufacturing	3.63	1,067
Chemicals and Chemical-Based Products	2.91	2,869
Energy	1.4	4,353
Wood and Forest Manufacturing	1.16	742
Machinery Manufacturing	1.01	400

Total 25 County EDA Region

Location Quotient

Location quotients, as mentioned earlier, show the strength and concentration of industry sectors relative to the U.S. economy based on employment. While all five clusters showed a strong LQ of over one, the Machinery Manufacturing cluster had the highest percent change in the 25 county region of 53%. Even though the Chemicals and Chemical Based Products and Energy clusters showed a negative change, these clusters in the 25 county region were extremely strong relative to the U.S. with LQ's much greater than one.

Location quotient, simply referred to as LQ, shows local or regional strengths based on employment.

Table 3: Total 25 County Region Manufacturing Clusters by Location Quotient

Cluster Description	2010 LQ	2014 LQ	% Change
Metals Manufacturing	3.33	3.43	0.03
Chemicals & Chemical Based Products	2.56	2.38	-0.07
Machinery Manufacturing	1.25	1.92	0.53
Energy	1.71	1.61	-0.06
Forest and Wood Products	1.42	1.48	0.04
Source: Quarterly Census of Employment and Wages, accessed from the Ohio Longitudinal Data Archive			



Shift Share

Table 4 shows the results of the shift share analysis for the 25-county region. Significant job growth took place in all five clusters, clusters that account for the majority of manufacturing jobs in the region between 2010-2014. The cluster with the largest increase in jobs during this period was the Machinery Manufacturing cluster. This cluster is comprised of NAICS category 333, a broad group which includes agriculture, construction, mining, and commercial and industrial machinery. The group also includes HVAC machinery, and engine, turbine and power equipment machinery manufacturing. With the region's strong concentration in manufacturing jobs, this cluster is comprised of important processes used in manufacturing, such as welding and assembling parts, skills that support a growing manufacturing base. With over 90% of the job creation in the five clusters occurring as a result of regional factors, researchers conclude that much of the positive changes, although potentially short term, took place due to some unique competitive advantage, such as shale development. As seen in Table 5, the regional effect was positive for all five clusters within the 25-county region, even as industry mix factors in three of the clusters are negative.

Shift share is an analytical tool used to determine how much job growth can be attributed to regional factors.

Table 4: Total 25 County Region Manufacturing Clusters by Shift Share Analysis

Cluster Description	National Share	Industry Mix	Regional Shift	Total Change (2010 - 2014)
Machinery Manufacturing	1,544	308	26,562	28,413
Chemicals & Chemical Based Products	823	-77	14,220	15,043
Energy	1,051	-343	6,832	7,540
Metals Manufacturing	2,404	-39	21,978	24,343
Forest and Wood Products	31	27	5,782	5,840
Source: Quarterly Census of Employment and Wages, accessed from the Ohio Longitudinal Data Archive				

Buckeye Hills-Hocking Valley



Location Quotient

Table 5 below illustrates the change in LQ between 2010 and 2014 for the Buckeye Hills-Hocking Valley region. All five clusters showed a very strong percent change of LQ between 2010 and 2014. Four of the clusters that experienced growth consist of LQ's that are well above one, indicating the region was extremely strong relative to the U.S. economy. The remaining cluster, Machinery Manufacturing had the highest percent change in the region of 307%. Although Machinery Manufacturing recorded the highest percent change, in 2010 the LQ was only 0.11 indicating this was a new emerging cluster in the region.

Table 5: Buckeye Hills-Hocking Valley Manufacturing Clusters by Location Quotient

Cluster Description	2010 LQ	2014 LQ	% Change
Energy	1.03	2.74	1.66
Chemicals & Chemical Based Products	0.77	2.28	1.94
Metals Manufacturing	0.42	1.22	1.91
Forest and Wood Products	0.87	1.19	0.37
Machinery Manufacturing	0.11	0.45	3.07
Source: Quarterly Census of Employment and Wages, accessed from the Ohio Longitudinal Data Archive			

Shift Share

Table 6 shows the results of the shift share analysis. While the LQ analysis shows concentration of clusters in a region, shift share delineates whether the concentration is due to regional or national economic changes, or due to fluctuations in the industry itself. Table 5 lists the five industry clusters for the Buckeye- Hills-Hocking Valley region and clearly demonstrates that all five clusters have expanded employment and that the growth of all five was due largely to regional changes in the economy. For instance, of the 547 jobs created in the Machinery Manufacturing cluster between 2010-2014, the vast majority, 530, were created as a result of regional changes and only 22 were attributed to the national share. Industry-wide, there was actually a negative impact of 5 jobs, an indication that between 2010-2014, the industry was contracting somewhat. Of the five industry clusters being analyzed, Chemicals and Chemical-Based Products showed the most significant change, with a total change of 1,478 jobs. Almost all of the positive change growth in this cluster can be attributed to regional shift. Energy was the only cluster that was growing, in small part, due to national share and industry mix factors, with 102 and 107 jobs attributable to these two measures, respectively.

Shift share has three components: 1) industrial mix, 2) national growth effect, and 3) regional growth effect. Industrial mix effect represents the share of job growth that is due to growth of the industry at the national level.

Table 6: Buckeye Hills-Hocking Valley
Manufacturing Clusters by Shift Share Analysis

Cluster Description	National Share	Industry Mix	Regional Shift	Total Change (2010 - 2014)
Machinery Manufacturing	22	-5	530	547
Chemicals & Chemical Based Products	40	-47	1,484	1,478
Energy	102	107	1,036	1,245
Metals Manufacturing	49	-12	753	789
Forest and Wood Products	3	3	164	169

Source: Quarterly Census of Employment and Wages, accessed from the Ohio Longitudinal Data Archive

Eastgate Regional Council of Government

Location Quotient

Table 7 below illustrates the change in LQ between 2010 and 2014 for the Eastgate Regional Council of Government region. This was the only region to experience a negative percentage of change from 2010 to 2014 in three of the five clusters. While the Chemicals and Chemical Based Products cluster experienced a negative change of 32%, this cluster still recorded a strong LQ of 1.67 in 2014. In addition the Eastgate region posted the highest LQ for the Metals Manufacturing cluster and the Machinery Manufacturing cluster when compared to the other three economic development districts. Perhaps the greatest positive change was in the Machinery Manufacturing cluster which experienced the largest percentage change of 169% posting an LQ of 3.12 in 2014.

The LQ calculation is a division problem, finding whether the percentage of total employment in a particular sector exceeds the state or national percentage in that same sector.



Table 7: Eastgate Regional Council of Government Manufacturing Clusters by Location Quotient

Cluster Description	2010 LQ	2014 LQ	% Change
Metals Manufacturing	3.68	4.25	0.15
Machinery Manufacturing	1.16	3.12	1.69
Chemicals & Chemical Based Products	2.45	1.67	-0.32
Forest and Wood Products	0.99	0.71	-0.28
Energy	0.49	0.41	-0.17
Source: Quarterly Census of Employment and Wages, accessed from the Ohio Longitudinal Data Archive			



National growth effect explains how much of the regional growth is due to overall national economic growth.

Shift Share

As shown in Table 8 below, of all four EDD regions, the Eastgate region had the greatest positive effect in the Machinery Equipment Manufacturing cluster with a total change of 11,550 jobs. Over 95% of the jobs in this cluster were attributable to regional factors. Growth in the national economy was a positive factor in all five clusters, but more so in the Machinery and Metals Manufacturing clusters. Metals Manufacturing, a historically strong cluster for this region and comprised of iron and steel mills, steel and aluminum product manufacturing and nonferrous metal processing, also experienced significant job growth between 2010-2014. Both the Wood Products and Energy clusters have a much lesser economic profile in Eastgate than the Machinery, Metals and Chemicals and Chemical-Based Products clusters.

Table 8: Eastgate Regional Council of Government
Manufacturing Clusters by Shift Share Analysis

Cluster Description	National Share	Industry Mix	Regional Shift	Total Change (2010 - 2014)
Machinery Manufacturing	274	2	11,273	11,550
Chemicals & Chemical Based Products	151	85	1,538	1,604
Energy	58	1	359	419
Metals Manufacturing	510	1	6,809	7,320
Forest and Wood Products	4	5	423	432

Source: Quarterly Census of Employment and Wages, accessed from the Ohio Longitudinal Data Archive

Northeast Ohio Four County Regional Planning and Development

Location Quotient

Table 9 below illustrates the change in LQ between 2010 and 2014 for the Northeast Ohio Four County Regional Planning and Development Organization region. It appears this region experienced steady and consistent growth anchored by the Metals Manufacturing and Chemicals and Chemical Based Products clusters. While it was the only region that did not have a cluster enjoy a percentage growth change of more than 100%, all five of the clusters analyzed yielded an LQ greater than one in 2014. Furthermore, even though the Chemicals and Chemical Based Products cluster indicated a negative change of 11%, this cluster still had an LQ of 2.54 which was extremely strong relative to the U.S. economy.

Do-it-yourself LQ
calculators are available on
the internet, on the Bureau
of Labor Statistics website,
or StatsAmerica
(www.statsamerica.org),
which is a service of the
Indiana Business Research
Center.

Table 9: Northeast Ohio Four County Regional Planning and Development Organization
Manufacturing Clusters by Location Quotient

Cluster Description	2010 LQ	2014 LQ	% Change
Metals Manufacturing	3.07	3.73	0.22
Chemicals & Chemical Based Products	2.84	2.54	-0.11
Machinery Manufacturing	1.49	1.57	0.05
Energy	1.28	1.55	0.21
Forest and Wood Products	1.01	1.09	0.08
Source: Quarterly Census of Employment and Wages, accessed from the Ohio Longitudinal Data Archive			

Shift Share

Table 10 shows the top five clusters and total employment change for the NEFCO region. As with the Eastgate region, NEFCO saw the greatest change in jobs within the Machinery and Metals clusters, although significant positive change could be seen in all five. Only the Energy cluster showed a negative industry mix relative to overall effect including both the national economic growth and regional factors. The industrial mix effect represents the share of the regional industry growth explained by the growth of the industry nationwide. With a net positive change of 15,903 jobs during the four year period between 2010-2014, NEFCO's top cluster was Metals Manufacturing. Occupations in the metalworking machinery manufacturing cluster,

If regional growth is not due to either national trends in the industry or the economy as a whole, then the growth can be explained as a result of some unique competitive advantage that the region possesses; the regional growth effect.



according to the Bureau of Labor Statistics, are projected to decline by 10,600 jobs, or by 5.8%, between 2014-2024. This region, in addition to the Eastgate region, may have a sufficient concentration necessary to leverage growth in this cluster despite national growth projections.

Table 10: Northeast Ohio Four County Regional Planning and Development Organization Manufacturing Clusters by Shift Share Analysis

Cluster Description	National Share	Industry Mix	Regional Shift	Total Change (2010 - 2014)
Machinery Manufacturing	957	305	9,176	10,438
Chemicals & Chemical Based Products	475	64	7,815	8,354
Energy	409	-140	4,378	4,648
Metals Manufacturing	1,151	49	14,702	15,903
Forest and Wood Products	12	7	2,368	2,387
Source: Quarterly Census of Employment and Wages, accessed from the Ohio Longitudinal Data Archive				

Ohio Mid-Eastern Governments Association

Location Quotient

Table 9 below illustrates the change in LQ between 2010 and 2014 for the Ohio Mid-Eastern Governments Association region. Of the four regions analyzed, the Ohio Mid-Eastern Governments Association region appears to have experienced the most significant growth between 2010 and 2014. In fact, four of the five clusters recorded a percentage of change increase of 120% or greater. In addition the region also posted the highest LQ for the Energy (3.71), Chemicals and Chemical Based Products (3.37), and Forest and Wood Products (3.66) clusters when compared to the other three economic development districts.



Table 11: Ohio Mid-Eastern Governments Association
Manufacturing Clusters by Location Quotient

Cluster Description	2010 LQ	2014 LQ	% Change
Energy	1.24	3.71	1.99
Forest and Wood Products	1.54	3.66	1.38
Metals Manufacturing	1.77	3.43	0.93
Chemicals & Chemical Based Products	1.33	3.37	1.53
Machinery Manufacturing	0.73	1.61	1.2

Source: Quarterly Census of Employment and Wages, accessed from the Ohio Longitudinal Data Archive

Shift Share

The OMEGA region experienced positive job change in all five clusters somewhat equally, i.e., not one cluster stood out as being that much more significant than another. That said, the Energy cluster, as would be expected, showed a more significant employment increase than other EDD regions due to the concentration of shale gas drilling and extraction in the OMEGA region. As most of the shale activity took place in this region during the 2010-2014 time period, it would be expected that job growth in the Energy cluster would also be stronger relative to the other regions. In fact, almost all of the job growth in energy, 3,924, was due to unique regional factors, most likely shale development. Forest and Wood products also experienced a significant regional shift component in OMEGA, more so than in the other four regions, with almost all of the job growth due to regional factors.

The Forest and Wood cluster is comprised of establishments that make all types of wood products, including wood processing used in the construction of shale extraction pads located throughout the region.

Shift share highlights the uniqueness of a regional economy based on job growth in an industry, but does not indicate why the industry is competitive – that is determined by local leaders and analysts who have knowledge of local conditions.



Table 12: Ohio Mid-Eastern Governments Association
Manufacturing Clusters by Shift Share Analysis

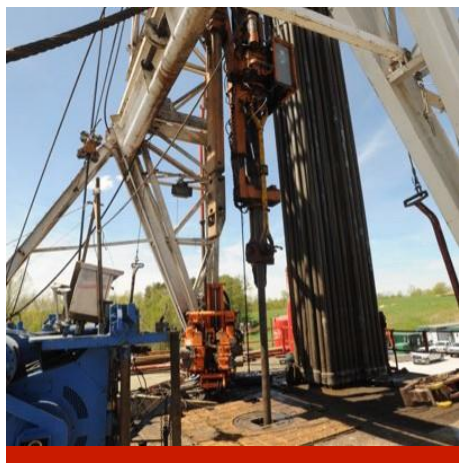
Cluster Description	National Share	Industry Mix	Regional Shift	Total Change (2010 - 2014)
Machinery Manufacturing	292	28	2,644	2,965
Chemicals & Chemical Based Products	156	-59	4,667	4,764
Energy	279	-97	3,924	4,107
Metals Manufacturing	468	-18	3,640	4,089
Forest and Wood Products	12	13	2,788	2,813

Source: Quarterly Census of Employment and Wages, accessed from the Ohio Longitudinal Data Archive

Implications

This analysis defines and demonstrates growing clusters and emerging manufacturing linkages that can be related to shale development. These linkages and potential new development activities appear to be more pronounced in the Machinery and Metals Manufacturing clusters. These two clusters together accounted for over 52,000 net new jobs within the 25-county region between 2010-2014. These two clusters were #1 and #2 in total employment change during this period, representing almost half of the total job growth. The shift share analysis indicated that over 95% of the growth was due to the regional shift or unique regional economic changes. Researchers recommend further development or attraction of new or expansion of existing businesses that help to grow regional cluster strengths. Initial strategies may include:

- Detailed mapping of the Metals and Machinery Manufacturing clusters for the 25-county region to identify common inputs and technologies. Mapping will identify potential cluster gaps or opportunities.
- Developing a bank of information and resources for the clusters to provide access to specialized market, technical and competitive information to encourage growth of businesses within the clusters.
- Identifying investments by government that can be made to incentivize additional growth and sustainability. Investments may include specialized infrastructure or educational programs, or access to potential employees trained through local programs.
- Monitoring major investments and developments in the midstream processing (i.e. natural gas processing, fractionation plants, and ethane cracker plants) that could influence the future supply chain of many Ohio manufactures.



Ohio Longitudinal Data Archive Disclaimer

This workforce solution was funded by a grant awarded to the U.S. Department of Labor's Employment and Training Administration. The solution was created by the Center for Human Resource Research on behalf of the Ohio Department of Job and Family Services and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership. This solution is copyrighted by the institution that created it. Internal use, by an organization and/or personal use by an individual for non-commercial purposes, is permissible.

References

Farren, M., Weinstein, A., and Partridge, M. (2012). *Making Shale Development Work for Ohio*. [Policy Summary Report]. Columbus, OH: Ohio State University. Retrieved from: http://aede.osu.edu/sites/aede/files/publication_files/Making%20Shale%20Development%20Work%20for%20Ohio%20June%201.pdf

IMPLAN Professional Version 2.0 Users Guide. 2004. Minnesota IMPLAN Group, Inc. (4th Edition). *The IMPLAN Input-Output System*. 2003. Minnesota IMPLAN Group, Inc.

United States Department of Energy, Energy Information Administration (USDOE/EIA). (2014). *The Annual Energy Outlook 2014*. United States Department of Energy, Energy Information Administration, Washington D.C.



THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

Please contact us for more information:

740-725-6317 or energizeohio.osu.edu

The following regional location quotient and shift share maps were created by Bret Allphin, Development Director for the Buckeye Hills-Hocking Valley Regional Development District – one of the four economic development districts partnering with OSU, Extension on the EDA funded project, *Building Sustainable Communities in Ohio's Shale Region: Leveraging Manufacturing Clusters and Local Assets with Strategic Planning.*

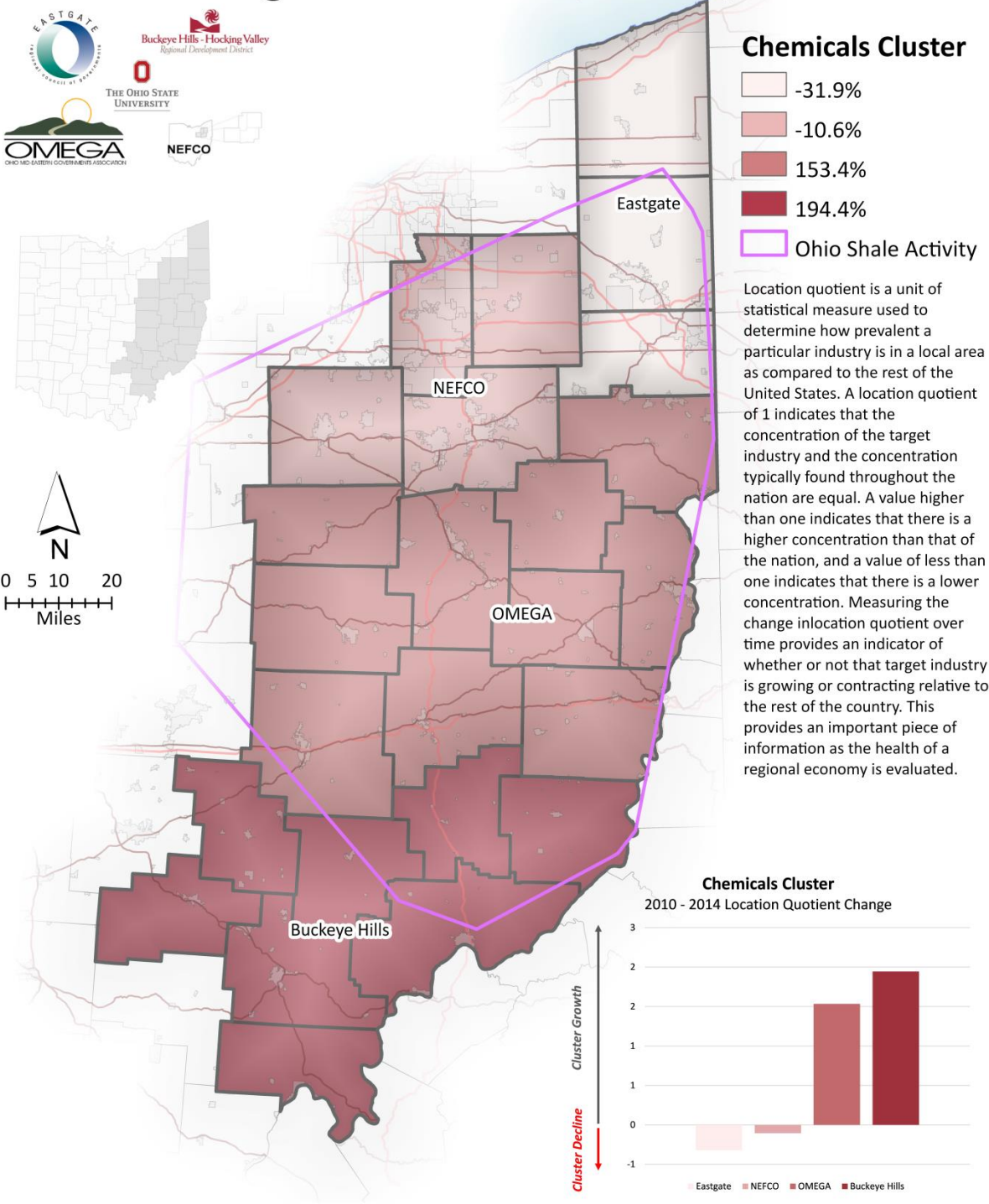
Location Quotient and Shift Share maps were created for the following industry clusters:

- **Chemicals**
- **Energy**
- **Machinery**
- **Metals**
- **Wood**

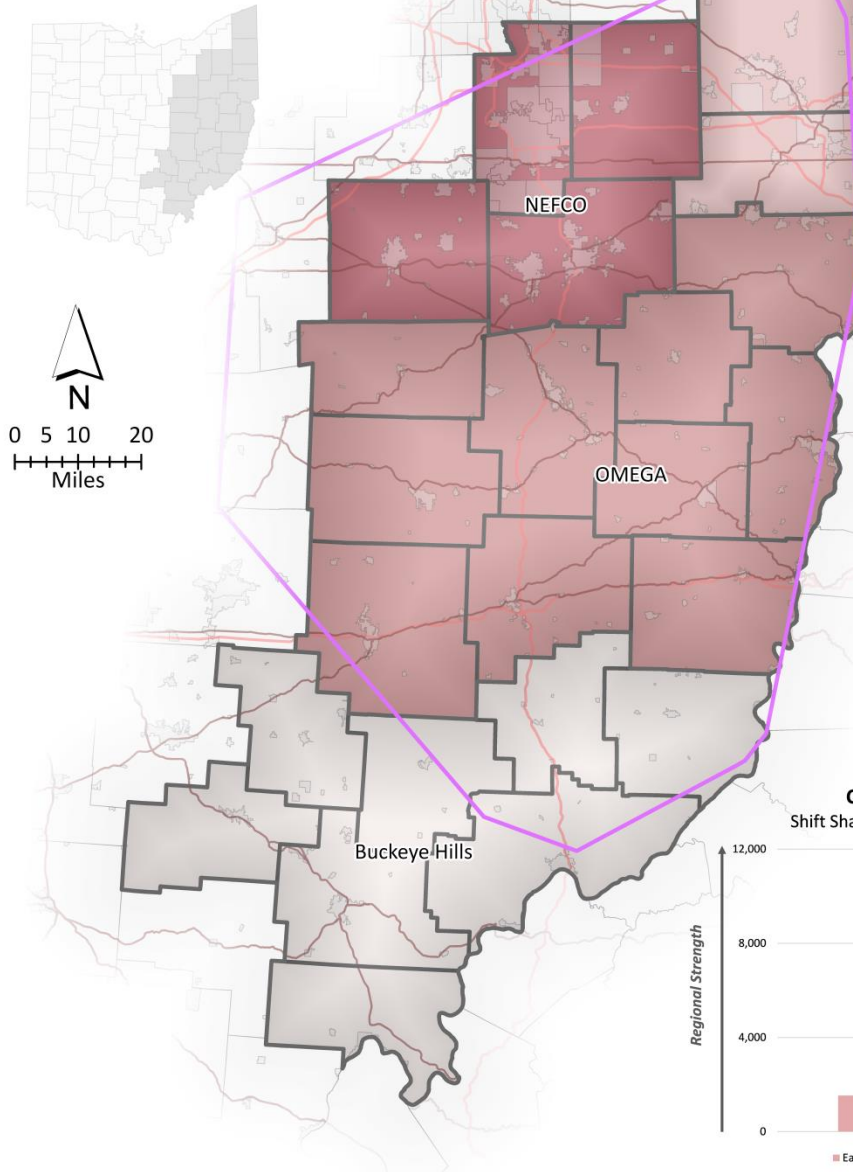
The region delineated includes the following four economic development districts:

- **Ohio Mid-Eastern Governments Association (OMEGA)**
- **Buckeye Hills-Hocking Valley Regional Development District**
- **Eastgate Council of Governments**
- **Northeast Ohio Four County Regional Planning and Development Organization (NEFCO)**

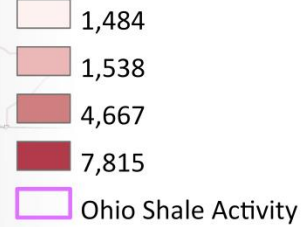
Percent Change in Location Quotient, 2010 - 2014



Regional Shift Share - 2014

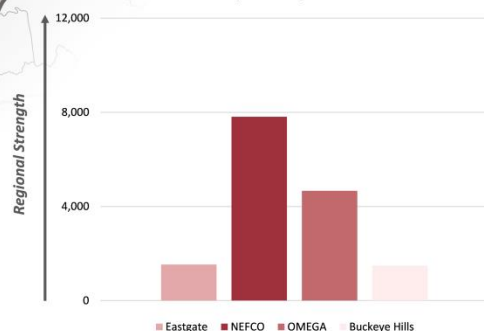


Chemicals Cluster

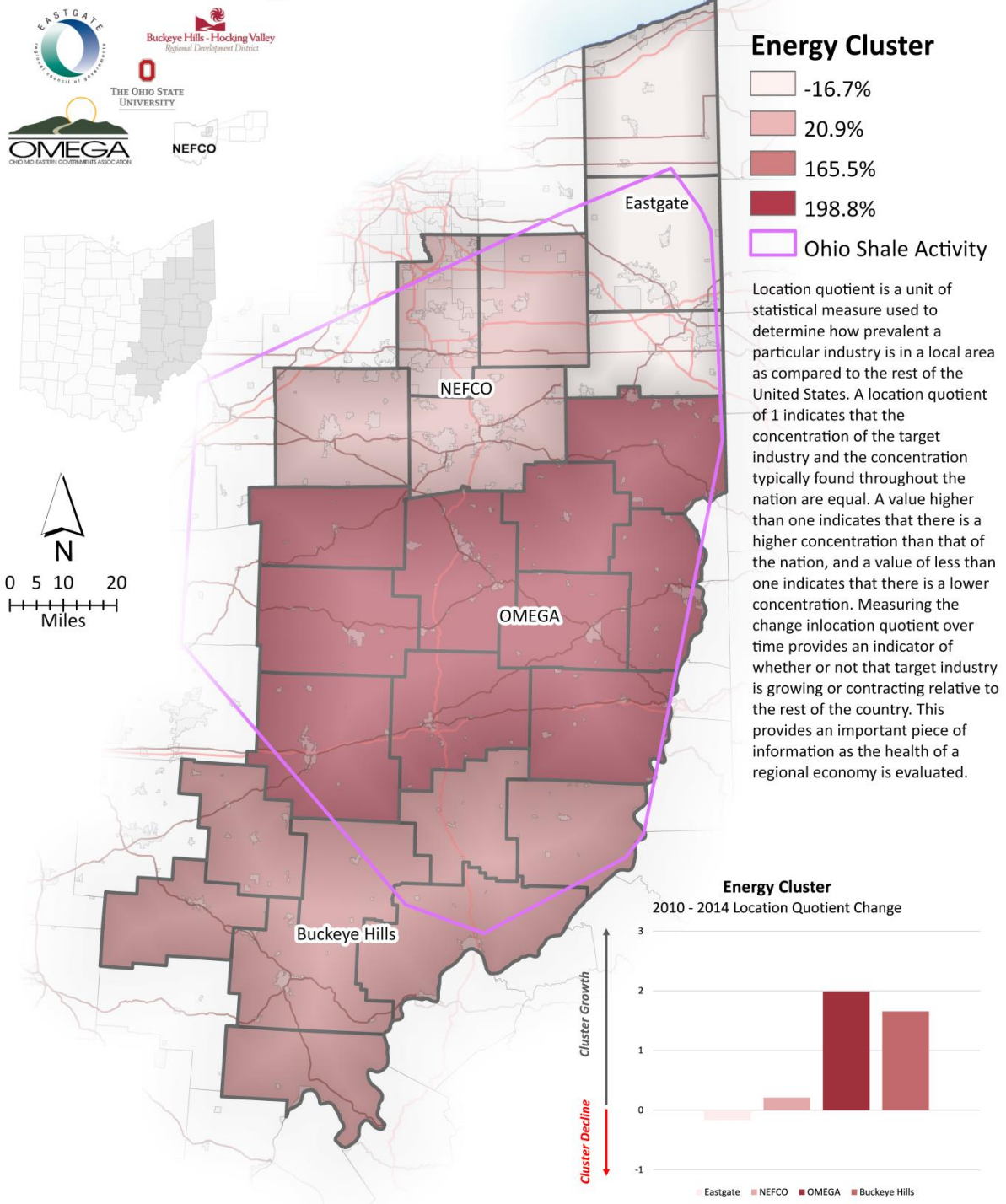


Shift share analysis is a statistical measure used to understand the driving factors of a particular target industry in an area of analysis. Shift share analysis made up of three measures, national share, industry mix, and regional share. National share indicates what portion of an industry's growth or decline is due to the condition of the overall national economy. Industry mix indicates what portion of an industry's growth or decline is due to the overall state of the industry or sector the target business is part of. Regional share indicates what portion of an industry's growth or decline is due to specific competitive advantages found in the local area of analysis. Together these factors provide an important analytical basis for understanding the status of any particular industry in a local area.

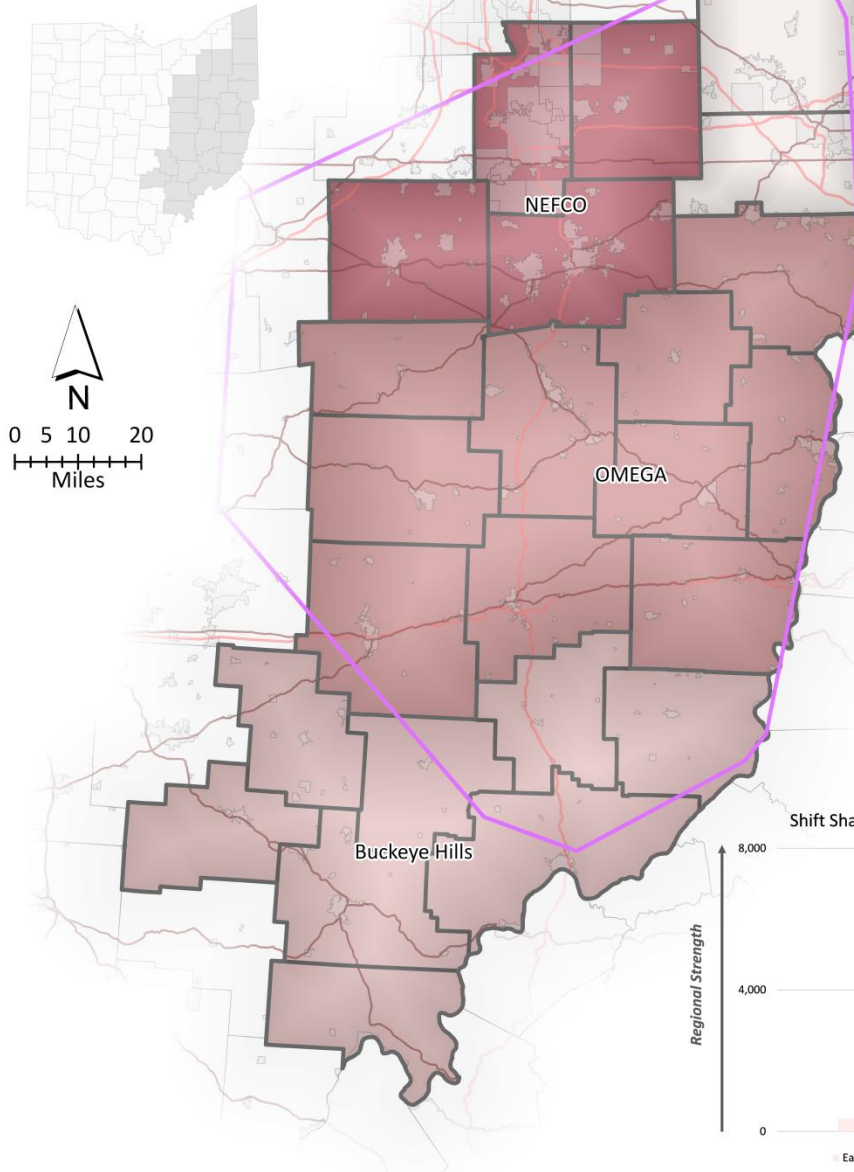
Chemicals Cluster
Shift Share Analysis - Regional Shift



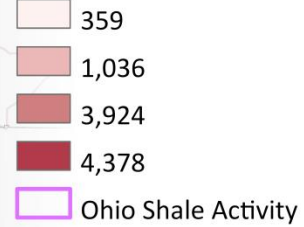
Percent Change in Location Quotient, 2010 - 2014



Regional Shift Share - 2014



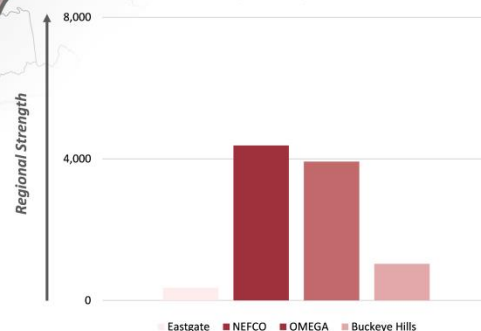
Energy Cluster



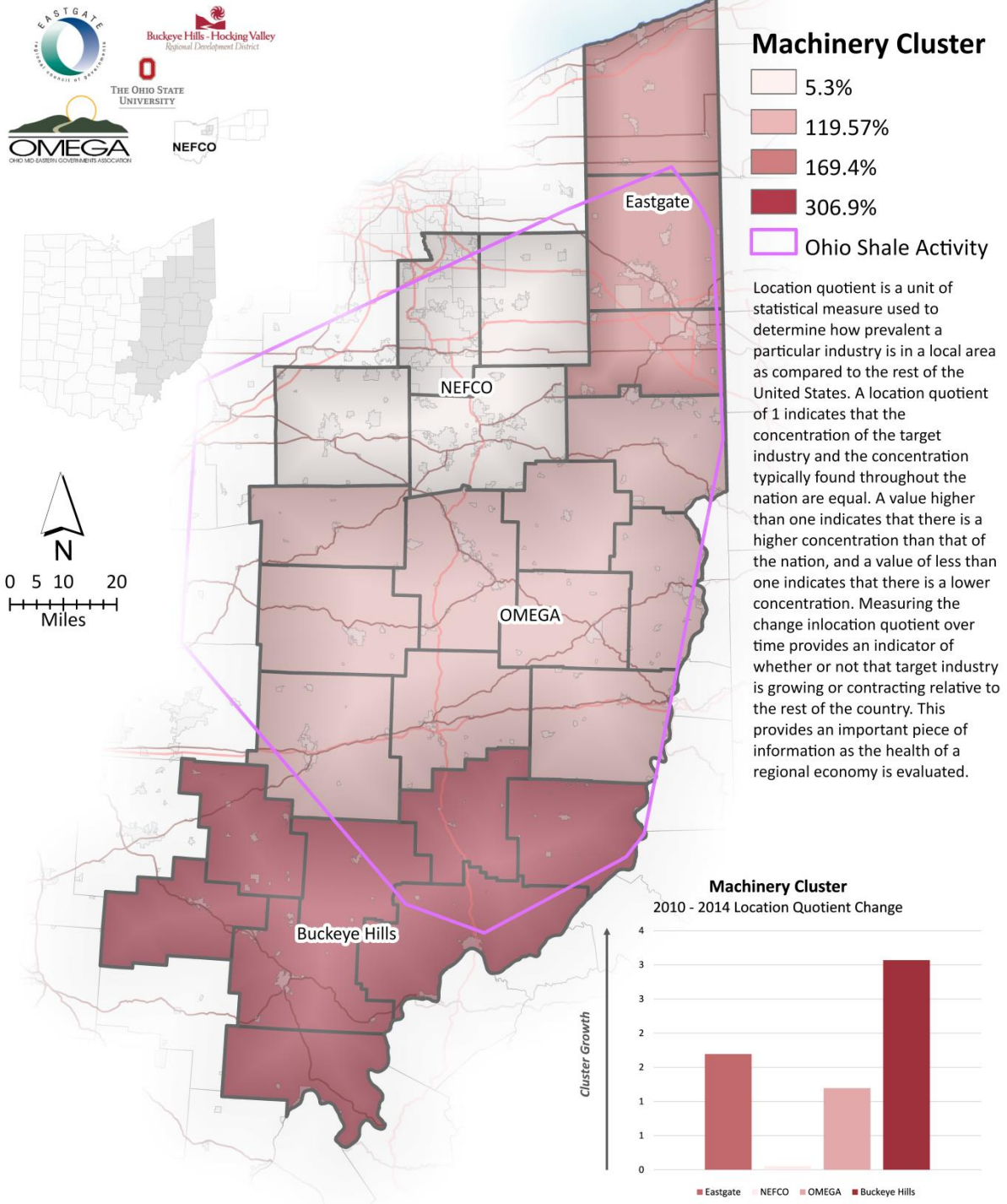
Shift share analysis is a statistical measure used to understand the driving factors of a particular target industry in an area of analysis. Shift share analysis made up of three measures, national share, industry mix, and regional share. National share indicates what portion of an industry's growth or decline is due to the condition of the overall national economy. Industry mix indicates what portion of an industry's growth or decline is due to the overall state of the industry or sector the target business is part of. Regional share indicates what portion of an industry's growth or decline is due to specific competitive advantages found in the local area of analysis. Together these factors provide an important analytical basis for understanding the status of any particular industry in a local area.

Energy Cluster

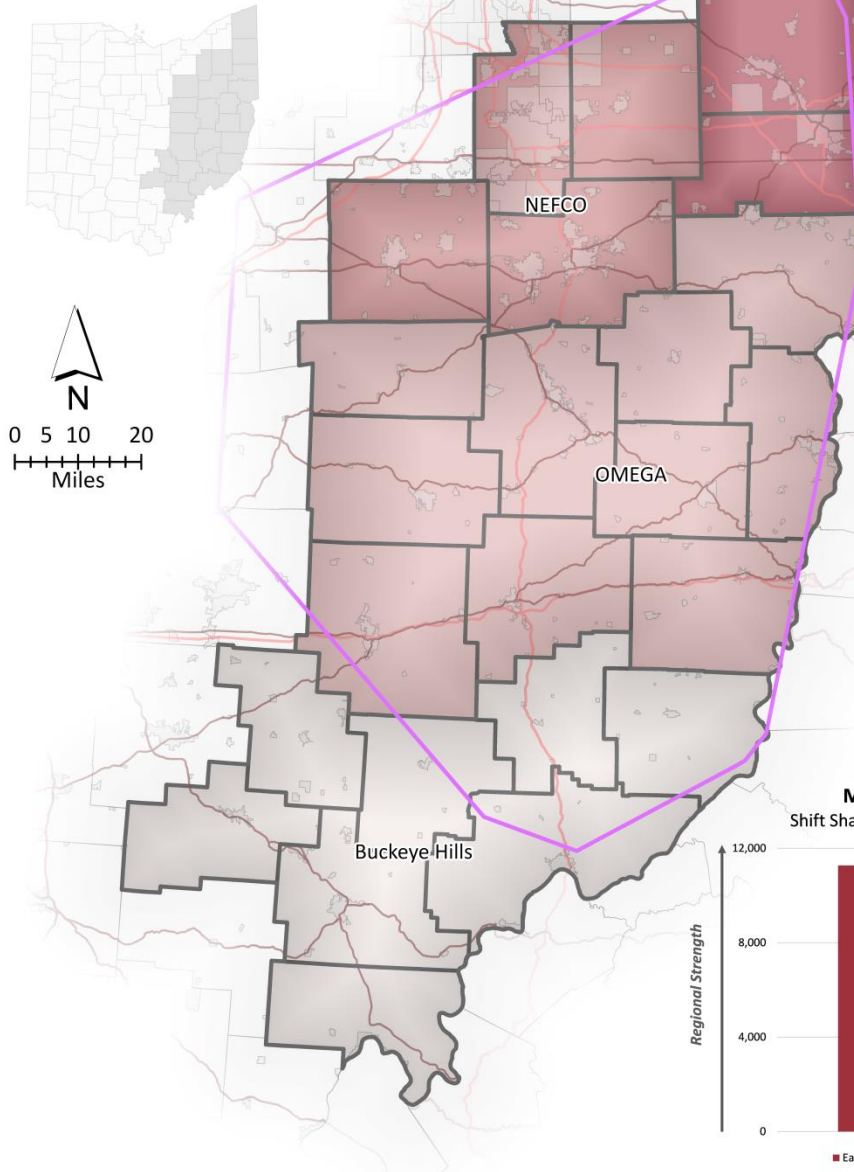
Shift Share Analysis - Regional Shift



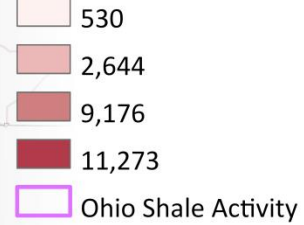
Percent Change in Location Quotient, 2010 - 2014



Regional Shift Share - 2014



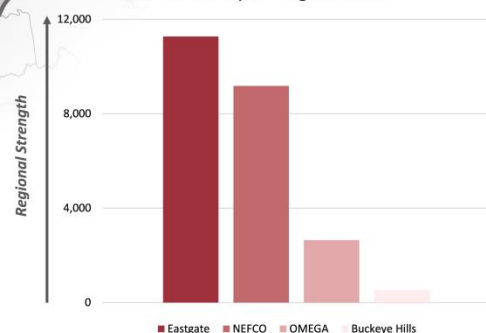
Machinery Cluster



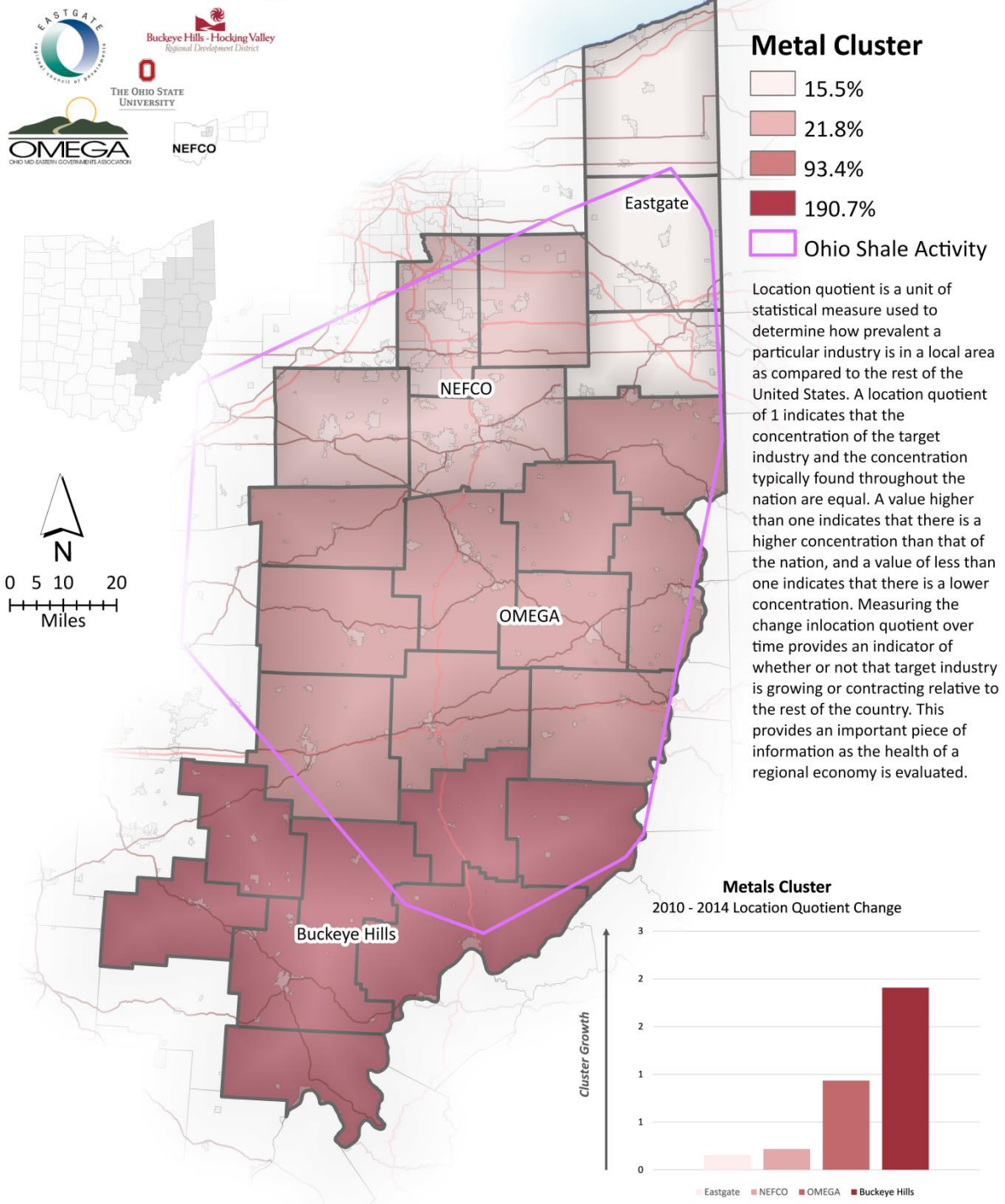
Shift share analysis is a statistical measure used to understand the driving factors of a particular target industry in an area of analysis. Shift share analysis made up of three measures, national share, industry mix, and regional share. National share indicates what portion of an industry's growth or decline is due to the condition of the overall national economy. Industry mix indicates what portion of an industry's growth or decline is due to the overall state of the industry or sector the target business is part of. Regional share indicates what portion of an industry's growth or decline is due to specific competitive advantages found in the local area of analysis. Together these factors provide an important analytical basis for understanding the status of any particular industry in a local area.

Machinery Cluster

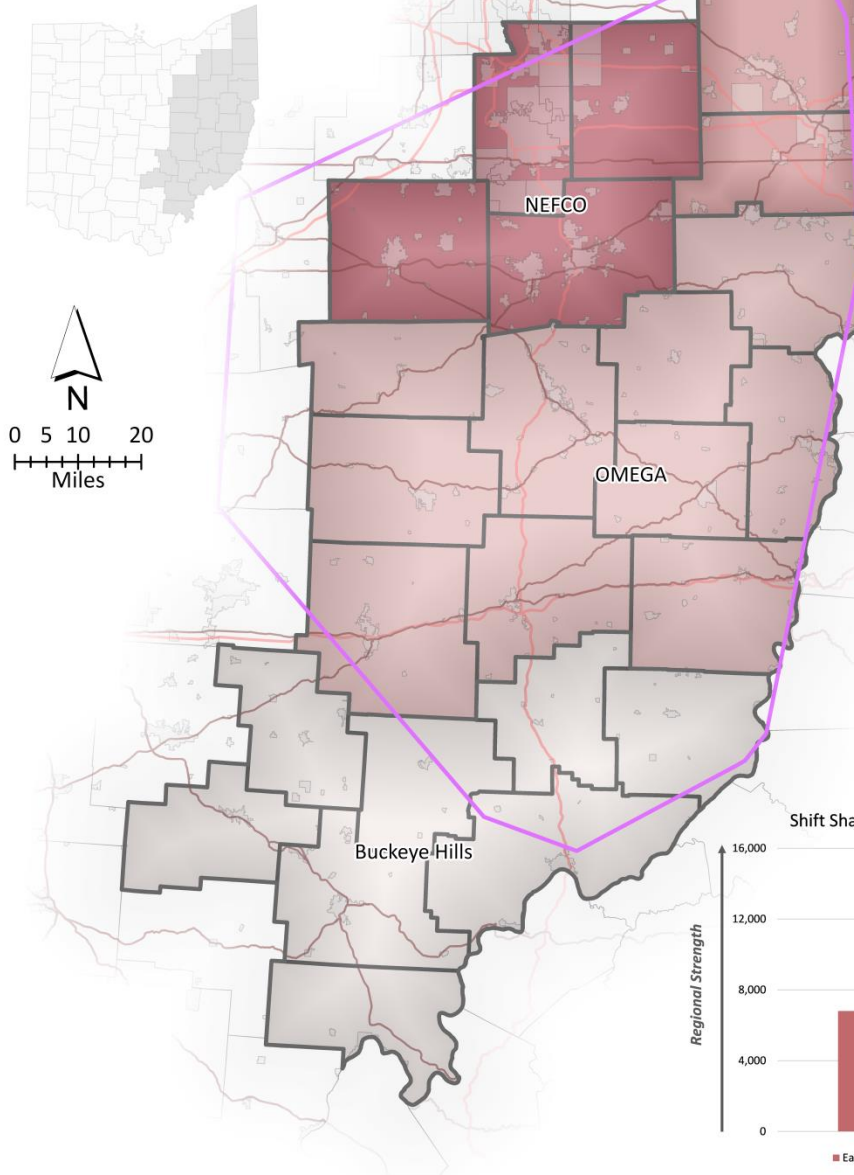
Shift Share Analysis - Regional Shift



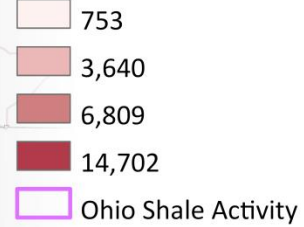
Percent Change in Location Quotient, 2010 - 2014



Regional Shift Share - 2014



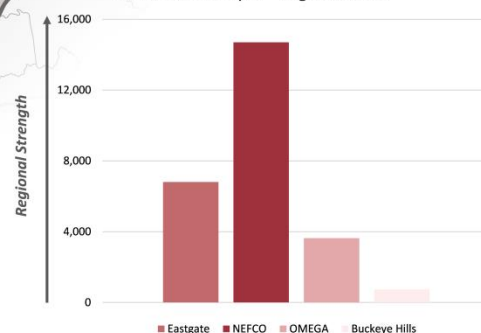
Metals Cluster



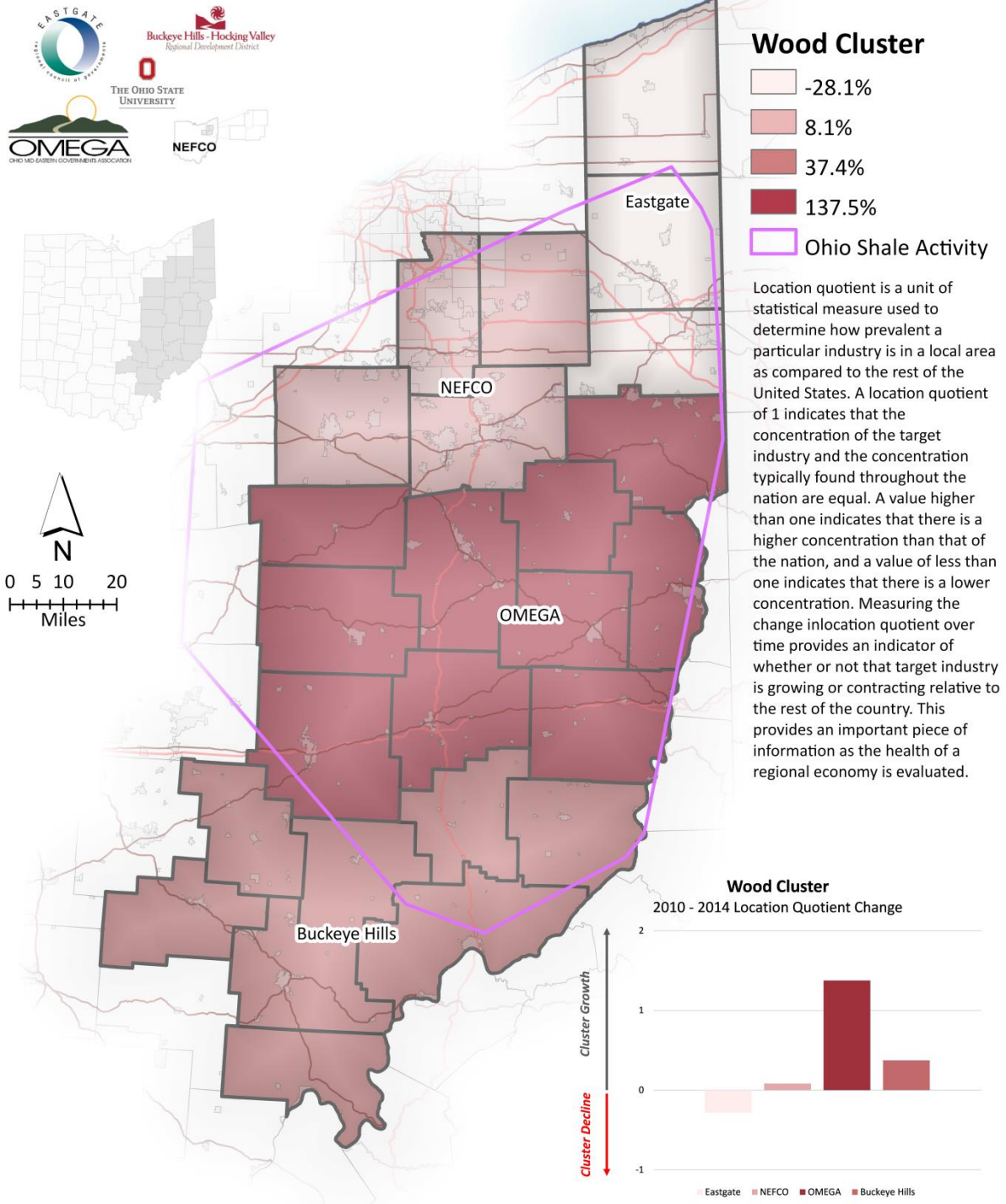
Shift share analysis is a statistical measure used to understand the driving factors of a particular target industry in an area of analysis. Shift share analysis made up of three measures, national share, industry mix, and regional share. National share indicates what portion of an industry's growth or decline is due to the condition of the overall national economy. Industry mix indicates what portion of an industry's growth or decline is due to the overall state of the industry or sector the target business is part of. Regional share indicates what portion of an industry's growth or decline is due to specific competitive advantages found in the local area of analysis. Together these factors provide an important analytical basis for understanding the status of any particular industry in a local area.

Metals Cluster

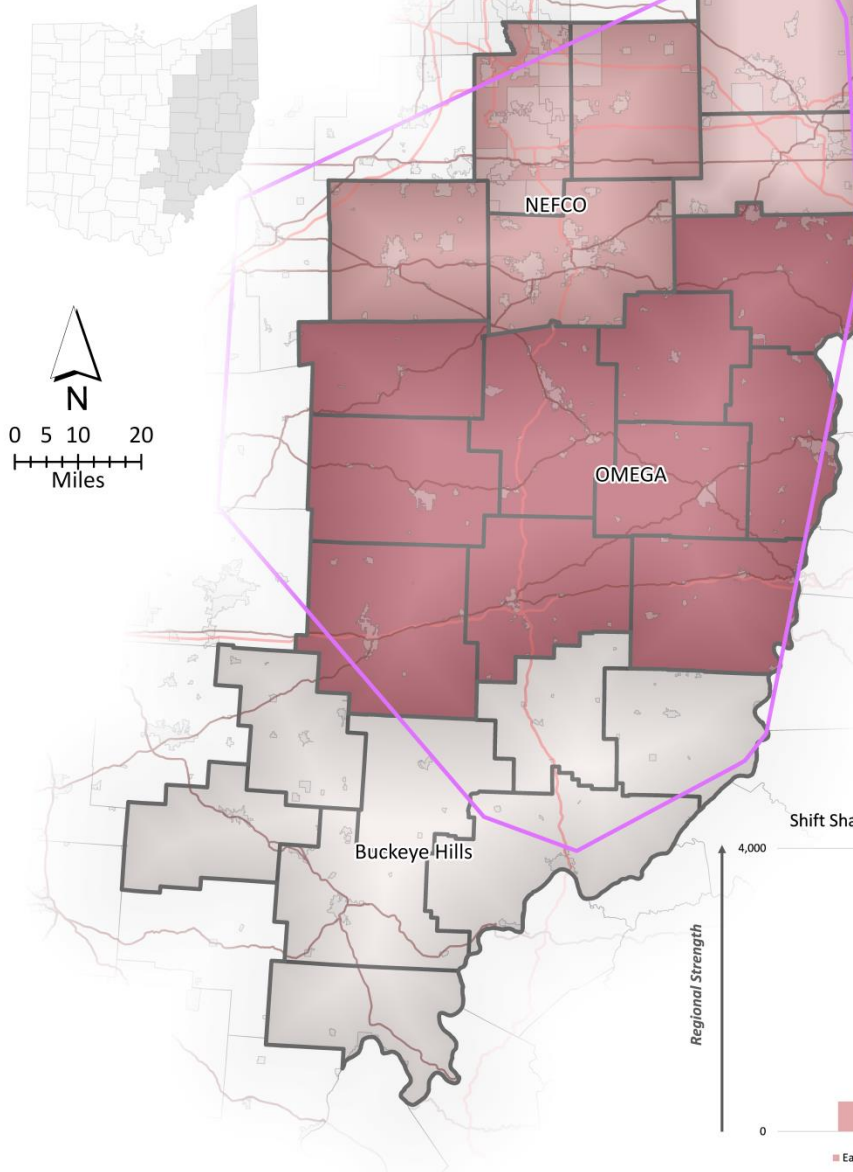
Shift Share Analysis - Regional Shift



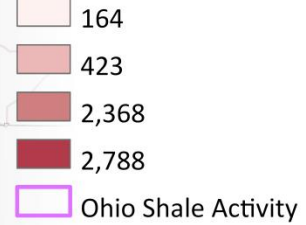
Percent Change in Location Quotient, 2010 - 2014



Regional Shift Share - 2014



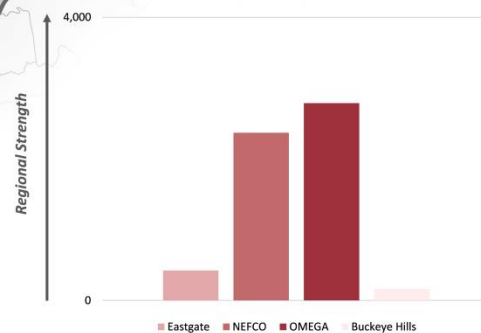
Wood Cluster



Shift share analysis is a statistical measure used to understand the driving factors of a particular target industry in an area of analysis. Shift share analysis made up of three measures, national share, industry mix, and regional share. National share indicates what portion of an industry's growth or decline is due to the condition of the overall national economy. Industry mix indicates what portion of an industry's growth or decline is due to the overall state of the industry or sector the target business is part of. Regional share indicates what portion of an industry's growth or decline is due to specific competitive advantages found in the local area of analysis. Together these factors provide an important analytical basis for understanding the status of any particular industry in a local area.

Wood Cluster

Shift Share Analysis - Regional Shift





2016 CEDS Annual Performance Report

Component One: Adjustment to the Strategy *(continued)*

Updates on Economic Development Partnerships in the OMEGA Region

Voinovich School of Leadership and Public Affairs – Ohio University

JobsOhio – Appalachian Partnership for Economic Growth (APEG)

JobsOhio – Team Northeast Ohio (NEO)

The 5th Annual Appalachian Ohio State of the Region Conference was held on May 17, 2016 at Ohio University in Athens. The conference theme was “**Exploring our Business Ecosystem.**” The event offered public officials, regional economic development personnel and representatives from other businesses and organizations an opportunity to learn about the regional business ecosystem in a series of panel discussions and presentations. The conference was an opportunity for business owners and organizations throughout the area to network with local and state officials, economic developers and educational leaders in the region. The conference agenda featured three panel discussions, luncheon speaker and a facilitated discussion of next steps for the region. Topics of the panel discussions were as follows:

- **Non-Bank Finance**
- **Operational Safety, Assistance and Design**
- **Staying Legal: Meeting your Human Resources and Regulatory Requirements**

The luncheon speaker was Cheryl Hay, Director of Talent Acquisition for JobsOhio.

Representatives from the four economic development districts participated on the conference planning committee and served as session monitors for the panel discussions. An exhibit hall was set up for conference attendees to review materials, see interactive displays, and learn about local and regional resources. The Voinovich School of Leadership and Public Affairs hosted a regional reception the evening prior to the conference. The reception provided representatives of the Voinovich School and Economic Development Districts with an opportunity to discuss important topics with regional EDA leaders.

Included among the biggest announcements for Team NEO was Shell moving forward to build a \$4 billion ethane cracker plant in western Pennsylvania. Per Team NEO's press release, Shell is planning to build an ethane cracker, the first major U.S. project of its type to be built outside of the Gulf Coast region in 20 years. Construction is anticipated to begin within 18 months and take several years to complete. When finished, it will employ 600 people. The facility will produce polyethylene that is used by manufacturers in plastic products. Although the facility is in Pennsylvania, its location along the Ohio River will have a huge economic impact on Ohio. It will provide easier access to polyethylene for Ohio manufacturing companies utilizing the product, minimizing their costs and reducing start-to-finish product production time. The same benefits apply for new companies looking to build manufacturing facilities for similar reasons.

In addition to the Shell project, PTT Global Chemical America, Thailand's largest and Asia's leading integrated petrochemical and refining company, is considering development of an ethane cracker in Mead Township along the Ohio River in Belmont County. PTT Global has conducted a \$10 million pre-engineering feasibility study that showed positive results and recently announced a \$100 million investment to determine a cost estimate for the full project. A final investment decision is anticipated in early 2017. If the project moves forward, it will take approximately four years to build the cracker. Interest in the proposed site is due to its location in the Marcellus and Utica shale region and its access to major highway, rail, pipeline and port infrastructure that would increase efficiency while reducing the environmental and financial costs of transportation. If built, the facility would create hundreds of full-time jobs, thousands of construction jobs and multibillion dollars in investments.



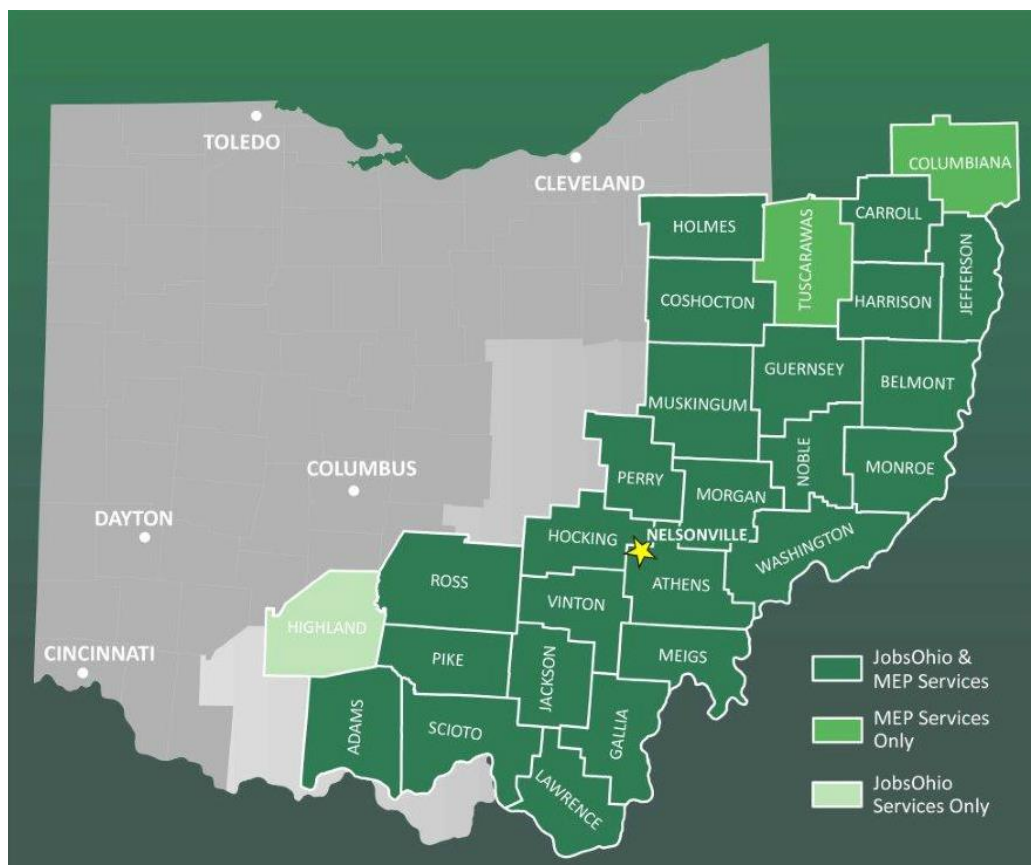
John Hemmings, Executive Director - Ohio Valley Regional Development Commission; Jeannette Wierzbicki, P.E., Executive Director - Ohio Mid-Eastern Governments Association; Kathy Zook, Program Manager – Eastgate Council of Governments; Misty Casto, Executive Director – Buckeye Hills-Hocking Valley Regional Development District; Jason Wilson, Director – Governor’s Office of Appalachia; and Mark Weinberg, Founding Dean – George V. Voinovich School of Leadership and Public Affairs, Ohio University

OMEGA and its fellow EDA Economic Development Districts also worked cooperatively with the Appalachian Partnership for Economic Growth and EDA University Center at the George Voinovich School of Leadership and Public Affairs – Ohio University to develop a core narrative for the 32-county Appalachian Counties in Ohio relative to the Partnerships for Opportunity and Workforce and Economic Revitalization (POWER) Initiative. The POWER Initiative is an integrated, multi-agency effort to invest in federal economic and workforce development resources in communities and regions negatively impacted by changes in the coal economy.

The core narrative is included in Appendix B.

The following pages contain valuable information on the OMEGA region and beyond presented through quarterly newsletters professionally produced by the Appalachian Partnership for Economic Growth (APEG). The title of the newsletter, ***A Rare Mix of Assets***, certainly captures the essence of the region. Please note two counties in the OMEGA District (Columbiana and Tuscarawas) are located in the JobsOhio Team NEO region.

Thank you to John Molinaro, APEG President and CEO who graciously agreed to allow OMEGA to include the newsletters in our CEDS report.



JobsOhio Appalachian Partnership for Economic Growth (APEG) Regional Map

For APEG to attract more jobs in manufacturing, distribution and other key industries, it must grab and hold the attention of companies and site selectors looking for properties that meet expansion plans.

A corn field next to a highway may look great to the local community, but a site selector's lens requires deep, detailed information for a point-by-point comparison of each site's potential, said Mike Jacoby, APEG's vice president of business development.

Gathering and presenting that information in a uniform, convenient way could be daunting for the region's local economic development professionals. In 2014, APEG made it a priority to help those professionals understand the need for these details and how to gather and organize them for instant access.

"Having this information readily available makes us more responsive when a prospecting company looks at our region; we boost our chances of attracting new companies and jobs to the area," said Donna Hrezo, APEG project manager/site advisor.

Expanding companies want to quickly identify the best spots available. The goal of the site selector working on their behalf, whether employee or consultant, becomes collecting as much information as possible in a standardized format about each prospective site.

Basic information includes clearly stated prices for the land and buildings and details about utilities and utility rates – water, sewer, electricity, natural gas and broadband access – with appropriate size and capacity available to support the proposed project.

As the process continues, environmental assessments, soil borings, wetland delineations, engineering surveys, etc., are required for many projects.

Often, it becomes a process of elimination. Site selectors ultimately want a small, manageable list of the top prospective sites to give to company executives. The initial response to a site request can generate a couple of hundred sites that is narrowed to three to five sites for consideration by the company.

"Companies have all kinds of choices of where they want to go," Jacoby said. "So, in order to stay in the mix, you have to have all the boxes checked."

For some projects, final negotiations between the executives and economic development officials at the state



John's Corner Industrial Park offers 116 acres for industrial development. It is 4.5 miles from two four-lane highways (US 23 and SR 32) and CSX Transportation has developed a plan for rail siding from its adjacent mainline. All utilities are on the site.

A potential industrial site in Waverly, Pike County, claimed the distinction as the first AEP Ohio certified site in the state. The certification of 116 developable acres in the Zahn's Corner Industrial Park was announced in March.

Those in attendance were optimistic that the designation would attract the attention of a potential new business and "bring much needed jobs to an area of hardworking individuals," said Gary Arnett, director of the Pike County Office of Community and Economic Development.

To get the certification, the Zahn's Corner site was evaluated by McCallum Sweeney, a nationally recognized site consultant firm, who looked at engineering and

environmental studies as part of the qualifying process. The goal of a third-party, independent review is to guarantee a site's features are accurately described.

This certification program was put in place by AEP to help communities attract businesses who, in turn, become customers of the electric power provider.

"Certifying sites is part of our strong community partnership," said Tim Wells, manager, AEP Ohio economic and business development.

"If we can help attract new jobs we are helping a community flourish."

A certified site can help a new industry lower its start-up costs and shorten the time it takes for the company to find the right location.

and local levels may include tax incentives or abatements, required job creation, provisions for equipment, workforce training resources and other considerations that might influence the decision. Companies may be talking with economic development entities in multiple states to leverage incentives and support.

When all is said and done, one site will win the project.

Although highly competitive, a site choice always supports a company's goals. There are some understandable tenets that can help APEG target potential companies.

"Ohio is within a day's drive of 60 percent of the North American population," said Jacoby. "That makes us very attractive for warehousing and distribution operations."

Zanesville/Muskingum County has taken advantage of their I-70 location to attract distribution centers for Avon, AutoZone, and Dollar General.

In the southern portion of the region, Ohio Route 32 provides uncongested, four-lane, east-west access. In combination with the US Route 23 north-south interchange, that area can become a prime transportation corridor. Rural King's decision to lease 930,000 square feet of warehouse space in Waverly, Pike County, was to supply and grow their retail presence in the south.

In Ross County a growing number of suppliers have located manufacturing and distribution operations to serve Kenworth Truck's Chillicothe assembly plant and other auto manufacturers located north and south of Ohio.

Zanesville and Chillicothe are examples of what can happen when one major employer selects a particular area to expand. Other companies often follow suit, creating clusters of new business and jobs, Jacoby explained.

View all of APEG's sites, buildings and Ohio River sites at apeg.com.

To showcase detailed information about the sites and buildings available in the region, APEG is focused on several new and ongoing initiatives. "We're doing everything we can to make our sites and counties more competitive so that we can keep our sites in the running," said Donna Hrezo, APEG project manager/site advisor.

Ohio River Sites offers an online resource showing a variety of information about industrial sites along the Ohio River. The unique APEG resource provides essential data on acreage, buildings, distances to four-lane highways, rail access, etc. Each site

links to its location on a detailed online GIS map that offers 13 base layers to assist in the review of the sites.

Sites chosen for the River Sites pages are properties located near interstate or four-lane highways and with existing utility infrastructure or rail. They include brownfield and greenfield sites ranging in size from 14 to 800 acres.

Prime Sites is a new APEG initiative. It will feature information on 17 high-value inland industrial sites in the region. The data will be available soon on the APEG website and will offer engineering data and mapping with similar details to Ohio River Sites pages.

Ohio InSite is a JobsOhio site selection tool/searchable database which allows APEG to display the sites and buildings available throughout the region. When accessed from the JobsOhio website, all of the properties available in Ohio are shown. When accessed from the APEG site, only the 634 regional sites are shown.

JobsOhio Revitalization offers loans and grants designed to accelerate redevelopment of brownfield sites and buildings; it specifically addresses those projects where the cost of redevelopment and remediation exceeds the value of the land/facility. Priority is given to projects

that retain or create at least 20 jobs in JobsOhio's targeted industries and pay a wage rate higher than the local average.

SiteOhio Certification is a new JobsOhio program designed to identify ready-for-development sites and to determine gaps needed to get others to that point. InSite Consulting, an independent site selection firm, is spearheading the evaluation of approximately 350 Ohio properties, including more than 25 in the APEG region.

InSite will place each property in one of three categories: ready for development; has issues that can be overcome; or fatal, major challenges.

Contact: Donna Hrezo dhrezo@apeg.com

News from the Partnership

Adams: Seaman Monarch Meadows Skilled Nursing is building a 57,000-square-foot, 50-bed nursing facility which includes 12 assisted living units. The \$4.3 million facility will open in July and will employ 80.

Athens: Nelsonville A \$20 million project to convert former public school buildings into commercial space plus 33 apartments has received a \$1.5 million loan and housing tax credits from the Ohio Housing Finance Agency, joining historic preservation tax credits from the Ohio Development Services Agency. Construction will begin in the spring.

Belmont: St. Clairsville Ohio's 10 top-producing shale wells are in Belmont County and eight of the wells belong to Rice Energy. Those eight wells produced nearly 12 billion cubic feet of natural gas during the last quarter of 2015. Ascent is currently drilling a new well and Gulfport Energy received a permit in March to drill six new wells.

Carroll: Carrollton Results of a three-year study by the University of Cincinnati determined that fracking the Utica and Marcellus shale has had no effect on groundwater in the region and that no wells have been contaminated. Carroll and surrounding counties were the target of the research.

Coshocton: Coshocton Woodbury Outfitters started with a few hunting boots sold on internet auctions and has grown into three retail locations, online-auction sales and the largest in-store gun display in Ohio. The original store is near the 43,000-acre Woodbury Wildlife game reserve which draws hunters from across the nation to rifle and bow hunt deer, Turkey, squirrel, rabbit and coyote are also hunted in the reserve.

Gallia: Gallipolis A \$1 million runway rehabilitation at the Gallia-Meigs Regional Airport was completed with a grant from the Federal Aviation Administration and U.S. Department of Transportation; plus a \$120,000 match from the county and additional grants. The airport is an important economic development tool in the region; the runway is 3,999 feet long and 75 feet wide.

Guernsey: Cambridge To address workforce issues, the Southeast Ohio Manufacturers Council (created by the Guernsey County Planning Commission's Education/Workforce Subcommittee) hired a Career Pathways Specialist to facilitate collaboration between the county's education and manufacturing organizations. A number of shadowing, internship, scholarship and job placements have occurred.

Cambridge Columbia Gas of Ohio presented a \$75,000 grant from its Jobs Growth Fund to Encore Plastics to complete the plant's new fire suppression system. The plant produces and distributes a variety of plastics products and has nearly 200 employees.

Harrison: Cadiz Wheeling Hospital announced a plan to acquire Cadiz-based Harrison Community Hospital. The Harrison population is looking forward to the advanced diagnostics, specialty care and resources from the larger provider to expand their healthcare options and keep services close to home. Due diligence and regulatory agency approvals are yet to be completed.

Highland: Greenfield The Highland County Community Improvement Corporation received \$250,000 from the Governor's Office of Appalachia to purchase a trim press to be leased to Corvac Composites. New to Ohio, Corvac uses thermo-forming to make plastic components for the automotive industry. They started production in March.



To test the largest jet engine in the world GE had to build the largest-ever bellmouth inlet duct. The unit - 18 feet in diameter and 12 feet long - sits in front of the engine's fan and a part of accurately measuring airflow. GE's 7,000-acre jet engine test site is in Adams County.

Testing the World's Largest Jet Engine

Testing the world's largest jet engine is no small feat and it's being done at the Peebles Testing Operation in Adams County. The GE9X with a 134-inch diameter front fan (a full six inches larger than its predecessor the GE90) called for a new, custom-built system for the engine's required ground certification testing.

GE Aviation invested about \$10 million including constructing the largest ever testing bellmouth inlet duct - 18 feet in diameter and 12 feet long - designed to sit in front of the GE9X's fan. The inlet smooths the air entering the engine's fan to provide accurate airflow measurement during testing.

"The GE9X's 27:1 compressor ratio is the highest pressure ratio of any commercial engine in service, which led us to add new material to our testing stand air systems to withstand the temperatures," said Brian DeBruin, plant manager for GE's Peebles operation.

"We also upgraded our engine hoists and transporters to handle the GE9X during final assembly and modified a wall in our prep building so the engine can be moved to the test stand."

The first full-engine testing will begin soon, ending nearly five years of technology maturation testing. Engine certification testing will start next year along with flight testing on GE Aviation's flying test bed. Certification of the engine is anticipated in 2018. Nearly 700 GE9X engines are now on order.

GE9X Engine specs: 100,000 pound thrust class; composite fan case; 16 fourth-generation carbon fiber composite fan blades; next-generation 27:1 pressure ratio 11-stage, high-pressure compressor; third-generation TAPS III combustor for high efficiency and low emissions; and CMC material in the combustor and turbine.

Hocking: Logan Smead Manufacturing, makers of folders, files and die cut business products, recently added new equipment and product lines at this 60-year-old location. The changes followed a corporate restructuring. The Logan plant currently has 173 full-time employees and is hiring to accommodate the new products.

Holmes: Sugar Creek ProVia Stone's new 300,000-square-foot facility is on target for spring completion. The building will house the company's manufactured stone products operation; they make veneers and siding for commercial and residential use. Part of the design is a rainwater catchment system that will meet all of the facility's water needs. When fully operational, 15 new positions will join the current 30 employees.

Jackson: Wellston American Wood Fibers, the nation's largest producer of wood shavings and wood flour, has leased warehouse space for both raw materials and finished product in the Wellston Manufacturing Complex and the Elam Road Warehouse. AWF is accessing these two facilities in Jackson County as critical points within their supply chain.

Jefferson: Wintersville Signs Limited will break ground this spring on a 1,200-square-foot expansion of their facility in the Jefferson County Industrial Park. The project will add two new jobs and enhanced painting capabilities to better serve their five-county market. Signs Limited makes illuminated cabinet signs; electronic display and message boards; channel letters; monument, post and panel signs; and vehicle graphics.

Morgan: McConnellsville Miba Sinter is growing to meet auto industry demand for their powder metallurgy-made parts. The Austrian-owned company doubled production capacity and the size of the facility last year and grew from three employees in 2009 to 220 today. The plant boasts the lowest absenteeism among Miba's plants worldwide. Their parts are used in engines, transmissions, body chassis and pumps.

Muskingum: Zanesville Baracuda products provide a fast, easy, versatile way to secure a door in a lockdown situation. Designed by a local veteran and law enforcement officer and locally produced by Bilco, manufacturer of access products, the recently patented Baracuda is a free-standing door-stopping device with versions that work on inward and outward opening doors as well as on scissor action openers.

Noble: Caldwell Duck Creek Towing has joined the Noble County family of businesses. Tracy VanHorn purchased the business using Business Expansion Program revolving loan funds. In addition to towing they sell tires and have a mechanic on staff. The company plans to expand services to better serve the community.

Perry: New Lexington AEP is investing \$10 million to upgrade a 138,000-volt line along Route 13. A substation to facilitate line linkage will be completed by June 2017.

Pike: Piketon Wastren Advantage (WAI) was recently recognized by Fluor-BWXT for the successful completion of the Department of Energy's (DOE) five-year long Mentor/Protégé Program. The DOE program encourages prime contractor to assist small businesses in increasing their performance and capabilities to work in the government sector and become a "prime" contractor to DOE sites. WAI provides project management and environmental cleanup services.

Ross: Chillicothe Riddle Machine Works, Inc. is adding a third 100,000-square-foot building on their 25-acre campus. In 2008 the company moved from leased facilities into a new 50,000-square-foot building which was doubled in 2011 and joined in 2013 by a second 100,000-square-foot building. The third-party logistics provider serves Kenworth and others; employees grew from 32 in 2008 to 205 currently.

Scioto: Lucasville Scioto County Career Technical Center received a \$726,235 grant to purchase robotics equipment to expand their advanced manufacturing career path. The competitive grant was made by the Straight A Governing Board. More than 200 applications were received and 20 grants were awarded.

Vinton: near Londonderry Buff Lo Dip, a buffalo wing ranch-flavored dipping sauce made by Duane Boring and his family, will be a featured offering through Longaberger's consultant sales network this spring. Their first batch, 234 jars made in 2011, sold out in a week. Boring worked with ACEnet on the nutritional label and shelf-stability. The family produces and packages the sauce by hand; it is sold in five states.

Washington: Reno Veterans Affairs opened a new 10,000-square-foot VA clinic in the Reno Business Park on Ohio 7. In addition to primary care, telehealth services allow specialized services without travel. HealthVet kiosks facilitate records requests and other online services.

Lawrence: South Point The Lawrence Economic Development Corp. recently opened its 10th building in The Point Industrial Park. A \$1.3 million project, the 58,000-square-foot shell structure can handle a 20-ton crane and is being marketed for a manufacturing industry that is heavily dependent on abundant logistical support. Currently 700 jobs are located within the industrial park.



Meigs: Pomeroy The Holzer Meigs Emergency Department, a free-standing emergency care facility, served 12,818 patients in 2015. Its first full year of operation. The facility provides emergency care that had been performed outside of the county since 2001. The facility represents a portion of the \$20 million in private investment in Meigs County during the past 24 months.

Monroe: Clarington A \$146,000 grant from the JobsOhio Revitalization fund is funding a Phase II Environmental Study on a 49-acre parcel recently purchased by the Monroe County Port Authority. A \$10,000 AEP LEAP grant was awarded for engineering and design to extend water and sewer to the site.



21st Century Buffalo Hunting



John Molinaro
APEG President and CEO

Many economic developers describe the art of attracting large domestic and foreign companies as "buffalo hunting." Some praise the practice saying that bagging the big, migratory beast fills a lot of stewpots and benefits the whole tribe. Others criticize economic development as being too focused on buffalo, rather than on local firms – the rabbits, squirrels and deer that fill most of our stewpots every day.

Since starting in 2012, APEG has focused mostly on local game. We know that 80-90 percent of new jobs come from growing companies already present in our economy. We have made thousands of calls on local companies, looking for ways to help them grow and succeed here in Appalachia. Our retention and expansion efforts have resulted in most of the 5500 plus new jobs we have helped grow in the region.

Mike Jacoby describes (below) how APEG is launching new efforts to attract

companies to the region. So if existing companies create most new jobs, why is APEG focusing more effort on attraction? It's because retention and expansion alone are not enough to support a vibrant regional economy.

In a perfect world, local firms would all thrive, grow and add jobs, but we all know that some companies downsize, move or close. To keep our economy healthy we need to replace those companies' contributions to our economy. Startups are one way to replace lost jobs, but it takes a long time to grow a new company, and pay and benefits are often very low in a firm's early days. That leaves a gap that can only be filled by attracting larger companies – buffalo – to our region.

Our region is blessed with a range of assets that can help us attract new firms – our central location, skilled workforce and great transportation infrastructure to name just three. What we haven't had, until now, is a concentrated effort to promote our region as a great place to do business. Some local economic development organizations have done a good

job promoting their community or county, but it is very hard for one city or county, alone, to gain the attention of larger firms. That's where a regional approach can make a big difference.

We know we have the right mix of assets to compete for investments from major foreign and domestic firms; 34 Fortune 500 and 47 international firms have chosen our region as a great place to do business. It's our job – and our challenge – to show other companies that the region is right for them.

We are not moving away from helping the companies that are here to grow and add jobs. We will still devote most of our effort to them. But it is time for us to do more, so we've joined the hunt to bring home the buffalo. It won't be easy or quick but we are confident that it will help our region and people prosper.

In April Molinaro will be buffalo hunting as part of a JobsOhio contingent attending Hannover Messe, the world's leading trade show for industrial technology held annually in Germany.

APEG Launches Business Attraction

Retaining and growing regional businesses has been the foundation of rural economic development. But when some of those businesses are in decline, embracing a new strategy is smart.

"In parallel to the 'grow your own' strategy, APEG is investing resources in attracting new industries into the region," said Mike Jacoby, vice president for business development. "We will be working in partnership with the local economic development professionals in our counties to bring them prospective new businesses."

Got Dirt?

Since business location decisions ultimately come down to real estate, APEG and JobsOhio's focus on identifying the most attractive sites and/or buildings in the counties has been the first step. In 2012, fewer than 400 APEG sites were available on InSite (JobsOhio's site database) and over half lacked complete data. Currently APEG has 634 sites listed with sufficient data, a testimony to the commitment of the local county professionals.

Determining what target industries are most likely to value APEG's key site assets then creating a compelling sales proposition (with all of the supporting data) are the next steps.

"Getting our sites in front of the right decision makers is really the key," said Jacoby, "and the competition is fierce." Every state and major city has a similar attraction goal as do some regions and counties; many of the efforts are very well funded.

A face-to-face visit with a company or professional site selector can be the most effective way to sell, but it can also be the most time consuming and expensive tactic. Advertising, while less expensive on a per exposure basis, must compete in crowded message markets and may or may not be seen by the decision makers.

Once a business expresses interest in a specific site, only about 5 percent end up completed projects. Success is built on persistence, learning from each prospect interaction and improving for the next opportunity.

Last fall, APEG contracted with a site consulting group who will identify

companies in the metals, chemicals and petrochemical sectors that may have expansion project plans. They will screen companies and set up a number of conference calls and visits with those whose plans fit our regional resources. Once real estate needs are identified, APEG will work with counties whose sites match the project.

On the Road

John Molinaro, president and CEO of APEG, was in Toronto, Canada, with other JobsOhio affiliates talking with companies interested in U.S. business locations. He will be at Hannover Messe, world's leading industrial technology trade fair, and will meet with targeted companies in the wood and metal manufacturing and energy sectors.

APEG's project managers will be joining JobsOhio and sister network affiliates on specific market visits to major cities to meet with site selectors and companies. And an electronic communication strategy targeting site selectors will be implemented.

Contact Jacoby: mjacoby@apeg.com

International Companies with APEG Operations



Australia

Ansell Protective Products, Inc.
Dyno Nobel Transportation, Inc.
Minova, USA



Austria

Miba Bearings US, LLC
Miba Sinter USA, LLC
Miba Energy Holding, LLC



Belgium

EMCO USA, LLC
Solway Specialty USA, LLC



Canada

CGI Technologies & Solutions, Inc.
Extendicare Health Services, Inc.
Extendicare Homes, Inc.
Stantec, Inc.



Colombia

Mansfield Plumbing Products, LLC



Finland

Huhtamaki Inc.



France

Ludowici Roof Tile, Inc.
Eramet Marietta, Inc.



Germany

Detroit Diesel Remanufacturing East
DSI Underground Systems, Inc.
Hanson Aggregates, Inc.
LMI Custom Mixing, LLC
MAHLE Engine Components USA, Inc.
Van-Rob, Inc.



Ireland

The Shelly Holding Co.
Shelly Materials, Inc.



Japan

LMI Custom Mixing, LLC
Weastec, Inc.
Wayne-Dallan Corp.
YSK Corporation



Luxembourg

IAC Homesville, LLC
Degussa Engineered Carbons, LLC



Mexico

Bimbo Bakeries, USA, Inc.



Netherlands

AMG Vanadium, Inc.
CS&I, Inc.



New Zealand

Graham Packaging Co. Inc.



South Korea

Ohio Coatings Company



Spain

Globe Metallurgical, Inc.



Switzerland

Nestle Purina Petcare Company
Elpro Services, Inc.



Sweden

Domestic Corporation



United Kingdom

Certhwood LTD
Columbus Washboard Co.
GKN Sinter Metals, Inc.
Element Materials Technology
Cambridge, Inc.
Rexam Healthcare
Speyside Bourbon Cooperage, Inc.
Tykna, Inc.
Hunting Titan

APEG 2016 Travel Calendar

Toronto JobsOhio Event
January

Site Selectors Guild
Memphis/February

JobsOhio Market Visit
Atlanta/March

American Fuel & Petrochemicals
Manufacturers
Dallas/March

Hannover Messe
April/Germany

Select USA
Washington DC/June

North American
Wholesale Lumber
Assoc. Show
Las Vegas/October



These 34 Fortune 500 manufacturing, distribution and back office operations employ more than 12,000 in the APEG region.

Sensor Innovates in Motion Capture Market

A \$1 million venture capital investment in Portsmouth's Yost Labs is focused on accelerating the market adoption of the company's innovative sensors and real-time human movement motion-capture systems.

One of the fastest growing technology companies in Ohio, Yost's inertial sensor technology has a wide range of uses from drone and robot control to creating the virtual realities of online games, sports performance and rehabilitation. Their customers are from entertainment, military/government and e-commerce sectors.

Yost is launching a new sensor "designed to bring aerospace-grade inertial tracking to the consumer electronics market," according to Greg Merrill, CEO. The next-generation sensor will offer low latency and high accuracy for head-mounted display tracking, drone stabilization, biomechanics analysis and real-time robotic control.

In addition, a spring launch is planned for a full-body array of sensors that track body motion in real time. According to Merrill, thousands of the virtual reality units have been pre-sold. Their expectation is "to create the largest user and developer community of any full-body inertial interface device in the world," he said.

Called the PrioVR Dev Kit, applications for the unit include virtual reality video game control, character animation motion capture and sports performance enhancement.

Yost Labs was founded by Paul Yost, the company's chief technologist, and holds a number of patents in sensor technology. The company has averaged 42 percent year-over-year growth over the past four years.

"Yost Labs is an impressive example of taking



High-accuracy sensors attached to the head and body allow the motions of the actor to be captured as a digital model in 3D software. The real-time human motion capture can also be used to guide physical rehabilitation and sports performance enhancement.

innovations from the lab and refining them based on market need and opportunity," said John Glazer, director of TechGROWTH Ohio, an organization committed to technology entrepreneurship. The TechGROWTH fund is among Yost's Series A funders.

According to independent market analysts, Yost is a leader in the emerging virtual and augmented reality market – a market estimated to be worth \$150 billion by 2020.

To learn more visit: yostlabs.com

In Other News

Chillicothe and Jackson nationally ranked for economic development

Two of APEG's "micropolitan" cities were among 19 Ohio cities named as Top 100 Micropolitan Areas by Site Selection magazine – more than the next two states combined.

Chillicothe and Jackson were ranked having completed, respectively, three and two economic development projects in 2015. Each project needed to have a minimum of \$1 million in capital investment, 200,000 square feet of space or create at least 20 new jobs.

Findlay, Ohio, was the top ranked micropolitan in the nation. The classification includes cities of 10,000 to 50,000 people in non-metropolitan counties. Projects must be in manufacturing, distribution and office and technology for consideration.

John Minor, JobsOhio president and chief investment officer, commented, "The number and diversity of the micro-communities named to this list is proof that Ohio has the formula for success; access to exceptional resources, a competitive business climate, and dedicated economic development teams working collaboratively at every level."

For the third consecutive year, Site Selector named Ohio number two overall and ranked the state third in projects per capita.

Portsmouth advances in Best Communities Competition

Portsmouth continues to advance in the America's Best Communities Competition achieving Top 15 status in a contest that started with nearly 400 communities.

The Southern Ohio Port Authority, Portsmouth Area Chamber of Commerce and Main Street Portsmouth joined forces to create the Portsmouth Community Revitalization Plan which they submitted to the judges.

The plan is built around the Ohio River with the goal of improving commercial and community access to the riverfront.

"We would like to see the port become a premier regional destination for industrial development, small business development and riverfront recreation," said Jason Kester, executive director of the Southern Ohio Port Authority.

Communities were encouraged to highlight their pride in unique ways. Local songwriter Shane Runion was asked to write a song about the city. It was difficult until the 'hook' to the song came to him.



"I want to build up this town and pass it down to our daughters and sons. Because I'm proud of where I'm from," wrote Runion about Portsmouth. A music video of the song has been made using the city scenes as a backdrop. It will be screened on the JumboTron at Portsmouth Day with the Cincinnati Reds and available on social media.

In late April, eight communities will be chosen to receive \$100,000 awards to support their development plans. After one year those community efforts will be evaluated and the three communities who have made the most impact and shown the greatest potential will receive additional awards.

The top community will receive \$3 million with second and third places receiving \$3 and \$2 million, respectively.

The competition is sponsored by Frontier Communication, Dish Network, The Weather Channel and CoBank with the goal of inspiring small town and rural communities to find innovative ways to grow local economies and improve quality of life.

APEG Welcomes New Staff

Cynthia Raneo, part-time Finance Assistant, is preparing and recording transactions and accounting reports and providing general office support.



Cynthia Raneo

Cynthia earned an Associates Degree in accounting from Hocking College, Nelsonville. She served six years in US Navy and Reserves where she was trained and worked in radio communication, data processing and computer maintenance.

Jesse Roush,

Wood Manufacturing Improvement specialist, joins the APEG Forest and Wood Products team to help regional manufacturers add value to their operations. He will assist companies in evaluating and improving their processes and operations.



Jesse Roush

Jesse has experience in sales, customer relations, engineering and construction and worked in the gas and oil industry. He is a graduate of Ohio University and native of Washington County.

Save
the Date

Fifth Annual Appalachian Ohio State of the Region Conference
Exploring Our Business Ecosystem **May 17, 2016**
Ohio University, Baker Center, Athens, OH

To learn more about the Appalachian Partnership for Economic Growth go to APEG.com.

Charlotte Hatfield, Editor

Lora Ottenberger, Xosio Design

Jim Dillon, Contributing Writer

To join the mailing list contact chatfield@apeg.com



Manufacturing
Extension Partnership



Funded through a contract with the U.S. Small Business Administration. All opinions, conclusions, and/or recommendations expressed herein are those of the author(s) and do not necessarily reflect the views of the SBA.

Appalachian Partnership for Economic Growth

35 Public Square | PO Box 456 | Nelsonville, Ohio 45764 | 740.753.5359 | www.APEG.com



Appalachian Partnership for Economic Growth

Board of Directors

APEG welcomes two new members to the Board of Directors.

Adam Conway is president of Superior Hardwoods of Ohio, Inc., which owns and operates four modern band mills and dry kilns in the APEG region. He has experience in timber



Adam Conway

procurement and management; primary and secondary manufacturing; import and export sales; and international lumber trading. He has run the family business since 1999.

Conway's economics/ international business degree is from the Ohio State University and he completed the National Hardwood Lumber Association inspection school. He serves on the boards of the Ohio Forestry Association and the ODNR Forest Advisory Council.

Jay Goodman, CCIM, is principal at Harvey Goodman Realtor, headquartered in St. Clairsville. He is a third generation member of the firm which has seven offices in five counties. In addition to real estate brokerage, HGR has



Jay Goodman

completed several commercial and residential developments in Belmont County and offers general contracting, development and property management.

After graduating from Ohio University with a degree in marketing and real estate, Goodman began his career in Chicago. He returned to the family business in 2012.

The APEG Board

Chairman **Mark James**, VP economic and business development, American Electric Power; Secretary **Matt Ehl**, CFO, Axon Recycled Plastics; Treasurer **Stanley Sagun**, NGD Finance, accounting & commercial operations, NSource; and members **Greg Adams**, retired founder of Resource Systems and venture investor; **Mike Archer**, CEO, Pioneer Group; **Cara Brook**, president, Foundation for Appalachian Ohio; **Greg Floerke**, EVP, chief commercial officer, MarkWest Energy; **MarJean Kennedy**, director business development and marketing, Holzer Health System; **Gordon Litt**, partner, BakerHostetler; **Carolyn Mendel**, plant manager, General Milk; **Weldon**; and **Kristi Tanner**, managing director, JobsOhio.

Reshoring Jobs to Athens

The offshoring tide has turned for Athens Mold and Machine (AMM), a tire mold manufacturing company that halted production in 2010 after a decade of declining sales. With nearly \$3 million in support from local, state and national economic development entities, the company will be back in production this year.

In return, AMM has committed to create 60 new "living wage" jobs with benefits over the next three years. The ramp up will create an estimated \$2-million-plus annual payroll; full production will take 36 months.

"As our market started to come back we needed to grow production and knew restarting the Athens operation was the right decision," said Samuel Thornton, project manager, AMM. "We're opening with the support of many groups who wanted to bring these jobs back to Athens as much as I did."

Costs Change Market

AMM closed because of low-cost competition in Europe and Asia but changes in international shipping and labor costs over the past several years have led to some manufacturing returning to the U.S.

Key to the reopening was the open line of communication between the company and Sara Marrs-Maxfield, executive director, Athens County Economic Development Council (ACEDC).

"I followed manufacturing trends and had many conversations with colleagues in other states regarding reshoring efforts," said Marrs-Maxfield. "The company made it clear they wanted to reopen but market conditions had to change; it took patience."

By late 2015 that patience paid off and the ACEDC began the process of identifying and securing funding

currently 5.2 percent. The manufacturing jobs will help provide diversified employment opportunities.

Widespread Project Support

Through their Revitalization Grant program, JobsOhio has committed \$400,000 to support facility and office renovation and \$300,000 in 629 Funds (road improvement) enhancing truck access to AMM via a McKinley Avenue extension.

The tire molding facility is located in the city's only manufacturing park so roadwork will benefit the entire park.

The Appalachian Regional Commission has set aside \$500,000 to support the road project. An application for those funds has been made by the Athens City Council which will make a \$250,000 matching grant. Ohio University will provide up to \$750,000 toward the roadwork, consistent with their Comprehensive Master Plan.

The Southern Ohio Agricultural and Community Development Fund (SOACDF) granted \$50,000 to AMM to be used for machinery upgrades. Columbia Gas of Ohio Jobs Growth Fund and AEP Ohio are also supporting the project.

"I want to express my sincere appreciation to the people and entities who are helping make this possible," said Thornton. "I am eager to bring jobs back to my home community to help the local economy and city development."



When Athens Mold and Machine reopens this year it will make the molds like this one made in their Tennessee plant. A blank tire is put inside the mold and air pressure forces the rubber to expand creating the tread design and setting on the side of the tire. Because the air must vent to the in the detail you see tiny rubber strings on the tire.

for facility renovation and equipment upgrades needed to make the reopening possible. New drills, milling and metal fabrication equipment will be purchased and the building will be re-roofed and refurbished with energy efficient HVAC and lighting, according to Thornton.

"New manufacturing jobs in Athens County are welcome!" said Katy Farber, APEG project manager. "There were a lot of people pulling to make this happen."

Athens County's unemployment rate is

JobsOhio and APEG at worldwide trade show

By John Molinaro,
President and CEO of APEG

What do President Obama, APEG, JobsOhio and 210,000 industrial leaders from around the globe all have in common? We all traveled to Hannover, Germany in April to attend the largest industrial trade show in the world, the Hannover Messe.

Why did the President attend? There is no better place in the world to identify and meet with industrial leaders who can bring additional jobs, investment and prosperity to America. In addition, for the first time in the Messe's 69-year history, America was the show's official partner country. President Obama and various federal agencies used the Messe to showcase America as a place to invest, do business and create jobs.

Strategically placed next to the main stage, foot traffic at the Ohio booth was intense for the entire week.

Our JobsOhio contingent had the largest presence of any state at the Messe; more than 100 Ohioans were there to showcase the innovation, business climate, and talent that

Ohio offers the world in advanced manufacturing and materials.

I represented APEG at the Messe. As a first-time participant, I spent much of my time working the foot traffic at the booth. All told, I returned from Hannover having made 35 promising contacts, some of which have become specific leads with companies that will consider our region for an American location.

Part of our strategy is to focus on companies that need the mix of assets that our region can provide – such as our central location, great transportation

assets and manufacturing history, workforce and know-how. There is no better place for us to reach industrial companies needing our assets than Hannover.

When we return to Hannover we expect the relationships we began to nurture this year to grow, and the opportunities derived from them to multiply. This form of attraction is a long-term strategy that achieves its best results when sustained over time. Like any long journey, you can only reach your destination after you take your first steps down the road. I am glad to say that we are on our way.

Opening day of Hannover Messe President Barack Obama and German Chancellor Angela Merkel joined U. Gov. Mary Taylor in the Ohio booth.



Appalachian Partnership
for Economic Growth

www.APEG.com

News from the Partnership

Adams: Winchester Koford Engineering, LLC, is a leading U.S. maker of high performance slot car equipment with products for every class of wing car racing plus drag and scale racing. They also make



high performance slotless brushless motors for military, aerospace, medical and dental applications, electric power tools and industrial applications. Founder Stuart Koford is an inventor and patent holder.

Athens: Nelsonville Quickloadz, a technology that loads/unloads a shipping container from a truck trailer with the push of a button, has received a \$360,000 grant from TechGROWTH Ohio. The automated system lowers a trailer to ground level and slides it under the container. Built-in hooks, chains and rollers move the container safely onto the truck bed. The driver operates the system via a cell phone. The funding will help the start-up complete market research, file patents and grow sales.

Belmont: Dilles Bottom FirstEnergy Corp. continues demolition of the former Burger coal-fired electricity plant in preparation for the potential location there of an ethane cracker plant by FTT Global Chemical. The 500-acre site is bordered by the Ohio River, Ohio Highway 7 and the Arch A. Moore Jr. Bridge crossing. The final decision on the project will be made in early 2017.

Carroll: Washington Township Rex Energy's three-well Kiko pad produced 2.3 million cubic feet of natural gas, 502 barrels of natural-gas liquids and 369 barrels of condensate per day during the first quarter. Rex drilled two wells, fracked a well and placed four wells in production in the county during first quarter.

Coshocton: Coshocton The \$50 million expansion of The Kraft Heinz Company's bacon facility announced 18 months ago is expected to be completed this summer. With the new facility, machinery and equipment, the company was able to consolidate its bacon production; many of the 300 to 350 new jobs being created have already been filled. Bacon has been produced at the plant since 1984.

Gallia: Gallipolis Last year the Downtown Revitalization Project (DRP) group made a grant to River City Leather/ River City Manufacturing/ B&E Shoe Repair (three complementary businesses with a single owner). The business was so encouraged by the support they held a spring fundraising event that raised more than \$7,600 in one night and donated it all back to the DRP.

Guernsey: Quaker City Eclipse Resources, working with Haliburton, completed drilling what may be the longest onshore horizontal shale well in the U.S. The "Purple Hayes" well is 18,500 feet long and 27,046 feet deep. Highly cost effective, it was fracked in 124 stages in 24 days.

According to the U.S. Energy Information Administration, the U.S. natural gas output from fracked wells has grown from 7 percent in 2000 to 47 percent in 2015 and helped produce a record 79 billion cubic feet of natural gas per day last year.

Harrison: Scio A major rehabilitation project of State Route 151 from Scio to Jewett will inconvenience drivers for 81 days but county offices are pleased about the upgrade. The \$2.1 million project will put a bonded concrete overlay on the road that serves the oil and gas industry.

Cadiz Construction is underway on Marathon's 50-mile-long Conestoga Pipeline. The \$250 million project should be complete this year and will transport 180,000 barrels of natural gas and condensate per day from Cadiz to the Canton refinery. An eight-mile section of the pipeline from Cadiz to Hopedale will also be completed this year.



Jackson: Jackson A long-time Ford dealership changed ownership becoming Mark Porter Ford, a family-owned and operated automotive sales and service business. The dealership is an investment of \$2.7 million; it retains 11 jobs and creates 17 new jobs. The County CDBG RLF was part of the financial package.

Jefferson: A \$600,000 EPA grant to assess and clean up area brownfields will help the county repurpose potentially contaminated properties to make them ready for new businesses in Toronto, Steubenville and Mingo Junction. The grant was made to the Jefferson County Port Authority and their West Virginia Business Development Corp. partners.



Scioto County student teams competed with the VEX robots they built and programmed during engineering summer camp. The team whose robot moved the most green balls into the opponent court was the winner.

Science and Engineering Summer Camp

The perfect summer camp! A week of racing balloon cars, launching catapults, magnetic slime, popsicle-stick bridges and robot racing was a great way to spend a summer week for 42 Scioto County seventh and eighth graders.

But it was more than fun – the kids designed, built and tested the cars, catapults, bridges and robots in a hands-on experience to learn how things work, explore new ideas and work in teams. All the while they were adding to their science, technology, engineering and math (STEM) skills.

Part of the national Project Lead the Way program, the instructors were STEM middle and high school teachers from Scioto County. The activities at the week-long camp introduced students to different engineering fields with experiences designed to inspire creativity and develop self-confidence in young students.

This was the seventh year for the Scioto County Career and Technical Center Summer Engineering Camp. The students were from South Webster, Wheelersburg, Valley, Northwest and Minford.

Highland: Countywide Highland County Economic Development, in partnership with APEG and Ohio Means Jobs-Highland County, launched a Manufacturers' Roundtable with human resource and plant managers countywide participating. The goal is to build relationships and exchange ideas and insight about the challenges unique to manufacturing. Monthly meetings will be held at member manufacturing facilities.

Hocking: Logan The city's 200th anniversary is bringing community groups together to plan celebrations and create a vision and strategic plan for the future of the city. The organizations are using the Roger Brooks Webinar Series to develop goals, tasks and measures of success which will be revealed at a Bicentennial Ball at the end of the year.

Holmes: Berlin Berlin Gardens, LLC, recently completed a 55,000-square-foot facility where they will manufacture and warehouse cushions for outdoor furniture and related outdoor accessories. The company makes outdoor poly furniture, accessories and lawn structures. The project is expected to create six new full-time jobs.

Lawrence: Ironton A major riverfront improvement project received a \$636,000 U.S. Fish and Wildlife Service boating infrastructure grant to install a seawall, sidewalk and 33-slip marina on the Ohio River. An additional \$208,000 will be provided by the Lawrence Economic Development Corp. and Lawrence County Port Authority. The marina will serve transient boats up to 26 feet long.

Meigs: Middleport Watco Transportation Services announced they have leased the 309-mile stretch of Norfolk Southern Line that includes the Hobson Yards station. Service will begin this summer running from Refugee, Ohio, to Mullens, W.V. Watco is one of the largest short line railroad holding companies in the U.S. with 35 short line railroads and more than 4,700 miles of track.

Monroe: Hannibal A \$25,000 grant from the Army Corps of Engineers Pittsburgh District will help refurbish and reopen the visitors' center at the Hannibal Locks and Dam. One of only two grants made in the district and 23 grants across the nation, the proposal included 13 groups working in collaboration to improve area tourism by telling the story of the Ohio River.

Morgan: Chesterhill The Chesterhill Produce Auction sells locally grown produce. In 2015, 142 growers participated, aggregating produce for sale to 62 commercial and institutional buyers in 5 West Virginia and 16 Ohio counties, serving a total of 1170 buyers. The market, operated by Rural Action, serves restaurants, schools, hospitals and individuals who can and preserve. Since 2009 sales have increased by 253 percent.

Muskingum: Zanesville Ohio Stave Company produces oak staves and ships them to Kentucky, Missouri and California to be assembled into wine and bourbon barrels. The company, which employs 60, was founded by the McMillan family in 1940 and acquired in 2013 by American Stave, the largest barrel manufacturer in the world. They use only white and chinkapin oak for their product.

Noble: Caldwell International Converter manufactures laminated products combining materials such as paper, foil and plastic film for use in food packaging and building supplies like the foil seal on food containers or the foil backing on home insulation. Acquired by Novalex in 2014, the 40-year-old company employs more than 70 people.

Perry: Somerset Schmelzer Industries, Inc., a family-owned company, manufactures lightweight fiberglass veil material used for surfacing industrial and sports products. They make pipes and tanks; rotor blades for wind, aerospace and industry; surfboards and snowboards; and marine applications. The 32-year-old majority woman-owned company employs 25.

Pike: Piketon Work has begun on a sediment pond at the On-site Waste Disposal Facility (OSWDF) that will be a state-of-the-art permanent disposal site for materials coming from the deactivation of the former Portsmouth Gaseous Diffusion Plant. The 100-plus-acre site will be in use in late 2019.

Ross: Chillicothe The Kenworth truck assembly plant is constructing a 25,000-square-foot addition to implement a new management system and a climate-controlled, automated storage facility for painted parts. The \$17 million project uses technology to enhance efficiency of storage and retrieval of painted parts. The plant produced its 500,000th truck this year.

Scioto: Portsmouth Appalachian Wood Floors recently acquired the formerly abandoned grocery building to add an additional production line and streamline their logistical operations. The project, which will create 20 new jobs, received assistance from the JobsOhio revitalization program.

Vinton: New Plymouth Originally built in 1995 with only four guest rooms, Ravenwood Castle has since expanded to include a medieval village, cabins, and gypsy wagons. They recently hired a new team of innkeepers, renovated their kitchen, offices, and gift shop, and implemented new operating software.



Washington: Beverly Decommissioning the retired AEP-Muskingum River Plant is about half complete with 75 acres, including onsite rail, presently available for development. By the end of 2017 an additional 100 acres with a rail loop and automatic unloading facility will also be available.

GKN Grows Skilled Workforce

The Appalachian Partnership's broad base of services – unique among its Ohio peers – supports the growth of its existing manufacturing base in a variety of ways.

JobsOhio programs help companies grow capacity and market share and the Ohio Manufacturing Extension Partnership (MEP) strengthens the workforce of a company by developing knowledge and skills via tailored training and the UpSkill Your Workforce program.

Ford Selects GKN

GKN Sinter Metals, Gallipolis, is a beneficiary of all three programs and credits APEG and JobsOhio with helping them land a direct contract with Ford for a significant new gear-related technology currently being made at their facility. Since then, APEG has partnered with the company to develop and increase the workforce skills needed to meet the demands of the contract.

The Ford contract was the result of a 2013 competition between four U.S. facilities. "We had the opportunity to put together a package to help Gallipolis compete for this new product and keep the facility relevant for future operations," said Katy Farber, APEG project manager. "The facility demonstrated how much they wanted the project and the economic development organizations stepped up to support them."



Freight handler, operator, a 25-year employee, operates a 9000 turning center, part of the direct facility contract. GKN won to provide Ford with altered gear-related technology. The equipment was part of the \$10 million investment that has created almost 100 jobs.

The new contract meant the Gallipolis operation received \$10 plus million in new machinery and equipment. In turn, the company received a variety of tax credits and support that required them to create 50 new jobs.

The result has been the creation of almost twice the number of new jobs they promised!

GKN employees grew from 143 in 2013 to its current roster of 240.

"We added cutting-edge technology and grew our employees by 60 percent in the past three years," said Gale Hess, Human Resource manager for GKN. "APEG has been a great partner at every step."

UpSkill Incumbent Workers

With growth happening quickly, the ability to increase employee skill levels is critical.

"Training helps us troubleshoot a lot quicker," said Shannon Onson, maintenance supervisor. "We ask better questions and have more confidence in what we're doing."

The UpSkill Your Workforce training program provided a wide variety of incumbent worker trainings including: FANUC Robotics; Edgcam Milling; programmable logic controllers; forklift licensing; metallurgy; and Laser Safety Officer training.

The "real world" aspect of the UpSkill training is appreciated by employees. GKN partnered with Keith Saunders from the University of Rio Grande, who took the time to learn what we do at GKN and created custom training panels that related to what our jobs are, commented one employee.

Training contributes to the overall success of the organization because there is a higher level of understanding among work groups, including those on different shifts.

"The maintenance team relies on each other to work together and talk through a problem," said Deron Deem, Gallipolis facilities manager. "They can better resolve an issue together before they need to ask someone outside the group for help."

MEP recently provided facility-wide training for employees on Workplace Violence / Sexual Harassment / Substance Abuse.



Edgcam milling and turning training improved the quality of tooling. Clark Scurlock's team creates to be used to manufacture forged gears and parts. "Better skills mean my group is producing a better product so the gear our customer gets is even better," said Scurlock, Tool Room supervisor.

Improving Production Quality

A manufacturing company with a strong training culture also creates an environment that reflects pride in effort, quality improvement and performance.

Clark Scurlock, Tool Room supervisor, has seen a clear improvement in the quality of the tooling his group creates to be used on the manufacturing floor.

"The Edgcam training (basic milling and turning) improved the level of our work. Our tooling is even more precise than before so the forging group is producing a more perfect gear for our customers," said Scurlock.

"Anytime you get a chance to learn it helps you," said Clarence Farrell, maintenance tech. "We fix anything that breaks and install whatever's new. I like my job because it's not the same every day." Today's maintenance tech needs knowledge in multiple trades – welding, hydraulics, electrical, programmable logic controls, plumbing, robotics and pipelining.

GKN training is offered to those who volunteer for the opportunities and there is no shortage of volunteers.

Future Payoff

"Our skilled workforce helps ensure our future," said Hess. "It takes top-notch skills to be competitive in our global market."

GKN's low staff turnover means what we teach today will be here tomorrow; we can really invest in our people and it pays off, she explained. Employees with 20, 30 and 40 years with the company are not unusual.

UAW 2nd Vice President Rick Rardin added, "The more opportunities



Clarence Farrell, maintenance tech, is GKN's first employee to complete an apprenticeship program. It was a "family decision" to commit to the four-year program, four nights a week for 8,000 hours of on-the-job training and related instruction, which was completed at Buckeye Hills Career Center. "Anytime you get a chance to learn it helps you," said Farrell.

we get to further our education and training, the safer and more productive we can be."

GKN employees have also begun taking part in apprenticeship training classes held at Buckeye Hills Career Center in Rio Grande. Their first maintenance tech is completing the four-year-long, 8,000 hour training. Two other maintenance techs and a machine tool apprentice are in their respective programs.

Growing skills among employees is only part of the challenge. GKN is always looking for new employees who have skills and are willing to learn more, a challenge faced by most manufacturers.

"What we do is lots of hands on and there aren't many skilled workers left," said Onson. "Manufacturing is a good middle-class living but there's a disconnect with the future workforce."

"I'd be happy to have my son work in manufacturing," added Onson.

Eastern Ohio's Natural Gas is Generating Power

Eastern Ohio's low-cost natural gas is changing America's energy picture and attracting new gas-fired electric generating plants to the state. Four are under construction and three more are planned.

The boom is a product of the Utica and Marcellus shale in the tri-state area known as the Appalachian Basin. According to the U.S. Energy Information Administration, since 2012 Ohio, Pennsylvania and West Virginia have accounted for 85 percent of U.S. shale gas growth; shale gas represents two-thirds of the U.S. natural gas production.

"Ohio's spot price for natural gas is more than 40 percent lower than the Eastern U.S. average," said Matt Waldo, senior manager of research with JobsOhio. "This fuels our tremendous downstream demand."

In addition to pipelines taking natural gas to large population areas (New England, Virginia, Chicago, Detroit and Ontario), liquefied natural gas is being shipped via tanker to Europe and Asia.



Advanced Power's Carroll County Energy natural gas-fired power plant broke ground in April 2015. The \$1.9-billion construction project will use approximately 1,800 tons of structural steel, 30 miles of pipe, 200 miles of cable and 16,000 yards of concrete. The 700-megawatt plant will power 700,000 homes and cost \$280 million to build.

Natural-Gas Fired Power Plants Under Construction

Project	Company	County	Investment	Megawatts	Households Served
Carroll County Energy	Advanced Power Services	Carroll	\$900 million	700	750,000
Oregon Clean Energy	Oregon Clean Energy LLC	Lucas	\$860 million	869	500,000
Middletown Energy Center	NTE Energy	Butler & Warren	\$600 million	475	600,000
Lordstown Energy Center	Clean Energy Future Lordstown	Trumbull	\$850 million	800	700,000

Natural-Gas Fired Power Plants Planned

Columbiana County Energy	South Field Energy LLC	Columbiana	\$1.1 billion	1,100	900,000
Guernsey Power Station	Apex Power Group LLC	Guernsey	\$1 billion	1,100	1,000,000
Pickaway Energy Center	NTE Energy	Pickaway	\$900 million	1,000	800,000

2016 EODA Excellence Awards

The Eastern Ohio Development Alliance (EODA) recognized outstanding economic development efforts in its 16-county membership at their 26th annual meeting in April.

Technology

SUPERB Industries, Sugar Creek, annually produces 134 million engineered components for appliance, automotive, energy and security manufacturing.

Nationally recognized for his entrepreneurship, founder John Miller is committed to continued education and created the SUPERB Technical Institute which offers employees training and journeyman certification programs. The company has support centers in four states and in Mexico.

Miller, an eighth-grade-educated Amish man, and his brother started the company in his garage in 1986.

Large Manufacturing

Miba Sinter, McConnellsville, supplies engine and transmission components to automotive manufacturing companies in North America and Europe. The company opened in 2004 (next to a sister Miba facility) with 40 employees. It has grown to 250 employees and a planned expansion will increase that number to 350. Miba makes a significant contribution to the economic stability of the county and its 15,000 residents.

The company's growth has been a collaboration with local leadership; a top-notch workforce is touted as a big part of their success. Miba is a privately-owned Austrian company with global operations.

Small Business

Brian Dawes, owner and president of James C. Dawes Company, Inc., Martin's Ferry, provides welding supplies to a tri-state area. Dawes recently opened a second location in Cadiz to better serve the shale industry. In addition to supplies and gases, the company offers repair services, engineering and welding consulting and is growing its services to the gas and oil industry.

Dawes is the third generation to run the family business founded by his grandfather in 1941.

Tourism

Historic Dreamsville, USA, a non-profit charitable organization supporting tourism in Dennison and Uhrichsville, started in the early 1990s to promote "The Twin Cities." They were recognized for their Dreamsville, USA concept drawing on the area's



A new award, honoring former EODA director Dale Heman, was given to Dorothy Starnum, director of the Coshocton County Port Authority, for her outstanding efforts in economic development. Jim Schach, executive director of EODA gave the award and said Dorothy was the perfect first recipient. Her leadership in developing a public-private coalition to repair six miles of CR 12 was key among her accomplishments. The project supported the 60 Amish families making along the road. Heman, who died last year, led EODA for 25 years.

WWII history. The nickname was given by the 1.3 million soldiers who were served hot cups of coffee and food at the Dennison Depot Servicemen's Canteen during the war.

The Foundation for Appalachian Ohio made two awards at EODA from the Don Myers Legacy Fund. Belmont County Health Department received funds to expand its Cribs for Kids initiative. Harrison North Elementary School, Scio, received a grant to support its Vocabulary through Music and Fun program.

AEP Grants Support Local Economic Development Projects

AEP Ohio selected seven Appalachian Partnership local economic development groups to receive LEAP grants to support their local efforts. The competitive process awarded 19 grants statewide this year for a total of \$110,000 in support.

"This year's LEAP Grants recognized programs and projects ranging from workforce development, to infrastructure development, to marketing and web development," said Tim Wells, manager, Economic and Business Development for AEP

Ohio. "We appreciate the work of local development organizations and are proud to support their great work through the LEAP Grant program."

The annual grant competition is designed to support local economic development organization projects and programs that bolster job creation and economic growth. Over \$1 million in grants have been given since 2005.

AEP Leap Grants in the APEG region

Morgan County Development Office

Jackson County Economic Development Board

Holmes County Economic Development Council

Southern Ohio Port Authority

Gallia County Economic & Community Development

Vinton County Chamber of Commerce

Southeastern Ohio Port Authority

Shannon Wells

Jennifer Jacobs

Mark Leininger

Jason Kester

Melissa Clark

Terri Fetherolf

Jim Black

Water study - SR 60

Website development

Wage and benefit survey

Aerospace industry study

Drone photography

Website development

Site development study

\$ 10,000

\$ 7,050

\$ 7,500

\$ 5,000

\$ 5,000

\$ 7,250

\$ 5,000

In Other News

Campaign introduces Shale Crescent USA

A group of community and business leaders in Marietta unveiled a video and campaign designed to attract new business and industry with ties to the Marcellus and Utica shale plays.

Branded as the Shale Crescent USA, the group's mission is to "encourage business growth in the Mid-Ohio Valley based upon low natural gas prices that allow manufacturers to operate more efficiently while producing products more economically with access to water and over half the population of the United States."

Several hundred attended a presentation featuring Jim Tressel, president of Youngstown State University and a panel of shale experts. Visit the website for information and to view video: shalecrescentusa.com.

Molinaro named to SBA Council

John Molinaro, president and CEO of APEG, has accepted an invitation to serve on the U.S. Small Business Administration's (SBA) 10-member Council on Underserved Communities.

The Council provides advice and counsel on initiatives to strengthen support for small businesses in underserved communities, examines the obstacles that small businesses in underserved communities currently face, and delivers perspectives from underserved groups regarding the efficacy of SBA programs and services. Underserved groups include socially, economically and geographically disadvantaged small business owners.



John Molinaro

New name better reflects effort

Jackson County Economic Development Partnership (JCEDP) is the new name for Jackson



County's economic development entity. The recently announced change "better reflects the large number of agencies and businesses who make up the effort," said Jackson Mayor Randy Heath who also chairs the organization.

Along with the name change will come an updated website and expanded marketing effort to provide greater exposure for the county, said Jennifer Jacobs, executive director of the JCEDP.

The agency, formed more than 25 years ago, is funded through private and public donations and is overseen by a 30-member board drawn from business, industry and public service.

APEG Welcomes New Staff

Tom Poorman,

JobsOhio Project

Manager, joined the

APEG staff in mid-

June and will cover

APEG's central

counties with the

goal of bringing

new businesses and expanding

current businesses to strengthen the

region's economy and grow jobs. His

eight-county region includes Athens,

Hocking, Meigs, Morgan, Muskingum,

Noble, Perry and Washington

Counties.

Tom served the last 25 years as

president of the Zanesville-Muskingum

County Chamber of Commerce where

he attracted and retained businesses

and supported workforce and small

business development. His bachelor's

degree is from Muskingum College

and he attended Miami University as a

graduate student.

Contact: tpoorman@apeg.com



Tom Poorman

Von Williams

has taken a new

position. She will

serve APEG as

Regional Talent

Acquisition

Manager, joining a

newly formed

JobsOhio group.

Von will work with new companies

coming to Ohio to provide targeted

recruitment and training to fill their

employment needs.

In her previous role as Manager -

Workforce Development she

implemented the grant-funded

Upskill Your Workforce program

which began in 2014.

Contact: vwilliams@apeg.com



Von Williams

To learn more about the Appalachian Partnership for Economic Growth go to APEG.com.

Charlotte Hatfield, Editor

Lois Ottenberger, Kasio Design

To join the mailing list contact: chhatfield@apeg.com



Manufacturing
Extension Partnership



Funded through a contract with the U.S. Small Business Administration. All opinions, conclusions, and/or recommendations expressed herein are those of the author(s) and do not necessarily reflect the views of the SBA.

Appalachian Partnership for Economic Growth

35 Public Square | PO Box 456 | Nelsonville, Ohio 45764 | 740.753.5359 | www.APEG.com



Wood is Mighty Economic Contributor

Ohio's \$24 billion wood industry takes a lot of folks by surprise. It's like a hardwood iceberg – it's easy to see the tip without knowing what else is connected.

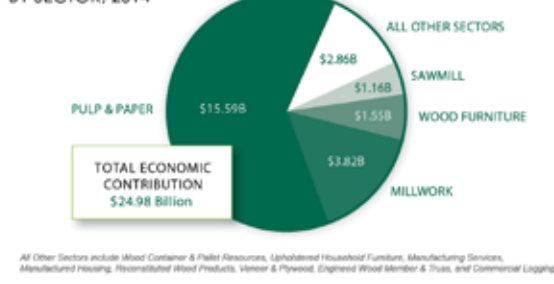
In rural counties, forests are the berg's visible tip and logging and sawmills are well-known parts of the economy. In Ohio cities, pulp and paper mills contribute significantly to the industry sector. Across the state, millwork and furniture-making companies of all sizes add significant numbers to the mix.

As part of the SBA Regional Innovation Cluster initiative, researchers at Ohio University's Voinovich School of Leadership and Public Affairs have compiled data about this vast industry from 2014 sources and calculated the economic impact of the Ohio wood industry sector.

"Since Ohio has about 30 wood-related industry sectors, including several manufacturers at one end of the value chain, it was necessary to combine them into groups for reporting purposes," explained Gilbert Michaud, cluster analyst at the Voinovich School. For example, millwork represents kitchen cabinet, shelving, window and door, flooring and burial casket manufacturing, in addition to several other categories.

Statewide, 116,321 full- and part-time workers were employed in the

**OHIO WOOD INDUSTRY
ECONOMIC CONTRIBUTION
BY SECTOR, 2014**



wood industry and paid \$6.26 billion in wages and benefits in 2014. The pulp and paper sector was the largest contributor adding \$15.6 billion to the economy. Representative of the size and complexity of these manufacturing processes, the sector also employs the most workers and pays the industry's highest wages.

Across all of Ohio, the wood sector makes the highest per capita contribution in five Appalachian Partnership counties: Holmes, Ross, Vinton, Coshocton and Pike.

Appalachia's Wood Industry

In Ohio's 32 Appalachian-designated counties, forest and wood products manufacturing contributes \$5.2 billion and employs more than 26,000 people.

"Roughly 75 percent of the economic impact from logging happens in our Appalachian counties," said Jesse Roush, interim senior project leader for the Forest to Furniture initiative. Logging in Ohio generates nearly \$500 million for the state's economy with \$371 million in Appalachian-designated counties.

The sawmill sector is also heavily represented in the APEG region with more than 60 percent of the workers statewide.

"Holmes County is a good example of the importance of the wood cluster in our region," said John Molinaro, president and CEO of APEG. "The 4,300 employees contribute over \$660 million to the economy, which is over 36 percent of the county's total gross regional product."

Wood furniture manufacturing accounts for \$255 million in the economy of Appalachian Ohio and employs 10,500 people.

Ohio's Forests

The 8 million acres of Ohio's forests and abundant hardwoods make the industry possible; 31 percent of Ohio is forested.

Hardwood trees make up 96 percent of Ohio forests and represent over 100 species. Appalachian hardwoods are highly valued and exported for use around the world.

According to the Ohio Department of Natural Resources, Ohio harvests 300-400 million board feet of timber each year. The state grows one billion board feet of wood each year.

State and national forests account for about 427,000 acres of Ohio's forests; 87 percent of woodlands are in the hands of private owners.

Three Celebrations Mark New Jobs

The deals were different but three September celebrations of partnership and economic opportunity shared common themes for Meigs, Athens and Jackson counties.

Imperial Electric Renovation

In Middleport, a \$3.2 million investment in state-of-the-art equipment at Imperial Electric demonstrated a commitment to the future of their Meigs County facility by Nidec Corp. of Japan, who purchased the plant in 2012.

JobsOhio and AEP Ohio contributed funds to support the equipment upgrade, \$200,000 and \$50,000 respectively.

"We are already seeing benefits of our strategy to modernize the Middleport facility, taking advantage of its central location and highly skilled workforce," said Pradeep Sood, president of Nidec's elevator and drive systems businesses. The central location, the highly trained workforce and strong support from APEG and business and community leaders were critical to the investment decision.

Founded in 1968, the company makes equipment for the elevator industry including: submersible and dry pump motors for hydraulic elevators; hoist motors and generator sets; and custom hoist-way equipment and platforms for elevator systems.

The investments brought a new product line of elevator hoist-way equipment and sling platforms to the plant and created 18 new jobs.

Athens Mold & Machine Re-opens

The manufacture of tire molds in Athens returned after being off-line since 2011 when off-shoring and the recession closed the facility. The fall re-opening was

a celebration of not only the return of the company and \$3.2 million investment in the facility and equipment, but their commitment to create 60 living-wage jobs in the next three years.

The company makes the metal molds used by tire-makers to form vehicle tires.

In addition to \$400,000 for facility and office renovations from JobsOhio, Athens Mold and Machine also received \$40,000 from AEP Ohio, \$50,000 from Columbia Gas and a \$50,000 grant from the Southern Ohio Agricultural and Community Development Fund.

The partnerships that are a critical part of bringing together the interests and resources for an economic development project can also lead to additional projects.

According to Sara Marrs-Maxfield, executive director of the Athens County Economic Development Council, the plant's re-opening helped generate funding for road improvements to serve the mold company and other businesses. The McKinley Avenue improvements total more than \$1.5 million and will be funded by JobsOhio, the Appalachian Regional Commission, the City of Athens and Ohio University.

Speyside Cooperage is Rolling

After two years of planning and partnering, early this summer barrels began rolling out of the Speyside Bourbon Cooperage. At a recent event Darren Whitmer, Speyside's general manager, described the journey that allowed production to begin in record time using terms like "fantastic" and a "team effort."

Success has followed quickly. Whitmer said the company is already looking at doubling production from 400 to 800

barrels a day which would entail adding a second shift to the current 53 employees.

Owned by Tonnellerie Francois Freres Group, a French company, Speyside has been making bourbon and whiskey barrels from American oak for almost 70 years. They began U.S. production in 2010 and found a good fit in Jackson for their second facility.

Speyside's location decision was influenced by the supply-chain proximity of Appalachian white oak and a stave-making facility in Pike County. The availability of a large, former cabinet-manufacturing building in Jackson and a strong local workforce completed the package.

Local officials speaking at the open house credited local, regional and state-level economic development support and collaboration for making the manufacturing facility a reality.

New barrels are charred for 40 seconds or more. The heat creates chemical changes in the wood that affect the flavors passed from the oak to the bourbon aged in the barrel.



**Appalachian Partnership
for Economic Growth**

www.APEG.com

News from the Partnership

Adams: West Union Eagle Creek Health and Rehabilitation Center has expanded their patient capacity with the addition of 21 private rooms plus a new rehab therapy gym. The current staff of 93 will grow by about 25 with the new addition.

Athens: Athens The Athens County Economic Development Council is set to close on its first small business micro revolving loan fund with Little Fish Brewing Company. The two-year-old company will use the \$50,000 loan to purchase new equipment and install solar panels. The fund was created as a resource for small businesses to expand the county's economic base.

Belmont: Beloit A mile of road through the Beloit Industrial Park will be rebuilt to accommodate increased traffic. A \$150,000 Roadway Development Grant will help offset the cost of the \$600,000 project. Work will be completed this year.

Carroll: Carroll Plans are underway to build a new campus for local students grades 6-12. Cost of the project will be shared by the village and the Ohio School Facilities Commission. The district will receive \$1.3 million annually (up to \$30 million) from Carroll County Energy, an electric power generating plant set to open in December 2017.

Coshocton: Coshocton The 2nd Appalachian Bacon Nation celebration, held in September, featured a free pancake and bacon breakfast, a bacon eating contest, Bacon King and Queen crowning, and a Bacon and Legs 5K run. The event is a thank you to the Kraft Heinz Company from the community. The company's production plant employs about 650 to make Oscar Mayer bacon. And, yes, the Wienermobile was there!



Gallia: Gallipolis An ElectroCraft consolidation will bring additional equipment and create 30 new jobs. The project received \$90,000 from JobsOhio Revitalization and Workforce Grant funds and was approved for assistance by the Ohio Tax Credit Authority. The plant has 135 employees and makes a variety of motors for industrial use.

Guernsey: Cambridge The Guernsey County Port Authority, the city and Area Agency on Aging Region Nine (AAA9) are partnering in a \$3.2 million renovation of a downtown landmark. The three-story, 27,000-square-foot former department store will be restored to its historic style and will consolidate the more than 100 employees of AAA9 into a single location.

Harrison: Cadiz Houston-based EmberClear Corp. announced it will build a \$900 million, 1,000 megawatt natural gas-fired electrical power generation facility on 60 acres in the county's industrial park. Construction will begin in late 2018 and the plant will open in 2021. About 500 construction workers will be needed; when completed the plant will employ about 30 skilled workers.

Highland: Greenfield W&W Dry Cleaners, Laundry and Linen Services, LLC, will use a \$50,000 JobsOhio Revitalization Grant to help rehab a building that had been vacant for 20+ years. The company will invest over \$700,000 and create 14 jobs as they expand their service to include industrial clients.

Hocking: Logan

When micro-moonshine distillation was legalized, the St. Clair boys (2 brothers and a cousin) fired up their still and began producing corn whiskey reminiscent of 100 years ago. One year later they won a Bronze award for their 120 proof Buckeye Lightning and a Silver for their Original Recipe (90 proof) at the 2016 Denver International Spirits Competition. Four 45-proof flavored moonshines are available – Blackberry, Raspberry, Granny Smith Apple and Sweet Peach Tea.



Jackson: Jackson Three grants totaling more than \$1.4 million will be used to rebuild the key connecting road between U.S. Route 35 and State Route 93, the prime corridor for current and future industrial/economic development. Grant sources include: Small Cities, 629 Roadwork and Ohio Public Works Commission.

Jefferson: Steubenville Industrial site marketing was the topic of a summit hosted by the Port Authority and attended by local investors, government partners and workforce development professionals. The county is building a strategy for future development in anticipation of the potential ethane cracker siting in neighboring Belmont County.



Haessly Hardwood Lumber President Jack Haessly (center) and sons Mark (left) and Steve (right) with stacks of export-ready lumber.

Haessly Hardwood Celebrates 75 Years

Jack Haessly started in the lumber business in 1954 working with his father, Norman, who founded Haessly Hardwood Lumber Co. In 1941 in Northern Ohio and settled in Washington County, Ohio in 1956.

In the beginning a 1929 McCormick tractor powered Norm's sawmill. For many decades circular saws were the industry standard. In 1997 Jack and his sons, Mark and Steve (Haessly Lumber vice presidents) built a modern day bandmill aided by computerized equipment that maximizes the board yield from each log and – many steps later – automatically counts and inventories those same boards now in neat 6-x-4-foot stacks.

"As much as possible, we strive to be leaders and not followers in our industry," said Haessly. "This is made possible by staying up with the many changes occurring in our industry." The two-man operation of 75 years ago now has more than 70 employees and several contractors who, on a daily basis, produce 40,000 board feet of lumber and a variety of by-products.

The operation includes dry kilns that extract moisture from the raw lumber to stabilize it for future uses.

About 75 percent of highest grade lumber is sold to export markets. Haessly has been exporting for 40 years. "We fill 3-4 containers daily with lumber that is shipped to markets around the world" said Haessly. Each bundle of lumber has the name HAESSLY and USA stenciled on it.

By necessity, a sawmill has to market all its by-products – bark, woodchips and sawdust. To that end, Haessly's Inland Wood Products manufactures wooden pallets and subsidiary Nature's Cushion makes mulch for school playgrounds.

On the occasion of Haessly Lumber's 75th Anniversary, Jack remembered the work of his father, who passed away in 1993, and the commitment of his many long-time employees including one who worked for them for 50 years. The celebration drew more than 400 including numerous employees with 20-, 30- and 40-plus years of service.

Holmes: Sugar Creek A \$437,000 road improvement project to support product transport from the new ProVia Stone manufacturing facility will be accomplished through a collaborative effort. Contributing funds are: ODOT; Department of Jobs and Commerce; Appalachian Regional Commission; Governor's Office of Appalachia Rapid Response; 629 Roadwork; the Holmes County Commissioners; Holmes County Engineer; and Walnut Creek Township Trustees.

The company has 50 employees.



Lawrence: South Point A new alternative STEM+M high school slated for a fall 2017 opening is planned for The Point Industrial Park. Focused on science, technology, engineering, math and medicine, 120 freshmen will be admitted each year. The public school will accept students from the tri-State region.

Meigs: Orange Township The county CIC is constructing a 28,810-square-foot spec building in the East Meigs Industrial Park. The steel and masonry building is on 4.743 acres, five minutes from US 50 and 25 minutes from I-77. Expandable to 50,000 square feet, the building will be complete by year's end.

Monroe: Clarington Hannibal Industrial Park welcomed two new companies. Pleasant Valley Operating subsidiaries Valley Energy Services and Eastern Resource Services provide water hauling, heavy brine distribution and heavy vehicle/equipment maintenance and estimate hiring up to 40 employees. Basin Rowell provides equipment rental including equipment for well testing and flow back.

Morgan: A fire collection event this summer gathered nearly 2,000 fires from residents and organizations. Sponsored by the county commissioners and funded by a \$7,500 Ohio EPA grant there was no charge to bring the fires for disposal. Other partners were the county development office and CIC.

Muskingum: Zanesville A \$775,000 JobsOhio Revitalization grant matched by equal funding from the ZMC Port Authority, is preparing a 30-acre plot at the Airport Industrial Park. Deep dynamic compaction will create a construction-ready site on the former surface-mined coal mine. The site is expected to be ready by next spring.

Noble: Caldwell The Noble County Chamber of Commerce recognized Rodney Rohrbaugh Trucking as the 2016 Business of the Year. Rohrbaugh, a general freight hauler, was praised for his dedication to Noble County and his years of service and support for community events.

Perry: Thorn Township A \$500,000 allocation in Ohio's capital budget will help residents achieve local public access to Buckeye Lake and a nearby nature preserve. A study will be completed to identify the best location.

Pike: Waverly AEP Ohio presented city school officials a check for \$212,000 to help offset the cost of the recent renovation of the district's HVAC systems and installation of energy efficient lighting. The changes are expected to reduce district-wide electric usage by 49 percent for an annual savings of over \$250,000.

Ross: Green Township Nier River Road Development, LLC, has begun construction of a 100,000-square-foot spec building following Ross County Commission approval of a first-ever spec building tax abatement for the \$4.5 million project. A companion facility is planned for the 18-acre remediated site along US 23 north of Chillicothe.

Scioto: Portsmouth A Cool and Connected grant will help the city plan to use existing historic and commercial district broadband and public Wi-Fi to encourage more people to walk and open businesses, as well as connect downtown amenities to recreation areas with information kiosks and QR Code/smart phone technology. The funding is sponsored by the USDA, EPA and ARC.

Vinton: A \$600,000 rail safety grant from the Department of Transportation will upgrade about 10 miles of track providing a safe rail corridor to transport hazardous materials. The line serves Austin Powder, a major employer in the area.

Washington: Belpre With help from Buckeye Hills HRVDD, the City of Belpre received a \$1.5 million grant from the Economic Development Administration to improve critical infrastructure along State Route 7. The \$3.2 million project will create sewer capacity for expansion and development as well as growth for six current businesses currently located along the Ohio River. Construction is set for 2017.



Fanatics Fulfills Fan Experience

Sports fans thrive on the anticipation and excitement of the game and the play. That's the same feeling Fanatics wants fans to feel when unwrapping that team jersey, jacket or mug picked, packaged and shipped with pride at their Frazzysburg, Ohio, distribution center.

As the "global leader in licensed sports merchandise," around 500 full-time Fanatics employees send out about 100,000 packages a day to fans of all major sports and hundreds of professional and collegiate teams. During the holiday season volume increases sharply with nearly 1 million items leaving the center each day. Over 50 percent of their distribution is done in the last three months of the year.

"No matter what team the fan loves, our job is to heighten the fan experience," said Skip Smith, general manager of the Frazzysburg distribution center. "We've built our company around connecting the fans and their teams."

Sports themes decorate staff areas, employees are sometimes referred to as athletes and the focus is on the winning combination of teamwork, great attitude and a positive outlook.

Fanatics, which opened in 2013, chose the Muskingum County facility because

of its central location and the work ethic of the local workforce. National carriers ferry the packages to respective truck and air hubs for international distribution.

Employees navigate four-stories of metal aisles and wire racks to "pick" the right merchandise for the online buyer. Workers on the "outbound" side of the house can log multiple miles traversing these areas in a single shift.

Employees on the "inbound" side receive team-related items from a number of officially licensed manufacturers and unpack, sort and organize them in preparation for distribution.

"We have to get the product in the building correctly or we're not going to get it out correctly," explained Cheryl Ethell, a three-year employee who works on the inbound side of the warehouse. When we spoke, team members were making space for 700,000 new items scheduled to arrive in the next several days.



Fanatics employee/athletes on the out-bound side can log several miles a day "picking" ordered items from four-stories of licensed sports merchandise.



Appalachian Partnership
for Economic Growth



Twice-a-day "Start Up" meetings bring employee teams together to share anticipated order volume for the shift, company announcements, safety and quality tips and stretching exercises.

Energetic Environment

That game day energy feeling is part of the team-based environment Fanatics cultivates with twice-a-day meetings held at the beginning of each shift and after the meal break. The format is part business and part team huddle according to Ryan Fletcher, senior inbound operations manager.

"At each 'Start Up' meeting the Team Leader shares any company announcements and the anticipated order volume (from constantly updated online projections) for the shift plus we always have a team member share a safety tip and a quality tip," said Fletcher.

The work is physical so each 'Start-Up' ends with some stretches and a team clap-out. The clap-out starts slow and builds speed and volume to finish with repeated shouts of "We are Fanatics!"

To keep the energy going music pumps throughout the day. Heads bob to the beat with a subconscious recognition of its motivation.

Wanted Seasonal Workers

From the day after Thanksgiving, the largest online shopping day of the year, through mid-January, Fanatics is in their high season driven by holiday gifting. Shoppers can choose from hundreds of thousands of unique items from across the Fanatics platform of sites.

But the pre-season ramp-up begins months earlier. Fall marks recruitment season for the over 1,600 seasonal employees Fanatics must have to meet demand.

"We're looking for full- and part-time seasonal help and we have a variety of shifts to fit worker's schedules," said Sonia Postema, staffing supervisor.

"I just hired a college student who is commuting from Columbus because our weekend schedule was a good fit for his class schedule," she said. "Our employees are very diverse, especially in high season. For some it's a second job, we have retirees who want to add some income and we hire students or parents who work only on weekends for some extra holiday funds."

Amber Kinser started three years ago as a seasonal employee. That experience lead to regular employment and this year she will be an EPIC (Ensuring Peak Is Covered) Lead.

"I've had good opportunities for growth," she said. "I see a path to being a Lead and I know someone who went from Lead to Supervisor and that will open up an opportunity."

"We have opportunities to be cross-trained. If I want to learn a new area all I have to do is ask," said Kinser. "I like it because I'm always busy and I don't get bored."

Regular and seasonal workers, alike, can work five eight-hour shifts; four 10-hour shifts; or five five-hour shifts. Seasonal workers have the option of a weekend-only shift (two 10-hour shifts). Day and evening shifts are available.

Fanatics hires "on the spot" and starting pay is \$12.50 an hour.



Some of America's favorite football-viewing snacks are made in Appalachian Ohio!

Jackson County is the worldwide home of pizza roll manufacturing. The flavor-filled pillows of dough are made by the millions at the General Mills plant in Wellston and Bellisio Fine Foods in Jackson. A variety of sweet, salty and savory temptations are created for your snacking pleasure by more than 150 APEG food manufacturing companies! Here are a few items to add to the grocery list.



✓ **Chips, etc.** – Conn's Potato Chips; Evans' Pork Rinds; Herr's Kettle Cooked Chips; Shagbark Heirloom Popcorn



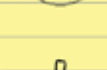
✓ **Salsa & Dip** – JB's Best Cilantro Salsa; Frog Ranch Chipotle Salsa; Buff Lo Dip
✓ **For the Grill** – PatterFam Burnin' Love Wing Sauce; JB's Best Maple Bacon BBQ; Kiser's Big Boss Pork Rub



✓ **Say Cheese** – Creekside Farm's Chevre Cheese; Heini's Horseradish Cheese; Pearl Valley Jumping Jack Cheese; Guggisberg Baby Swiss



✓ **Cold Cuts** – Troyer's Genuine Trail Bologna; Troyer Pit Smoked Summer Sausage
✓ **Out of the Oven** – General Mills Totino's Pizza Rolls; Bellisio's Chili's Southwestern-style Potato Skins
✓ **On the side** – Mad Sweet Heat Sliced Candied Jalapenos; Pork and Pickles' Curry Pickled Cauliflower;



Walnut Creek Foods' Grandma's Potato Salad; Amish Wedding Smoked Pickled Eggs
✓ **Somethin' Sweet** – Crumbs Bakery Oatmeal Spice Cookies; Cathy's Confections' Dipped Chocolate Pretzels; Coblentz Dark Chocolate Peanut Clusters; Putnam Chocolate Cashew Snappers



✓ **After the game** – Dirty Girl Coffee; Silver Bridge Pumpkin Spice Coffee



Four Counties Host Site Decision Makers

Site selectors are the professionals who can hold the key to attracting a new business. Their job is to research potential sites that may fit their client's (or employer's) requirements. They consider dozens of factors -- everything from electric power and highway access to workforce availability and construction costs. They are quick to eliminate sites that don't fill the bill.

The Joint Economic Development Initiative of Southern Ohio (JEDISO), the four-county regional marketing partnership of Jackson, Pike, Ross and Scioto counties, recently held the first south central Ohio site selector familiarization tour, hosting four site selectors to see first-hand what the region can offer.

Site selectors visited the Kenworth assembly plant, toured the Ohio River aboard a tug boat, reviewed the certified site in Zahn's Corner and learned about the nationally ranked virtual reality and online-game design programs at Shawnee State University.

One of the visitors commented that he only thought about "deer and hills" when picturing Appalachia, but he left "pleasantly surprised" by the amount of transportation infrastructure, factories, and the regional cooperation in the area, said Jason Kester, executive director, Southern Ohio Port Authority.

The event was sponsored by American Electric Power in conjunction with Fluor-BWXT and APEG. A second JEDISO "FAM tour" is planned for next year.



Site selectors and economic development leaders from Jackson, Pike, Ross and Scioto counties gather for a "familiarization tour" of Ohio's Kenworth truck assembly plant.

Playing the Long Game



John Molinar, APEG President and CEO

Every once in a while you will hear a country, a politician or a company described as "playing the long game." Urban Dictionary defines the phrase as "active participation in achieving goals which may take some time." Other sources add that those playing the long game may pass over short- or medium-term gains in order to reach larger and more beneficial long-term goals.

Economic development is a field where winners learn playing the long game produces more benefits. Economies rise and fall over decades so strategies work best when they address long-term opportunities and challenges and answer questions like:

- What are our unique competitive advantages and how can we capitalize on them?
- What new industries are emerging that are right for our region? How do we attract them?
- How do we preserve viable segments of declining industries?
- What infrastructure, sites and buildings need to be in place 5, 10, 20 years from now so we are positioned to grow?
- How do we prepare our children to be the workers we need in the future?

Most economic development players are too focused on short-term results to ever answer these questions. That's not an indictment of them. There are lots of factors that focus them on near-term results including funding sources.

Election and appropriations cycles drive the short-term focus of many elected leaders. Balanced budget requirements force reductions when times are tough and tax revenues are down -- just when economic development is needed the most. All that pushes organizations to prioritize immediate opportunities and avoid making long-term plans and commitments since resources might not be there to support them.

With the creation of JobsOhio, we have an opportunity to do better. One of JobsOhio's strongest features is its long-term funding. In forming JobsOhio, visionary leaders provided the financial stability and organizational structure that allows JobsOhio and its regional partners to play the long game.

The proposed ethane cracker petrochemical complex in Belmont County is a great example of how much a long game can pay off. JobsOhio's strategy of attracting companies to process our shale gas resources goes back to its founding in 2011. It took several years of exhaustive work to position Ohio for this opportunity and to find a company with the interest and ability to pull it off. For the last three years, JobsOhio, APEG, local officials and the site owners have been working to prove to the company that Ohio and the site have all the right characteristics for project success.

Over the next few months, the company will evaluate designs, review cost projections, determine the project's feasibility and approach capital markets for financing.

If the final decision is to proceed, it will come nearly six years after JobsOhio set its strategy in motion. The payoff would be the single biggest private sector investment ever made in Ohio. Moreover, by providing a local source of polyethylene, the cracker will likely lead to major growth in plastics manufacturing in Ohio. These are the kinds of differences playing the long game can make in economic development.

I came back to Ohio in 2012 to start-up APEG because I believed that the JobsOhio model was the best idea I had seen in 30+ years in the field, and because of JobsOhio's commitment that Appalachian Ohio would not be left behind again.

Like JobsOhio, APEG is playing the long game. While we certainly jump on immediate opportunities, our shale energy, wood products and Ohio River strategies are just three areas where we are playing the long game to position the region for greater prosperity for decades to come.

News from the Manufacturing Extension Partnership

APEG-MEP earns ISO 9001 certification

APEG's Manufacturing Extension Partnership (MEP) team just completed the ISO 9001:2015 compliance process.

Being ISO compliant is a way to "walk the talk," explained Steve Hillard, vice president -- business services. "Having worked through the process my sales team can attest to the value of ISO certification."

ISO 9001 is a widely used set of standards for quality management and is one of several quality tools MEP offers area manufacturers.

Welcome Mia Williams

Mia Williams joins APEG as an MEP Account Executive. She will serve the eastern counties of the region providing access to Manufacturing Extension Partnership training and advising to businesses of all sizes. She will work with companies to identify and help them achieve their growth and expansion goals.

Williams' recognized experience in sales includes inside and outside business-to-business account management in Oklahoma and Ohio.

She holds a bachelor's degree in communication from the University of Tulsa. Contact Williams at mwilliams@apeg.com or 614.638.7478.



Mia Williams

to identify next steps for increasing productivity, improving quality, safety compliance, upgrading workforce skills, etc. Customized advising and training is developed for each company.

If you would like more information or are interested in being a part of the board, contact Smith at 740.821.2441 or bsmith@apeg.com.

Sponsors Wanted

APEG is hosting the region's first robotics competition on January 7, 2017. Teams of high school students will compete and showcase talents in programming and robotics at the Scioto County Career Technical Center in Lucasville.

The competition is held in conjunction with VEX Robotics, creator of classroom robotics.

If you would like to help sponsor the event contact: Bryan Smith, MEP Account Executive, 740.821.2441 or bsmith@apeg.com.



Tonya Kohler, human capital manager, Mia Williams, MEP Account Executive, MEP continuous improvement expert, receives the APEG-MEP 2016 affiliate partner award. Mia Williams, MEP Account Executive, and APEG's Manufacturing Extension Partnership staff and experts have collaborated on several projects to implement quality improvement strategies, strengthen employee skills and create more efficient manufacturing processes. Mia Williams is a key employee in Morgan County and continues to expand operations and add jobs.

To learn more about the Appalachian Partnership for Economic Growth go to APEG.com.

Charlytte Hatfield, Editor

Lara Oshinske, Kiosk Design

To join the mailing list contact charlytte@apeg.com



Manufacturing Extension Partnership

JobsOhio



Financed through a contract with the U.S. Small Business Administration. All opinions, conclusions, and recommendations expressed herein are those of the author(s) and do not necessarily reflect the views of the SBA.

Appalachian Partnership for Economic Growth

35 Public Square | PO Box 456 | Nelsonville, Ohio 45764 | 740.753.5359

www.APEG.com





Disaster Resiliency in the OMEGA Region

Disasters often strike with little or no warning and the damage can be staggering. In addition to the dramatic social and humanitarian consequences a disaster can cause, communities can also experience sudden economic losses and dislocation. In disaster-impacted communities, emergency management agencies, economic development organizations (such as OMEGA) and chambers of commerce often lead economic recovery efforts by helping local businesses respond to impacted employees, facilities, customers, and supply networks. They have the existing relationships with local officials and businesses. These relationships are crucial during and after a major event as communication channels have become disruptive and chaotic. They can also facilitate a strategic planning process for economic recovery and work on recovery actions by coordinating involvement and leverage resources from the community and beyond.

To better assist in disaster preparedness and economic recovery an EDA-funded website (www.restoreyoureconomy.org) was created. The Restore Your Community website provides comprehensive information for a wide range of potential natural, man-made, and technological types of disasters. While the potential and type of disaster varies from region to region, OMEGA will use this information to guide our actions in the event of a disaster. OMEGA's revised CEDS report is due on October 31, 2017. Our board, CEDS committee and staff will be focused on determining our role as economic development professionals in the event of a disaster. We will be using the chart illustrating both the traditional and non-traditional roles provided on the EDA-funded website as a guiding document.

Three Most Common Causes of Natural Disaster in Eastern Ohio

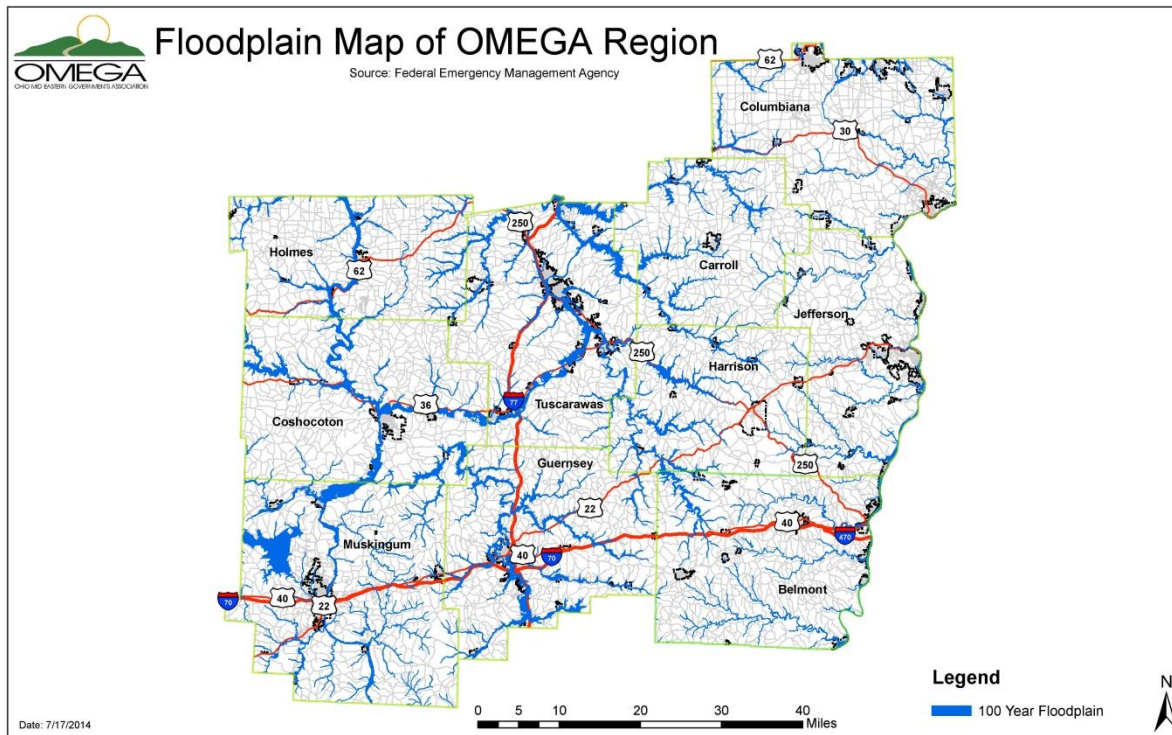
- **Flooding**
- **Landslides**
- **Strong Seasonal Storms**



OMEGA counties designated in green

Note: Mine subsidence also contributes to the potential for disasters in the OMEGA Region.

Below is a map of the floodplains in the OMEGA Region. Floodplain management plays a critical role in disaster resiliency in eastern Ohio.





2016 CEDS Annual Performance Report

Component Two: Report on Economic Development Activities

The majority of economic development activities in the OMEGA region have been focused on natural gas-fired power plants. Four such facilities have announced within the last three years. Details are provided below.



Rendering of proposed facility

Construction of Carroll County Energy Facility on Schedule

Project Highlights:

\$899 million natural gas-fueled power plant owned by Advanced Power based in Switzerland

Creation of **700** construction jobs.

Creation of **30** permanent jobs.

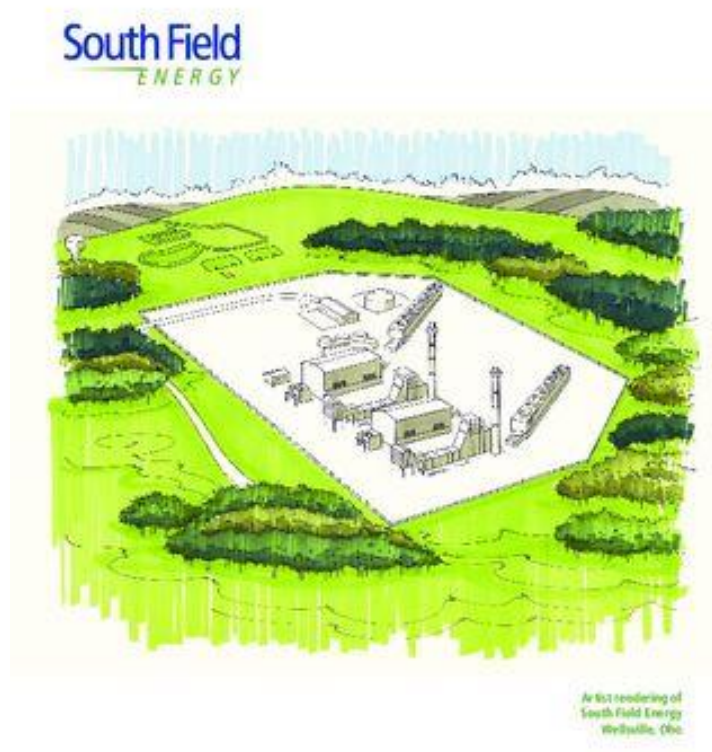
700 megawatt energy production – able to power 750,000 homes

The facility will be arranged in a **2x2x1 configuration**: two gas turbines, two heat recovery steam generators and one steam turbine.

Construction began in **2015**. Operation is scheduled to begin in **2017**.

This project has already resulted in **\$15 million** worth of contracts awarded to local businesses.

This project will provide critical electric generation capacity in a region that has experienced significant energy facility retirements.



Rendering of proposed facility

\$1.1 Billion Energy Facility Proposed for Wellsville

Project Highlights:

\$1.1 billion natural gas fueled power plant owned by South Field Energy, a subsidiary of Advanced Power based in Switzerland

Creation of **550** construction jobs

Creation of **30** permanent jobs

1,100 megawatt electric generation on less than **20** acres

Target date for operation is **2020**.

Ohio Power Siting Board is currently holding public meetings.

This project proposes to purchase local water and sewer services.

This project will utilize state-of-the-art General Electric technology with a combined-cycle design to produce energy efficiently by capturing waste heat to create additional electricity in a steam turbine.



Facility will be designed similar to the plant in this photo

Apex Power Group plans 1,100 megawatt Plant in Guernsey County

Project Highlights:

\$1 billion natural gas-fueled power plant owned by Apex Power Group

Creation of **500** construction jobs.

Creation of **35** permanent jobs.

Construction proposed for spring **2018**.

Operation targeted for **2020**.

1,100 megawatt energy production – ability to power 1 million homes

Ohio Power Siting Commission permits are currently being sought by Apex representatives.

This project will consist of two modern, natural gas-fired combustion turbine generators and one steam turbine generator fired by heat recovered from the combustion turbines.

This project is designed to support both current and future electrical demand in areas of Ohio, Pennsylvania and West Virginia.



Facility will be designed similar to the plant in this photo

\$900 Million Power Plant to be Constructed in Harrison County

Project Highlights:

\$900 million natural gas-fueled power plant owned by Houston-based EmberClear Corporation

Creation of **500** construction jobs.

Creation of **30** permanent jobs

1,000 megawatt energy production plant on **60 acres**

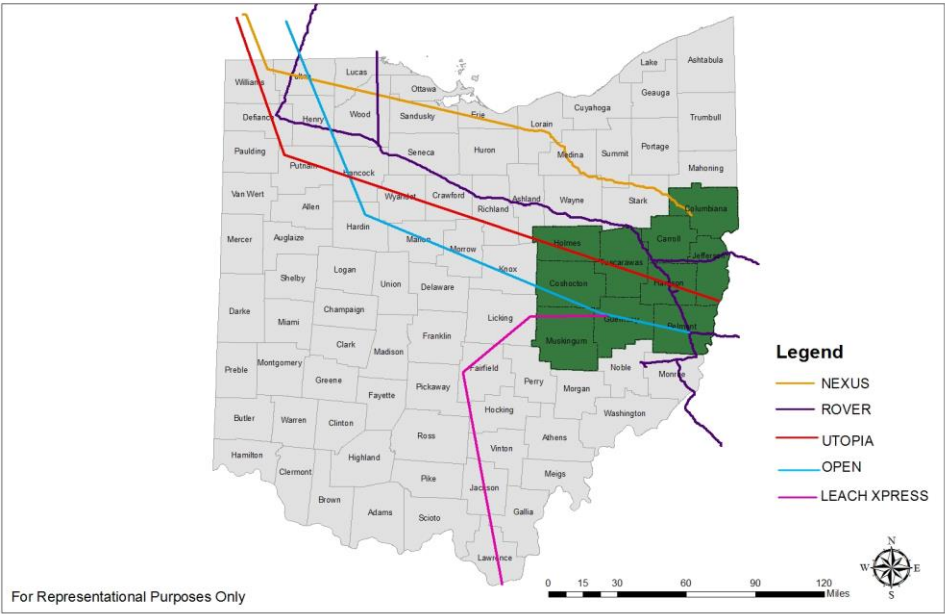
Construction scheduled to begin in **2018**

Operation scheduled to begin in **2021**

Ohio Power Siting Commission permits are currently being sought by Apex representatives.

This plant will employ the latest advanced turbine technology and benefit from best-in-class fuel efficiency.

[Connecting to the Michigan Hub]



The map above depicts the top five pipeline projects currently pending in Ohio.

Below are additional details on each pipeline project.

Company	Project Name	Investment	Miles
Columbia Pipeline	Leach Xpress	\$1.4 Billion	161
Spectra Energy	OPEN	\$468 Million	76
Spectra Energy	NEXUS	\$2 Billion	250
Energy Transfer	ROVER	\$4.3 Billion	711
Kinder Morgan	UTOPIA	\$500 Million	200





Wellsville Intermodal Facility Unveils \$5.1 M Crane System

Project Highlights:

\$5.1 Million crane and conveyor system

Partially funded by a **\$3.5 Million** loan from Ohio Development Services Agency which may be converted to a grant in the future

Mantsinen 120 HybriLift crane is capable of lifting **800 tons** of bulk material off of barges every hour.

The crane was custom-designed for the Wellsville Intermodal Facility featuring an electric motor and fixed mounts to hold it to its platform in the Ohio River.

Wellsville Intermodal Facility is located **25 miles** downstream from the site of the ethane cracker being constructed in Monaca, Pa. and **55 miles** upstream of the site in Belmont County where PTT Global is considering the construction of an ethane cracker – See Component Four for more details.

“This is an illustration of a wise investment on the part of the state government,” said state Rep. Tim Giner, R-5 Salem. “In an age when people question the investment of government, this is a sterling example of an investment that will bring real jobs, real work, real income to our region.” [Quote from – September 23, 2016]



2016 CEDS Annual Performance Report

Component Three: Evaluation of Progress on Implementation Plan and Goals

While all of the projects and activities reported in Component Two are indicative of an exciting economic future for the region, the rules of basic economic development in our most rural areas cannot be overlooked. Over 80% of the OMEGA region is categorized as rural. There are still many areas that lack basic infrastructure to attract economic development and offer at least a moderate quality of life such as safe drinking water and sanitary sewer systems. Also contributing to attracting economic development and impacting quality of life of communities are roadways and transportation systems. OMEGA has been engaged in a new role focusing on transportation for the past three years.

On July 1, 2013, the Ohio Department of Transportation (ODOT) authorized OMEGA to participate in a two-year pilot program to develop a Regional Transportation Planning Organization (RTPO) to serve eight counties in the OMEGA district which are not members of a Metropolitan Planning Organization. These eight counties are: Carroll, Columbiana, Coshocton, Guernsey, Harrison, Holmes, Muskingum, and Tuscarawas. A regional voice and planning organization are needed to address the major transportation needs that will facilitate economic and community development, address safety and congestion issues, and improve the quality of life of our residents.

During the initial two-year pilot program, OMEGA focused on the development of a Regional Transportation Plan. The Executive Summary of this plan was included in the 2015 CEDS Annual Performance Report. The full plan is still available for viewing or downloading at www.omegadistrict.org.

On January 27, 2016, Governor John R. Kasich designated OMEGA as an Ohio Regional Transportation Planning Organization (RTPO).

Since adoption of the Regional Transportation Plan by OMEGA's Executive Board in June 2015, OMEGA has and will continue to focus on managing the transportation planning program **(Management Activities)**, establishing and maintaining databases **(Asset Management)**, assisting communities with funding applications **(Grant Writing)**, and implementing the regional transportation plan that was adopted as a part of the RTPO Pilot Program **(Plan Implementation)**. These work activities will improve upon the transportation planning program that was established during the Pilot Program.

Specific transportation planning activities focused on economic development include participation in the statewide planning project to improve US 250, a major two-lane freight corridor in Ohio and in the OMEGA region; collaboration with ODOT and local communities on specific projects to improve this corridor; continued participation in efforts to develop and improve US 30 Ohio's Energy Corridor; participation in state, regional, and local active transportation planning; conducting road safety audits; designation of intermodal facilities; and conducting freight surveys .

Realizing the importance of the Ohio River to the region's economy, OMEGA successfully collaborated with the Belmont County Port Authority, ODOT, and Bellaire Harbor Services to obtain a \$374,000 grant that will allow Bellaire Harbor Services to repower one of the tugs in their fleet with cleaner more efficient diesel engines. This is just one example of private/public collaboration that is occurring in the region.

Another excellent example of public private partnerships to improve transportation systems in the OMEGA region is the County Road 10 project in Coshocton County. This project is the second phase of a program to improve access for a growing manufacturing community in northeast Coshocton County that is focused on Ohio's Forest and Wood Products Sector.

In North East Coshocton County CR 10 area, there are more than 30 businesses that have developed over the past few years. This once Amish farming area has grown into a booming high quality, hand crafted, fine furniture and cabinetry manufacturing district. The combined annual sales of these businesses is more than \$47 million with an annual payroll of over \$7 million and 212 employees. Over the next 3 to 5 years, an additional 60 jobs are expected to be created. These companies also deal directly with an additional 3,000 other support businesses including lumber companies and saw mills.

With this economic boom has come infrastructure deterioration. The main county road in and out of the area is in very poor condition making transportation to and from the manufacturing facilities close to impassable. It is also unsafe for emergency vehicles to travel the road at necessary speeds. The condition of the roads makes shipments to and from the manufacturing site treacherous.

When some of the finest hand crafted furniture and cabinetry in the US is damaged before it ever gets out of the county... that is a serious problem. To avoid damage, these manufacturers must ship product over a 30 mile detour to avoid CR 10, leading to increased transportation costs and longer delivery times.

To resolve these logistical issues, a consortium of local businessmen met with local and state officials to develop a cost effective solution. The total estimated cost of the road improvements is \$870,800. State resources from the Governor's Office of Appalachia, ODOT Office of Jobs and Commerce, Jobs Ohio through the Appalachian Partnership for Economic Growth, and the Ohio Public Works Commission invested approximately \$613,800 (70%) with the remaining 30% being funded by the County Engineer, in-kind work, and **\$110,000** investment from the **private consortium of business owners**. This private investment enabled the county to complete the needed road improvements which will spur additional investment and job creation.



OMEGA's Vision Statement, Goals and Objectives, and Performance Measurements for 2016 and beyond:

Vision Statement

The OMEGA District and Ohio Appalachian Region will have access to financial and technical resources, responsible and sustainable economic development, and a workforce with the skills and knowledge to compete in a global economy.

Goal One

OMEGA District residents will have the skills and knowledge necessary to compete in the world economy in the 21st century.

Objectives: Where We Want to Be

- The rate of *EDUCATED* high school graduates will exceed the national average
- Vocational high school students will have access to school-to-work transition programs compatible with real-world needs and technology applications.
- The percentage of OMEGA District workers receiving advanced skills training will equal or exceed the national average.
- OMEGA District community leaders will have the necessary skills to assume leadership positions.
- OMEGA District residents will have affordable access to the Internet.

Strategies: How We Will Get There

- Build the capacity of local institutions and school districts to provide basic work-force readiness skills to help all students find and hold jobs.
- Expand educational opportunities through telecommunications.
- Work toward building the capacity of training institutions, such as community colleges, to upgrade work-force skills and increase productivity.
- Assist local area educational institutions in assessment processes, innovative program development, leadership and organizational development and training and capacity-building services.

Update on the progress of a new **Carrollton High School** project included in the 2015 CEDS report –

Background: Carroll County Energy (current project details provided in Component Two) will provide \$1.3 million annually to the school district as part of a 15-year tax abatement plan. Carrollton Exempted Village Schools secured additional funds from the Ohio Facilities Construction Commission.

Update:

- The Ohio Controlling Board released the first payment of state funds for the construction of the new school in June.
- 61% of the local share is being provided by Carroll County Energy
- The first payment of \$488,000 will be used for design and pre-construction services.
- An architectural plan has been developed for a 243,428 square foot campus designed with separate pods for elementary, middle and high school. The pods will connect to a central cafeteria, kitchen, gymnasium, and auditorium. The learning spaces are flexible, adaptable and sustainable to support the district's collaborative, student-centered and problem-based approach to learning.

Goal Two

OMEGA District communities will have the physical infrastructure necessary for self-sustaining economic development and improved quality of life.

Objectives: Where We Want to Be

- Adequate telecommunications access will be available and every county will have access to at least one public site with a two-way interactive video and data transmission.
- All OMEGA communities will have access to safe drinking water and sanitary sewer and waste-disposal systems.
- There will be a developed and active industrial site, business park, or business incubator within a reasonable commute of OMEGA District residents.

Strategies: How We Will Get There

- Plan appropriate job-creation activities around corridors and corridor interchanges.
- Identify for completion critical highway interchanges and priority miles.
- Support partnership efforts of institutions of higher education corporations and telecommunications providers to demonstrate applications in the work force.
- Support water resources management and cooperative solutions among providers.
- Promote multi-county approaches and partnerships with the private sector to manage solid waste disposal, water and wastewater treatment.
- Support waste recycling and new disposal technologies.
- Provide technical assistance in clustering and the use of new technologies.
- Continue basic and supplemental funding to meet priority needs as identified through multi-county strategic plans.
- Help rural communities work with technical colleges and other public and private organizations to meet their basic infrastructure needs.

Below is a brief summary of an infrastructure project submitted to EDA in the fourth quarter seeking funds from the Public Works grant program.

Northern Corridor Water and Sewer Project

This project begins at the intersection of State Route 43 and Lemon Road southeast of Malvern and extends south along State Route 43 to the intersection of Arrow Road – a distance of approximately 3.85 miles. State Route 43 is the primary transportation corridor in Carroll County and is a prime location for business development. However, the lack of public water and wastewater systems is a major deterrent to economic development. Several businesses have decided to locate to other counties due to the lack of this basic infrastructure. This project will include the installation of water and sanitary sewers and is in response to recent requests from businesses related to the oil and gas industry as well as other industries seeking locations in the subject area. Components of the project include 20,400 feet of 12” water main, 23 fire hydrants, 54 water services, 20,400 feet of 8” PVC sanitary sewer, 5,300 feet of 8” PVC sanitary force main, and 3 duplex sanitary pumping stations. This project encompasses Fairmont Tool which has plans to add 25 – 35 jobs in the next three years and invest \$30 million in private funding.

Estimated Project Cost: \$6 million

Below is a dashboard summary of the economic impact/return on investment of broadband prepared for the OMEGA region.

Measure	Impact
Businesses Adopting	6,594
New Revenues / Business	\$64,400
Annual GDP	\$ 522.0 M
Annual Tax Revenues	\$ 19.50 M
Total New Jobs	7,653

Source: Strategic Networks Group – October 2016

Goal Three

The people and organizations of the OMEGA District will have the vision and capacity to mobilize and work together for sustained economic progress and improvement of their communities.

Objective: Where We Want to Be

- The number of OMEGA District residents participating in leadership development programs will continue to increase each year.

Strategies: How We Will Get There

- Support programs that foster leadership development and civic involvement.
- Continue efforts to serve as conveners of community efforts and catalysts for economic development.
- Provide technical assistance and research to help communities form new partnerships and initiate new services.
- Support local-level planning to develop shared visions for communities and encourage the incorporation of local planning efforts into local and regional plans.

Congressman Bill Johnson was the keynote speaker at the OMEGA Legislative Mixer in August. The Congressman addressed the need to fix America's transportation infrastructure. He shared information about the Fixing America's Surface Transportation (FAST) Act. The act provides more than \$305 billion for long-term funding for surface transportation infrastructure. Congressman Johnson also addressed the opioid addiction crisis that affects the OMEGA region and lauded the Comprehensive Addiction and Recovery Act of 2016. Also in attendance and addressing the audience were Ohio Senator Troy Balderson and Ohio Representative Andy Thompson, as well as representatives from the offices of U.S. Senator Rob Portman and U.S. Congressman Bob Gibbs. The event drew an audience of around 100 with many local elected officials and economic development professionals.



Local Governments Working for Development



(L to R): Director of the Governor's Office of Appalachia, Jason Wilson, awards a check for \$75,000 to Coshocton County Head Start representatives Steve Troendly, Executive Director, and Kenneth Smailes, Board President

Coshocton County Head Start Program Receives Grant Funds for Renovation

The Governor's Office of Appalachia recently awarded the Coshocton County Head Start Program \$75,000 for renovation of the East Wing of the Hilltop Facility. The total cost of the renovation project is \$905,000. The renovation will include new plumbing, walls, floors, ceilings, and windows. New lighting and high efficiency HVAC units will also be installed in the effort to convert the east wing of a former nursing home into an Early Head Start classroom facility to benefit 72 low and moderate income families with early learning programs. Congratulations to all staff members of Coshocton County Head Start and Dana Soter, OMEGA ARC/GOA Project Manager who worked with Director Wilson and the Ohio Development Services Agency to secure funding for this early childhood education project.

OMEGA Wins Excellence in Regional Transportation Award from NADO

The National Association of Development Organizations (NADO) recently announced the winners of the **2016 Excellence in Regional Transportation Awards**. Each award recognizes a noteworthy project that helps meet regional needs in innovative ways, through cooperation with partners, increasing system and community resilience, and in many cases, using creative funding. The award-winning projects serve as models for many different transportation program areas in which regional development organizations engage.

Congratulations to OMEGA which serves as a Regional Transportation Planning Organization (RTPO) for 8 counties in the district that are not served by a Metropolitan Planning Organization (MPO). OMEGA's project, **Rural Road Safety Audit—A Multi-disciplinary Approach to Improving Road Safety**, was led by Ken Shonkwiler, Transportation Planner and GIS Coordinator. Mr. Shonkwiler offered the following, "In Muskingum County, our Road Safety Audit team examined and made recommendations to Dillon Falls/Dillon School Road and Licking Road, ultimately producing a Road Safety Audit document to address roadway needs. Efforts to make improvements are currently underway."

The award will be presented at the 2016 National Regional Transportation Conference in Chattanooga, TN in mid-June. Jeannette Wierzbicki, P.E., Executive Director, and Mr. Shonkwiler will be attending the conference to accept the award on behalf of OMEGA.

OMEGA Receives Approval from EDA to Continue Partnership Planning Efforts

OMEGA recently received approval from the U.S. Department of Commerce, Economic Development Administration (EDA), to continue serving as an EDA Economic Development District (EDD). The \$163,884 partnership planning grant award will be matched with additional funds exceeding \$100,000. We are looking forward to continuing to work with our partners on Public Works, Technical Assistance, and other EDA eligible projects. If you would like to learn more about EDA funding programs, please contact Cindi Kerschbaumer at (740) 439-4471, ext. 206 or cindik@omegadistrict.org.

OMEGA Revolving Loan Fund Expanding to Include Ohio Regional 166 Funding

OMEGA was recently awarded State of Ohio 166 Loan Program funds to add to their Revolving Loan Fund Program. The 166 Loan Program offers low, fixed-rate loans that can finance up to 40% of a total project for private, for-profit businesses in the OMEGA region. The maximum loan amount is \$500,000. Loan proceeds can be used for fixed assets only—real estate, machinery, equipment, etc. A 10% owner equity contribution is required. The program allows for the balance to be financed through third party investors and/or private financial institutions. For more information on the Revolving Loan Fund program, please contact Lolly Ravak, Loan Administrator, at (740) 439-4471, ext. 203 or lravak@omegadistrict.org.

Goal Four

OMEGA District residents will have access to financial and technical resources to help build dynamic and self-sustaining local economies.

Objectives: Where We Want to Be:

- The rate of business start-ups will at least equal the national average.
- The percentage of small and medium-sized firms engaged in international trade will at least equal the national average.
- Every citizen will have access to a program in entrepreneurship.
- OMEGA Counties will begin to restructure their local economies in order to provide more opportunities for high-value, high-wage employment.

Strategies: How We Will Get There:

- Help communities develop and implement strategies to build sustainable local economies that provide employment and entrepreneurial opportunities to all citizens and that support a high quality of life.
- Promote efforts to enhance export development by increasing the number of firms engaged in exporting and the volume of exported goods and services.
- Provide assistance for the physical infrastructure necessary to encourage the creation of new enterprises and the expansion of existing businesses.
- Encourage the transfer of new process and product technologies that increase productivity and create new entrepreneurial opportunities.
- Support the development of industry networks and trade organizations that promote inter-firm collaboration, resource sharing and the coordination of business-assistance services.
- Support public-private efforts to collaborate in providing assistance and technical resources to new and expanding businesses.
- Support leadership, marketing and planning efforts to enhance local strategies for tourism development.
- Offer a low-interest loan program for business start-ups and expansions.

OMEGA REVOLVING LOAN FUND

YTD Statistics (as of 09/30/16):

Total Loans: 90
Total RLF \$ Loaned: \$6,186,222
Total Jobs (c/r): 1,527

Startups: 31
Expansions: 40
Retentions: 16
Women-Owned: 18
Minority-Owned: 4
Bad Debt: 3 (FJE, Jefferson County - \$30,438; T-Saw & Tool, Columbiana County – \$21,960; Hilton Roofing & Maintenance, Belmont County - \$16,132; Total bad debt is 1.22% of total loan portfolio)

RLF Administrator's Comments:

Last year I reported that the RLF program deal flow was at an all-time low resulting in the loss of agency revenue. However, I am pleased to announce that 2016 is off to a great start with two projects approved recently totaling \$323,000 with thirty (30) jobs retained and seven (7) to be created!

It is my goal to continue marketing and networking efforts to the region's banks, elected officials, economic development professionals, small business development centers, etc. Additionally, building valuable relationships with the banking community and providing an affordable financing option to regional businesses will remain a focus.

As always, your support is greatly appreciated and your participation is encouraged. As the opportunity arises, please recommend the OMEGA RLF program to businesses, entrepreneurs, banks, etc.

*Thank-you.
Lolly Ravak*

OMEGA RLF Program –



"A tool for business development"

OMEGA LOAN REVIEW COMMITTEE

09/01/16 TO 08/31/19

CHAIRMAN

Mr. Chris Olney
SVP/Chief Credit Officer
The Community Bank
113 N. Fifth Street
Zanesville, OH 43701
Tele: 740-454-1600

Fax: 740-454-3016

Email: colney@thecombank.com
lravak@omegadistrict.org

ADMINISTRATOR

Ms. Lolly Ravak
OMEGA
326 Highland Avenue
Suite B
Cambridge, OH 43725
Tele: 740-439-4471 x203

Fax: 740-439-7783

Email:

BELMONT COUNTY

Mr. James F. Kacsma, CPA, AEP, CGMA
Mgr.
44901 Kacsma Estates Drive
St. Clairsville, OH 43950
Tele: 740-695-1140 (Home)
Cell: 740-391-0045
jfkcpsaep@gmail.com

HARRISON COUNTY

Mr. Michael Sliva, VP/Branch
PNC Bank
235 S. Main Street
Cadiz, OH 43907
Tele: 740-942-2132
Fax: 740-942-4556
Email: michael.sliva@pnc.com

CARROLL COUNTY

Mr. Jon Rinkes
Rinkes Insurance, LLC
Econ.Dev.
P.O. Box 246
Carrollton, OH 44615
Tele: 330-627-4442
Fax: 330-627-2271
Cell: 330-323-7631
Email: rinkesj2@nationwide.com
aoliver@co.holmes.oh.us

HOLMES COUNTY

Mr. Arnold Oliver, Director
Reg. Planning Comm. &
2 Court St., Suite 21
Millersburg, OH 44654
Tele: 330-674-8625
Fax: 330-674-1582
Cell: 330-231-4309
Email:

COLUMBIANA COUNTY

Ms. Vicki Hall, Bus. Dev. Officer
Consumers National Bank
141 S Ellsworth Ave.
Salem, OH 44460
Tele: 330-337-2411
Cell: 330-936-4494
Email: vhall@consumersbank.com
timmons@wesbanco.com

JEFFERSON COUNTY

Mr. Thomas Timmons
WesBanco Bank, Inc.
333 Penco Road
Weirton, WV 26062
Tele: 304-905-7307
Fax: 304-797-8071
Email:

COSHOCTON COUNTY

Mr. Todd Brown
Vice President, Commercial Banking
Peoples Bank
P.O. Box 1000
Coshocton, OH 43812
Tele: 740-610-2012
Fax: 740-373-2721
Email: todd.brown@pebo.com
jwilson@thecombank.com

GUERNSEY COUNTY

Mr. Michael Yanico, Asst. VP
Peoples Bank
845 Wheeling Avenue
Cambridge, OH 43725
Tele: 740-435-3780
Fax: 740-568-1426
Email: myanico@pebo.com

MUSKINGUM COUNTY

Mr. James Wilson
VP/Business Banker
The Community Bank
113 N. Fifth Street
Zanesville, OH 43701
Tele: 740-454-1600
Fax: 740-454-3016
Email:

TUSCARAWAS COUNTY

Mr. Robert Wolf, Loan Officer
First National Bank
824 Boulevard Street
Dover, OH 44622
Tele: 330-364-8671
Fax: 330-364-4791
Email: rwolf@fnbdennison.com

Goal Five

OMEGA District manufacturers will have access to quality technical export assistance.

Objectives: Where We Want to Be:

- More businesses in the OMEGA District will utilize existing export assistance programs.
- The number of OMEGA District businesses/manufacturers exporting will grow.

Strategies: How We Will Get There:

- Work in cooperation with the Department of Commerce, JobsOhio and the Appalachian Partnership for Economic Growth to further exporting opportunities in the region.
- Provide access to brochures, fact sheets and other materials to support marketing of exporting programs.

Excerpts from an article in the Q2.2016 newsletter produced by the Appalachian Partnership for Economic Growth (APEG) – full newsletter provided in Component One.

JobsOhio and APEG at worldwide trade show

By John Molinaro, President and CEO of APEG

“What do President Obama, APEG, JobsOhio and 210,000 industrial leaders from around the globe all have in common? We all traveled to Hanover, Germany in April to attend the largest industrial trade show in the world, the Hannover Messe.”

“Why did the President attend? There is no better place in the world to identify and meet with industrial leaders who can bring additional jobs, investment and prosperity to America.”

“Strategically placed next to the main state, foot traffic at the Ohio booth was intense for the entire week.”

Goal Six

The people and organizations of the OMEGA District will have access to free technical assistance for the preparation of grants.

Objectives: Where We Want to Be:

- Individuals and organizations in the OMEGA District will gain a better understanding of the basic grant process.
- Individuals and organizations in the OMEGA District will learn how to prepare basic grant applications.

Strategies: How We Will Get There:

- OMEGA will conduct one-on-one or group training seminars for individuals or organizations within the ten county district.
- Seminars will be open to all. Clients will choose the area in which the seminar will be held.
- Prepare brochures, fact sheets and other informational material to enhance the grant training seminars.

To assist with project planning, OMEGA will meet with local officials, businesses, and non-profit organizations to identify and discuss viable strategies to finance community improvement and economic development. Our Community Development Specialists are well versed in federal and state programs to fund infrastructure improvements (water, wastewater, roads, and bridges) as well as business/industrial parks, recreation facilities, community facilities, public safety facilities and equipment. Included among these agencies are:

- ❖ Appalachian Regional Commission
- ❖ Community Development Block Grants
- ❖ Federal Emergency Management Agency
- ❖ JobsOhio
- ❖ Ohio Department of Transportation
- ❖ Ohio Development Services Agency
- ❖ Ohio EPA
- ❖ Ohio Public Works Commission
- ❖ Ohio Water Development Authority
- ❖ U.S. Department of Agriculture
- ❖ U.S. Department of Commerce Economic Development Administration
- ❖ U.S. Environmental Protection Agency
- ❖ Ohio Office of Criminal Justice
- ❖ Local, state, and national foundations

OMEGA 2016 Grant Record

Applicant	Project	Funding Agency	Grant/Loan	Total Project Cost	Status
Bellaire Village	Robinson Road Slip Repair	Emergency OPWC	\$280,800	\$312,000	Approved
Belmont County Port Authority/Bellaire Harbor Service LLC ⁽¹⁾	Diesel Emissions Reduction Grant (Engine Repower)	Ohio EPA/ODOT	\$373,994	\$498,659	Approved
Bethesda ⁽¹⁾	WWTP UV Disinfection System	OPWC Small Government	\$148,000	\$200,000	Approved
Bethesda	Police Staffing Project	OCJS Edward Byrne JAG LE	\$6,048	\$7,068	Approved
Bethesda	Shared Street Cleaner	ODSA: Local Government Innovation Fund	\$139,961	\$155,512	Pending
Bethesda	Police Staffing/Equipment/Training	OCJS Edward Byrne JAG LE	\$16,092	\$17,880	Pending
Brown Local School District	Sidewalk, Signage, and Pedestrian Signals	ODOT: Safe Routes to School	\$246,500	\$312,352	Approved
Byesville Police	Body Cameras, Cruiser, License Plate Reader	ODSA: Local Government Safety Capital	\$48,808	\$48,808	Not Approved
Carrollton	SR 43 (Canton Road) Drainage Improvements	Ohio Public Works Commission	\$246,083	\$325,628	Pending
Cross Creek Twp.	Marshall Road Park Rehabilitation	ODNR: Natureworks	\$20,801	\$32,737	Approved
Dillonvale	Police Equipment/Training	OCJS Edward Byrne JAG LE	\$11,497	\$12,647	Pending
Dillonvale	Municipal Building Roof Replacement	ODSA: Local Government Innovation Fund	\$180,000	\$200,000	Pending
East Liverpool	Downtown Lighting Upgrade (LED)	ODSA: Local Government Innovation Fund	\$26,072	\$28,970	Pending
Guernsey Co. VFD	County-Wide Communications	FEMA Assistance to Firefighters	\$116,289	\$127,917	Not Approved
Harrison Co. Commissioners	County Home Wastewater System Improvements	CDBG Critical Infrastructure	\$300,000	\$339,780	Approved
Mead Twp - Belmont County	TR 296 Cash Ridge Road Slip Repair	Ohio Public Works Commission	\$166,560	\$123,250	Approved
Newcomerstown	2017 Street Improvement Project	Ohio Public Works Commission	\$143,276	\$325,628	Pending
OMEGA	US 250 Ohio's Energy Choke Point	Federal Highway Administration (TIGER)	\$7,100,000	\$12,570,000	Not Approved
OMEGA	Regional 166 Loan Program	Ohio Development Services Agency	\$750,000	\$750,000	Approved
Pultney Township	Cement Mill TR 619 Slip Repair	Emergency OPWC	\$139,914	\$155,460	Approved
Roswell	John F. Kennedy Park Pavilion	Reeves Foundation	\$35,000	\$35,000	Approved
Salem / SOD	Creative Placemaking for Downtown Salem	Nat'l Endowment for the Arts (NEA)	\$100,000	\$215,000	Pending
Somerton VFD	New Ambulance	ODSA: Local Government Safety Capital	\$100,000	\$172,687	Not Approved
Uhrichsville Fire Dept	Firehouse Repairs	ODSA: Local Government Safety Capital	\$47,219	\$52,466	Not Approved
Zanesville	Zanesville Centennial Trail	ODNR Recreational Trail Program	\$147,300	\$195,100	Not Approved
TOTAL			\$10,609,414	\$16,902,549	
TOTAL GRANTS/LOANS APPROVED				\$2,467,617	

Notes

(1) Application submitted in 2015, but awarded in 2016.

Goal Seven

Agencies, organizations, and residents in the OMEGA District will actively participate in developing and implementing comprehensive mineral extraction policies and programs that promote best practices and sustainability of the positive impacts brought about by the rich natural resources in the region.

Objectives: Where We Want to Be

- A model community committed to working toward a long-term positive impact from oil and gas exploration and drilling in the region.
- A model community committed to continued exploration and support for opportunities provided by our local coal resources.
- Residents of the OMEGA District will have enhanced access to basic and advanced educational options relative to employment opportunities in all facets of the oil and gas industry.
- Economic Development organizations in the OMEGA District will be engaged in a proactive and cooperative approach toward capitalizing on oil and gas industry opportunities.

Strategies: How We Will Get There

- Build the capacity of local educational institutions to provide workforce development skill to help residents obtain long-term jobs related to the oil and gas industry.
- Identify workforce development needs in a timely manner to meet demands of all facets of the oil and gas industry.
- Support community partnerships to share information and resources.
- Support public-private partnerships developed in the best interest of all parties involved.

OMEGA employs these metrics to assess the effectiveness of our Comprehensive Economic Development Strategy.

Performance Measurements

- **Number of Businesses/Organizations/Individuals Participating in or Benefitting from a Program or Project**
- **Number and Types of Investments in the Region**
- **Number of Jobs Created in the Region**
- **Number of Jobs Retained in the Region**
- **Amount of Private Sector Investment in the Region after Implementation of the CEDS**
- **Changes in Economic Environment for the Region**
- **Square Feet of Manufacturing and Industrial Space Occupied**
- **Miles of Roadway Built or Improved**
- **Linear Feet of Water or Sewer Line Installed or Improved**
- **Change in Population in the Region**
- **Change in General Health Statistics of the Region**
- **Change in Average Income of Population in the Region**
- **Change in Educational Attainment Levels in the Region**
- **Change in Access and Demand for Social and Medical Services**


Strengths, Weaknesses, Opportunities and Threats Analysis

OMEGA District and Ohio Appalachian Region

The following Strengths, Weaknesses, Opportunities and Threats have been identified in the OMEGA District and Ohio Appalachian Region by the staff and membership of the local development districts.

Strength: Natural Resources and New Technology to Access Abundance of Shale Oil and Gas  **Opportunity:** Increased Employment and Tax Base

Strength: Availability of Land to Attract Development  **Opportunity:** Infrastructure Development

Strength: Strong Work Ethic  **Opportunity:** To Train or Retrain Workforce We must continue to work to instill this strong work ethic into future generations.

Strength: JobsOhio Program  **Opportunities:** 1.) Grow What We Have – to build a coordinated retention and expansion program

2.) Go On the Offense – to create a proactive sales team that aggressively pursues new opportunities

3.) Be Fast and Smart – to lead the market


4.) Work Peer to Peer – to leverage private investment

Strength: Collaborative Partnerships for Economic Development 

Opportunity: Work Together for the Region

Weakness: Demographic Shift  **Threat:** Jobs Going to Metropolitan Areas

Weakness: Gaps in Access to Capital  **Threat:** Businesses Locating in Metropolitan Areas

Weakness: Insufficient Water and Wastewater Systems  **Threat:** Businesses Not Locating in Areas with Insufficient Water and Wastewater Systems and Population Relocation

Weakness: Lack of Broadband Internet Access  **Threat:** Businesses and Population Relocating

There is strong optimism in the region that these first four weaknesses will be lessened by the shale oil and gas developments in eastern Ohio.

Weakness: Shortage of Health Care Services  **Threat:** Decline in General Health of the Population

Weakness: High Rates of Chronic Diseases  **Threat:** Decrease in Available Workforce and Increase in Demand for Social Services

Weakness: High Rates of Drug Abuse  **Threat:** Decrease in Available Workforce and Increase in Demand for Social Services

Weakness: Lower Level of Educational Attainment  **Threat:** Decrease in Available Workforce

Weakness: Need for Transportation Development  **Threat:** Increase Isolation of Appalachian Ohio



2016 CEDS Annual Performance Report

Component Four: Goals for Next Year

First and foremost, the OMEGA executive board, members, director and staff will remain committed to being valuable partners and responsible economic development stewards in the OMEGA region.

Under the leadership of Executive Director, Jeannette Wierzbicki, P.E., we will continue to work with our local communities to build a more sustainable economy for our region through our federal and state grant programs, grant assistance activities, transportation planning, and revolving loan fund programs. All executive board and membership meetings will continue to offer current and relevant economic development substance. Four executive board meetings will be held in addition to two full membership meetings. A legislative mixer will also be held in the Summer of 2017. Executive board meetings typically have an attendance of 40-50. Full membership meetings and the legislative mixer historically have drawn a crowd of 100 or more. OMEGA meetings have become known over the years as the meetings to attend if you need to network with the local elected officials and economic development professionals in the OMEGA region. Our meetings are well attended by representatives of state agencies and the legislature. The meetings are a great mechanism for keeping in touch with our members who are responsible for submitting the priority projects listed on the following pages.

While it is no longer a requirement of the CEDS report, representatives of the OMEGA region believe it is still important to document a list of priority projects for which funding is currently being sought. Federal and state funding continues to play a significant role in whether or not a project can be accomplished. **So many of these projects are still focused on fulfilling basic infrastructure needs in the OMEGA region.**



Priority Projects in the OMEGA District

Belmont County

As previously mentioned in Component One, PTT Global Chemical America, Thailand's largest and Asia's leading integrated petrochemical and refining company, is considering development of an ethane cracker in Mead Township along the Ohio River in Belmont County. PTT Global has conducted a \$10 million pre-engineering study that showed positive results and recently announced a \$100 million investment to determine a cost estimate for the full project. A final investment decision is anticipated in early 2017. If the project moves forward, it will take approximately four years to build the cracker. Interest in the proposed site is due to its location in the Marcellus and Utica shale region and its access to major highway, rail, pipeline and port infrastructure that would increase efficiency while reducing the environmental and financial costs of transportation. If built, the facility would create hundreds of full-time jobs, thousands of construction jobs and multibillion dollars in investments.

Below are details of other priority projects in Belmont County.

Project Name: Fox-Shannon Wastewater Treatment Plant Improvements

Improvements at the Fox-Shannon wastewater treatment plant are necessary for mitigating discharge violations and to increase the plant capacity for future development in the Fox Commerce Industrial Park and small businesses within Belmont County. The discharge violations are the result of much needed upgrades at the sewer plant along with high ammonia levels in the sewage received from the Belmont Correctional Institution. A capacity increase at the Fox-Shannon plant has the potential to influence hundreds of local jobs.

Project Construction: The project will provide the following improvements: allow the Fox-Shannon plant to maintain compliance with Ohio EPA; increase capacity for future development at the Fox Commerce Park; and allow the Belmont County Sanitary Sewer District to continue supplying existing customers with reliable service.

Other Funding Sources: Ohio Public Works Commission, Ohio EPA (WPCLF), Local Funds, USDA Rural Development

Estimated Project Cost: \$6,200,000

Project Name: Ohio Vally Mall Sanitary Sewer Lift Station

The existing Ohio Valley Mall sanitary sewer lift station is fundamentally outdated. The infrastructure is 35 years old and cannot support the new requirements of the expanding mall area. A new lift station to accommodate the increased force main capacity will be required to support the proposed mall expansion project and any future development in this area. A capacity increase at the Ohio Valley Mall lift station and force main has the potential to create/retain hundreds of local jobs.

The proposed upgrades are necessary to maintain compliance with the Ohio EPA. Appropriations for this project will help keep user rates affordable for new businesses and our existing customers.

Project Construction: The project will provide the following improvements: allow Belmont County Sanitary Sewer District to maintain compliance with Ohio EPA, increase capacity for future development at the Ohio Valley Mall area, and allow the Belmont County Sanitary Sewer District to grow and continue supplying existing customers with reliable service.

Other Funding Sources: Ohio Public Works Commission, Ohio EPA (WPCLF), Local Funds, USDA Rural Development

Estimated Project Cost: \$1,200,000

Carroll County

Project Name: Northern Corridor Water and Wastewater Project

This project begins at the intersection of State Route 43 and Lemon Road and is proposed to extend south for a distance of 3.85 miles along State Route 43 to the intersection of Arrow Road. Completion of this project will provide Carroll County with 500 acres of prime land ready for development and subsequent job creation. Fairmont Tool is currently located in the subject corridor. This proposed water and wastewater lines will enable Fairmont Tool to initiate a \$30 million expansion plan. This expansion is projected to create 25-30 jobs in the first three years. Providing public water and sewer services to the 28 parcels currently identified as ready for development will enable the county to attract additional industry cluster related businesses focusing on Primary Metal Manufacturing, Fabricated Metal Products Manufacturing, Transportation Equipment Manufacturing, Manufacturing Superclusters, Chemicals and Chemical Based Products, and Advanced Materials. Adding to the need for this project is that the abundance of natural resources in Carroll County has led to the development of a \$900 million natural gas-fired power plant with additional inquiries from businesses and industries that utilize hydrocarbons as feedstock or an energy source in production. This project is paramount to the continued diversification and sustainability of Carroll County as this project is proposed for a specifically identified area that will result in the largest number of acres ready for development and job creation.

Estimated Project Cost: \$6.31 million

An application requesting \$3 million in public works grant funding was submitted to EDA in July 2016

Project Name: Fairmont Intermodal Facility

This project consists of adding multiple rail sidings to the Wheeling & Lake Erie Railway line that extends into Carroll County. The project is being spearheaded by Fairmont Tool, who has recently purchased the grounds and needs the intermodal facility to do business. Fairmont Tool would also like to open the intermodal facility to other businesses to allow them to transact business more efficiently. The facility will be located on State Route 43 halfway between the Villages of Malvern and Carrollton.

Estimated Project Cost: \$3 million

Project Name: Amsterdam Village Wastewater Collection and Treatment System

The Village of Amsterdam is looking to alleviate problems with failing or poorly designed septic systems by replacing them with a sewer system within the village. The village is one of the largest villages not served by sewer according to the Ohio EPA, and as the village sits flush to the Jefferson County/Carroll County line a joint county project is being investigated. Carroll County is partnering with Jefferson County to pursue grant funding and resolve the issues.

Estimated Project Cost: \$9 million

Columbiana County

Project Name: St. Clair Township Columbia Drive

This project would finish Columbia Drive from State Route 170 to McGuffey Drive in St. Clair Township. Approximately \$750,000 has been spent on the first phase of this project. The current phase will open at least 60 acres of land in a densely commercial area and is anticipated to result in the addition of 200 new jobs. The project will also address safety and congestion issues along State Route 170.

Estimated Project Cost: \$2,200,000

Project Name: Salem Sewer Extension/Improvement Project

This project is currently in the planning stages. It involves the potential retention of 950 jobs as well as an opportunity to open 30 acres of industrial zoned sites in the City of Salem.

Estimated Project Cost: \$2,200,000

Coshocton County

Project Name: Cassingham Hollow Sanitary Sewer Project

The City of Coshocton is proposing to install sanitary sewer to Overlook Drive, Sara Drive, Cambridge Road and Cassingham Hollow Road, areas where sanitary facilities are not currently available. The cost estimate is based on a preliminary engineered estimate for projects of a similar nature in the state and reflects payment of prevailing wages.

Estimated Project Cost: \$2,050,000

Project Name: Wastewater Treatment Plant Improvements

The City of Coshocton is proposing a Raw Sewage Pump Replacement, Trickling Filter Isolation and Ultraviolet Disinfection. The cost estimate is based on a preliminary engineered estimate for projects of a similar nature in the state and reflects payment of prevailing wages.

Estimated Project Cost: \$660,000

Project Name: Airport Road Extension

The Coshocton County Engineer, in conjunction with the Coshocton County Regional Airport Board and the Coshocton County Commissioners, is proposing to extend Airport Road to intersect with County Road 193. Presently there is only one way in and out of Richard Downing Airport. For improved safety and traffic flow these entities are working to acquire property and

funding to construct approximately one-half mile of road to provide alternative access to the airport and the various businesses located there. Also located at the airport is the Ohio National Guard Readiness Center. The property needed for the extension passes through property currently owned by The Ohio State University and operated by the Ohio Agricultural Research and Development Center. In addition, the development of the brine disposal facility on Airport Road by Buckeye Brine makes an alternative route to the airport even more important.

Estimated Project Cost: \$650,000

Guernsey County

Project Name: State Route 209/I-70 Interchange Improvements

The location of a major truck stop just several feet south of the State Route 209/I-70 interchange has created congestion that is not just inconvenient, but also dangerous. Eastbound on and off ramps to the interchange intersect with State Route 209 almost directly in conjunction with entrance and egress to the truck stop. Adjacent to the truck stop is the entrance to a K-Mart shopping plaza and several commercial establishments. Pressure on this area recently increased with the completion of a new hotel. The developer also plans to build a second hotel, small retail strip, and a restaurant. The development would route an estimated 800 cars daily into this already highly congested area. Planners are currently examining several options to relieve pressure on the area which may involve reconfiguration of the interchange.

Estimated Project Cost: \$6.5 million

Project Name: Establish a New Industrial Park

The Guernsey County Commissioners and economic development professionals recognize the need for a new industrial park to attract businesses to the area.

Estimated Project Cost: To Be Determined

Project Name: D.O. Hall Business Mine Mitigation

The D.O. Hall Business Park is the only full service business park in Guernsey County with development sites available. However, these sites are encumbered with the presence of deep mines and mine spoils which must be mitigated in order for development to occur.

Estimated Project Cost: To Be Determined

Harrison County

Project Name: Village of Cadiz Wastewater System Improvements

With the shale development that is occurring in the OMEGA region, the Village of Cadiz in Harrison County is uniquely poised to develop a more sustainable diverse economy. Two Mark West processing facilities and office building are located in Cadiz and more development to include a natural gas fired power plant as well as other commercial developments are planned. To meet the needs of these new facilities, the Village of Cadiz needs to improvement the wastewater collection system and treatment plant. Similar to many older communities, the wastewater collection system is subject to significant sources of inflow and infiltration leading to sanitary sewer overflows during wet weather events. Ohio EPA has placed the Village under findings and orders to include a limited connection ban. This connection ban is hindering economic development and diversification as the Village must demonstrate a reduction in system wet weather flow in order to connect any new developments.

The Village, with assistance from state and federal agencies, has already invested \$6 million to reduce the volume of clean water entering the system, but an additional \$9.3 million in improvements are required. In addition, the wastewater treatment plant is nearing the end of its useful life and needs to be replaced. The estimated cost for replacing the plant is dependent upon the reduction of inflow and infiltration but maybe as high as \$12 million. The Village's immediate priority is to complete rehabilitation of the collection system in order to allow new development to occur.

Project Name: The Junction at Jewett Logistics Campus

The Junction at Jewett project responds to huge volumes of essential products that need to be imported and exported as the Utica Shale area continues to grow over the next several decades. By linking effective, strategic rail and truck transloading services with unit train capacity infrastructure, the best economies of scale are provided. These economies of scale help create a unique development and operating platform.

Estimated Project Cost: To Be Determined

Project Name: Harrison County Justice Center

An August 2013 inspection by the Ohio Department of Rehabilitation and Correction found the Harrison County jail did not comply with 44 of the 68 standards of the “minimum Standards for Jails in Ohio.” The inspection report stated that the age and layout of the existing jail facility did not provide an established jail security perimeter or a secure booking and release area. It also stated that the facility’s layout did not provide a recreation area or the require 35 square feet per prisoner; nor did it segregate violent offenders from the non-violent. The proposed justice center will have the capability to house 60 prisoners, accommodate female prisoners who are currently being sent to other locations, provide an observation cell for special need prisoners, and reduce operating costs county-wide due to the sharing of services.

Estimated Project Cost: \$7,500,000 - \$9,000,000

Holmes County

Project Name: ProVia Road Improvement

The Board of Holmes County Commissioners, Holmes County Engineer, and Holmes County Economic Development Council are seeking funding to complete improvements to portions of Holmes County Road 140 and Township Road 420. The improvements will include stabilizing the road sub-grade, widening and replacing the existing road surface with reinforced concrete, and installing an aggregate shoulder and guardrail. The proposed improvements will improve public

safety by better accommodating additional heavy truck traffic that will accompany the opening and operation of a new 300,000 square foot manufactured stone facility. This project includes the retention of 35 jobs and the creation of 15 jobs.

Estimated Project Cost: \$450,500

This project was recently funded by ODOT Office of Jobs & Commerce, JobsOhio 629 funds, and Governor's Office of Appalachia Rapid Response Program and is currently under construction.

Project Name: Village of Killbuck Industrial Park Phase II

The Holmes County Commissioners, Village of Killbuck Mayor and Council, Holmes County Economic Development Council, and the Holmes County Planning Commission have worked cooperatively to bring the Killbuck Industrial Park Phase 1 from a 0% occupancy rate in 2007 to a 100% occupancy rate in 2014. The Holmes County Commissioners and the Village of Killbuck are seeking funds to develop the Killbuck Industrial Park Phase II. The site will require the extension of utilities and other infrastructure.

Estimated Project Cost: \$2,000,000

Project Name: Daniel's Amish Collection Fire Suppression System

The Holmes County Economic Development Council and Appalachian Partnership for Economic Growth (APEG) are seeking funding to install a 100,000 gallon water holding tank on the site of the Daniel's Amish collection furniture manufacturing facility. The holding tank is needed to supply water to the fire suppression system located at the facility. The company recently completed a 15,000 square foot expansion project and during construction it was discovered that the current water supply would not be sufficient to operate the new fire suppression system. The company currently employs 150 people and it is anticipated that 25 new jobs will be created when the expanded facility becomes operational.

Estimated Project Cost: \$300,000

Jefferson County

Project Name: University Boulevard Sewer Rehab Project

A portion of the 48" University Boulevard combined sewer is a critical line which is in the process of collapsing. Other sections of this sewer are in bad condition and need to be rehabilitated. The University Boulevard combined sewer services four hotels, two restaurants, the Franciscan University of Steubenville, several other businesses, and many private residences. This line also services a large strip of land along University Boulevard that the Franciscan University of Steubenville is seeking to develop which will result in more jobs to benefit the local economy.

Estimated Project Cost: \$2,000,000

Project Name: Lover's Lane and Fort Steuben Drive Intersection Improvement - Phase I

Intersection improvement project to alleviate a congestion problem that exists at the intersection. This is the first of three phases. The option chosen is a single lane, three leg roundabout. This will also improve access for pedestrian traffic.

Estimated Project Cost: \$1,531,00

Project Name: Lover's Lane and Sunset Boulevard Intersection Improvement - Phase II

This intersection has been identified as a high crash location in the Ohio Department of Transportation Highway Safety Program. The project will implement the recommended improvements identified in the latest safety study. Work involves realignment of State Route 43 through the intersection, widening to lengthen the east bound left turn lane, widening to create right turn lanes on the eastbound, westbound and southbound approaches. Replacement of sidewalks, curb and catch basins as needed. Mill and fill existing asphalt

concrete surface, minor pavement repair, curb ramp construction, drainage improvements, pavement markings, traffic control signs, street name signs, replacement of traffic signal installation including replace of traffic signal video vehicle detection. Right-of-way acquisition is also required.

Estimated Project Cost: \$2,396,000

Project Name: Mall Drive and Fort Steuben Drive Roadway Upgrades

This roadway improvement project will rehabilitate approximately 2,350 linear feet of pavement that has reached the end of its useful life. In addition, it will replace 10 storm drainage basins which will improve the roadway drainage. The project also includes the installation of long life pavement markings which will improve safety and traffic flow.

Estimated Project Cost: \$350,000

Muskingum County

Project Name: East Muskingum Community Development Center

Eastern Muskingum County, along Interstate 70 and U.S. Route 40, has been the primary manufacturing and distribution growth area in Muskingum County. The Muskingum County Commissioners and Zanesville-Muskingum County Port Authority have identified this corridor as the most promising location for the development of the county's next business park. A feasibility study for the project is currently underway. However, sanitary sewer service is near capacity in this area. Water line capacity is also inadequate in the corridor. Muskingum County proposes to upgrade and install new sewer and water infrastructure in this corridor to both accommodate existing businesses and facilitate the development of a new business park.

Estimated Project Cost: \$5,700,000

Project Name: Graham Industrial Site

The Graham Farm between Frazeesburg and Nashport in Jackson Township has over 460 flat acres of ground between 4-lane State Route 16 and the Ohio Central Railroad. The site is intersected by electric transmission line and has great economic development potential, except that it lacks water and sewer infrastructure and has not had due diligence performed on soil compaction, environmental assessment, archeological assessment, wetlands delineation, and verification of clear title. The Zanesville-Muskingum County Port Authority is seeking funding for preliminary utility engineering and other due diligence studies to make the Graham site more marketable.

Estimated Project Cost: \$100,000

Project Name: Southeast Ohio Energy Research Park

With historically high-unemployment, high-poverty, and low-educational attainment rates, Southeast Ohio has been pegged as a typical Appalachian region with little momentum for prosperity. However, a new vision of the region is gaining momentum: the vision of a vibrant community filled with businesses investing capital, setting up operations, and creating high-paying jobs in the region; colleges and universities offering state-of-the-art research capabilities, workforce training, and continuing education opportunities; and healthy families enjoying an enhanced quality of life and innumerable community assets.

This vision is endorsed by the federal, state, county, and local government officials, community and economic development leaders, Chambers of Commerce, businesses, private philanthropists, and local residents. Realization of the vision would transform one of the most distressed areas in Ohio into a world-class research and business hub where quality of life is enhanced and small town congeniality is not sacrificed.

The Research Triangle Park (RTP) in North Carolina is an inspiration for what Southeast Ohio could become. Renown as one of the world's largest research parks, the genesis and growth

of RTP was the result of a well-formed vision and strategy. In the late 1950s there was very little reason for companies to want to operate in North Carolina. However, university leaders, economic developers, and philanthropists looked at the region's strengths and competitive advantages and created a new future on a 7,000 acre tract of land that has resulted in six decades of prosperous economic conditions for the entire state.

Southeastern Ohio is ripe for dramatic economic development. The land targeted for the Southeast Ohio's Energy Research Park is part of a 9,500 acre expanse located in Guernsey, Muskingum, and Noble Counties that is rich with abundant natural resources and lies near two major interstate highways. The recent exploration and drilling of the Utica and Marcellus shale formations in eastern Ohio are attracting multi-national oil and gas companies to the region and has created a resurgence of business opportunities for existing local pipeline, compression, and drilling companies and their suppliers.

The area to be served has many of the ingredients needed for an energy research park:

- A tract of reclaimed strip mined land may be available that is massive in size, spans three Appalachian Ohio counties, and is held by a single owner. The land owner and commissioners from four contiguous counties co-commissioned a study to determine the feasibility of developing the land as a business park. The study--conducted by a nationally recognized leader in architectural, engineering, and planning services--concluded that the mega-site has many characteristics necessary to become a center of major job creation and economic investment.
- Interstate 70 and Interstate 77 intersect in the region near the mega-site. I-77 extends from Cleveland, OH and south through Charlotte, NC; U.S. 22 traverses from Pittsburgh to Cincinnati and the Southwest; and I-70 from Washington, DC through Indianapolis and on to the West Coast. Thus 50 percent of the U.S. population and two-thirds of the nation's manufacturers are within one day's drive.
- Zanesville Municipal Airport (Muskingum County) can accommodate corporate jets.

Cambridge Municipal Airport (Guernsey County) currently has a 4,300 foot asphalt runway with plans for expanding it to 5,000 feet to enable the landing of larger planes. Pittsburgh International Airport, Cleveland Hopkins, Port Columbus, and Akron Canton airports are within an hour or two by car.

- Vast natural resources are abundant, including oil, gas, coal, and multiple sources of renewable energy.
- Higher education institutions preparing tens of thousands of students annually for knowledge jobs are located in and/or near the region.
- World Class Research Capability
- With oil and gas as the catalyst for economic growth, the time is now to capitalize on university-business partnerships to create a sustainable economic future for residents that does not rise and fall in tandem with production and profit cycles of a single industry or one large employer.
- Major national and global leaders in research and development are focused on the region to conduct research and provide support to business, agricultural, energy, animal preservation, environmental, and other national priorities. Included among these leaders are:
 - Battelle Memorial Institute
 - Ohio University George V. Voinovich School of Leadership and Public Affairs
 - The Ohio State University Eastern Agricultural Research Station
 - The Ohio State University John Glenn College of Public Affairs
 - The Ohio State University Subsurface Energy Resource Center Shale Energy and Environmental Laboratory
 - The International Center for the Preservation of Wild Animals, Inc. (also known as the Wilds)

Currently the 2016 federal budget includes more than \$700 billion to fund research projects and new policies that would ensure environmentally sustainable domestic and global supplies of oil and natural gas and reduce the nation's dependence on foreign sources for its energy needs; support discovery of technological innovations that reduce cost, enhance performance, educate and train an energy workforce; and modernize the nation's energy infrastructure.

As Ohio's energy corridor begins to prosper, the growth of community resources and assets will demonstrate to other industries that Appalachian Ohio is "the" place to locate for economic advantages. The corridor will attract advanced manufacturing and research sectors such as polymers, aerospace, and information technology.

Benefits/Anticipated Outcomes

Anticipated outcomes of the Southeast Ohio Energy Research Park will benefit the United States in reduced dependency on foreign energy supplies, lower energy costs for consumers, and worldwide leadership in the production, generation, and transmission of energy industries. The region will experience dramatic growth in jobs created, population, per capita income, and quality of life.

Estimated Project Cost: To Be Determined (A request for funding from EDA for a feasibility study is currently being developed.)

Project Name: Waterline for The Wilds

The International Center for the Preservation of Wild Animals or, The Wilds, is located in the southeastern corner of Muskingum County on 10,000 acres of reclaimed surface-mined land. The Wilds is affiliated with the Columbus Zoo and has partnership agreements with the Ohio State University for academic and research programs. The Wilds attracts over 100,000 visitors a year, including international scientists, Ohio students and tourists from across the United States. In addition, the Wilds' animal outreach program visits local schools, nursing homes and libraries and impacts nearly 26,000 people annually. In the heart of its season, the Wilds provides over 120 jobs for area residents. The Wilds is developing a Scientific Institute to help

solve a broader range of real world issues for endangered animals, the environment and humankind including leading research in the field of restoration ecology.

The Issue: Located in a very rural part of Muskingum County, the facility lacks basic infrastructure including a sufficient potable water source. The nearest public water line is 4 miles from the property and operated by the Muskingum County Water Authority. This lack of public water results in The Wilds spending \$60,000 per year to have water trucked on-site.

The Solution: Extend the Muskingum County Water Authority water line, which currently terminates at the Village of Chandlersville, to the site and create a modern looped delivery system throughout the park for future growth and development.

Project Cost: \$4,499,000

Project Name: Broadband for Downtown Zanesville

The City of Zanesville is researching the possibility of adding high speed internet to the downtown area to attract and retain high wage occupations. The city will soon undertake a major public works project when it complies with an Environmental Protection Agency mandate of separating the combined sewers and will seize the opportunity to add value to the central business district while the streets are exposed to the utility level.

Estimated Project Cost: \$3,000,000

Tuscarawas County

Project Name: County-wide 911 Radio System Upgrade and Maintenance

This project will upgrade the infrastructure of the radio system and provide for maintenance and future compatibility of the county's radio system.

Estimated Project Cost: \$16.1 million

Project Name: Tuscarawas Regional Technology Park Broadband and Electricity Upgrades

The Tuscarawas Regional Technology Park would receive greater interest by broadband critical user companies and data centers with broadband and electricity upgrade for redundant service. This project would include extension of electricity and broadband to connect with alternative and independent sources.

Estimated Project Cost: \$1,000,000

Project Name: Newcomerstown Industrial Park Bridge

The Newcomerstown Industrial Park could expand its footprint to include a 200 acre developable tract across the Tuscarawas River with a new bridge constructed across the river. In addition to transportation, this bridge would provide utility extension to the currently undeveloped tract.

Estimated Project Cost: \$2,000,000

Appendix A

County Profiles

Ohio County Profiles

Prepared by the Office of Research



Belmont County

Established: Proclamation - September 7, 1801
2015 Population: 69,154
Land Area: 537.3 square miles
County Seat: St. Clairsville City
Named for: French: "Beautiful Mountain"



Taxes

Taxable value of real property	\$1,099,660,020
Residential	\$709,167,570
Agriculture	\$125,067,880
Industrial	\$27,074,660
Commercial	\$197,548,340
Mineral	\$40,801,570
Ohio income tax liability	\$41,415,265
Average per return	\$1,469.88

Land Use/Land Cover

	Percent
Developed, Lower Intensity	8.49%
Developed, Higher Intensity	1.05%
Barren (strip mines, gravel pits, etc.)	1.07%
Forest	57.64%
Shrub/Scrub and Grasslands	3.50%
Pasture/Hay	21.10%
Cultivated Crops	5.84%
Wetlands	0.14%
Open Water	1.17%

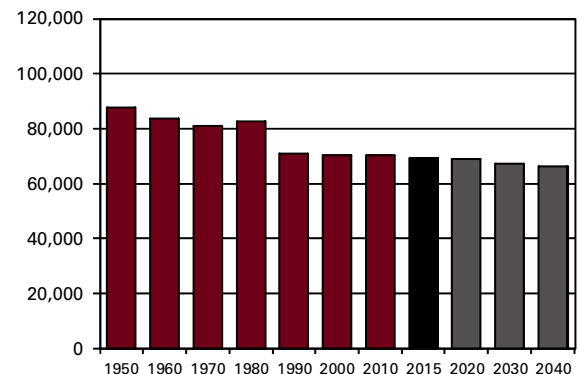
Largest Places

	Est. 2015	Census 2010
Richland twp UB	9,678	9,789
Martins Ferry city	6,786	6,915
St. Clairsville city	5,105	5,184
Pultney twp UB	4,397	4,475
Pease twp UB	4,382	4,467
Colerain twp	4,200	4,276
Bellaire vlg	4,189	4,279
Barnesville vlg	4,125	4,193
Shadyside vlg	3,714	3,785
Mead twp UB	2,178	2,225

UB: Unincorporated balance.

Total Population

Census			Estimated
1800		1910	76,856
1810	11,097	1920	93,193
1820	20,329	1930	94,719
1830	28,627	1940	95,614
1840	30,901	1950	87,740
1850	34,600	1960	83,864
1860	36,398	1970	80,917
1870	39,714	1980	82,569
1880	49,638	1990	71,074
1890	57,413	2000	70,226
1900	60,875	2010	70,400
		2011	70,065
		2012	69,638
		2013	69,527
		2014	69,414
		2015	69,154
		Projected	
		2020	68,880
		2030	67,330
		2040	66,140



Population by Race

	Number	Percent
ACS Total Population	69,793	100.0%
White	65,442	93.8%
African-American	2,654	3.8%
Native American	66	0.1%
Asian	279	0.4%
Pacific Islander	2	0.0%
Other	162	0.2%
Two or More Races	1,188	1.7%
Hispanic (may be of any race)	529	0.8%
Total Minority	4,621	6.6%

Educational Attainment

	Number	Percent
Persons 25 years and over	50,738	100.0%
No high school diploma	5,430	10.7%
High school graduate	22,532	44.4%
Some college, no degree	10,315	20.3%
Associate degree	4,880	9.6%
Bachelor's degree	4,841	9.5%
Master's degree or higher	2,740	5.4%

Family Type by Employment Status

	Number	Percent
Total Families	18,222	100.0%
Married couple, husband and wife in labor force	6,767	37.1%
Married couple, husband in labor force, wife not	3,174	17.4%
Married couple, wife in labor force, husband not	1,137	6.2%
Married couple, husband and wife not in labor force	3,018	16.6%
Male householder, in labor force	1,139	6.3%
Male householder, not in labor force	355	1.9%
Female householder, in labor force	1,595	8.8%
Female householder, not in labor force	1,037	5.7%

Household Income

	Number	Percent
Total Households	28,007	100.0%
Less than \$10,000	2,154	7.7%
\$10,000 to \$19,999	3,899	13.9%
\$20,000 to \$29,999	3,812	13.6%
\$30,000 to \$39,999	3,222	11.5%
\$40,000 to \$49,999	2,940	10.5%
\$50,000 to \$59,999	2,277	8.1%
\$60,000 to \$74,999	2,629	9.4%
\$75,000 to \$99,999	3,319	11.9%
\$100,000 to \$149,999	2,728	9.7%
\$150,000 to \$199,999	521	1.9%
\$200,000 or more	506	1.8%
Median household income	\$43,045	

Population by Age

	Number	Percent
ACS Total Population	69,793	100.0%
Under 5 years	3,441	4.9%
5 to 17 years	10,012	14.3%
18 to 24 years	5,602	8.0%
25 to 44 years	17,112	24.5%
45 to 64 years	20,978	30.1%
65 years and more	12,648	18.1%
Median Age	43.7	

Family Type by Presence of Own Children Under 18

	Number	Percent
Total Families	18,254	100.0%
Married-couple families with own children	4,726	25.9%
Male householder, no wife present, with own children	548	3.0%
Female householder, no husband present, with own children	1,367	7.5%
Families with no own children	11,613	63.6%

Poverty Status of Families By Family Type by Presence Of Related Children

	Number	Percent
Total Families	18,254	100.0%
Family income above poverty level	16,427	90.0%
Family income below poverty level	1,827	10.0%
Married couple, with related children	390	2.1%
Male householder, no wife present, with related children	118	0.6%
Female householder, no husband present, with related children	889	4.9%
Families with no related children	430	2.4%

Ratio of Income To Poverty Level

	Number	Percent
Population for whom poverty status is determined	65,751	100.0%
Below 50% of poverty level	3,930	6.0%
50% to 99% of poverty level	5,625	8.6%
100% to 124% of poverty level	2,932	4.5%
125% to 149% of poverty level	3,464	5.3%
150% to 184% of poverty level	5,205	7.9%
185% to 199% of poverty level	1,727	2.6%
200% of poverty level or more	42,868	65.2%

Geographical Mobility

	Number	Percent
Population aged 1 year and older	69,382	100.0%
Same house as previous year	61,784	89.0%
Different house, same county	3,961	5.7%
Different county, same state	2,246	3.2%
Different state	1,329	1.9%
Abroad	62	0.1%

Percentages may not sum to 100% due to rounding.

Travel Time To Work

	Number	Percent
Workers 16 years and over	28,392	100.0%
Less than 15 minutes	9,048	31.9%
15 to 29 minutes	11,190	39.4%
30 to 44 minutes	4,217	14.9%
45 to 59 minutes	1,980	7.0%
60 minutes or more	1,957	6.9%

Mean travel time 23.4 minutes

Housing Units

	Number	Percent
Total housing units	32,295	100.0%
Occupied housing units	28,007	86.7%
Owner occupied	21,001	75.0%
Renter occupied	7,006	25.0%
Vacant housing units	4,288	13.3%

Year Structure Built

	Number	Percent
Total housing units	32,295	100.0%
Built 2010 or later	241	0.7%
Built 2000 to 2009	2,266	7.0%
Built 1990 to 1999	2,709	8.4%
Built 1980 to 1989	2,364	7.3%
Built 1970 to 1979	4,975	15.4%
Built 1960 to 1969	3,206	9.9%
Built 1950 to 1959	3,626	11.2%
Built 1940 to 1949	2,385	7.4%
Built 1939 or earlier	10,523	32.6%

Median year built 1959

Value for Specified Owner-Occupied Housing Units

	Number	Percent
Specified owner-occupied housing units	21,001	100.0%
Less than \$20,000	1,405	6.7%
\$20,000 to \$39,999	1,645	7.8%
\$40,000 to \$59,999	2,567	12.2%
\$60,000 to \$79,999	3,406	16.2%
\$80,000 to \$99,999	2,887	13.7%
\$100,000 to \$124,999	2,722	13.0%
\$125,000 to \$149,999	1,351	6.4%
\$150,000 to \$199,999	2,291	10.9%
\$200,000 to \$299,999	1,878	8.9%
\$300,000 to \$499,999	719	3.4%
\$500,000 to \$999,999	81	0.4%
\$1,000,000 or more	49	0.2%

Median value \$89,700

House Heating Fuel

	Number	Percent
Occupied housing units	28,007	100.0%
Utility gas	13,246	47.3%
Bottled, tank or LP gas	1,927	6.9%
Electricity	7,812	27.9%
Fuel oil, kerosene, etc	3,437	12.3%
Coal, coke or wood	1,300	4.6%
Solar energy or other fuel	202	0.7%
No fuel used	83	0.3%

Percentages may not sum to 100% due to rounding.

Gross Rent

	Number	Percent
Specified renter-occupied housing units	7,006	100.0%
Less than \$100	137	2.0%
\$100 to \$199	328	4.7%
\$200 to \$299	670	9.6%
\$300 to \$399	537	7.7%
\$400 to \$499	766	10.9%
\$500 to \$599	1,254	17.9%
\$600 to \$699	930	13.3%
\$700 to \$799	494	7.1%
\$800 to \$899	268	3.8%
\$900 to \$999	433	6.2%
\$1,000 to \$1,499	271	3.9%
\$1,500 or more	44	0.6%
No cash rent	874	12.5%

Median gross rent \$554

Median gross rent as a percentage of household income 26.8

Selected Monthly Owner Costs for Specified Owner-Occupied Housing Units

	Number	Percent
Specified owner-occupied housing units with a mortgage	10,602	100.0%
Less than \$400	282	2.7%
\$400 to \$599	1,043	9.8%
\$600 to \$799	1,999	18.9%
\$800 to \$999	2,243	21.2%
\$1,000 to \$1,249	2,044	19.3%
\$1,250 to \$1,499	1,137	10.7%
\$1,500 to \$1,999	1,223	11.5%
\$2,000 to \$2,999	529	5.0%
\$3,000 or more	102	1.0%

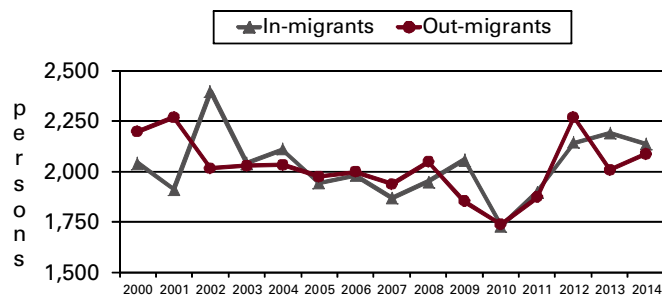
Median monthly owners cost \$973

Median monthly owners cost as a percentage of household income 19.6

Vital Statistics

	Number	Rate
Births / rate per 1,000 women aged 15 to 44	704	63.7
Teen births / rate per 1,000 females 15-19	61	35.3
Deaths / rate per 100,000 population	826	1,189.2
Marriages / rate per 1,000 population	431	6.4
Divorces / rate per 1,000 population	248	3.7

Migration



Agriculture

Land in farms (acres)	113,233
Number of farms	700
Average size (acres)	162
Total cash receipts	\$20,135,000
Per farm	\$28,764
Receipts for crops	\$4,410,000
Receipts for livestock/products	\$15,725,000

Education

Public schools buildings	23
Students (Average Daily Membership)	9,157
Teachers (Full Time Equivalent)	554.3
Expenditures per student	\$8,301
Graduation rate	89.5
Non-public schools	7
Students	662
4-year public universities	0
Branches	1
2-year public colleges/satellites	1
Private universities and colleges	0
Public libraries (Main / Branches)	4 / 5

Transportation

Registered motor vehicles	83,774
Passenger cars	50,150
Noncommercial trucks	15,942
Total license revenue	\$2,374,518.14
Interstate highway miles	33.66
Turnpike miles	0.00
U.S. highway miles	32.01
State highway miles	213.75
County, township, and municipal road miles	1,205.50
Commercial airports	2

Health Care

Physicians (MDs & DOs)	74
Registered hospitals	4
Number of beds	278
Licensed nursing homes	10
Number of beds	793
Licensed residential care	4
Number of beds	180
Persons with health insurance (Aged 0 to 64)	89.9%
Adults with insurance (Aged 18 to 64)	88.4%
Children with insurance (Aged Under 19)	94.5%

Voting

Number of registered voters	49,431
Voted in 2014 election	19,678
Percent turnout	39.8%

Communications

Television stations	0
Radio stations	3
Daily newspapers	1
Circulation	12,000
Weekly newspapers	1
Circulation	3,611

Crime

Total crimes reported in Uniform Crime Report	732
Violent crime	44
Property crime	688
Arson	0

Finance

FDIC insured financial institutions (HQs)	3
Assets (000)	\$1,041,378
Branch offices	32
Institutions represented	13

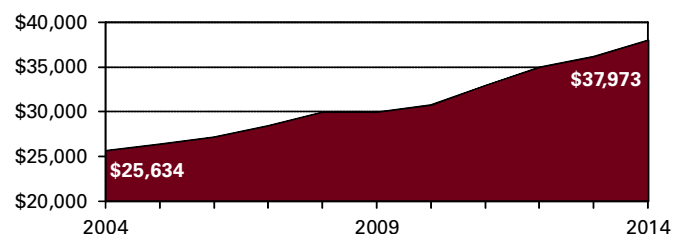
Transfer Payments

Total transfer payments	\$655,413,000
Payments to individuals	\$641,746,000
Retirement and disability	\$245,160,000
Medical payments	\$306,695,000
Income maintenance (Supplemental SSI, family assistance, food stamps, etc)	\$54,242,000
Unemployment benefits	\$6,397,000
Veterans benefits	\$15,490,000
Federal education and training assistance	\$9,829,000
Other payments to individuals	\$3,933,000
Total personal income	\$2,637,611,000
Dependency ratio	24.8%
(Percent of income from transfer payments)	

State Parks, Forests, Nature Preserves, Scenic Waterways, And Wildlife Areas

Areas/Facilities	4
Acreage	18,853.78

Per Capita Personal Income



Civilian Labor Force

	2011	2012	2013	2014	2015
Civilian labor force	32,300	31,700	32,000	31,800	31,300
Employed	29,200	29,100	29,400	29,700	29,300
Unemployed	3,100	2,600	2,600	2,100	2,000
Unemployment rate	9.5	8.2	8.2	6.7	6.3

Establishments, Employment, and Wages by Sector: 2014

Industrial Sector	Number of Establishments	Average Employment	Total Wages	Average Weekly Wage
Private Sector	1,435	19,906	\$777,709,952	\$751
Goods-Producing	218	4,334	\$305,904,021	\$1,357
Natural Resources and Mining	51	* * * * *	Data Not Available	* * * * *
Constuction	126	* * * * *	Data Not Available	* * * * *
Manufacturing	41	924	\$42,871,254	\$892
Service-Providing	1,217	15,573	\$471,805,931	\$583
Trade, Transportation and Utilities	409	5,585	\$167,560,020	\$577
Information	13	321	\$11,740,202	\$704
Financial Services	135	1,048	\$42,084,027	\$773
Professional and Business Services	167	1,356	\$80,271,362	\$1,138
Education and Health Services	205	3,691	\$115,528,988	\$602
Leisure and Hospitality	148	2,880	\$39,876,403	\$266
Other Services	138	688	\$14,466,459	\$404
Federal Government		158	\$8,142,866	\$993
State Government		757	\$32,938,600	\$837
Local Government		2,859	\$93,989,334	\$632

Private Sector total includes Unclassified establishments not shown.

Change Since 2009

Private Sector	-0.7%	6.4%	38.4%	29.9%
Goods-Producing	4.8%	27.1%	62.7%	28.0%
Natural Resources and Mining	75.9%	* * * * *	Data Not Available	* * * * *
Construction	-4.5%	* * * * *	Data Not Available	* * * * *
Manufacturing	-12.8%	-10.9%	-5.1%	6.4%
Service-Producing	-1.7%	1.9%	26.1%	23.8%
Trade, Transportation and Utilities	-2.9%	7.2%	20.2%	12.0%
Information	-23.5%	-21.9%	-22.8%	-1.3%
Financial Services	-4.9%	-9.0%	23.3%	35.6%
Professional and Business Services	5.7%	43.2%	223.3%	125.3%
Education and Health Services	3.5%	-10.2%	-1.9%	9.3%
Leisure and Hospitality	2.1%	4.3%	27.0%	21.5%
Other Services	-9.8%	-0.7%	28.5%	29.5%
Federal Government		-13.2%	-5.1%	9.7%
State Government		-6.0%	-11.3%	-5.6%
Local Government		-6.1%	-2.8%	3.6%

Business Numbers

	2011	2012	2013	2014	2015
Business starts	82	95	101	92	72
Active businesses	1,203	1,160	1,184	1,163	1,154

Major & Notable Employers

Barnesville Hospital Assn	Serv
Belmont Community Hospital	Serv
Belmont County Government	Govt
Commercial Vehicle Group	Mfg
East Ohio Regional Hospital	Serv
Kroger Co	Trade
Murray Energy/Ohio Valley Coal Co	Mining
State of Ohio	Govt
Wal-Mart Stores Inc	Trade

Residential Construction

	2011	2012	2013	2014	2015
Total units	7	11	18	5	52
Total valuation (000)	\$706	\$1,084	\$2,265	\$508	\$4,974
Total single-unit bldgs	5	11	10	5	8
Average cost per unit	\$132,777	\$98,566	\$123,708	\$101,605	\$152,735
Total multi-unit bldg units	2	0	8	0	44
Average cost per unit	\$21,300	\$0	\$128,442	\$0	\$85,273

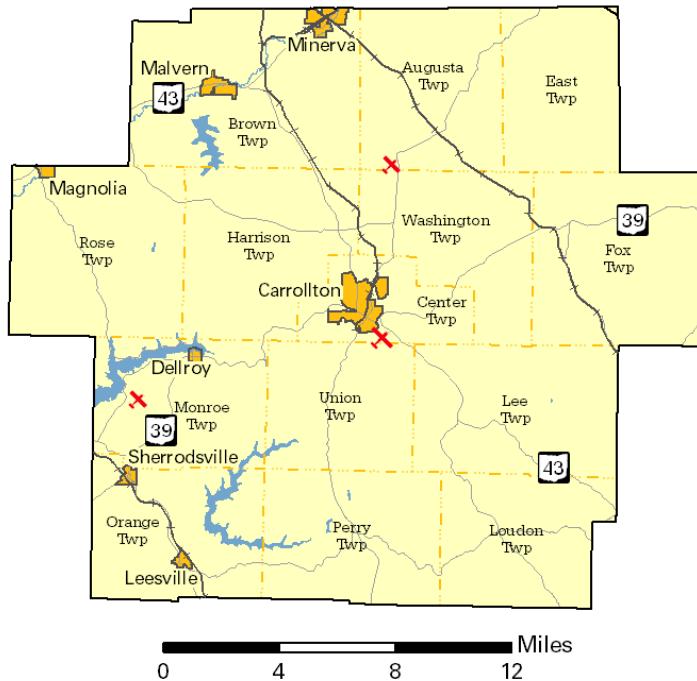
Ohio County Profiles

Prepared by the Office of Research



Carroll County

Established: Act - January 1, 1833
2015 Population: 27,811
Land Area: 394.7 square miles
County Seat: Carrollton Village
Named for: Charles Carroll, signer of the Declaration of Independence



Taxes

Taxable value of real property	\$620,801,870
Residential	\$317,474,650
Agriculture	\$161,144,030
Industrial	\$12,865,130
Commercial	\$39,183,870
Mineral	\$90,134,190
Ohio income tax liability	\$11,772,722
Average per return	\$1,195.93

Land Use/Land Cover

	Percent
Developed, Lower Intensity	6.68%
Developed, Higher Intensity	0.30%
Barren (strip mines, gravel pits, etc.)	0.11%
Forest	55.49%
Shrub/Scrub and Grasslands	2.25%
Pasture/Hay	19.61%
Cultivated Crops	13.91%
Wetlands	0.29%
Open Water	1.37%

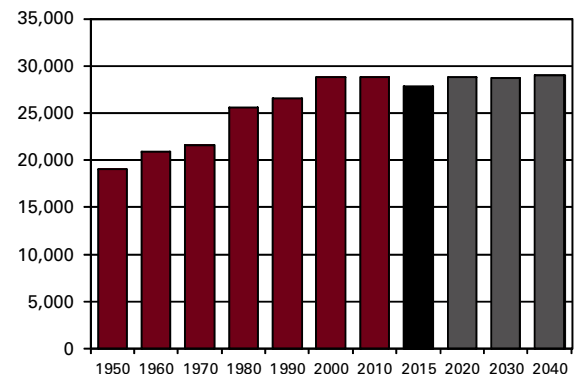
Largest Places

	Est. 2015	Census 2010
Brown twp UB	4,785	4,968
Carrollton vlg	3,137	3,247
Harrison twp	2,391	2,478
Minerva vlg (part)	1,732	1,776
Monroe twp UB	1,612	1,670
Augusta twp	1,563	1,619
Center twp UB	1,360	1,417
Rose twp UB	1,223	1,271
Washington twp	1,194	1,239
Malvern vlg	1,155	1,191

UB: Unincorporated balance.

Total Population

Census			Estimated
1800		15,761	2011 28,894
1810		15,942	2012 28,583
1820		16,057	2013 28,307
1830		17,449	2014 28,209
1840	18,108	19,039	2015 27,811
1850	17,685	20,857	
1860	15,738	21,579	
1870	14,491	25,598	
1880	16,416	26,521	
1890	17,566	28,836	
1900	16,811	28,836	
			Projected
			2020 28,770
			2030 28,720
			2040 29,040



Population by Race

	Number	Percent
ACS Total Population	28,539	100.0%
White	27,840	97.6%
African-American	204	0.7%
Native American	3	0.0%
Asian	62	0.2%
Pacific Islander	8	0.0%
Other	46	0.2%
Two or More Races	376	1.3%
Hispanic (may be of any race)	295	1.0%
Total Minority	893	3.1%

Educational Attainment

	Number	Percent
Persons 25 years and over	20,213	100.0%
No high school diploma	2,713	13.4%
High school graduate	9,969	49.3%
Some college, no degree	3,835	19.0%
Associate degree	1,556	7.7%
Bachelor's degree	1,227	6.1%
Master's degree or higher	913	4.5%

Family Type by Employment Status

	Number	Percent
Total Families	7,927	100.0%
Married couple, husband and wife in labor force	3,031	38.2%
Married couple, husband in labor force, wife not	1,468	18.5%
Married couple, wife in labor force, husband not	755	9.5%
Married couple, husband and wife not in labor force	1,368	17.3%
Male householder, in labor force	331	4.2%
Male householder, not in labor force	153	1.9%
Female householder, in labor force	528	6.7%
Female householder, not in labor force	293	3.7%

Household Income

	Number	Percent
Total Households	10,922	100.0%
Less than \$10,000	702	6.4%
\$10,000 to \$19,999	1,300	11.9%
\$20,000 to \$29,999	1,249	11.4%
\$30,000 to \$39,999	1,453	13.3%
\$40,000 to \$49,999	1,197	11.0%
\$50,000 to \$59,999	1,139	10.4%
\$60,000 to \$74,999	1,129	10.3%
\$75,000 to \$99,999	1,309	12.0%
\$100,000 to \$149,999	933	8.5%
\$150,000 to \$199,999	296	2.7%
\$200,000 or more	215	2.0%
Median household income	\$45,660	

Population by Age

	Number	Percent
ACS Total Population	28,539	100.0%
Under 5 years	1,438	5.0%
5 to 17 years	4,838	17.0%
18 to 24 years	2,050	7.2%
25 to 44 years	6,263	21.9%
45 to 64 years	8,797	30.8%
65 years and more	5,153	18.1%
Median Age	43.9	

Family Type by Presence of Own Children Under 18

	Number	Percent
Total Families	7,927	100.0%
Married-couple families with own children	2,229	28.1%
Male householder, no wife present, with own children	214	2.7%
Female householder, no husband present, with own children	476	6.0%
Families with no own children	5,008	63.2%

Poverty Status of Families By Family Type by Presence Of Related Children

	Number	Percent
Total Families	7,927	100.0%
Family income above poverty level	7,016	88.5%
Family income below poverty level	911	11.5%
Married couple, with related children	317	4.0%
Male householder, no wife present, with related children	38	0.5%
Female householder, no husband present, with related children	410	5.2%
Families with no related children	146	1.8%

Ratio of Income To Poverty Level

	Number	Percent
Population for whom poverty status is determined	28,196	100.0%
Below 50% of poverty level	2,315	8.2%
50% to 99% of poverty level	2,179	7.7%
100% to 124% of poverty level	1,175	4.2%
125% to 149% of poverty level	2,091	7.4%
150% to 184% of poverty level	1,820	6.5%
185% to 199% of poverty level	994	3.5%
200% of poverty level or more	17,622	62.5%

Geographical Mobility

	Number	Percent
Population aged 1 year and older	28,276	100.0%
Same house as previous year	25,249	89.3%
Different house, same county	1,754	6.2%
Different county, same state	951	3.4%
Different state	312	1.1%
Abroad	10	0.0%

Percentages may not sum to 100% due to rounding.

Travel Time To Work

	Number	Percent
Workers 16 years and over	11,628	100.0%
Less than 15 minutes	3,338	28.7%
15 to 29 minutes	2,773	23.8%
30 to 44 minutes	2,601	22.4%
45 to 59 minutes	1,783	15.3%
60 minutes or more	1,133	9.7%

Mean travel time 30.0 minutes

Housing Units

	Number	Percent
Total housing units	13,636	100.0%
Occupied housing units	10,922	80.1%
Owner occupied	8,571	78.5%
Renter occupied	2,351	21.5%
Vacant housing units	2,714	19.9%

Year Structure Built

	Number	Percent
Total housing units	13,636	100.0%
Built 2010 or later	76	0.6%
Built 2000 to 2009	1,500	11.0%
Built 1990 to 1999	2,068	15.2%
Built 1980 to 1989	1,151	8.4%
Built 1970 to 1979	2,211	16.2%
Built 1960 to 1969	1,675	12.3%
Built 1950 to 1959	1,337	9.8%
Built 1940 to 1949	631	4.6%
Built 1939 or earlier	2,987	21.9%

Median year built 1971

Value for Specified Owner-Occupied Housing Units

	Number	Percent
Specified owner-occupied housing units	8,571	100.0%
Less than \$20,000	483	5.6%
\$20,000 to \$39,999	472	5.5%
\$40,000 to \$59,999	607	7.1%
\$60,000 to \$79,999	992	11.6%
\$80,000 to \$99,999	1,206	14.1%
\$100,000 to \$124,999	1,209	14.1%
\$125,000 to \$149,999	490	5.7%
\$150,000 to \$199,999	1,442	16.8%
\$200,000 to \$299,999	1,019	11.9%
\$300,000 to \$499,999	359	4.2%
\$500,000 to \$999,999	204	2.4%
\$1,000,000 or more	88	1.0%

Median value \$110,900

House Heating Fuel

	Number	Percent
Occupied housing units	10,922	100.0%
Utility gas	3,888	35.6%
Bottled, tank or LP gas	1,542	14.1%
Electricity	2,800	25.6%
Fuel oil, kerosene, etc	1,275	11.7%
Coal, coke or wood	1,189	10.9%
Solar energy or other fuel	218	2.0%
No fuel used	10	0.1%

Percentages may not sum to 100% due to rounding.

Gross Rent

	Number	Percent
Specified renter-occupied housing units	2,351	100.0%
Less than \$100	7	0.3%
\$100 to \$199	29	1.2%
\$200 to \$299	69	2.9%
\$300 to \$399	193	8.2%
\$400 to \$499	298	12.7%
\$500 to \$599	378	16.1%
\$600 to \$699	300	12.8%
\$700 to \$799	275	11.7%
\$800 to \$899	140	6.0%
\$900 to \$999	140	6.0%
\$1,000 to \$1,499	163	6.9%
\$1,500 or more	0	0.0%
No cash rent	359	15.3%

Median gross rent \$607

Median gross rent as a percentage of household income 28.0

Selected Monthly Owner Costs for Specified Owner-Occupied Housing Units

	Number	Percent
Specified owner-occupied housing units with a mortgage	4,928	100.0%
Less than \$400	100	2.0%
\$400 to \$599	338	6.9%
\$600 to \$799	575	11.7%
\$800 to \$999	978	19.8%
\$1,000 to \$1,249	1,049	21.3%
\$1,250 to \$1,499	807	16.4%
\$1,500 to \$1,999	726	14.7%
\$2,000 to \$2,999	279	5.7%
\$3,000 or more	76	1.5%

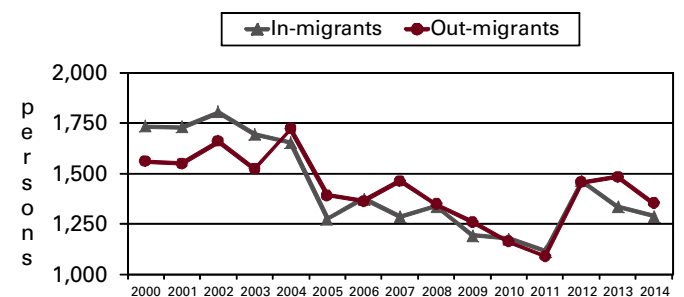
Median monthly owners cost \$1,113

Median monthly owners cost as a percentage of household income 22.6

Vital Statistics

	Number	Rate
Births / rate per 1,000 women aged 15 to 44	264	57.7
Teen births / rate per 1,000 females 15-19	16	17.8
Deaths / rate per 100,000 population	384	1,362.3
Marriages / rate per 1,000 population	176	6.2
Divorces / rate per 1,000 population	84	3.0

Migration



Agriculture

Land in farms (acres)	106,256
Number of farms	733
Average size (acres)	145
Total cash receipts	\$39,199,000
Per farm	\$53,478
Receipts for crops	\$20,239,000
Receipts for livestock/products	\$18,960,000

Education

Public schools buildings	8
Students (Average Daily Membership)	2,820
Teachers (Full Time Equivalent)	164.0
Expenditures per student	\$10,676
Graduation rate	92.9
Non-public schools	0
Students	0
4-year public universities	0
Branches	0
2-year public colleges/satellites	0
Private universities and colleges	0
Public libraries (Main / Branches)	1 / 1

Transportation

Registered motor vehicles	40,427
Passenger cars	20,785
Noncommercial trucks	8,845
Total license revenue	\$1,132,120.19
Interstate highway miles	0.00
Turnpike miles	0.00
U.S. highway miles	0.00
State highway miles	152.53
County, township, and municipal road miles	767.11
Commercial airports	3

Health Care

Physicians (MDs & DOs)	13
Registered hospitals	0
Number of beds	0
Licensed nursing homes	3
Number of beds	219
Licensed residential care	0
Number of beds	0
Persons with health insurance (Aged 0 to 64)	88.8%
Adults with insurance (Aged 18 to 64)	87.2%
Children with insurance (Aged Under 19)	93.1%

Voting

Number of registered voters	18,174
Voted in 2014 election	8,014
Percent turnout	44.1%

Communications

Television stations	0
Radio stations	0
Daily newspapers	0
Circulation	0
Weekly newspapers	1
Circulation	4,800

Crime

Total crimes reported in Uniform Crime Report	337
Violent crime	51
Property crime	284
Arson	2

Finance

FDIC insured financial institutions (HQs)	0
Assets (000)	\$0
Branch offices	9
Institutions represented	6

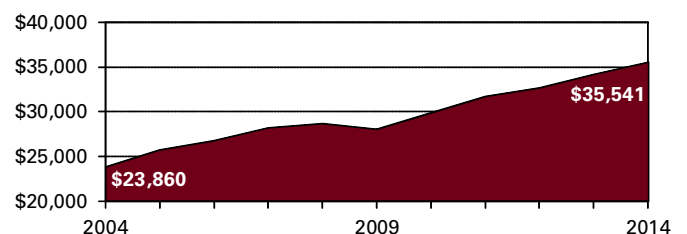
Transfer Payments

Total transfer payments	\$250,536,000
Payments to individuals	\$244,722,000
Retirement and disability	\$98,613,000
Medical payments	\$115,873,000
Income maintenance (Supplemental SSI, family assistance, food stamps, etc)	\$18,513,000
Unemployment benefits	\$2,704,000
Veterans benefits	\$4,576,000
Federal education and training assistance	\$2,776,000
Other payments to individuals	\$1,667,000
Total personal income	\$1,001,808,000
Dependency ratio	25.0%
(Percent of income from transfer payments)	

State Parks, Forests, Nature Preserves, Scenic Waterways, And Wildlife Areas

Areas/Facilities	2
Acreage	699.91

Per Capita Personal Income



Civilian Labor Force

	2011	2012	2013	2014	2015
Civilian labor force	14,100	13,800	13,700	13,600	13,500
Employed	12,700	12,700	12,600	12,700	12,700
Unemployed	1,400	1,100	1,100	800	800
Unemployment rate	10.2	7.9	7.9	6.1	5.9

Establishments, Employment, and Wages by Sector: 2014

Industrial Sector	Number of Establishments	Average Employment	Total Wages	Average Weekly Wage
Private Sector	479	5,775	\$214,353,711	\$714
Goods-Producing	125	2,247	\$115,633,195	\$990
Natural Resources and Mining	20	248	\$15,088,589	\$1,169
Constuction	65	584	\$42,531,451	\$1,400
Manufacturing	40	1,415	\$58,013,155	\$789
Service-Providing	355	3,528	\$98,720,516	\$538
Trade, Transportation and Utilities	122	1,338	\$49,505,612	\$711
Information	6	37	\$1,593,528	\$819
Financial Services	35	147	\$4,511,523	\$591
Professional and Business Services	56	404	\$13,204,818	\$628
Education and Health Services	37	618	\$15,945,674	\$497
Leisure and Hospitality	54	770	\$9,472,039	\$236
Other Services	43	212	\$4,433,606	\$402
Federal Government		45	\$1,906,418	\$815
State Government		33	\$1,575,445	\$930
Local Government		913	\$29,169,078	\$614

Private Sector total includes Unclassified establishments not shown.

Change Since 2009

Private Sector	5.3%	31.8%	79.4%	36.3%
Goods-Producing	-2.3%	62.6%	124.4%	38.1%
Natural Resources and Mining	100.0%	191.8%	247.9%	19.2%
Construction	-14.5%	202.6%	648.2%	146.9%
Manufacturing	-4.8%	28.2%	39.7%	9.1%
Service-Producing	8.6%	17.6%	45.3%	23.4%
Trade, Transportation and Utilities	7.0%	11.6%	43.2%	28.3%
Information	0.0%	0.0%	12.8%	10.2%
Financial Services	34.6%	19.5%	59.6%	34.3%
Professional and Business Services	24.4%	147.9%	253.9%	43.1%
Education and Health Services	-5.1%	-11.7%	-2.9%	10.2%
Leisure and Hospitality	12.5%	37.0%	76.4%	28.3%
Other Services	-8.5%	-0.5%	24.6%	25.2%
Federal Government		-15.1%	-11.2%	3.6%
State Government		6.5%	3.0%	-1.2%
Local Government		-8.5%	0.3%	9.4%

Business Numbers

	2011	2012	2013	2014	2015
Business starts	27	47	30	26	30
Active businesses	385	395	383	389	378

Major & Notable Employers

Atwood Lake Resort	Serv
Carroll County Government	Govt
Carroll Health Care Center Inc	Serv
Carrollton Exempted Village Schools	Govt
Colfor Manufacturing	Mfg
GBS Corporation	Mfg
St John's Villa	Serv

Residential Construction

	2011	2012	2013	2014	2015
Total units	5	1	4	1	0
Total valuation (000)	\$707	\$175	\$336	\$80	\$0
Total single-unit bldgs	5	1	4	1	0
Average cost per unit	\$141,400	\$175,000	\$84,000	\$80,000	\$0
Total multi-unit bldg units	0	0	0	0	0
Average cost per unit	\$0	\$0	\$0	\$0	\$0

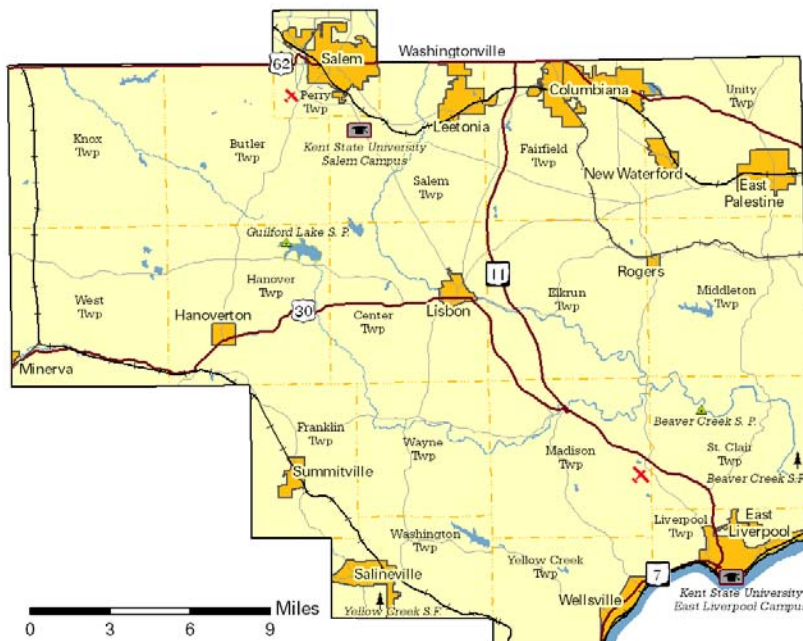
Ohio County Profiles

Prepared by the Office of Research



Columbiana County

Established: Act - May 1, 1803
2015 Population: 104,806
Land Area: 532.5 square miles
County Seat: Lisbon Village
Named for: Christopher Columbus



Taxes

Taxable value of real property	\$1,548,984,820
Residential	\$1,072,017,830
Agriculture	\$232,775,150
Industrial	\$53,027,220
Commercial	\$185,071,290
Mineral	\$6,093,330
Ohio income tax liability	\$42,982,210
Average per return	\$994.50

Land Use/Land Cover

	Percent
Developed, Lower Intensity	12.75%
Developed, Higher Intensity	1.25%
Barren (strip mines, gravel pits, etc.)	0.38%
Forest	43.99%
Shrub/Scrub and Grasslands	2.08%
Pasture/Hay	19.47%
Cultivated Crops	18.80%
Wetlands	0.36%
Open Water	0.90%

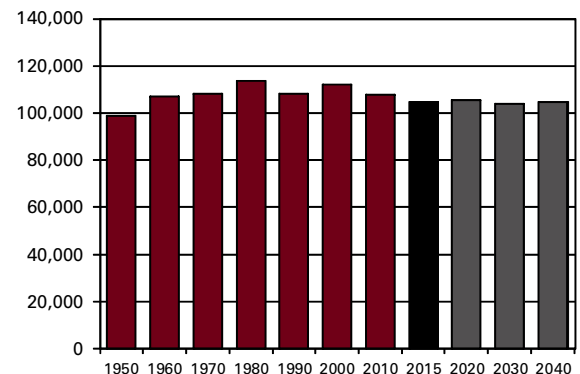
Largest Places

	Est. 2015	Census 2010
Salem city (part)	11,999	12,291
East Liverpool city	10,846	11,212
St. Clair twp	7,746	7,956
Columbiana city (part)	5,625	5,725
Elkrum twp UB	4,579	4,654
East Palestine vlg	4,576	4,718
Perry twp UB	4,443	4,559
Knox twp	4,297	4,434
Fairfield twp UB	3,984	4,094
Liverpool twp	3,893	4,030

UB: Unincorporated balance.

Total Population

Census			Estimated
1800		1910	76,619
1810	10,878	1920	83,131
1820	22,033	1930	86,484
1830	35,592	1940	90,121
1840	40,378	1950	98,920
1850	33,621	1960	107,004
1860	32,836	1970	108,310
1870	38,299	1980	113,572
1880	48,602	1990	108,276
1890	59,029	2000	112,075
1900	68,590	2010	107,841
		2011	107,265
		2012	106,441
		2013	105,827
		2014	105,597
		2015	104,806
		Projected	
		2020	105,380
		2030	103,870
		2040	104,710



Population by Race

	Number	Percent
ACS Total Population	106,622	100.0%
White	101,701	95.4%
African-American	2,340	2.2%
Native American	132	0.1%
Asian	379	0.4%
Pacific Islander	0	0.0%
Other	516	0.5%
Two or More Races	1,554	1.5%
Hispanic (may be of any race)	1,482	1.4%
Total Minority	5,836	5.5%

Educational Attainment

	Number	Percent
Persons 25 years and over	75,788	100.0%
No high school diploma	9,685	12.8%
High school graduate	35,537	46.9%
Some college, no degree	13,564	17.9%
Associate degree	6,678	8.8%
Bachelor's degree	6,845	9.0%
Master's degree or higher	3,479	4.6%

Family Type by Employment Status

	Number	Percent
Total Families	28,589	100.0%
Married couple, husband and wife in labor force	10,651	37.3%
Married couple, husband in labor force, wife not	4,742	16.6%
Married couple, wife in labor force, husband not	1,938	6.8%
Married couple, husband and wife not in labor force	4,331	15.1%
Male householder, in labor force	1,489	5.2%
Male householder, not in labor force	529	1.9%
Female householder, in labor force	3,147	11.0%
Female householder, not in labor force	1,762	6.2%

Household Income

	Number	Percent
Total Households	42,184	100.0%
Less than \$10,000	3,364	8.0%
\$10,000 to \$19,999	5,586	13.2%
\$20,000 to \$29,999	5,452	12.9%
\$30,000 to \$39,999	4,898	11.6%
\$40,000 to \$49,999	4,298	10.2%
\$50,000 to \$59,999	3,616	8.6%
\$60,000 to \$74,999	5,016	11.9%
\$75,000 to \$99,999	4,910	11.6%
\$100,000 to \$149,999	3,639	8.6%
\$150,000 to \$199,999	715	1.7%
\$200,000 or more	690	1.6%
Median household income	\$43,707	

Population by Age

	Number	Percent
ACS Total Population	106,622	100.0%
Under 5 years	5,759	5.4%
5 to 17 years	16,928	15.9%
18 to 24 years	8,147	7.6%
25 to 44 years	25,427	23.8%
45 to 64 years	31,854	29.9%
65 years and more	18,507	17.4%
Median Age	42.8	

Family Type by Presence of Own Children Under 18

	Number	Percent
Total Families	28,589	100.0%
Married-couple families with own children	7,269	25.4%
Male householder, no wife present, with own children	1,012	3.5%
Female householder, no husband present, with own children	2,560	9.0%
Families with no own children	17,748	62.1%

Poverty Status of Families By Family Type by Presence Of Related Children

	Number	Percent
Total Families	28,589	100.0%
Family income above poverty level	25,109	87.8%
Family income below poverty level	3,480	12.2%
Married couple, with related children	657	2.3%
Male householder, no wife present, with related children	340	1.2%
Female householder, no husband present, with related children	1,681	5.9%
Families with no related children	802	2.8%

Ratio of Income To Poverty Level

	Number	Percent
Population for whom poverty status is determined	102,586	100.0%
Below 50% of poverty level	6,250	6.1%
50% to 99% of poverty level	10,377	10.1%
100% to 124% of poverty level	5,439	5.3%
125% to 149% of poverty level	6,221	6.1%
150% to 184% of poverty level	7,498	7.3%
185% to 199% of poverty level	3,999	3.9%
200% of poverty level or more	62,802	61.2%

Geographical Mobility

	Number	Percent
Population aged 1 year and older	105,438	100.0%
Same house as previous year	91,117	86.4%
Different house, same county	9,133	8.7%
Different county, same state	2,787	2.6%
Different state	2,197	2.1%
Abroad	204	0.2%

Percentages may not sum to 100% due to rounding.

Travel Time To Work

	Number	Percent
Workers 16 years and over	44,041	100.0%
Less than 15 minutes	15,201	34.5%
15 to 29 minutes	14,005	31.8%
30 to 44 minutes	8,117	18.4%
45 to 59 minutes	3,734	8.5%
60 minutes or more	2,984	6.8%

Mean travel time 24.8 minutes

Housing Units

	Number	Percent
Total housing units	46,860	100.0%
Occupied housing units	42,184	90.0%
Owner occupied	30,197	71.6%
Renter occupied	11,987	28.4%
Vacant housing units	4,676	10.0%

Year Structure Built

	Number	Percent
Total housing units	46,860	100.0%
Built 2010 or later	191	0.4%
Built 2000 to 2009	3,769	8.0%
Built 1990 to 1999	4,954	10.6%
Built 1980 to 1989	3,633	7.8%
Built 1970 to 1979	7,260	15.5%
Built 1960 to 1969	4,614	9.8%
Built 1950 to 1959	5,712	12.2%
Built 1940 to 1949	3,359	7.2%
Built 1939 or earlier	13,368	28.5%

Median year built 1962

Value for Specified Owner-Occupied Housing Units

	Number	Percent
Specified owner-occupied housing units	30,197	100.0%
Less than \$20,000	1,589	5.3%
\$20,000 to \$39,999	2,342	7.8%
\$40,000 to \$59,999	2,986	9.9%
\$60,000 to \$79,999	4,213	14.0%
\$80,000 to \$99,999	4,396	14.6%
\$100,000 to \$124,999	3,952	13.1%
\$125,000 to \$149,999	2,715	9.0%
\$150,000 to \$199,999	3,999	13.2%
\$200,000 to \$299,999	2,646	8.8%
\$300,000 to \$499,999	992	3.3%
\$500,000 to \$999,999	235	0.8%
\$1,000,000 or more	132	0.4%

Median value \$97,600

House Heating Fuel

	Number	Percent
Occupied housing units	42,184	100.0%
Utility gas	21,472	50.9%
Bottled, tank or LP gas	2,714	6.4%
Electricity	10,693	25.3%
Fuel oil, kerosene, etc	4,428	10.5%
Coal, coke or wood	2,384	5.7%
Solar energy or other fuel	392	0.9%
No fuel used	101	0.2%

Percentages may not sum to 100% due to rounding.

Gross Rent

	Number	Percent
Specified renter-occupied housing units	11,987	100.0%
Less than \$100	167	1.4%
\$100 to \$199	288	2.4%
\$200 to \$299	491	4.1%
\$300 to \$399	758	6.3%
\$400 to \$499	1,446	12.1%
\$500 to \$599	1,965	16.4%
\$600 to \$699	1,970	16.4%
\$700 to \$799	1,175	9.8%
\$800 to \$899	1,074	9.0%
\$900 to \$999	385	3.2%
\$1,000 to \$1,499	624	5.2%
\$1,500 or more	129	1.1%
No cash rent	1,515	12.6%

Median gross rent \$607

Median gross rent as a percentage of household income 26.9

Selected Monthly Owner Costs for Specified Owner-Occupied Housing Units

	Number	Percent
Specified owner-occupied housing units with a mortgage	17,217	100.0%
Less than \$400	312	1.8%
\$400 to \$599	1,253	7.3%
\$600 to \$799	2,780	16.1%
\$800 to \$999	3,908	22.7%
\$1,000 to \$1,249	3,655	21.2%
\$1,250 to \$1,499	2,029	11.8%
\$1,500 to \$1,999	2,147	12.5%
\$2,000 to \$2,999	984	5.7%
\$3,000 or more	149	0.9%

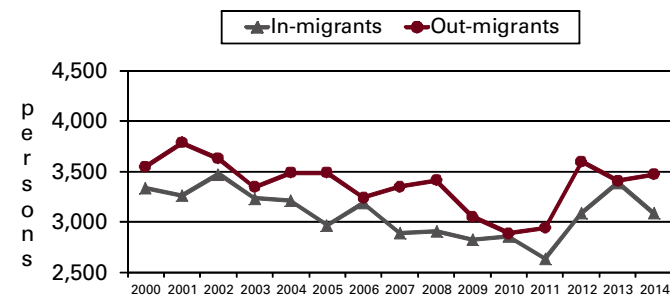
Median monthly owners cost \$1,024

Median monthly owners cost as a percentage of household income 20.3

Vital Statistics

	Number	Rate
Births / rate per 1,000 women aged 15 to 44	1,053	60.9
Teen births / rate per 1,000 females 15-19	103	35.4
Deaths / rate per 100,000 population	1,276	1,207.4
Marriages / rate per 1,000 population	631	5.9
Divorces / rate per 1,000 population	364	3.4

Migration



Agriculture

Land in farms (acres)	127,846
Number of farms	1,045
Average size (acres)	122
Total cash receipts	\$99,296,000
Per farm	\$95,020
Receipts for crops	\$38,141,000
Receipts for livestock/products	\$61,155,000

Education

Public schools buildings	39
Students (Average Daily Membership)	15,375
Teachers (Full Time Equivalent)	970.8
Expenditures per student	\$10,524
Graduation rate	83.4
Non-public schools	4
Students	525
4-year public universities	0
Branches	2
2-year public colleges/satellites	0
Private universities and colleges	0
Public libraries (Main / Branches)	7 / 0

Transportation

Registered motor vehicles	125,578
Passenger cars	75,185
Noncommercial trucks	23,797
Total license revenue	\$3,520,748.78
Interstate highway miles	0.00
Turnpike miles	0.00
U.S. highway miles	50.44
State highway miles	251.96
County, township, and municipal road miles	1,332.15
Commercial airports	2

Health Care

Physicians (MDs & DOs)	101
Registered hospitals	2
Number of beds	351
Licensed nursing homes	12
Number of beds	923
Licensed residential care	7
Number of beds	343
Persons with health insurance (Aged 0 to 64)	89.2%
Adults with insurance (Aged 18 to 64)	87.4%
Children with insurance (Aged Under 19)	94.2%

Voting

Number of registered voters	65,551
Voted in 2014 election	27,780
Percent turnout	42.4%

Communications

Television stations	0
Radio stations	0
Daily newspapers	3
Circulation	20,600
Weekly newspapers	0
Circulation	0

Crime

Total crimes reported in Uniform Crime Report	836
Violent crime	55
Property crime	779
Arson	2

Finance

FDIC insured financial institutions (HQs)	0
Assets (000)	\$0
Branch offices	39
Institutions represented	10

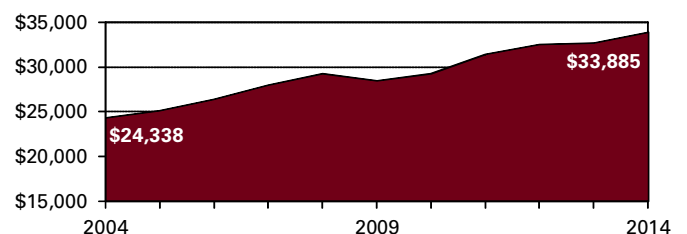
Transfer Payments

Total transfer payments	\$1,001,932,000
Payments to individuals	\$980,690,000
Retirement and disability	\$369,506,000
Medical payments	\$460,701,000
Income maintenance (Supplemental SSI, family assistance, food stamps, etc)	\$91,184,000
Unemployment benefits	\$10,251,000
Veterans benefits	\$30,226,000
Federal education and training assistance	\$12,485,000
Other payments to individuals	\$6,337,000
Total personal income	\$3,581,153,000
Dependency ratio	28.0%
(Percent of income from transfer payments)	

State Parks, Forests, Nature Preserves, Scenic Waterways, And Wildlife Areas

Areas/Facilities	10
Acreage	9,607.73

Per Capita Personal Income



Civilian Labor Force

	2011	2012	2013	2014	2015
Civilian labor force	51,900	50,900	50,700	50,100	49,600
Employed	46,600	46,700	46,500	46,900	46,600
Unemployed	5,300	4,200	4,200	3,200	2,900
Unemployment rate	10.2	8.2	8.3	6.5	5.9

Establishments, Employment, and Wages by Sector: 2014

Industrial Sector	Number of Establishments	Average Employment	Total Wages	Average Weekly Wage
Private Sector	1,994	25,974	\$864,311,235	\$640
Goods-Producing	416	7,584	\$317,078,685	\$804
Natural Resources and Mining	43	406	\$15,863,910	\$752
Constuction	193	1,180	\$51,664,961	\$842
Manufacturing	180	5,999	\$249,549,814	\$800
Service-Providing	1,579	18,390	\$547,232,550	\$572
Trade, Transportation and Utilities	521	6,288	\$206,726,107	\$632
Information	17	143	\$6,228,545	\$841
Financial Services	165	848	\$31,270,789	\$709
Professional and Business Services	232	2,029	\$68,278,558	\$647
Education and Health Services	271	5,457	\$178,105,294	\$628
Leisure and Hospitality	193	2,657	\$31,441,425	\$228
Other Services	176	967	\$25,086,064	\$499
Federal Government		584	\$37,567,744	\$1,238
State Government		333	\$19,397,491	\$1,120
Local Government		3,934	\$139,539,455	\$682

Private Sector total includes Unclassified establishments not shown.

Change Since 2009

Private Sector	-4.5%	7.5%	23.5%	14.9%
Goods-Producing	-10.3%	14.5%	32.3%	15.5%
Natural Resources and Mining	34.4%	23.4%	38.0%	11.9%
Construction	-13.8%	20.5%	51.0%	25.3%
Manufacturing	-13.9%	12.8%	28.6%	14.0%
Service-Producing	-2.8%	4.9%	18.9%	13.3%
Trade, Transportation and Utilities	-4.1%	6.3%	23.5%	16.2%
Information	-10.5%	5.1%	18.9%	13.0%
Financial Services	-8.3%	1.0%	10.1%	9.1%
Professional and Business Services	0.9%	22.6%	41.5%	15.3%
Education and Health Services	8.8%	0.2%	10.6%	10.4%
Leisure and Hospitality	-4.9%	3.5%	12.5%	9.1%
Other Services	-11.1%	-0.5%	13.8%	14.4%
Federal Government		-0.7%	10.2%	10.9%
State Government		-4.6%	9.5%	14.8%
Local Government		-2.6%	2.5%	5.2%

Business Numbers

	2011	2012	2013	2014	2015
Business starts	152	162	115	119	98
Active businesses	1,838	1,837	1,841	1,814	1,811

Residential Construction

	2011	2012	2013	2014	2015
Total units	12	18	30	16	50
Total valuation (000)	\$1,679	\$2,593	\$4,840	\$2,311	\$6,721
Total single-unit bldgs	12	18	28	16	27
Average cost per unit	\$139,955	\$144,067	\$165,713	\$144,409	\$177,879
Total multi-unit bldg units	0	0	2	0	23
Average cost per unit	\$0	\$0	\$100,000	\$0	\$83,391

Major & Notable Employers

American Standard Brands	Mfg
Columbiana County Government	Govt
East Liverpool City Schools	Govt
East Liverpool City Hospital	Serv
Flex-N-Gate/Ventra Salem	Mfg
Fresh Mark Inc	Mfg
Salem City Schools	Govt
Salem Community Hospital	Serv
State of Ohio	Govt
Wal-Mart Stores Inc	Trade

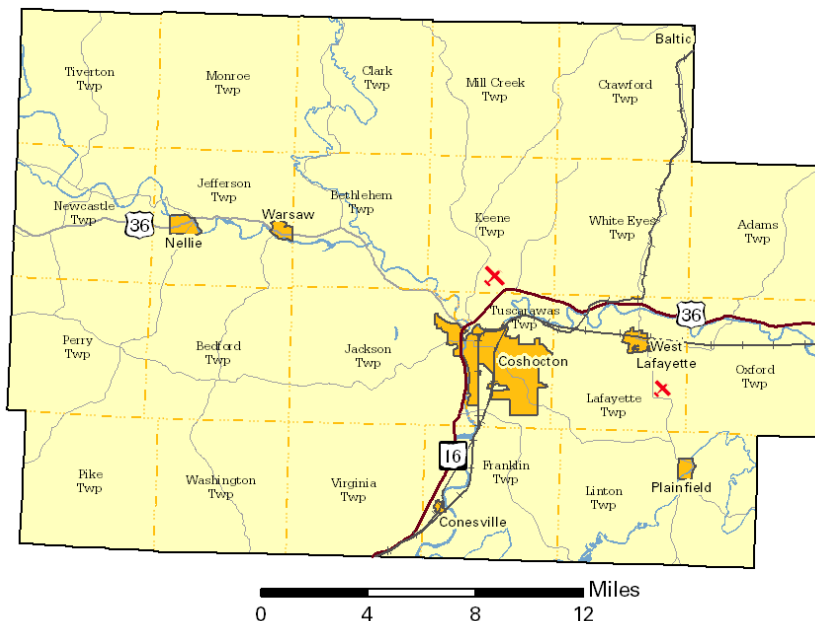
Ohio County Profiles

Prepared by the Office of Research



Coshocton County

Established: Act - January 31, 1810
2015 Population: 36,569
Land Area: 564.1 square miles
County Seat: Coshocton City
Named for: Native American word meaning "black bear town"



Taxes

Taxable value of real property	\$590,918,090
Residential	\$331,348,470
Agriculture	\$140,662,450
Industrial	\$45,193,380
Commercial	\$70,013,110
Mineral	\$3,700,680
Ohio income tax liability	\$13,638,228
Average per return	\$896.60

Land Use/Land Cover

	Percent
Developed, Lower Intensity	7.24%
Developed, Higher Intensity	0.53%
Barren (strip mines, gravel pits, etc.)	0.33%
Forest	55.23%
Shrub/Scrub and Grasslands	0.95%
Pasture/Hay	17.90%
Cultivated Crops	16.00%
Wetlands	0.59%
Open Water	1.22%

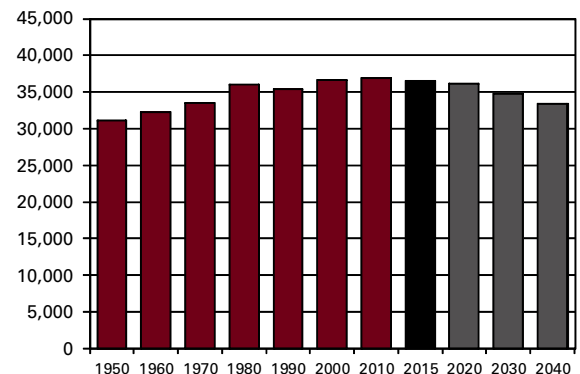
Largest Places

	Est. 2015	Census 2010
Coshocton city	11,121	11,216
West Lafayette vlg	2,286	2,320
Jackson twp	1,932	1,947
Tuscarawas twp	1,849	1,864
Crawford twp UB	1,848	1,858
Lafayette twp UB	1,745	1,761
Keene twp	1,677	1,690
Oxford twp	1,515	1,527
White Eyes twp	1,186	1,193
Bethlehem twp	1,115	1,123

UB: Unincorporated balance.

Total Population

Census			Estimated
1800		1910	30,121
1810		1920	29,595
1820	7,086	1930	28,976
1830	11,161	1940	30,594
1840	21,590	1950	31,141
1850	25,674	1960	32,224
1860	25,032	1970	33,486
1870	23,600	1980	36,024
1880	26,642	1990	35,427
1890	26,703	2000	36,655
1900	29,337	2010	36,901
		2011	36,919
		2012	36,821
		2013	36,745
		2014	36,568
		2015	36,569
		Projected	
		2020	36,190
		2030	34,790
		2040	33,390



Population by Race

	Number	Percent
ACS Total Population	36,768	100.0%
White	35,653	97.0%
African-American	391	1.1%
Native American	59	0.2%
Asian	98	0.3%
Pacific Islander	0	0.0%
Other	51	0.1%
Two or More Races	516	1.4%
Hispanic (may be of any race)	313	0.9%
Total Minority	1,343	3.7%

Educational Attainment

	Number	Percent
Persons 25 years and over	25,219	100.0%
No high school diploma	4,006	15.9%
High school graduate	12,334	48.9%
Some college, no degree	4,043	16.0%
Associate degree	1,773	7.0%
Bachelor's degree	2,099	8.3%
Master's degree or higher	964	3.8%

Family Type by Employment Status

	Number	Percent
Total Families	10,017	100.0%
Married couple, husband and wife in labor force	3,568	35.6%
Married couple, husband in labor force, wife not	1,981	19.8%
Married couple, wife in labor force, husband not	572	5.7%
Married couple, husband and wife not in labor force	1,638	16.4%
Male householder, in labor force	473	4.7%
Male householder, not in labor force	178	1.8%
Female householder, in labor force	995	9.9%
Female householder, not in labor force	612	6.1%

Household Income

	Number	Percent
Total Households	14,561	100.0%
Less than \$10,000	1,219	8.4%
\$10,000 to \$19,999	2,021	13.9%
\$20,000 to \$29,999	1,914	13.1%
\$30,000 to \$39,999	1,814	12.5%
\$40,000 to \$49,999	1,640	11.3%
\$50,000 to \$59,999	1,387	9.5%
\$60,000 to \$74,999	1,351	9.3%
\$75,000 to \$99,999	1,657	11.4%
\$100,000 to \$149,999	1,126	7.7%
\$150,000 to \$199,999	302	2.1%
\$200,000 or more	130	0.9%
Median household income	\$41,569	

Population by Age

	Number	Percent
ACS Total Population	36,768	100.0%
Under 5 years	2,221	6.0%
5 to 17 years	6,458	17.6%
18 to 24 years	2,870	7.8%
25 to 44 years	8,516	23.2%
45 to 64 years	10,514	28.6%
65 years and more	6,189	16.8%
Median Age	41.3	

Family Type by Presence of Own Children Under 18

	Number	Percent
Total Families	10,017	100.0%
Married-couple families with own children	2,686	26.8%
Male householder, no wife present, with own children	253	2.5%
Female householder, no husband present, with own children	852	8.5%
Families with no own children	6,226	62.2%

Poverty Status of Families By Family Type by Presence Of Related Children

	Number	Percent
Total Families	10,017	100.0%
Family income above poverty level	8,711	87.0%
Family income below poverty level	1,306	13.0%
Married couple, with related children	369	3.7%
Male householder, no wife present, with related children	92	0.9%
Female householder, no husband present, with related children	567	5.7%
Families with no related children	278	2.8%

Ratio of Income To Poverty Level

	Number	Percent
Population for whom poverty status is determined	36,306	100.0%
Below 50% of poverty level	2,494	6.9%
50% to 99% of poverty level	4,085	11.3%
100% to 124% of poverty level	2,186	6.0%
125% to 149% of poverty level	2,462	6.8%
150% to 184% of poverty level	2,601	7.2%
185% to 199% of poverty level	1,723	4.7%
200% of poverty level or more	20,755	57.2%

Geographical Mobility

	Number	Percent
Population aged 1 year and older	36,388	100.0%
Same house as previous year	32,031	88.0%
Different house, same county	3,108	8.5%
Different county, same state	1,019	2.8%
Different state	213	0.6%
Abroad	17	0.0%

Percentages may not sum to 100% due to rounding.

Travel Time To Work

	Number	Percent
Workers 16 years and over	14,153	100.0%
Less than 15 minutes	5,386	38.1%
15 to 29 minutes	4,604	32.5%
30 to 44 minutes	2,081	14.7%
45 to 59 minutes	917	6.5%
60 minutes or more	1,165	8.2%

Mean travel time 23.6 minutes

Housing Units

	Number	Percent
Total housing units	16,442	100.0%
Occupied housing units	14,561	88.6%
Owner occupied	10,757	73.9%
Renter occupied	3,804	26.1%
Vacant housing units	1,881	11.4%

Year Structure Built

	Number	Percent
Total housing units	16,442	100.0%
Built 2010 or later	100	0.6%
Built 2000 to 2009	1,617	9.8%
Built 1990 to 1999	1,808	11.0%
Built 1980 to 1989	1,395	8.5%
Built 1970 to 1979	2,253	13.7%
Built 1960 to 1969	1,576	9.6%
Built 1950 to 1959	1,667	10.1%
Built 1940 to 1949	724	4.4%
Built 1939 or earlier	5,302	32.2%

Median year built 1963

Value for Specified Owner-Occupied Housing Units

	Number	Percent
Specified owner-occupied housing units	10,757	100.0%
Less than \$20,000	631	5.9%
\$20,000 to \$39,999	966	9.0%
\$40,000 to \$59,999	962	8.9%
\$60,000 to \$79,999	1,664	15.5%
\$80,000 to \$99,999	1,521	14.1%
\$100,000 to \$124,999	1,342	12.5%
\$125,000 to \$149,999	862	8.0%
\$150,000 to \$199,999	1,348	12.5%
\$200,000 to \$299,999	933	8.7%
\$300,000 to \$499,999	396	3.7%
\$500,000 to \$999,999	95	0.9%
\$1,000,000 or more	37	0.3%

Median value \$95,600

House Heating Fuel

	Number	Percent
Occupied housing units	14,561	100.0%
Utility gas	6,972	47.9%
Bottled, tank or LP gas	1,755	12.1%
Electricity	3,248	22.3%
Fuel oil, kerosene, etc	1,131	7.8%
Coal, coke or wood	1,327	9.1%
Solar energy or other fuel	101	0.7%
No fuel used	27	0.2%

Percentages may not sum to 100% due to rounding.

Gross Rent

	Number	Percent
Specified renter-occupied housing units	3,804	100.0%
Less than \$100	0	0.0%
\$100 to \$199	119	3.1%
\$200 to \$299	181	4.8%
\$300 to \$399	323	8.5%
\$400 to \$499	531	14.0%
\$500 to \$599	733	19.3%
\$600 to \$699	653	17.2%
\$700 to \$799	371	9.8%
\$800 to \$899	239	6.3%
\$900 to \$999	82	2.2%
\$1,000 to \$1,499	137	3.6%
\$1,500 or more	20	0.5%
No cash rent	415	10.9%

Median gross rent \$571

Median gross rent as a percentage of household income 28.0

Selected Monthly Owner Costs for Specified Owner-Occupied Housing Units

	Number	Percent
Specified owner-occupied housing units with a mortgage	6,034	100.0%
Less than \$400	91	1.5%
\$400 to \$599	665	11.0%
\$600 to \$799	1,217	20.2%
\$800 to \$999	1,292	21.4%
\$1,000 to \$1,249	1,145	19.0%
\$1,250 to \$1,499	717	11.9%
\$1,500 to \$1,999	594	9.8%
\$2,000 to \$2,999	264	4.4%
\$3,000 or more	49	0.8%

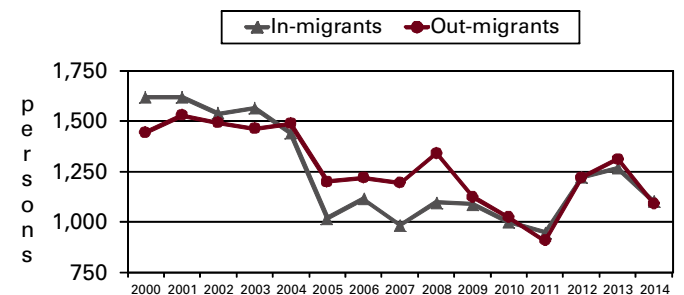
Median monthly owners cost \$964

Median monthly owners cost as a percentage of household income 22.0

Vital Statistics

	Number	Rate
Births / rate per 1,000 women aged 15 to 44	466	73.5
Teen births / rate per 1,000 females 15-19	26	24.1
Deaths / rate per 100,000 population	400	1,095.4
Marriages / rate per 1,000 population	290	8.1
Divorces / rate per 1,000 population	154	4.3

Migration



Agriculture

Land in farms (acres)	169,762
Number of farms	1,122
Average size (acres)	151
Total cash receipts	\$81,660,000
Per farm	\$72,781
Receipts for crops	\$32,562,000
Receipts for livestock/products	\$49,098,000

Education

Public schools buildings	13
Students (Average Daily Membership)	5,091
Teachers (Full Time Equivalent)	319.1
Expenditures per student	\$5,853
Graduation rate	92.9
Non-public schools	2
Students	181
4-year public universities	0
Branches	0
2-year public colleges/satellites	1
Private universities and colleges	0
Public libraries (Main / Branches)	1 / 1

Transportation

Registered motor vehicles	43,011
Passenger cars	24,210
Noncommercial trucks	9,482
Total license revenue	\$1,297,460.12
Interstate highway miles	0.00
Turnpike miles	0.00
U.S. highway miles	33.59
State highway miles	180.40
County, township, and municipal road miles	1,043.92
Commercial airports	2

Health Care

Physicians (MDs & DOs)	24
Registered hospitals	1
Number of beds	56
Licensed nursing homes	4
Number of beds	305
Licensed residential care	1
Number of beds	56
Persons with health insurance (Aged 0 to 64)	87.7%
Adults with insurance (Aged 18 to 64)	85.8%
Children with insurance (Aged Under 19)	92.3%

Voting

Number of registered voters	22,650
Voted in 2014 election	9,325
Percent turnout	41.2%

Communications

Television stations	0
Radio stations	2
Daily newspapers	1
Circulation	3,070
Weekly newspapers	0
Circulation	0

Crime

Total crimes reported in Uniform Crime Report	694
Violent crime	28
Property crime	661
Arson	5

Finance

FDIC insured financial institutions (HQs)	1
Assets (000)	\$187,763
Branch offices	12
Institutions represented	7

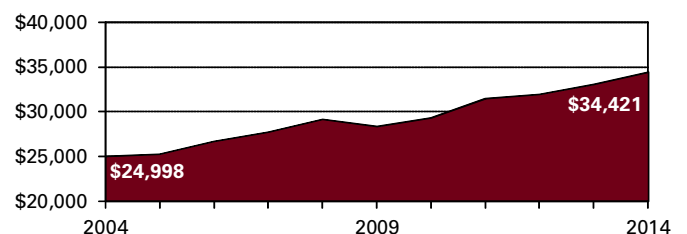
Transfer Payments

Total transfer payments	\$342,812,000
Payments to individuals	\$335,281,000
Retirement and disability	\$120,773,000
Medical payments	\$165,571,000
Income maintenance (Supplemental SSI, family assistance, food stamps, etc)	\$31,469,000
Unemployment benefits	\$3,557,000
Veterans benefits	\$8,135,000
Federal education and training assistance	\$3,605,000
Other payments to individuals	\$2,171,000
Total personal income	\$1,256,907,000
Dependency ratio	27.3%
(Percent of income from transfer payments)	

State Parks, Forests, Nature Preserves, Scenic Waterways, And Wildlife Areas

Areas/Facilities	5
Acreage	20,373.81

Per Capita Personal Income



Civilian Labor Force

	2011	2012	2013	2014	2015
Civilian labor force	16,800	16,200	16,400	15,800	16,100
Employed	14,900	14,600	14,800	14,600	15,000
Unemployed	1,900	1,600	1,600	1,200	1,000
Unemployment rate	11.5	10.1	9.8	7.5	6.3

Establishments, Employment, and Wages by Sector: 2014

Industrial Sector	Number of Establishments	Average Employment	Total Wages	Average Weekly Wage
Private Sector	624	9,045	\$347,405,751	\$739
Goods-Producing	129	2,912	\$151,323,154	\$999
Natural Resources and Mining	24	165	\$7,680,065	\$896
Constuction	43	245	\$11,633,673	\$915
Manufacturing	62	2,502	\$132,009,416	\$1,015
Service-Providing	495	6,133	\$196,082,597	\$615
Trade, Transportation and Utilities	163	2,043	\$74,024,818	\$697
Information	9	61	\$2,373,903	\$743
Financial Services	54	297	\$11,024,301	\$713
Professional and Business Services	67	885	\$37,238,406	\$810
Education and Health Services	86	1,724	\$55,721,157	\$622
Leisure and Hospitality	58	838	\$9,733,259	\$223
Other Services	58	282	\$5,891,255	\$402
Federal Government		70	\$3,302,388	\$905
State Government		47	\$2,196,583	\$900
Local Government		1,433	\$49,984,435	\$671

Private Sector total includes Unclassified establishments not shown.

Change Since 2009

Private Sector	-4.3%	0.8%	18.0%	17.1%
Goods-Producing	-5.8%	-2.8%	18.5%	21.8%
Natural Resources and Mining	-17.2%	-25.0%	-37.0%	-15.8%
Construction	-12.2%	28.3%	61.5%	26.2%
Manufacturing	5.1%	-3.2%	21.9%	25.9%
Service-Producing	-3.9%	2.6%	17.6%	14.5%
Trade, Transportation and Utilities	-1.2%	-2.1%	-1.8%	0.4%
Information	-10.0%	-19.7%	-13.0%	7.4%
Financial Services	-5.3%	-4.5%	16.3%	21.7%
Professional and Business Services	-10.7%	17.5%	73.6%	47.8%
Education and Health Services	7.5%	4.4%	29.1%	23.9%
Leisure and Hospitality	-7.9%	6.8%	13.0%	5.7%
Other Services	-12.1%	-8.7%	-0.6%	8.9%
Federal Government		-22.2%	-21.4%	1.3%
State Government		-4.1%	-3.0%	1.8%
Local Government		-5.2%	3.8%	9.5%

Business Numbers

	2011	2012	2013	2014	2015
Business starts	43	34	54	49	31
Active businesses	554	550	546	561	544

Major & Notable Employers

AK Steel Holding Corp	Mfg
American Electric Power Co	Utility
Coshocton City Schools	Govt
Coshocton County Government	Govt
Coshocton County Memorial Hospital	Serv
Kraft Heinz Company	Mfg
McWane Corp/Clow Water Systems	Mfg
Riverview Local Schools	Govt
WestRock/RockTenn	Mfg

Residential Construction

	2011	2012	2013	2014	2015
Total units	3	3	1	3	13
Total valuation (000)	\$165	\$375	\$60	\$340	\$780
Total single-unit bldgs	3	3	1	3	1
Average cost per unit	\$55,000	\$125,000	\$60,000	\$113,333	\$60,000
Total multi-unit bldg units	0	0	0	0	12
Average cost per unit	\$0	\$0	\$0	\$0	\$60,000

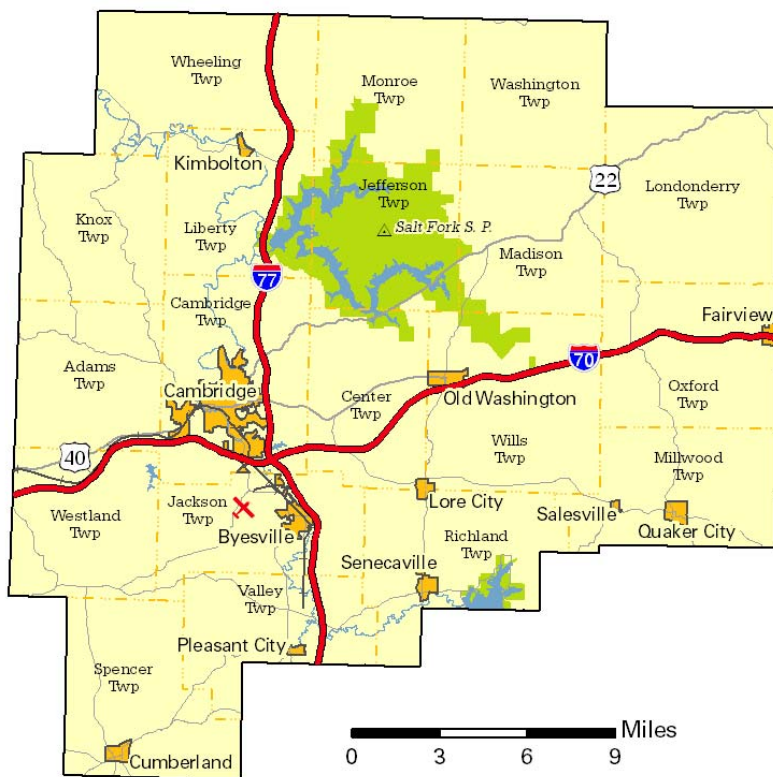
Ohio County Profiles

Prepared by the Office of Research



Guernsey County

Established: Act - March 1, 1810
2015 Population: 39,258
Land Area: 522.0 square miles
County Seat: Cambridge City
Named for: English Channel Island



Taxes

Taxable value of real property	\$589,921,180
Residential	\$369,977,550
Agriculture	\$91,021,870
Industrial	\$17,146,520
Commercial	\$88,394,730
Mineral	\$23,380,510
Ohio income tax liability	\$16,401,725
Average per return	\$1,074.75

Land Use/Land Cover

	Percent
Developed, Lower Intensity	8.78%
Developed, Higher Intensity	0.59%
Barren (strip mines, gravel pits, etc.)	0.22%
Forest	62.71%
Shrub/Scrub and Grasslands	2.25%
Pasture/Hay	14.09%
Cultivated Crops	9.53%
Wetlands	0.28%
Open Water	1.55%

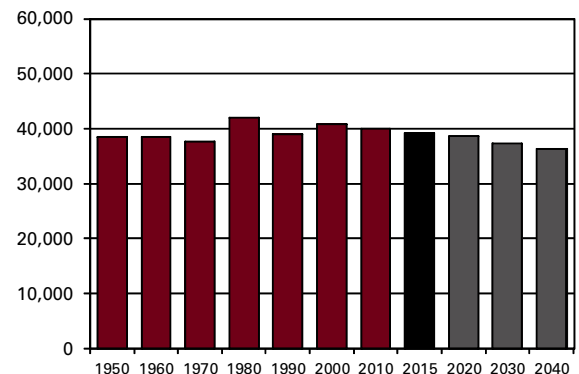
Largest Places

	Est. 2015	Census 2010
Cambridge city	10,402	10,635
Cambridge twp UB	3,880	3,935
Jackson twp UB	2,719	2,782
Byesville vlg	2,375	2,438
Westland twp	2,033	2,073
Adams twp	1,999	2,036
Valley twp UB	1,779	1,816
Center twp UB	1,678	1,711
Richland twp UB	1,500	1,529
Wills twp UB	1,179	1,207

UB: Unincorporated balance.

Total Population

Census			Estimated
1800		1910	42,716
1810	3,051	1920	45,352
1820	9,292	1930	41,486
1830	18,036	1940	38,822
1840	27,748	1950	38,452
1850	30,438	1960	38,579
1860	24,474	1970	37,665
1870	23,838	1980	42,024
1880	27,197	1990	39,024
1890	28,645	2000	40,792
1900	34,425	2010	40,087
		2011	39,857
		2012	39,826
		2013	39,608
		2014	39,582
		2015	39,258
		Projected	
		2020	38,750
		2030	37,310
		2040	36,390



Population by Race

	Number	Percent
ACS Total Population	39,794	100.0%
White	38,184	96.0%
African-American	764	1.9%
Native American	33	0.1%
Asian	122	0.3%
Pacific Islander	1	0.0%
Other	27	0.1%
Two or More Races	663	1.7%
Hispanic (may be of any race)	372	0.9%
Total Minority	1,910	4.8%

Educational Attainment

	Number	Percent
Persons 25 years and over	27,413	100.0%
No high school diploma	4,046	14.8%
High school graduate	11,907	43.4%
Some college, no degree	5,362	19.6%
Associate degree	2,477	9.0%
Bachelor's degree	2,294	8.4%
Master's degree or higher	1,327	4.8%

Family Type by Employment Status

	Number	Percent
Total Families	10,616	100.0%
Married couple, husband and wife in labor force	3,908	36.8%
Married couple, husband in labor force, wife not	1,608	15.1%
Married couple, wife in labor force, husband not	692	6.5%
Married couple, husband and wife not in labor force	1,795	16.9%
Male householder, in labor force	491	4.6%
Male householder, not in labor force	268	2.5%
Female householder, in labor force	1,082	10.2%
Female householder, not in labor force	772	7.3%

Household Income

	Number	Percent
Total Households	15,564	100.0%
Less than \$10,000	1,451	9.3%
\$10,000 to \$19,999	2,019	13.0%
\$20,000 to \$29,999	2,310	14.8%
\$30,000 to \$39,999	1,925	12.4%
\$40,000 to \$49,999	1,423	9.1%
\$50,000 to \$59,999	1,492	9.6%
\$60,000 to \$74,999	1,414	9.1%
\$75,000 to \$99,999	1,592	10.2%
\$100,000 to \$149,999	1,522	9.8%
\$150,000 to \$199,999	267	1.7%
\$200,000 or more	149	1.0%
Median household income	\$40,420	

Population by Age

	Number	Percent
ACS Total Population	39,794	100.0%
Under 5 years	2,336	5.9%
5 to 17 years	6,773	17.0%
18 to 24 years	3,272	8.2%
25 to 44 years	9,222	23.2%
45 to 64 years	11,479	28.8%
65 years and more	6,712	16.9%
Median Age	41.9	

Family Type by Presence of Own Children Under 18

	Number	Percent
Total Families	10,621	100.0%
Married-couple families with own children	2,785	26.2%
Male householder, no wife present, with own children	399	3.8%
Female householder, no husband present, with own children	1,094	10.3%
Families with no own children	6,343	59.7%

Poverty Status of Families By Family Type by Presence Of Related Children

	Number	Percent
Total Families	10,621	100.0%
Family income above poverty level	9,010	84.8%
Family income below poverty level	1,611	15.2%
Married couple, with related children	331	3.1%
Male householder, no wife present, with related children	130	1.2%
Female householder, no husband present, with related children	795	7.5%
Families with no related children	355	3.3%

Ratio of Income To Poverty Level

	Number	Percent
Population for whom poverty status is determined	39,224	100.0%
Below 50% of poverty level	3,398	8.7%
50% to 99% of poverty level	3,934	10.0%
100% to 124% of poverty level	2,212	5.6%
125% to 149% of poverty level	2,339	6.0%
150% to 184% of poverty level	2,863	7.3%
185% to 199% of poverty level	1,110	2.8%
200% of poverty level or more	23,368	59.6%

Geographical Mobility

	Number	Percent
Population aged 1 year and older	39,307	100.0%
Same house as previous year	34,516	87.8%
Different house, same county	2,879	7.3%
Different county, same state	1,401	3.6%
Different state	488	1.2%
Abroad	23	0.1%

Percentages may not sum to 100% due to rounding.

Travel Time To Work

	Number	Percent
Workers 16 years and over	15,372	100.0%
Less than 15 minutes	5,634	36.7%
15 to 29 minutes	5,337	34.7%
30 to 44 minutes	2,273	14.8%
45 to 59 minutes	894	5.8%
60 minutes or more	1,234	8.0%

Mean travel time 23.7 minutes

Housing Units

	Number	Percent
Total housing units	19,127	100.0%
Occupied housing units	15,564	81.4%
Owner occupied	11,529	74.1%
Renter occupied	4,035	25.9%
Vacant housing units	3,563	18.6%

Year Structure Built

	Number	Percent
Total housing units	19,127	100.0%
Built 2010 or later	56	0.3%
Built 2000 to 2009	1,984	10.4%
Built 1990 to 1999	2,580	13.5%
Built 1980 to 1989	2,062	10.8%
Built 1970 to 1979	2,641	13.8%
Built 1960 to 1969	1,611	8.4%
Built 1950 to 1959	1,606	8.4%
Built 1940 to 1949	846	4.4%
Built 1939 or earlier	5,741	30.0%

Median year built 1969

Value for Specified Owner-Occupied Housing Units

	Number	Percent
Specified owner-occupied housing units	11,529	100.0%
Less than \$20,000	719	6.2%
\$20,000 to \$39,999	813	7.1%
\$40,000 to \$59,999	1,104	9.6%
\$60,000 to \$79,999	1,717	14.9%
\$80,000 to \$99,999	1,825	15.8%
\$100,000 to \$124,999	1,525	13.2%
\$125,000 to \$149,999	844	7.3%
\$150,000 to \$199,999	1,314	11.4%
\$200,000 to \$299,999	1,168	10.1%
\$300,000 to \$499,999	378	3.3%
\$500,000 to \$999,999	65	0.6%
\$1,000,000 or more	57	0.5%

Median value \$94,400

House Heating Fuel

	Number	Percent
Occupied housing units	15,564	100.0%
Utility gas	7,218	46.4%
Bottled, tank or LP gas	2,215	14.2%
Electricity	4,053	26.0%
Fuel oil, kerosene, etc	651	4.2%
Coal, coke or wood	1,171	7.5%
Solar energy or other fuel	211	1.4%
No fuel used	45	0.3%

Percentages may not sum to 100% due to rounding.

Gross Rent

	Number	Percent
Specified renter-occupied housing units	4,035	100.0%
Less than \$100	8	0.2%
\$100 to \$199	153	3.8%
\$200 to \$299	289	7.2%
\$300 to \$399	244	6.0%
\$400 to \$499	383	9.5%
\$500 to \$599	813	20.1%
\$600 to \$699	507	12.6%
\$700 to \$799	468	11.6%
\$800 to \$899	373	9.2%
\$900 to \$999	132	3.3%
\$1,000 to \$1,499	218	5.4%
\$1,500 or more	52	1.3%
No cash rent	395	9.8%

Median gross rent \$591

Median gross rent as a percentage of household income 31.0

Selected Monthly Owner Costs for Specified Owner-Occupied Housing Units

	Number	Percent
Specified owner-occupied housing units with a mortgage	6,519	100.0%
Less than \$400	118	1.8%
\$400 to \$599	720	11.0%
\$600 to \$799	1,015	15.6%
\$800 to \$999	1,501	23.0%
\$1,000 to \$1,249	1,279	19.6%
\$1,250 to \$1,499	734	11.3%
\$1,500 to \$1,999	729	11.2%
\$2,000 to \$2,999	320	4.9%
\$3,000 or more	103	1.6%

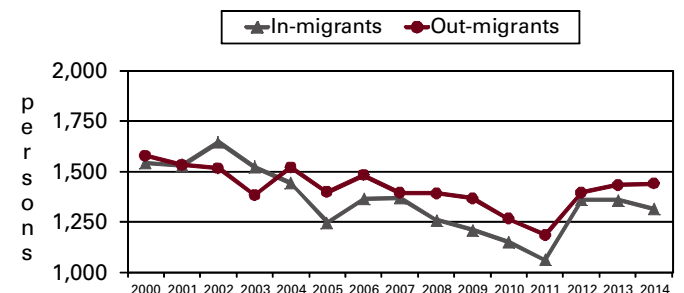
Median monthly owners cost \$987

Median monthly owners cost as a percentage of household income 21.1

Vital Statistics

	Number	Rate
Births / rate per 1,000 women aged 15 to 44	461	66.8
Teen births / rate per 1,000 females 15-19	47	38.8
Deaths / rate per 100,000 population	457	1,154.3
Marriages / rate per 1,000 population	265	6.6
Divorces / rate per 1,000 population	174	4.4

Migration



Agriculture

Land in farms (acres)	143,763
Number of farms	1,228
Average size (acres)	117
Total cash receipts	\$21,493,000
Per farm	\$17,503
Receipts for crops	\$7,873,000
Receipts for livestock/products	\$13,620,000

Education

Public schools buildings	14
Students (Average Daily Membership)	5,130
Teachers (Full Time Equivalent)	297.0
Expenditures per student	\$10,070
Graduation rate	87.5
Non-public schools	1
Students	95
4-year public universities	0
Branches	0
2-year public colleges/satellites	0
Private universities and colleges	0
Public libraries (Main / Branches)	1 / 2

Transportation

Registered motor vehicles	51,319
Passenger cars	28,522
Noncommercial trucks	10,815
Total license revenue	\$1,437,312.82
Interstate highway miles	51.92
Turnpike miles	0.00
U.S. highway miles	39.79
State highway miles	153.70
County, township, and municipal road miles	1,094.52
Commercial airports	1

Health Care

Physicians (MDs & DOs)	47
Registered hospitals	1
Number of beds	189
Licensed nursing homes	3
Number of beds	272
Licensed residential care	3
Number of beds	185
Persons with health insurance (Aged 0 to 64)	88.8%
Adults with insurance (Aged 18 to 64)	86.7%
Children with insurance (Aged Under 19)	94.3%

Voting

Number of registered voters	23,855
Voted in 2014 election	10,529
Percent turnout	44.1%

Communications

Television stations	0
Radio stations	6
Daily newspapers	1
Circulation	9,586
Weekly newspapers	0
Circulation	0

Crime

Total crimes reported in Uniform Crime Report	647
Violent crime	39
Property crime	604
Arson	4

Finance

FDIC insured financial institutions (HQs)	0
Assets (000)	\$0
Branch offices	15
Institutions represented	8

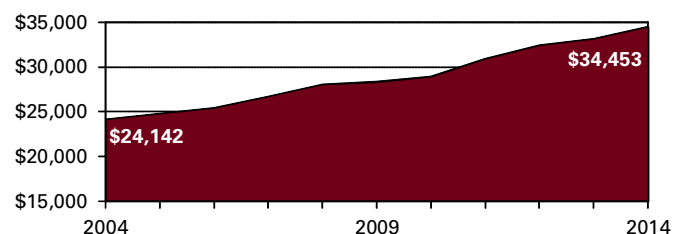
Transfer Payments

Total transfer payments	\$406,207,000
Payments to individuals	\$398,055,000
Retirement and disability	\$130,634,000
Medical payments	\$207,102,000
Income maintenance (Supplemental SSI, family assistance, food stamps, etc)	\$37,276,000
Unemployment benefits	\$3,827,000
Veterans benefits	\$13,081,000
Federal education and training assistance	\$3,904,000
Other payments to individuals	\$2,231,000
Total personal income	\$1,363,980,000
Dependency ratio	29.8%
(Percent of income from transfer payments)	

State Parks, Forests, Nature Preserves, Scenic Waterways, And Wildlife Areas

Areas/Facilities	6
Acreage	21,792.47

Per Capita Personal Income



Civilian Labor Force

	2011	2012	2013	2014	2015
Civilian labor force	18,500	18,200	18,600	19,100	19,100
Employed	16,500	16,600	17,000	17,800	17,900
Unemployed	2,000	1,600	1,600	1,300	1,200
Unemployment rate	10.8	9.0	8.7	6.7	6.3

Establishments, Employment, and Wages by Sector: 2014

Industrial Sector	Number of Establishments	Average Employment	Total Wages	Average Weekly Wage
Private Sector	829	13,041	\$493,663,236	\$728
Goods-Producing	161	4,449	\$236,969,130	\$1,024
Natural Resources and Mining	33	631	\$32,896,311	\$1,002
Constuction	67	937	\$59,640,548	\$1,225
Manufacturing	62	2,881	\$144,432,271	\$964
Service-Providing	669	8,591	\$256,694,106	\$575
Trade, Transportation and Utilities	220	2,714	\$79,459,490	\$563
Information	8	98	\$2,751,120	\$540
Financial Services	73	305	\$15,334,319	\$967
Professional and Business Services	95	865	\$39,746,601	\$884
Education and Health Services	112	2,535	\$84,401,048	\$640
Leisure and Hospitality	89	1,712	\$27,183,144	\$305
Other Services	72	363	\$7,818,384	\$415
Federal Government		112	\$6,017,967	\$1,033
State Government		502	\$23,512,652	\$900
Local Government		1,686	\$57,561,482	\$657

Private Sector total includes Unclassified establishments not shown.

Change Since 2009

Private Sector	-1.1%	17.1%	38.6%	18.4%
Goods-Producing	11.0%	36.9%	57.0%	14.7%
Natural Resources and Mining	57.1%	217.1%	246.8%	9.4%
Construction	-6.9%	75.8%	70.1%	-3.2%
Manufacturing	19.2%	14.4%	35.8%	18.7%
Service-Producing	-3.6%	8.9%	25.1%	15.0%
Trade, Transportation and Utilities	-1.3%	11.5%	27.7%	14.4%
Information	-33.3%	-17.6%	-17.3%	0.4%
Financial Services	-8.8%	-14.3%	29.5%	51.1%
Professional and Business Services	9.2%	21.5%	44.4%	18.8%
Education and Health Services	-5.1%	3.6%	14.5%	10.5%
Leisure and Hospitality	-2.2%	16.2%	44.4%	24.0%
Other Services	-11.1%	4.9%	2.8%	-1.9%
Federal Government		-8.2%	14.7%	24.9%
State Government		2.9%	-1.9%	-4.7%
Local Government		-6.6%	-1.3%	5.8%

Business Numbers

	2011	2012	2013	2014	2015
Business starts	68	85	57	67	41
Active businesses	721	727	697	723	721

Major & Notable Employers

Cambridge City Schools	Govt
Colgate-Palmolive Co	Mfg
Daimler AG/Detroit Diesel	Mfg
Encore Plastics	Mfg
Federal-Mogul Corp	Mfg
Guernsey County Government	Govt
JMC Steel Group/Picoma	Mfg
Southeastern Ohio Reg. Medical Ctr	Serv
State of Ohio	Govt
Wal-Mart Stores Inc	Trade

Residential

Construction

	2011	2012	2013	2014	2015
Total units	28	42	42	54	38
Total valuation (000)	\$2,848	\$4,947	\$5,655	\$6,494	\$5,322
Total single-unit bldgs	28	39	42	49	28
Average cost per unit	\$101,697	\$121,197	\$134,647	\$116,207	\$168,648
Total multi-unit bldg units	0	3	0	5	10
Average cost per unit	\$0	\$73,333	\$0	\$160,000	\$60,000

Ohio County Profiles

Prepared by the Office of Research



Harrison County

Established: Act - February 1, 1813
2015 Population: 15,450
Land Area: 403.6 square miles
County Seat: Cadiz Village
Named for: William Henry Harrison, Ninth U.S. President



Taxes

Taxable value of real property	\$312,923,385
Residential	\$124,614,730
Agriculture	\$108,445,690
Industrial	\$19,114,840
Commercial	\$16,964,760
Mineral	\$43,783,365
Ohio income tax liability	\$8,350,792
Average per return	\$1,195.70

Land Use/Land Cover

	Percent
Developed, Lower Intensity	6.87%
Developed, Higher Intensity	0.26%
Barren (strip mines, gravel pits, etc.)	1.05%
Forest	62.43%
Shrub/Scrub and Grasslands	3.09%
Pasture/Hay	16.21%
Cultivated Crops	7.73%
Wetlands	0.28%
Open Water	2.08%

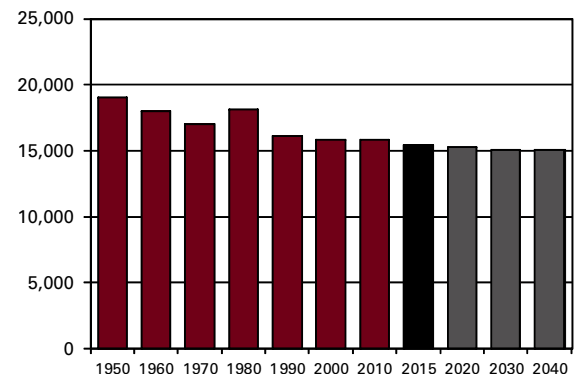
Largest Places

	Est. 2015	Census 2010
Cadiz vlg	3,271	3,353
North twp UB	929	954
Hopedale vlg	927	950
Green twp UB	914	937
German twp	782	805
Monroe twp UB	779	800
Rumley twp UB	757	779
Scio vlg	742	763
Short Creek twp UB	711	732
Jewett vlg	671	692

UB: Unincorporated balance.

Total Population

Census			Estimated		
1800		1910	19,076	2011	15,803
1810		1920	19,625	2012	15,710
1820	14,345	1930	18,844	2013	15,634
1830	20,916	1940	20,313	2014	15,567
1840	20,099	1950	19,054	2015	15,450
1850	20,157	1960	17,995		
1860	19,110	1970	17,013		
1870	18,682	1980	18,152		
1880	20,456	1990	16,085		
1890	20,830	2000	15,856		
1900	20,486	2010	15,864		
				Projected	
				2020	15,300
				2030	15,100
				2040	15,100



Population by Race

	Number	Percent
ACS Total Population	15,698	100.0%
White	15,050	95.9%
African-American	324	2.1%
Native American	41	0.3%
Asian	12	0.1%
Pacific Islander	0	0.0%
Other	27	0.2%
Two or More Races	244	1.6%
Hispanic (may be of any race)	107	0.7%
Total Minority	730	4.7%

Educational Attainment

	Number	Percent
Persons 25 years and over	11,256	100.0%
No high school diploma	1,481	13.2%
High school graduate	5,512	49.0%
Some college, no degree	2,155	19.1%
Associate degree	1,044	9.3%
Bachelor's degree	677	6.0%
Master's degree or higher	387	3.4%

Family Type by Employment Status

	Number	Percent
Total Families	4,390	100.0%
Married couple, husband and wife in labor force	1,585	36.1%
Married couple, husband in labor force, wife not	693	15.8%
Married couple, wife in labor force, husband not	429	9.8%
Married couple, husband and wife not in labor force	737	16.8%
Male householder, in labor force	191	4.4%
Male householder, not in labor force	113	2.6%
Female householder, in labor force	415	9.5%
Female householder, not in labor force	227	5.2%

Household Income

	Number	Percent
Total Households	6,333	100.0%
Less than \$10,000	498	7.9%
\$10,000 to \$19,999	866	13.7%
\$20,000 to \$29,999	942	14.9%
\$30,000 to \$39,999	739	11.7%
\$40,000 to \$49,999	722	11.4%
\$50,000 to \$59,999	467	7.4%
\$60,000 to \$74,999	564	8.9%
\$75,000 to \$99,999	775	12.2%
\$100,000 to \$149,999	566	8.9%
\$150,000 to \$199,999	113	1.8%
\$200,000 or more	81	1.3%
Median household income	\$41,819	

Population by Age

	Number	Percent
ACS Total Population	15,698	100.0%
Under 5 years	872	5.6%
5 to 17 years	2,462	15.7%
18 to 24 years	1,108	7.1%
25 to 44 years	3,360	21.4%
45 to 64 years	4,885	31.1%
65 years and more	3,011	19.2%
Median Age	45.4	

Family Type by Presence of Own Children Under 18

	Number	Percent
Total Families	4,390	100.0%
Married-couple families with own children	1,192	27.2%
Male householder, no wife present, with own children	155	3.5%
Female householder, no husband present, with own children	398	9.1%
Families with no own children	2,645	60.3%

Poverty Status of Families By Family Type by Presence Of Related Children

	Number	Percent
Total Families	4,390	100.0%
Family income above poverty level	3,804	86.7%
Family income below poverty level	586	13.3%
Married couple, with related children	149	3.4%
Male householder, no wife present, with related children	74	1.7%
Female householder, no husband present, with related children	261	5.9%
Families with no related children	102	2.3%

Ratio of Income To Poverty Level

	Number	Percent
Population for whom poverty status is determined	15,368	100.0%
Below 50% of poverty level	1,094	7.1%
50% to 99% of poverty level	1,658	10.8%
100% to 124% of poverty level	683	4.4%
125% to 149% of poverty level	917	6.0%
150% to 184% of poverty level	1,335	8.7%
185% to 199% of poverty level	476	3.1%
200% of poverty level or more	9,205	59.9%

Geographical Mobility

	Number	Percent
Population aged 1 year and older	15,507	100.0%
Same house as previous year	14,303	92.2%
Different house, same county	553	3.6%
Different county, same state	318	2.1%
Different state	319	2.1%
Abroad	14	0.1%

Percentages may not sum to 100% due to rounding.

Travel Time To Work

	Number	Percent
Workers 16 years and over	6,520	100.0%
Less than 15 minutes	1,929	29.6%
15 to 29 minutes	1,506	23.1%
30 to 44 minutes	1,682	25.8%
45 to 59 minutes	746	11.4%
60 minutes or more	657	10.1%

Mean travel time 28.3 minutes

Housing Units

	Number	Percent
Total housing units	8,130	100.0%
Occupied housing units	6,333	77.9%
Owner occupied	4,926	77.8%
Renter occupied	1,407	22.2%
Vacant housing units	1,797	22.1%

Year Structure Built

	Number	Percent
Total housing units	8,130	100.0%
Built 2010 or later	80	1.0%
Built 2000 to 2009	638	7.8%
Built 1990 to 1999	911	11.2%
Built 1980 to 1989	670	8.2%
Built 1970 to 1979	1,345	16.5%
Built 1960 to 1969	595	7.3%
Built 1950 to 1959	604	7.4%
Built 1940 to 1949	802	9.9%
Built 1939 or earlier	2,485	30.6%

Median year built 1963

Value for Specified Owner-Occupied Housing Units

	Number	Percent
Specified owner-occupied housing units	4,926	100.0%
Less than \$20,000	294	6.0%
\$20,000 to \$39,999	423	8.6%
\$40,000 to \$59,999	563	11.4%
\$60,000 to \$79,999	787	16.0%
\$80,000 to \$99,999	942	19.1%
\$100,000 to \$124,999	530	10.8%
\$125,000 to \$149,999	347	7.0%
\$150,000 to \$199,999	568	11.5%
\$200,000 to \$299,999	337	6.8%
\$300,000 to \$499,999	99	2.0%
\$500,000 to \$999,999	24	0.5%
\$1,000,000 or more	12	0.2%

Median value \$86,300

House Heating Fuel

	Number	Percent
Occupied housing units	6,333	100.0%
Utility gas	2,229	35.2%
Bottled, tank or LP gas	857	13.5%
Electricity	1,275	20.1%
Fuel oil, kerosene, etc	929	14.7%
Coal, coke or wood	886	14.0%
Solar energy or other fuel	156	2.5%
No fuel used	1	0.0%

Percentages may not sum to 100% due to rounding.

Gross Rent

	Number	Percent
Specified renter-occupied housing units	1,407	100.0%
Less than \$100	0	0.0%
\$100 to \$199	30	2.1%
\$200 to \$299	88	6.3%
\$300 to \$399	52	3.7%
\$400 to \$499	157	11.2%
\$500 to \$599	224	15.9%
\$600 to \$699	289	20.5%
\$700 to \$799	211	15.0%
\$800 to \$899	89	6.3%
\$900 to \$999	23	1.6%
\$1,000 to \$1,499	84	6.0%
\$1,500 or more	41	2.9%
No cash rent	119	8.5%

Median gross rent \$630

Median gross rent as a percentage of household income 28.5

Selected Monthly Owner Costs for Specified Owner-Occupied Housing Units

	Number	Percent
Specified owner-occupied housing units with a mortgage	2,680	100.0%
Less than \$400	69	2.6%
\$400 to \$599	305	11.4%
\$600 to \$799	588	21.9%
\$800 to \$999	624	23.3%
\$1,000 to \$1,249	399	14.9%
\$1,250 to \$1,499	317	11.8%
\$1,500 to \$1,999	304	11.3%
\$2,000 to \$2,999	74	2.8%
\$3,000 or more	0	0.0%

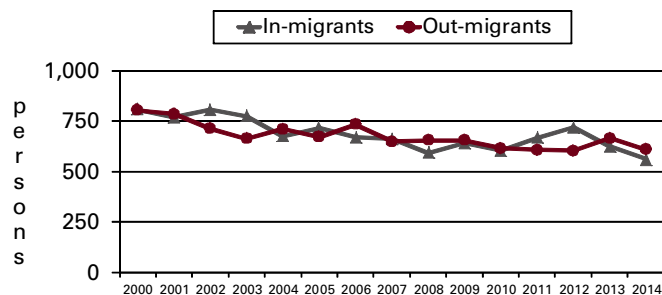
Median monthly owners cost \$895

Median monthly owners cost as a percentage of household income 21.4

Vital Statistics

	Number	Rate
Births / rate per 1,000 women aged 15 to 44	169	68.2
Teen births / rate per 1,000 females 15-19	17	39.6
Deaths / rate per 100,000 population	221	1,421.9
Marriages / rate per 1,000 population	116	7.6
Divorces / rate per 1,000 population	89	5.8

Migration



Agriculture

Land in farms (acres)	95,387
Number of farms	444
Average size (acres)	215
Total cash receipts	\$18,240,000
Per farm	\$41,081
Receipts for crops	\$7,769,000
Receipts for livestock/products	\$10,471,000

Education

Public schools buildings	5
Students (Average Daily Membership)	1,941
Teachers (Full Time Equivalent)	118.8
Expenditures per student	\$9,543
Graduation rate	87.7
Non-public schools	0
Students	0
4-year public universities	0
Branches	0
2-year public colleges/satellites	0
Private universities and colleges	0
Public libraries (Main / Branches)	2 / 2

Transportation

Registered motor vehicles	20,818
Passenger cars	10,753
Noncommercial trucks	4,979
Total license revenue	\$599,692.85
Interstate highway miles	0.00
Turnpike miles	0.00
U.S. highway miles	55.13
State highway miles	110.22
County, township, and municipal road miles	731.52
Commercial airports	1

Health Care

Physicians (MDs & DOs)	3
Registered hospitals	1
Number of beds	25
Licensed nursing homes	3
Number of beds	206
Licensed residential care	0
Number of beds	0
Persons with health insurance (Aged 0 to 64)	89.4%
Adults with insurance (Aged 18 to 64)	87.9%
Children with insurance (Aged Under 19)	93.5%

Voting

Number of registered voters	10,135
Voted in 2014 election	4,750
Percent turnout	46.9%

Communications

Television stations	0
Radio stations	0
Daily newspapers	0
Circulation	0
Weekly newspapers	1
Circulation	4,000

Crime

Total crimes reported in Uniform Crime Report	104
Violent crime	1
Property crime	103
Arson	0

Finance

FDIC insured financial institutions (HQs)	1
Assets (000)	\$12,795
Branch offices	7
Institutions represented	6

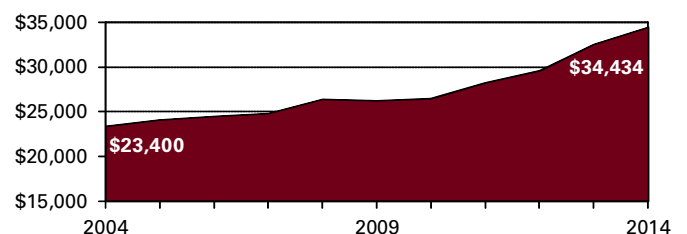
Transfer Payments

Total transfer payments	\$150,355,000
Payments to individuals	\$147,155,000
Retirement and disability	\$53,729,000
Medical payments	\$72,509,000
Income maintenance (Supplemental SSI, family assistance, food stamps, etc)	\$12,821,000
Unemployment benefits	\$1,338,000
Veterans benefits	\$4,399,000
Federal education and training assistance	\$1,530,000
Other payments to individuals	\$829,000
Total personal income	\$535,200,000
Dependency ratio	28.1%
(Percent of income from transfer payments)	

State Parks, Forests, Nature Preserves, Scenic Waterways, And Wildlife Areas

Areas/Facilities	3
Acreage	4,699.52

Per Capita Personal Income



Civilian Labor Force

	2011	2012	2013	2014	2015
Civilian labor force	7,000	7,000	7,300	7,400	7,200
Employed	6,300	6,400	6,700	6,900	6,800
Unemployed	700	600	600	400	500
Unemployment rate	10.7	8.5	7.9	6.0	6.3

Establishments, Employment, and Wages by Sector: 2014

Industrial Sector	Number of Establishments	Average Employment	Total Wages	Average Weekly Wage
Private Sector	280	3,305	\$141,499,242	\$823
Goods-Producing	76	1,322	\$80,547,953	\$1,172
Natural Resources and Mining	21	583	\$42,203,824	\$1,391
Constuction	44	381	\$22,831,925	\$1,151
Manufacturing	12	357	\$15,512,204	\$836
Service-Providing	204	1,983	\$60,951,289	\$591
Trade, Transportation and Utilities	75	836	\$28,737,401	\$661
Information	3	* * * * *	Data Not Available	* * * * *
Financial Services	21	129	\$3,628,796	\$540
Professional and Business Services	39	184	\$10,482,416	\$1,097
Education and Health Services	18	504	\$13,037,168	\$497
Leisure and Hospitality	29	240	\$2,613,809	\$210
Other Services	19	68	\$1,429,342	\$403
Federal Government		51	\$2,272,928	\$853
State Government		45	\$2,399,286	\$1,027
Local Government		657	\$18,674,537	\$547

Private Sector total includes Unclassified establishments not shown.

Change Since 2009

Private Sector	4.5%	30.9%	80.4%	37.6%
Goods-Producing	8.6%	46.4%	90.7%	30.2%
Natural Resources and Mining	40.0%	62.4%	84.0%	13.2%
Construction	7.3%	353.6%	980.3%	137.8%
Manufacturing	-14.3%	-22.4%	-9.8%	16.3%
Service-Producing	3.0%	22.4%	68.5%	37.8%
Trade, Transportation and Utilities	-2.6%	56.0%	98.3%	27.1%
Information	-25.0%	* * * * *	Data Not Available	* * * * *
Financial Services	10.5%	-0.8%	27.6%	28.3%
Professional and Business Services	62.5%	155.6%	469.1%	122.1%
Education and Health Services	-14.3%	-9.8%	0.7%	11.7%
Leisure and Hospitality	-17.1%	-4.0%	5.7%	10.5%
Other Services	0.0%	19.3%	44.1%	19.6%
Federal Government		-26.1%	-14.0%	16.4%
State Government		32.4%	56.2%	19.6%
Local Government		-11.3%	-4.4%	7.9%

Business Numbers

	2011	2012	2013	2014	2015
Business starts	17	36	24	20	24
Active businesses	272	270	291	294	294

Major & Notable Employers

Bowerston Shale Company	Mfg
Carriage Inn of Cadiz	Serv
Freeport Press Inc	Mfg
Gables Care Center	Serv
Harrison Community Hospital	Serv
Harrison County Government	Govt
Harrison Hills City Schools	Govt
McDonough Corp/L J Smith	Mfg

Residential Construction

	2011	2012	2013	2014	2015
Total units	0	0	0	0	1
Total valuation (000)	\$0	\$0	\$0	\$0	\$255
Total single-unit bldgs	0	0	0	0	1
Average cost per unit	\$0	\$0	\$0	\$0	\$254,795
Total multi-unit bldg units	0	0	0	0	0
Average cost per unit	\$0	\$0	\$0	\$0	\$0

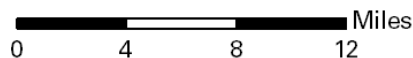
Ohio County Profiles

Prepared by the Office of Research



Holmes County

Established: Act - January 20, 1824
2015 Population: 43,909
Land Area: 423.0 square miles
County Seat: Millersburg Village
Named for: Major Holmes, War of 1812



Taxes

Taxable value of real property	\$851,146,920
Residential	\$451,117,010
Agriculture	\$256,340,870
Industrial	\$44,626,420
Commercial	\$96,624,480
Mineral	\$2,438,140
Ohio income tax liability	\$16,718,244
Average per return	\$1,009.31

Land Use/Land Cover

	Percent
Developed, Lower Intensity	7.24%
Developed, Higher Intensity	0.59%
Barren (strip mines, gravel pits, etc.)	0.13%
Forest	37.60%
Shrub/Scrub and Grasslands	1.01%
Pasture/Hay	25.53%
Cultivated Crops	26.87%
Wetlands	0.54%
Open Water	0.50%

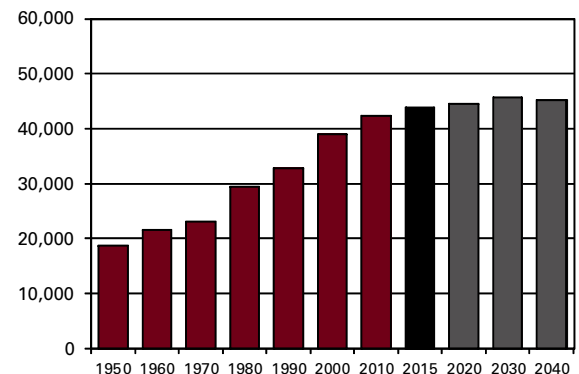
Largest Places

	Est. 2015	Census 2010
Salt Creek twp	4,431	4,260
Berlin twp	4,414	4,250
Paint twp	4,288	4,134
Clark twp UB	4,092	3,939
Walnut Creek twp	3,952	3,818
Mechanic twp	3,241	3,127
Millersburg vlg	3,151	3,035
Prairie twp UB	2,849	2,761
Hardy twp UB	2,700	2,608
Ripley twp	2,417	2,340

UB: Unincorporated balance.

Total Population

Census			Estimated
1800		17,909	2011 42,777
1810		16,965	2012 43,094
1820		16,726	2013 43,599
1830	9,135	17,876	2014 43,801
1840	18,088	18,760	2015 43,909
1850	20,452	21,591	
1860	20,589	23,024	
1870	18,177	29,416	
1880	20,776	32,849	
1890	21,139	38,943	
1900	19,511	42,366	
			Projected
			2020 44,620
			2030 45,700
			2040 45,280



Population by Race

	Number	Percent
ACS Total Population	43,176	100.0%
White	42,541	98.5%
African-American	212	0.5%
Native American	21	0.0%
Asian	40	0.1%
Pacific Islander	23	0.1%
Other	127	0.3%
Two or More Races	212	0.5%
Hispanic (may be of any race)	384	0.9%
Total Minority	863	2.0%

Educational Attainment

	Number	Percent
Persons 25 years and over	24,360	100.0%
No high school diploma	10,773	44.2%
High school graduate	8,167	33.5%
Some college, no degree	2,442	10.0%
Associate degree	1,084	4.4%
Bachelor's degree	1,242	5.1%
Master's degree or higher	652	2.7%

Family Type by Employment Status

	Number	Percent
Total Families	10,137	100.0%
Married couple, husband and wife in labor force	3,376	33.3%
Married couple, husband in labor force, wife not	3,897	38.4%
Married couple, wife in labor force, husband not	483	4.8%
Married couple, husband and wife not in labor force	1,232	12.2%
Male householder, in labor force	304	3.0%
Male householder, not in labor force	49	0.5%
Female householder, in labor force	556	5.5%
Female householder, not in labor force	240	2.4%

Household Income

	Number	Percent
Total Households	12,516	100.0%
Less than \$10,000	691	5.5%
\$10,000 to \$19,999	1,225	9.8%
\$20,000 to \$29,999	1,400	11.2%
\$30,000 to \$39,999	1,877	15.0%
\$40,000 to \$49,999	1,312	10.5%
\$50,000 to \$59,999	1,117	8.9%
\$60,000 to \$74,999	1,632	13.0%
\$75,000 to \$99,999	1,618	12.9%
\$100,000 to \$149,999	1,171	9.4%
\$150,000 to \$199,999	241	1.9%
\$200,000 or more	232	1.9%
Median household income	\$47,625	

Percentages may not sum to 100% due to rounding.

Population by Age

	Number	Percent
ACS Total Population	43,176	100.0%
Under 5 years	4,065	9.4%
5 to 17 years	10,423	24.1%
18 to 24 years	4,328	10.0%
25 to 44 years	9,937	23.0%
45 to 64 years	9,274	21.5%
65 years and more	5,149	11.9%
Median Age	30.1	

Family Type by Presence of Own Children Under 18

	Number	Percent
Total Families	10,142	100.0%
Married-couple families with own children	4,560	45.0%
Male householder, no wife present, with own children	86	0.8%
Female householder, no husband present, with own children	427	4.2%
Families with no own children	5,069	50.0%

Poverty Status of Families By Family Type by Presence Of Related Children

	Number	Percent
Total Families	10,142	100.0%
Family income above poverty level	8,984	88.6%
Family income below poverty level	1,158	11.4%
Married couple, with related children	592	5.8%
Male householder, no wife present, with related children	28	0.3%
Female householder, no husband present, with related children	260	2.6%
Families with no related children	278	2.7%

Ratio of Income To Poverty Level

	Number	Percent
Population for whom poverty status is determined	42,280	100.0%
Below 50% of poverty level	2,003	4.7%
50% to 99% of poverty level	4,081	9.7%
100% to 124% of poverty level	2,306	5.5%
125% to 149% of poverty level	3,785	9.0%
150% to 184% of poverty level	4,249	10.0%
185% to 199% of poverty level	1,776	4.2%
200% of poverty level or more	24,080	57.0%

Geographical Mobility

	Number	Percent
Population aged 1 year and older	42,534	100.0%
Same house as previous year	39,995	94.0%
Different house, same county	1,493	3.5%
Different county, same state	585	1.4%
Different state	388	0.9%
Abroad	73	0.2%

Travel Time To Work

	Number	Percent
Workers 16 years and over	16,202	100.0%
Less than 15 minutes	6,580	40.6%
15 to 29 minutes	5,030	31.0%
30 to 44 minutes	2,465	15.2%
45 to 59 minutes	800	4.9%
60 minutes or more	1,327	8.2%

Mean travel time 22.7 minutes

Housing Units

	Number	Percent
Total housing units	13,632	100.0%
Occupied housing units	12,516	91.8%
Owner occupied	9,666	77.2%
Renter occupied	2,850	22.8%
Vacant housing units	1,116	8.2%

Year Structure Built

	Number	Percent
Total housing units	13,632	100.0%
Built 2010 or later	189	1.4%
Built 2000 to 2009	2,130	15.6%
Built 1990 to 1999	2,229	16.4%
Built 1980 to 1989	1,891	13.9%
Built 1970 to 1979	1,961	14.4%
Built 1960 to 1969	923	6.8%
Built 1950 to 1959	684	5.0%
Built 1940 to 1949	508	3.7%
Built 1939 or earlier	3,117	22.9%

Median year built 1978

Value for Specified Owner-Occupied Housing Units

	Number	Percent
Specified owner-occupied housing units	9,666	100.0%
Less than \$20,000	492	5.1%
\$20,000 to \$39,999	343	3.5%
\$40,000 to \$59,999	327	3.4%
\$60,000 to \$79,999	549	5.7%
\$80,000 to \$99,999	776	8.0%
\$100,000 to \$124,999	1,101	11.4%
\$125,000 to \$149,999	1,053	10.9%
\$150,000 to \$199,999	1,668	17.3%
\$200,000 to \$299,999	2,075	21.5%
\$300,000 to \$499,999	967	10.0%
\$500,000 to \$999,999	228	2.4%
\$1,000,000 or more	87	0.9%

Median value \$155,300

House Heating Fuel

	Number	Percent
Occupied housing units	12,516	100.0%
Utility gas	5,816	46.5%
Bottled, tank or LP gas	1,419	11.3%
Electricity	1,812	14.5%
Fuel oil, kerosene, etc	286	2.3%
Coal, coke or wood	3,021	24.1%
Solar energy or other fuel	142	1.1%
No fuel used	20	0.2%

Percentages may not sum to 100% due to rounding.

Gross Rent

	Number	Percent
Specified renter-occupied housing units	2,850	100.0%
Less than \$100	8	0.3%
\$100 to \$199	48	1.7%
\$200 to \$299	209	7.3%
\$300 to \$399	181	6.4%
\$400 to \$499	358	12.6%
\$500 to \$599	481	16.9%
\$600 to \$699	272	9.5%
\$700 to \$799	341	12.0%
\$800 to \$899	192	6.7%
\$900 to \$999	53	1.9%
\$1,000 to \$1,499	107	3.8%
\$1,500 or more	51	1.8%
No cash rent	549	19.3%

Median gross rent \$557

Median gross rent as a percentage of household income 22.4

Selected Monthly Owner Costs for Specified Owner-Occupied Housing Units

	Number	Percent
Specified owner-occupied housing units with a mortgage	5,258	100.0%
Less than \$400	72	1.4%
\$400 to \$599	356	6.8%
\$600 to \$799	632	12.0%
\$800 to \$999	1,131	21.5%
\$1,000 to \$1,249	1,204	22.9%
\$1,250 to \$1,499	593	11.3%
\$1,500 to \$1,999	888	16.9%
\$2,000 to \$2,999	290	5.5%
\$3,000 or more	92	1.7%

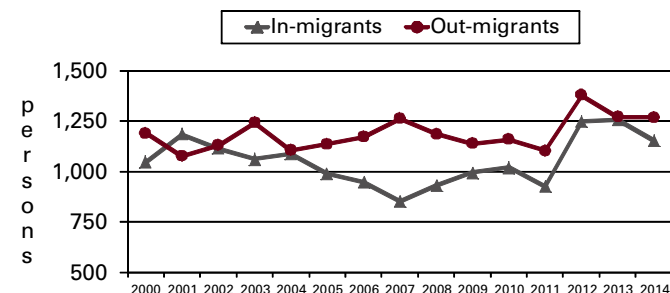
Median monthly owners cost \$1,091

Median monthly owners cost as a percentage of household income 21.9

Vital Statistics

	Number	Rate
Births / rate per 1,000 women aged 15 to 44	765	91.5
Teen births / rate per 1,000 females 15-19	22	12.5
Deaths / rate per 100,000 population	309	703.9
Marriages / rate per 1,000 population	347	8.3
Divorces / rate per 1,000 population	71	1.7

Migration



Agriculture

Land in farms (acres)	220,948
Number of farms	1,969
Average size (acres)	112
Total cash receipts	\$204,865,000
Per farm	\$104,045
Receipts for crops	\$42,791,000
Receipts for livestock/products	\$162,074,000

Education

Public schools buildings	16
Students (Average Daily Membership)	4,015
Teachers (Full Time Equivalent)	257.7
Expenditures per student	\$8,877
Graduation rate	93.8
Non-public schools	0
Students	0
4-year public universities	0
Branches	0
2-year public colleges/satellites	0
Private universities and colleges	0
Public libraries (Main / Branches)	1 / 4

Transportation

Registered motor vehicles	39,626
Passenger cars	17,913
Noncommercial trucks	6,825
Total license revenue	\$1,561,101.86
Interstate highway miles	0.00
Turnpike miles	0.00
U.S. highway miles	37.14
State highway miles	136.82
County, township, and municipal road miles	847.69
Commercial airports	1

Health Care

Physicians (MDs & DOs)	27
Registered hospitals	1
Number of beds	69
Licensed nursing homes	5
Number of beds	579
Licensed residential care	1
Number of beds	60
Persons with health insurance (Aged 0 to 64)	77.1%
Adults with insurance (Aged 18 to 64)	72.9%
Children with insurance (Aged Under 19)	84.3%

Voting

Number of registered voters	18,020
Voted in 2014 election	6,934
Percent turnout	38.5%

Communications

Television stations	0
Radio stations	1
Daily newspapers	0
Circulation	0
Weekly newspapers	0
Circulation	0

Crime

Total crimes reported in Uniform Crime Report	349
Violent crime	8
Property crime	338
Arson	3

Finance

FDIC insured financial institutions (HQs)	3
Assets (000)	\$1,147,391
Branch offices	20
Institutions represented	8

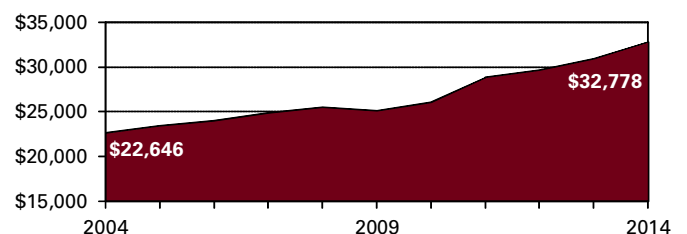
Transfer Payments

Total transfer payments	\$203,103,000
Payments to individuals	\$194,196,000
Retirement and disability	\$68,712,000
Medical payments	\$93,917,000
Income maintenance (Supplemental SSI, family assistance, food stamps, etc)	\$19,365,000
Unemployment benefits	\$2,331,000
Veterans benefits	\$3,470,000
Federal education and training assistance	\$4,309,000
Other payments to individuals	\$2,092,000
Total personal income	\$1,438,881,000
Dependency ratio	14.1%
(Percent of income from transfer payments)	

State Parks, Forests, Nature Preserves, Scenic Waterways, And Wildlife Areas

Areas/Facilities	4
Acreage	1,480.81

Per Capita Personal Income



Civilian Labor Force

	2011	2012	2013	2014	2015
Civilian labor force	19,600	19,700	20,100	19,900	20,600
Employed	18,400	18,700	19,000	19,100	19,900
Unemployed	1,200	1,000	1,000	800	700
Unemployment rate	6.3	5.1	5.2	4.0	3.4

Establishments, Employment, and Wages by Sector: 2014

Industrial Sector	Number of Establishments	Average Employment	Total Wages	Average Weekly Wage
Private Sector	1,172	16,444	\$550,837,682	\$644
Goods-Producing	586	9,158	\$335,316,785	\$704
Natural Resources and Mining	41	297	\$10,569,559	\$685
Constuction	255	2,017	\$77,403,998	\$738
Manufacturing	290	6,845	\$247,343,228	\$695
Service-Providing	586	7,286	\$215,520,897	\$569
Trade, Transportation and Utilities	270	3,637	\$121,133,415	\$641
Information	6	90	\$3,079,782	\$660
Financial Services	43	406	\$16,370,224	\$776
Professional and Business Services	70	595	\$22,480,847	\$727
Education and Health Services	50	951	\$27,222,066	\$550
Leisure and Hospitality	81	1,351	\$17,909,499	\$255
Other Services	66	254	\$7,275,117	\$552
Federal Government		61	\$2,911,419	\$924
State Government		37	\$1,669,342	\$876
Local Government		1,499	\$54,401,250	\$698

Private Sector total includes Unclassified establishments not shown.

Change Since 2009

Private Sector	14.7%	13.4%	33.6%	17.9%
Goods-Producing	22.1%	21.7%	41.1%	16.0%
Natural Resources and Mining	20.6%	5.7%	14.6%	8.4%
Construction	28.8%	17.9%	49.9%	27.2%
Manufacturing	16.9%	23.7%	39.9%	13.2%
Service-Producing	7.9%	4.4%	23.4%	18.3%
Trade, Transportation and Utilities	5.5%	19.8%	57.5%	31.6%
Information	0.0%	7.1%	28.8%	20.9%
Financial Services	-2.3%	2.3%	16.2%	13.6%
Professional and Business Services	2.9%	-44.4%	-35.9%	15.4%
Education and Health Services	13.6%	-1.7%	4.9%	6.6%
Leisure and Hospitality	2.5%	8.3%	14.7%	5.8%
Other Services	43.5%	41.1%	59.3%	13.1%
Federal Government		-15.3%	-5.4%	12.7%
State Government		-7.5%	-1.2%	8.0%
Local Government		-7.4%	0.5%	8.6%

Business Numbers

	2011	2012	2013	2014	2015
Business starts	48	94	65	70	73
Active businesses	905	933	946	953	965

Major & Notable Employers

Case Foods Inc	Mfg
Centor Inc	Mfg
East Holmes Local Schools	Govt
International Automotive	Mfg
Overhead Door/Wayne-Dalton	Mfg
Pomerene Hospital	Serv
Sperry & Rice Mfg Co LLC	Mfg
Weaver Leather Goods Inc	Mfg
West Holmes Local Schools	Govt

Residential Construction

	2011	2012	2013	2014	2015
Total units	39	3	3	4	5
Total valuation (000)	\$4,180	\$566	\$310	\$510	\$645
Total single-unit bldgs	1	3	1	4	5
Average cost per unit	\$180,000	\$188,667	\$160,000	\$127,500	\$128,941
Total multi-unit bldg units	38	0	2	0	0
Average cost per unit	\$105,263	\$0	\$75,000	\$0	\$0

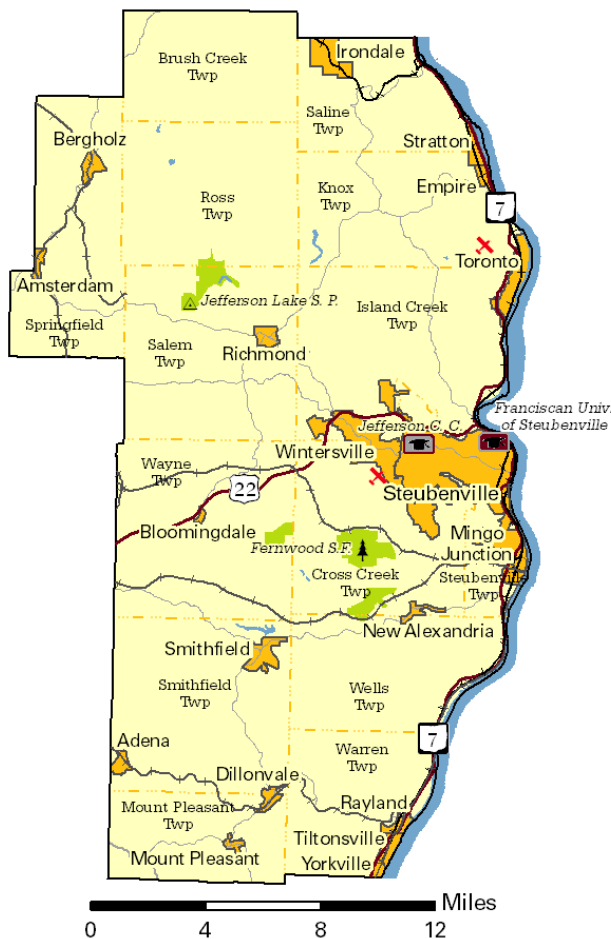
Ohio County Profiles

Prepared by the Office of Research



Jefferson County

Established: Proclamation - July 29, 1797
2015 Population: 67,347
Land Area: 409.6 square miles
County Seat: Steubenville City
Named for: Thomas Jefferson, Third U.S. President



Taxes

Taxable value of real property	\$926,740,340
Residential	\$624,141,710
Agriculture	\$91,682,260
Industrial	\$68,834,930
Commercial	\$134,918,180
Mineral	\$7,163,260
Ohio income tax liability	\$30,415,930
Average per return	\$1,017.39

Land Use/Land Cover

	Percent
Developed, Lower Intensity	10.29%
Developed, Higher Intensity	1.73%
Barren (strip mines, gravel pits, etc.)	0.78%
Forest	64.61%
Shrub/Scrub and Grasslands	2.25%
Pasture/Hay	12.11%
Cultivated Crops	7.05%
Wetlands	0.06%
Open Water	1.10%

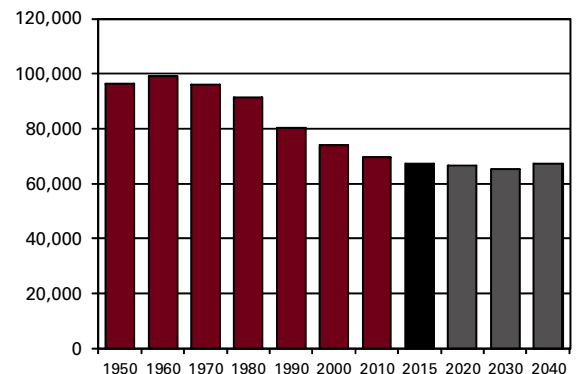
Largest Places

	Est. 2015	Census 2010
Steubenville city	18,219	18,659
Island Creek twp UB	6,241	6,480
Cross Creek twp UB	5,033	5,211
Toronto city	4,882	5,091
Winterville vlg	3,795	3,924
Mingo Junction vlg	3,324	3,454
Wells twp UB	2,705	2,813
Salem twp UB	2,568	2,667
Knox twp UB	1,969	2,048
Wayne twp UB	1,959	2,030

UB: Unincorporated balance.

Total Population

Census			Estimated
1800	8,766	1910	65,423
1810	17,260	1920	77,580
1820	18,531	1930	88,307
1830	22,489	1940	98,129
1840	25,030	1950	96,495
1850	29,133	1960	99,201
1860	26,115	1970	96,193
1870	29,188	1980	91,564
1880	33,018	1990	80,298
1890	39,415	2000	73,894
1900	44,357	2010	69,709
		2011	68,882
		2012	68,338
		2013	67,993
		2014	67,703
		2015	67,347
		Projected	
		2020	66,540
		2030	65,330
		2040	67,410



Population by Race

	Number	Percent
ACS Total Population	68,510	100.0%
White	62,847	91.7%
African-American	3,820	5.6%
Native American	69	0.1%
Asian	228	0.3%
Pacific Islander	3	0.0%
Other	79	0.1%
Two or More Races	1,464	2.1%
Hispanic (may be of any race)	842	1.2%
Total Minority	6,334	9.2%

Educational Attainment

	Number	Percent
Persons 25 years and over	48,418	100.0%
No high school diploma	5,099	10.5%
High school graduate	20,883	43.1%
Some college, no degree	9,325	19.3%
Associate degree	5,759	11.9%
Bachelor's degree	4,545	9.4%
Master's degree or higher	2,807	5.8%

Family Type by Employment Status

	Number	Percent
Total Families	18,402	100.0%
Married couple, husband and wife in labor force	5,889	32.0%
Married couple, husband in labor force, wife not	2,734	14.9%
Married couple, wife in labor force, husband not	1,479	8.0%
Married couple, husband and wife not in labor force	3,512	19.1%
Male householder, in labor force	889	4.8%
Male householder, not in labor force	545	3.0%
Female householder, in labor force	1,977	10.7%
Female householder, not in labor force	1,377	7.5%

Household Income

	Number	Percent
Total Households	28,176	100.0%
Less than \$10,000	2,776	9.9%
\$10,000 to \$19,999	4,139	14.7%
\$20,000 to \$29,999	3,567	12.7%
\$30,000 to \$39,999	3,282	11.6%
\$40,000 to \$49,999	3,040	10.8%
\$50,000 to \$59,999	2,397	8.5%
\$60,000 to \$74,999	2,653	9.4%
\$75,000 to \$99,999	2,991	10.6%
\$100,000 to \$149,999	2,358	8.4%
\$150,000 to \$199,999	546	1.9%
\$200,000 or more	427	1.5%
Median household income	\$40,816	

Population by Age

	Number	Percent
ACS Total Population	68,510	100.0%
Under 5 years	3,280	4.8%
5 to 17 years	10,205	14.9%
18 to 24 years	6,607	9.6%
25 to 44 years	14,740	21.5%
45 to 64 years	20,654	30.1%
65 years and more	13,024	19.0%
Median Age	44.3	

Family Type by Presence of Own Children Under 18

	Number	Percent
Total Families	18,402	100.0%
Married-couple families with own children	4,224	23.0%
Male householder, no wife present, with own children	486	2.6%
Female householder, no husband present, with own children	1,805	9.8%
Families with no own children	11,887	64.6%

Poverty Status of Families By Family Type by Presence Of Related Children

	Number	Percent
Total Families	18,402	100.0%
Family income above poverty level	16,090	87.4%
Family income below poverty level	2,312	12.6%
Married couple, with related children	430	2.3%
Male householder, no wife present, with related children	222	1.2%
Female householder, no husband present, with related children	1,115	6.1%
Families with no related children	545	3.0%

Ratio of Income To Poverty Level

	Number	Percent
Population for whom poverty status is determined	66,128	100.0%
Below 50% of poverty level	5,756	8.7%
50% to 99% of poverty level	5,808	8.8%
100% to 124% of poverty level	3,463	5.2%
125% to 149% of poverty level	3,663	5.5%
150% to 184% of poverty level	5,104	7.7%
185% to 199% of poverty level	2,339	3.5%
200% of poverty level or more	39,995	60.5%

Geographical Mobility

	Number	Percent
Population aged 1 year and older	67,987	100.0%
Same house as previous year	60,550	89.1%
Different house, same county	4,402	6.5%
Different county, same state	1,087	1.6%
Different state	1,888	2.8%
Abroad	60	0.1%

Percentages may not sum to 100% due to rounding.

Travel Time To Work

	Number	Percent
Workers 16 years and over	26,740	100.0%
Less than 15 minutes	8,618	32.2%
15 to 29 minutes	8,738	32.7%
30 to 44 minutes	4,627	17.3%
45 to 59 minutes	2,240	8.4%
60 minutes or more	2,517	9.4%

Mean travel time 25.4 minutes

Housing Units

	Number	Percent
Total housing units	32,661	100.0%
Occupied housing units	28,176	86.3%
Owner occupied	20,067	71.2%
Renter occupied	8,109	28.8%
Vacant housing units	4,485	13.7%

Year Structure Built

	Number	Percent
Total housing units	32,661	100.0%
Built 2010 or later	6	0.0%
Built 2000 to 2009	1,365	4.2%
Built 1990 to 1999	1,923	5.9%
Built 1980 to 1989	1,731	5.3%
Built 1970 to 1979	4,582	14.0%
Built 1960 to 1969	4,913	15.0%
Built 1950 to 1959	6,646	20.3%
Built 1940 to 1949	3,129	9.6%
Built 1939 or earlier	8,366	25.6%

Median year built 1957

Value for Specified Owner-Occupied Housing Units

	Number	Percent
Specified owner-occupied housing units	20,067	100.0%
Less than \$20,000	1,263	6.3%
\$20,000 to \$39,999	1,644	8.2%
\$40,000 to \$59,999	3,007	15.0%
\$60,000 to \$79,999	3,027	15.1%
\$80,000 to \$99,999	3,409	17.0%
\$100,000 to \$124,999	2,777	13.8%
\$125,000 to \$149,999	1,413	7.0%
\$150,000 to \$199,999	1,908	9.5%
\$200,000 to \$299,999	1,046	5.2%
\$300,000 to \$499,999	380	1.9%
\$500,000 to \$999,999	86	0.4%
\$1,000,000 or more	107	0.5%

Median value \$86,300

House Heating Fuel

	Number	Percent
Occupied housing units	28,176	100.0%
Utility gas	14,054	49.9%
Bottled, tank or LP gas	1,335	4.7%
Electricity	6,970	24.7%
Fuel oil, kerosene, etc	4,395	15.6%
Coal, coke or wood	1,178	4.2%
Solar energy or other fuel	174	0.6%
No fuel used	70	0.2%

Percentages may not sum to 100% due to rounding.

Gross Rent

	Number	Percent
Specified renter-occupied housing units	8,109	100.0%
Less than \$100	94	1.2%
\$100 to \$199	184	2.3%
\$200 to \$299	719	8.9%
\$300 to \$399	597	7.4%
\$400 to \$499	925	11.4%
\$500 to \$599	1,092	13.5%
\$600 to \$699	1,325	16.3%
\$700 to \$799	918	11.3%
\$800 to \$899	585	7.2%
\$900 to \$999	286	3.5%
\$1,000 to \$1,499	260	3.2%
\$1,500 or more	102	1.3%
No cash rent	1,022	12.6%

Median gross rent \$594

Median gross rent as a percentage of household income 29.1

Selected Monthly Owner Costs for Specified Owner-Occupied Housing Units

	Number	Percent
Specified owner-occupied housing units with a mortgage	10,091	100.0%
Less than \$400	240	2.4%
\$400 to \$599	953	9.4%
\$600 to \$799	2,195	21.8%
\$800 to \$999	2,443	24.2%
\$1,000 to \$1,249	1,786	17.7%
\$1,250 to \$1,499	1,200	11.9%
\$1,500 to \$1,999	879	8.7%
\$2,000 to \$2,999	308	3.1%
\$3,000 or more	87	0.9%

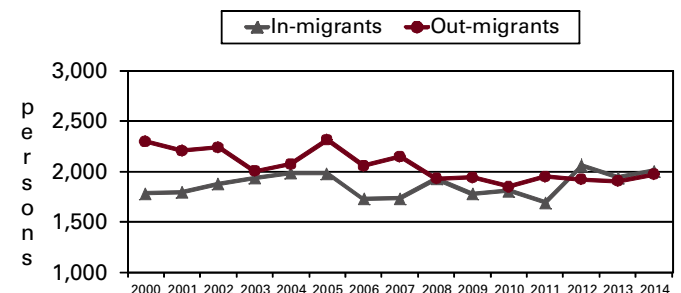
Median monthly owners cost \$937

Median monthly owners cost as a percentage of household income 19.6

Vital Statistics

	Number	Rate
Births / rate per 1,000 women aged 15 to 44	681	56.6
Teen births / rate per 1,000 females 15-19	58	25.6
Deaths / rate per 100,000 population	975	1,440.3
Marriages / rate per 1,000 population	376	5.6
Divorces / rate per 1,000 population	260	3.8

Migration



Agriculture

Land in farms (acres)	68,341
Number of farms	493
Average size (acres)	139
Total cash receipts	\$7,829,000
Per farm	\$15,879
Receipts for crops	\$3,788,000
Receipts for livestock/products	\$4,040,000

Education

Public schools buildings	24
Students (Average Daily Membership)	9,260
Teachers (Full Time Equivalent)	577.6
Expenditures per student	\$8,612
Graduation rate	92.2
Non-public schools	4
Students	796
4-year public universities	0
Branches	0
2-year public colleges/satellites	1
Private universities and colleges	1
Public libraries (Main / Branches)	1 / 6

Transportation

Registered motor vehicles	76,115
Passenger cars	49,696
Noncommercial trucks	13,173
Total license revenue	\$1,970,892.81
Interstate highway miles	0.00
Turnpike miles	0.00
U.S. highway miles	18.95
State highway miles	153.19
County, township, and municipal road miles	936.39
Commercial airports	2

Health Care

Physicians (MDs & DOs)	80
Registered hospitals	4
Number of beds	560
Licensed nursing homes	10
Number of beds	682
Licensed residential care	4
Number of beds	116
Persons with health insurance (Aged 0 to 64)	90.5%
Adults with insurance (Aged 18 to 64)	89.0%
Children with insurance (Aged Under 19)	94.8%

Voting

Number of registered voters	48,302
Voted in 2014 election	19,591
Percent turnout	40.6%

Communications

Television stations	1
Radio stations	2
Daily newspapers	1
Circulation	9,919
Weekly newspapers	0
Circulation	0

Crime

Total crimes reported in Uniform Crime Report	333
Violent crime	30
Property crime	303
Arson	0

Finance

FDIC insured financial institutions (HQs)	1
Assets (000)	\$59,159
Branch offices	27
Institutions represented	8

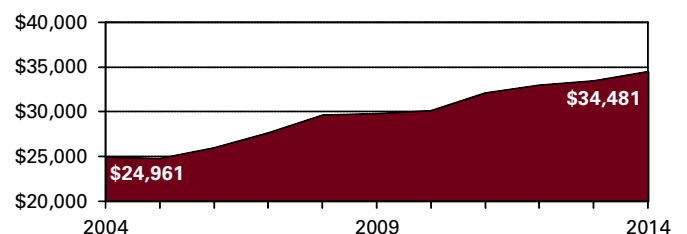
Transfer Payments

Total transfer payments	\$739,372,000
Payments to individuals	\$725,718,000
Retirement and disability	\$269,173,000
Medical payments	\$341,358,000
Income maintenance (Supplemental SSI, family assistance, food stamps, etc)	\$69,433,000
Unemployment benefits	\$7,466,000
Veterans benefits	\$17,838,000
Federal education and training assistance	\$16,476,000
Other payments to individuals	\$3,974,000
Total personal income	\$2,334,146,000
Dependency ratio	31.7%
(Percent of income from transfer payments)	

State Parks, Forests, Nature Preserves, Scenic Waterways, And Wildlife Areas

Areas/Facilities	3
Acreage	8,127.33

Per Capita Personal Income



Civilian Labor Force

	2011	2012	2013	2014	2015
Civilian labor force	32,000	31,300	30,700	29,800	29,600
Employed	28,200	27,900	27,300	27,400	27,400
Unemployed	3,800	3,400	3,300	2,400	2,200
Unemployment rate	12.0	10.9	10.9	8.1	7.4

Establishments, Employment, and Wages by Sector: 2014

Industrial Sector	Number of Establishments	Average Employment	Total Wages	Average Weekly Wage
Private Sector	1,250	17,771	\$671,070,062	\$726
Goods-Producing	157	2,261	\$145,274,921	\$1,236
Natural Resources and Mining	15	* * * * *	Data Not Available	* * * * *
Constuction	108	* * * * *	Data Not Available	* * * * *
Manufacturing	35	1,065	\$70,457,619	\$1,272
Service-Providing	1,092	15,510	\$525,795,141	\$652
Trade, Transportation and Utilities	320	5,715	\$225,056,924	\$757
Information	21	376	\$14,464,322	\$740
Financial Services	116	641	\$20,734,525	\$622
Professional and Business Services	153	1,081	\$35,191,419	\$626
Education and Health Services	190	4,977	\$188,792,464	\$730
Leisure and Hospitality	159	2,032	\$27,152,092	\$257
Other Services	133	686	\$14,287,508	\$401
Federal Government		160	\$8,376,708	\$1,006
State Government		67	\$3,296,147	\$946
Local Government		3,030	\$100,581,075	\$638

Private Sector total includes Unclassified establishments not shown.

Change Since 2009

Private Sector	-8.5%	-11.8%	-7.4%	4.9%
Goods-Producing	-19.9%	-45.7%	-34.6%	20.6%
Natural Resources and Mining	36.4%	* * * * *	Data Not Available	* * * * *
Construction	-27.0%	* * * * *	Data Not Available	* * * * *
Manufacturing	-5.4%	-41.8%	-24.8%	29.3%
Service-Producing	-6.7%	-2.9%	4.7%	7.8%
Trade, Transportation and Utilities	-11.8%	-4.6%	3.9%	8.9%
Information	-8.7%	-29.1%	-24.0%	7.2%
Financial Services	-12.8%	-11.7%	5.6%	19.6%
Professional and Business Services	-5.6%	-10.2%	-15.5%	-5.9%
Education and Health Services	2.2%	2.3%	10.6%	8.1%
Leisure and Hospitality	0.6%	4.5%	20.6%	15.2%
Other Services	-6.3%	-3.0%	17.9%	21.5%
Federal Government		-30.4%	-27.2%	4.4%
State Government		-24.7%	-28.2%	-4.7%
Local Government		-10.2%	-4.6%	6.2%

Business Numbers

	2011	2012	2013	2014	2015
Business starts	57	79	69	65	63
Active businesses	1,055	1,062	1,062	1,046	1,017

Major & Notable Employers

Buckeye Local Schools	Govt
Edison Local Schools	Govt
First Energy	Util
Franciscan Univ of Steubenville	Serv
Indian Creek Local Schools	Govt
Jefferson County Government	Govt
Steubenville City Schools	Govt
Titanium Metals Corp/Timet	Mfg
Trinity Health System	Serv
Wal-Mart Stores Inc	Trade

Residential

Construction

	2011	2012	2013	2014	2015
Total units	3	7	18	21	8
Total valuation (000)	\$479	\$1,388	\$1,211	\$1,834	\$1,569
Total single-unit bldgs	3	3	2	5	8
Average cost per unit	\$159,667	\$202,801	\$235,000	\$218,744	\$196,125
Total multi-unit bldg units	0	4	16	16	0
Average cost per unit	\$0	\$194,900	\$46,288	\$46,288	\$0

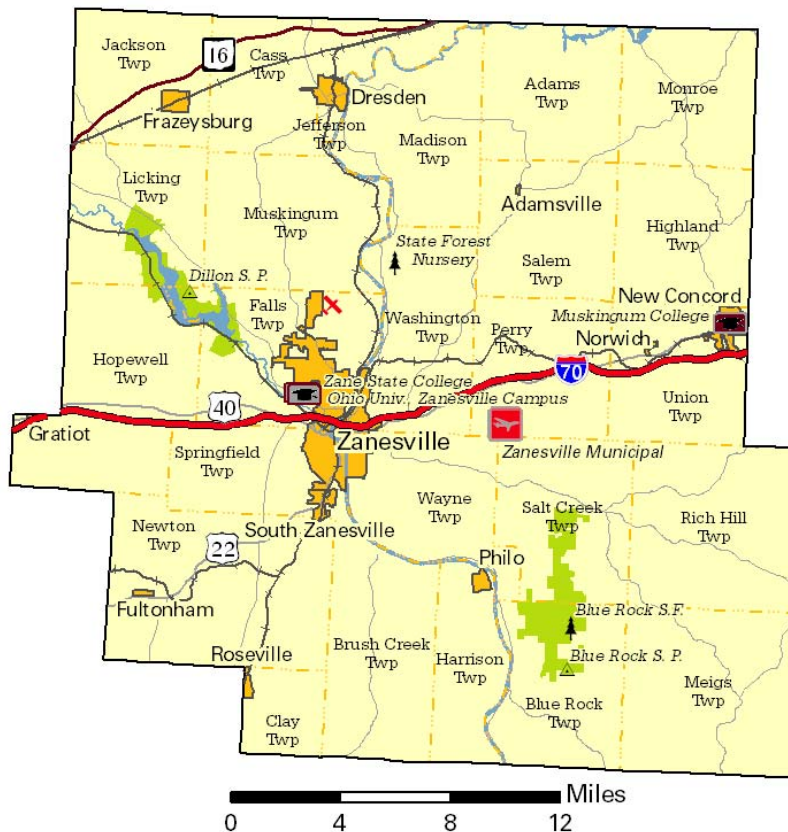
Ohio County Profiles

Prepared by the Office of Research



Muskingum County

Established: Act - March 1, 1804
2015 Population: 86,290
Land Area: 664.6 square miles
County Seat: Zanesville City
Named for: Native American word meaning "by the riverside"



Taxes

Taxable value of real property	\$1,427,942,840
Residential	\$922,920,340
Agriculture	\$161,938,720
Industrial	\$50,161,710
Commercial	\$286,067,700
Mineral	\$6,854,370
Ohio income tax liability	\$42,790,253
Average per return	\$1,057.54

Land Use/Land Cover

	Percent
Developed, Lower Intensity	9.02%
Developed, Higher Intensity	0.99%
Barren (strip mines, gravel pits, etc.)	0.38%
Forest	54.50%
Shrub/Scrub and Grasslands	3.60%
Pasture/Hay	22.03%
Cultivated Crops	7.84%
Wetlands	0.20%
Open Water	1.43%

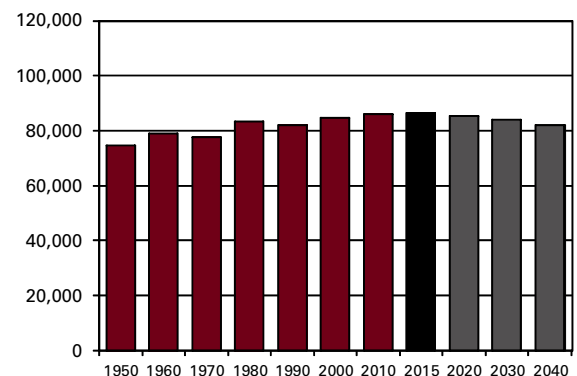
Largest Places

	Est. 2015	Census 2010
Zanesville city	25,498	25,484
Falls twp	8,185	8,131
Newton twp UB	5,161	5,157
Wayne twp	4,760	4,734
Muskingum twp	4,569	4,520
Washington twp	4,300	4,288
Springfield twp UB	3,672	3,653
Hopewell twp UB	3,011	3,005
Perry twp	2,629	2,621
New Concord vlg	2,343	2,491

UB: Unincorporated balance.

Total Population

Census			Estimated
1800		1910	57,488
1810	10,036	1920	57,980
1820	17,824	1930	67,398
1830	29,334	1940	69,795
1840	38,749	1950	74,535
1850	45,049	1960	79,159
1860	44,416	1970	77,826
1870	44,886	1980	83,340
1880	49,774	1990	82,068
1890	51,210	2000	84,585
1900	53,185	2010	86,074
		2011	86,228
		2012	85,873
		2013	85,742
		2014	85,946
		2015	86,290
		Projected	
		2020	85,420
		2030	83,900
		2040	81,900



Population by Race

	Number	Percent
ACS Total Population	85,947	100.0%
White	79,668	92.7%
African-American	2,803	3.3%
Native American	166	0.2%
Asian	246	0.3%
Pacific Islander	10	0.0%
Other	186	0.2%
Two or More Races	2,868	3.3%
Hispanic (may be of any race)	743	0.9%
Total Minority	6,762	7.9%

Educational Attainment

	Number	Percent
Persons 25 years and over	57,790	100.0%
No high school diploma	7,731	13.4%
High school graduate	25,652	44.4%
Some college, no degree	11,248	19.5%
Associate degree	4,737	8.2%
Bachelor's degree	5,245	9.1%
Master's degree or higher	3,177	5.5%

Family Type by Employment Status

	Number	Percent
Total Families	22,863	100.0%
Married couple, husband and wife in labor force	8,171	35.7%
Married couple, husband in labor force, wife not	3,116	13.6%
Married couple, wife in labor force, husband not	1,670	7.3%
Married couple, husband and wife not in labor force	3,453	15.1%
Male householder, in labor force	1,232	5.4%
Male householder, not in labor force	508	2.2%
Female householder, in labor force	3,165	13.8%
Female householder, not in labor force	1,548	6.8%

Household Income

	Number	Percent
Total Households	34,160	100.0%
Less than \$10,000	2,884	8.4%
\$10,000 to \$19,999	5,379	15.7%
\$20,000 to \$29,999	4,855	14.2%
\$30,000 to \$39,999	3,573	10.5%
\$40,000 to \$49,999	3,523	10.3%
\$50,000 to \$59,999	2,962	8.7%
\$60,000 to \$74,999	3,509	10.3%
\$75,000 to \$99,999	3,619	10.6%
\$100,000 to \$149,999	2,862	8.4%
\$150,000 to \$199,999	628	1.8%
\$200,000 or more	366	1.1%
Median household income	\$40,937	

Population by Age

	Number	Percent
ACS Total Population	85,947	100.0%
Under 5 years	5,215	6.1%
5 to 17 years	15,048	17.5%
18 to 24 years	7,894	9.2%
25 to 44 years	20,391	23.7%
45 to 64 years	23,741	27.6%
65 years and more	13,658	15.9%
Median Age	40.1	

Family Type by Presence of Own Children Under 18

	Number	Percent
Total Families	22,872	100.0%
Married-couple families with own children	5,687	24.9%
Male householder, no wife present, with own children	974	4.3%
Female householder, no husband present, with own children	3,004	13.1%
Families with no own children	13,207	57.7%

Poverty Status of Families By Family Type by Presence Of Related Children

	Number	Percent
Total Families	22,872	100.0%
Family income above poverty level	19,501	85.3%
Family income below poverty level	3,371	14.7%
Married couple, with related children	526	2.3%
Male householder, no wife present, with related children	525	2.3%
Female householder, no husband present, with related children	1,662	7.3%
Families with no related children	658	2.9%

Ratio of Income To Poverty Level

	Number	Percent
Population for whom poverty status is determined	83,487	100.0%
Below 50% of poverty level	6,974	8.4%
50% to 99% of poverty level	9,084	10.9%
100% to 124% of poverty level	4,572	5.5%
125% to 149% of poverty level	5,798	6.9%
150% to 184% of poverty level	6,842	8.2%
185% to 199% of poverty level	2,358	2.8%
200% of poverty level or more	47,859	57.3%

Geographical Mobility

	Number	Percent
Population aged 1 year and older	85,096	100.0%
Same house as previous year	72,787	85.5%
Different house, same county	9,162	10.8%
Different county, same state	2,441	2.9%
Different state	585	0.7%
Abroad	121	0.1%

Percentages may not sum to 100% due to rounding.

Travel Time To Work

	Number	Percent
Workers 16 years and over	35,038	100.0%
Less than 15 minutes	11,627	33.2%
15 to 29 minutes	12,740	36.4%
30 to 44 minutes	5,207	14.9%
45 to 59 minutes	2,146	6.1%
60 minutes or more	3,318	9.5%

Mean travel time 24.5 minutes

Housing Units

	Number	Percent
Total housing units	37,906	100.0%
Occupied housing units	34,160	90.1%
Owner occupied	23,084	67.6%
Renter occupied	11,076	32.4%
Vacant housing units	3,746	9.9%

Year Structure Built

	Number	Percent
Total housing units	37,906	100.0%
Built 2010 or later	187	0.5%
Built 2000 to 2009	4,373	11.5%
Built 1990 to 1999	4,145	10.9%
Built 1980 to 1989	3,713	9.8%
Built 1970 to 1979	5,210	13.7%
Built 1960 to 1969	4,121	10.9%
Built 1950 to 1959	3,694	9.7%
Built 1940 to 1949	2,345	6.2%
Built 1939 or earlier	10,118	26.7%

Median year built 1967

Value for Specified Owner-Occupied Housing Units

	Number	Percent
Specified owner-occupied housing units	23,084	100.0%
Less than \$20,000	1,495	6.5%
\$20,000 to \$39,999	1,313	5.7%
\$40,000 to \$59,999	2,031	8.8%
\$60,000 to \$79,999	2,834	12.3%
\$80,000 to \$99,999	3,064	13.3%
\$100,000 to \$124,999	3,176	13.8%
\$125,000 to \$149,999	2,490	10.8%
\$150,000 to \$199,999	3,593	15.6%
\$200,000 to \$299,999	2,089	9.0%
\$300,000 to \$499,999	659	2.9%
\$500,000 to \$999,999	196	0.8%
\$1,000,000 or more	144	0.6%

Median value \$106,300

House Heating Fuel

	Number	Percent
Occupied housing units	34,160	100.0%
Utility gas	19,278	56.4%
Bottled, tank or LP gas	2,705	7.9%
Electricity	9,338	27.3%
Fuel oil, kerosene, etc	1,088	3.2%
Coal, coke or wood	1,168	3.4%
Solar energy or other fuel	428	1.3%
No fuel used	155	0.5%

Percentages may not sum to 100% due to rounding.

Gross Rent

	Number	Percent
Specified renter-occupied housing units	11,076	100.0%
Less than \$100	211	1.9%
\$100 to \$199	184	1.7%
\$200 to \$299	693	6.3%
\$300 to \$399	623	5.6%
\$400 to \$499	1,105	10.0%
\$500 to \$599	1,718	15.5%
\$600 to \$699	1,466	13.2%
\$700 to \$799	1,621	14.6%
\$800 to \$899	1,040	9.4%
\$900 to \$999	648	5.9%
\$1,000 to \$1,499	788	7.1%
\$1,500 or more	106	1.0%
No cash rent	873	7.9%

Median gross rent \$637

Median gross rent as a percentage of household income 30.6

Selected Monthly Owner Costs for Specified Owner-Occupied Housing Units

	Number	Percent
Specified owner-occupied housing units with a mortgage	13,968	100.0%
Less than \$400	241	1.7%
\$400 to \$599	1,046	7.5%
\$600 to \$799	2,290	16.4%
\$800 to \$999	2,819	20.2%
\$1,000 to \$1,249	2,932	21.0%
\$1,250 to \$1,499	1,869	13.4%
\$1,500 to \$1,999	1,793	12.8%
\$2,000 to \$2,999	847	6.1%
\$3,000 or more	131	0.9%

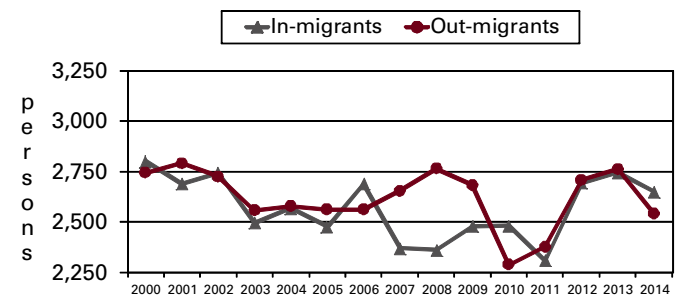
Median monthly owners cost \$1,050

Median monthly owners cost as a percentage of household income 21.4

Vital Statistics

	Number	Rate
Births / rate per 1,000 women aged 15 to 44	1,038	64.8
Teen births / rate per 1,000 females 15-19	98	33.8
Deaths / rate per 100,000 population	998	1,162.9
Marriages / rate per 1,000 population	592	6.9
Divorces / rate per 1,000 population	380	4.5

Migration



Agriculture

Land in farms (acres)	173,269
Number of farms	1,259
Average size (acres)	138
Total cash receipts	\$58,101,000
Per farm	\$46,149
Receipts for crops	\$30,122,000
Receipts for livestock/products	\$27,979,000

Education

Public schools buildings	36
Students (Average Daily Membership)	16,352
Teachers (Full Time Equivalent)	890.7
Expenditures per student	\$8,813
Graduation rate	86.7
Non-public schools	3
Students	418
4-year public universities	0
Branches	1
2-year public colleges/satellites	1
Private universities and colleges	1
Public libraries (Main / Branches)	1 / 5

Transportation

Registered motor vehicles	101,500
Passenger cars	60,590
Noncommercial trucks	18,990
Total license revenue	\$2,949,791.58
Interstate highway miles	27.35
Turnpike miles	0.00
U.S. highway miles	40.12
State highway miles	198.01
County, township, and municipal road miles	1,409.85
Commercial airports	2

Health Care

Physicians (MDs & DOs)	166
Registered hospitals	3
Number of beds	668
Licensed nursing homes	8
Number of beds	726
Licensed residential care	6
Number of beds	441
Persons with health insurance (Aged 0 to 64)	89.3%
Adults with insurance (Aged 18 to 64)	87.2%
Children with insurance (Aged Under 19)	94.7%

Voting

Number of registered voters	53,353
Voted in 2014 election	21,263
Percent turnout	39.9%

Communications

Television stations	1
Radio stations	5
Daily newspapers	1
Circulation	8,771
Weekly newspapers	0
Circulation	0

Crime

Total crimes reported in Uniform Crime Report	2,986
Violent crime	163
Property crime	2,805
Arson	18

Finance

FDIC insured financial institutions (HQs)	2
Assets (000)	\$560,902
Branch offices	32
Institutions represented	10

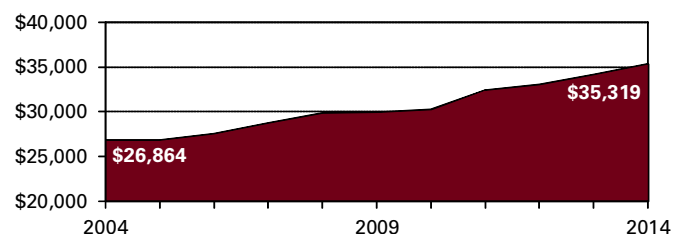
Transfer Payments

Total transfer payments	\$834,238,000
Payments to individuals	\$816,742,000
Retirement and disability	\$285,040,000
Medical payments	\$382,922,000
Income maintenance (Supplemental SSI, family assistance, food stamps, etc)	\$98,155,000
Unemployment benefits	\$8,502,000
Veterans benefits	\$19,761,000
Federal education and training assistance	\$16,991,000
Other payments to individuals	\$5,371,000
Total personal income	\$3,030,971,000
Dependency ratio	27.5%
(Percent of income from transfer payments)	

State Parks, Forests, Nature Preserves, Scenic Waterways, And Wildlife Areas

Areas/Facilities	13
Acreage	34,163.93

Per Capita Personal Income



Civilian Labor Force

	2011	2012	2013	2014	2015
Civilian labor force	41,300	40,400	40,000	39,300	39,100
Employed	36,800	36,700	36,400	36,600	36,700
Unemployed	4,500	3,700	3,700	2,800	2,400
Unemployment rate	10.9	9.2	9.2	7.1	6.1

Establishments, Employment, and Wages by Sector: 2014

Industrial Sector	Number of Establishments	Average Employment	Total Wages	Average Weekly Wage
Private Sector	1,685	26,774	\$968,540,717	\$696
Goods-Producing	285	4,153	\$224,433,857	\$1,039
Natural Resources and Mining	39	504	\$52,317,009	\$1,996
Constuction	169	858	\$33,951,650	\$761
Manufacturing	78	2,791	\$138,165,198	\$952
Service-Providing	1,400	22,621	\$744,106,860	\$633
Trade, Transportation and Utilities	475	7,548	\$228,399,875	\$582
Information	15	629	\$22,064,604	\$674
Financial Services	162	957	\$43,366,249	\$872
Professional and Business Services	186	1,950	\$63,950,941	\$631
Education and Health Services	202	6,781	\$308,043,550	\$874
Leisure and Hospitality	198	3,630	\$51,067,750	\$271
Other Services	157	1,115	\$26,979,747	\$466
Federal Government		216	\$11,982,046	\$1,068
State Government		399	\$13,317,199	\$641
Local Government		4,588	\$163,910,819	\$687

Private Sector total includes Unclassified establishments not shown.

Change Since 2009

Private Sector	-5.4%	-1.0%	12.5%	13.7%
Goods-Producing	-9.5%	-16.9%	6.5%	28.3%
Natural Resources and Mining	-15.2%	17.5%	190.2%	147.3%
Construction	-6.1%	6.1%	15.5%	8.9%
Manufacturing	-12.4%	-25.8%	-15.4%	14.0%
Service-Producing	-4.6%	2.6%	14.5%	11.6%
Trade, Transportation and Utilities	1.1%	3.1%	12.7%	9.2%
Information	-16.7%	16.1%	26.1%	8.5%
Financial Services	-7.4%	-11.6%	4.7%	18.5%
Professional and Business Services	-8.4%	46.1%	29.8%	-11.0%
Education and Health Services	-11.4%	-5.6%	14.8%	21.6%
Leisure and Hospitality	-2.5%	6.7%	16.2%	8.8%
Other Services	-7.1%	-5.9%	1.5%	7.9%
Federal Government		-22.9%	-14.1%	11.5%
State Government		7.3%	-5.9%	-12.4%
Local Government		3.1%	3.1%	0.0%

Business Numbers

	2011	2012	2013	2014	2015
Business starts	127	151	131	154	125
Active businesses	1,553	1,514	1,510	1,527	1,512

Major & Notable Employers

5 B's Inc	Mfg
AK Steel Holding Co	Mfg
Avon Products Inc.	Trade
AutoZone Inc	Trade
Dollar General Corp	Trade
Genesis HealthCare System	Serv
Kellogg's	Mfg
Longaberger Co	Mfg
Muskingum University	Serv
Muskingum County Government	Govt
Owens-Illinois/Owens-Brockway	Mfg
Wendy's Intl/East Balt Bakeries	Mfg
Zanesville City Schools	Govt

Residential

Construction

	2011	2012	2013	2014	2015
Total units	42	84	72	50	79
Total valuation (000)	\$1,389	\$6,525	\$6,250	\$3,235	\$7,557
Total single-unit bldgs	2	36	36	3	15
Average cost per unit	\$69,500	\$139,583	\$142,361	\$186,667	\$177,133
Total multi-unit bldg units	40	48	36	47	64
Average cost per unit	\$31,250	\$31,250	\$31,250	\$56,915	\$76,563

Ohio County Profiles

Prepared by the Office of Research



Tuscarawas County

Established: Act - March 15, 1808
2015 Population: 92,916
Land Area: 567.6 square miles
County Seat: New Philadelphia City
Named for: Native American word meaning "open mouth"



Taxes

Taxable value of real property	\$1,591,799,780
Residential	\$1,083,108,870
Agriculture	\$206,371,350
Industrial	\$74,318,230
Commercial	\$221,960,320
Mineral	\$6,041,010
Ohio income tax liability	\$47,200,343
Average per return	\$1,105.58

Land Use/Land Cover

	Percent
Developed, Lower Intensity	9.66%
Developed, Higher Intensity	1.61%
Barren (strip mines, gravel pits, etc.)	0.94%
Forest	52.23%
Shrub/Scrub and Grasslands	2.49%
Pasture/Hay	16.25%
Cultivated Crops	14.69%
Wetlands	0.77%
Open Water	1.36%

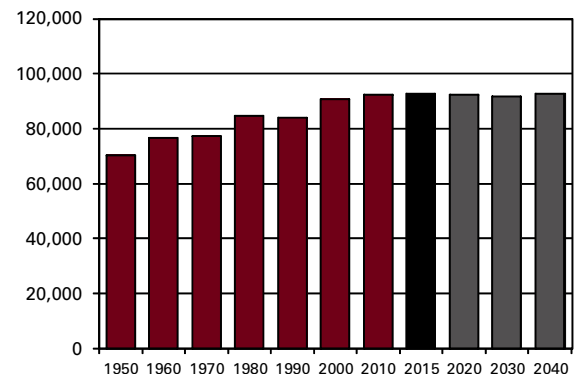
Largest Places

	Est. 2015	Census 2010
New Philadelphia city	17,484	17,283
Dover city	12,899	12,869
Uhrichsville city	5,404	5,413
Lawrence twp UB	4,642	4,575
Dover twp UB	4,405	4,339
Goshen twp UB	3,925	3,938
Newcomerstown vlg	3,794	3,822
Strasburg vlg	2,679	2,608
Dennison vlg	2,640	2,655
Sandy twp UB	2,236	2,252

UB: Unincorporated balance.

Total Population

Census			Estimated
1800		1910	57,035
1810	3,045	1920	63,578
1820	8,328	1930	68,193
1830	14,298	1940	68,816
1840	25,631	1950	70,320
1850	31,761	1960	76,789
1860	32,463	1970	77,211
1870	33,840	1980	84,614
1880	40,198	1990	84,090
1890	46,618	2000	90,914
1900	53,751	2010	92,582
		2011	92,518
		2012	92,501
		2013	92,778
		2014	92,774
		2015	92,916
		Projected	
		2020	92,310
		2030	91,890
		2040	92,840



Population by Race

	Number	Percent
ACS Total Population	92,616	100.0%
White	89,816	97.0%
African-American	925	1.0%
Native American	275	0.3%
Asian	308	0.3%
Pacific Islander	0	0.0%
Other	416	0.4%
Two or More Races	876	0.9%
Hispanic (may be of any race)	1,992	2.2%
Total Minority	4,234	4.6%

Educational Attainment

	Number	Percent
Persons 25 years and over	63,870	100.0%
No high school diploma	8,528	13.4%
High school graduate	30,598	47.9%
Some college, no degree	11,016	17.2%
Associate degree	4,310	6.7%
Bachelor's degree	6,232	9.8%
Master's degree or higher	3,186	5.0%

Family Type by Employment Status

	Number	Percent
Total Families	25,303	100.0%
Married couple, husband and wife in labor force	10,506	41.5%
Married couple, husband in labor force, wife not	4,072	16.1%
Married couple, wife in labor force, husband not	1,450	5.7%
Married couple, husband and wife not in labor force	3,826	15.1%
Male householder, in labor force	1,178	4.7%
Male householder, not in labor force	341	1.3%
Female householder, in labor force	2,858	11.3%
Female householder, not in labor force	1,072	4.2%

Household Income

	Number	Percent
Total Households	36,366	100.0%
Less than \$10,000	2,354	6.5%
\$10,000 to \$19,999	4,976	13.7%
\$20,000 to \$29,999	4,325	11.9%
\$30,000 to \$39,999	4,481	12.3%
\$40,000 to \$49,999	3,950	10.9%
\$50,000 to \$59,999	3,480	9.6%
\$60,000 to \$74,999	4,188	11.5%
\$75,000 to \$99,999	4,155	11.4%
\$100,000 to \$149,999	3,252	8.9%
\$150,000 to \$199,999	680	1.9%
\$200,000 or more	525	1.4%
Median household income	\$44,656	

Population by Age

	Number	Percent
ACS Total Population	92,616	100.0%
Under 5 years	5,448	5.9%
5 to 17 years	16,087	17.4%
18 to 24 years	7,211	7.8%
25 to 44 years	21,693	23.4%
45 to 64 years	26,365	28.5%
65 years and more	15,812	17.1%
Median Age	40.9	

Family Type by Presence of Own Children Under 18

	Number	Percent
Total Families	25,342	100.0%
Married-couple families with own children	6,937	27.4%
Male householder, no wife present, with own children	776	3.1%
Female householder, no husband present, with own children	2,317	9.1%
Families with no own children	15,312	60.4%

Poverty Status of Families By Family Type by Presence Of Related Children

	Number	Percent
Total Families	25,342	100.0%
Family income above poverty level	22,684	89.5%
Family income below poverty level	2,658	10.5%
Married couple, with related children	721	2.8%
Male householder, no wife present, with related children	126	0.5%
Female householder, no husband present, with related children	1,244	4.9%
Families with no related children	567	2.2%

Ratio of Income To Poverty Level

	Number	Percent
Population for whom poverty status is determined	91,361	100.0%
Below 50% of poverty level	4,988	5.5%
50% to 99% of poverty level	8,045	8.8%
100% to 124% of poverty level	4,578	5.0%
125% to 149% of poverty level	5,064	5.5%
150% to 184% of poverty level	6,570	7.2%
185% to 199% of poverty level	3,857	4.2%
200% of poverty level or more	58,259	63.8%

Geographical Mobility

	Number	Percent
Population aged 1 year and older	91,533	100.0%
Same house as previous year	81,206	88.7%
Different house, same county	7,043	7.7%
Different county, same state	2,257	2.5%
Different state	983	1.1%
Abroad	44	0.0%

Percentages may not sum to 100% due to rounding.

Travel Time To Work

	Number	Percent
Workers 16 years and over	40,315	100.0%
Less than 15 minutes	15,853	39.3%
15 to 29 minutes	14,034	34.8%
30 to 44 minutes	6,379	15.8%
45 to 59 minutes	2,286	5.7%
60 minutes or more	1,763	4.4%

Mean travel time 20.8 minutes

Housing Units

	Number	Percent
Total housing units	40,062	100.0%
Occupied housing units	36,366	90.8%
Owner occupied	26,231	72.1%
Renter occupied	10,135	27.9%
Vacant housing units	3,696	9.2%

Year Structure Built

	Number	Percent
Total housing units	40,062	100.0%
Built 2010 or later	158	0.4%
Built 2000 to 2009	4,264	10.6%
Built 1990 to 1999	4,887	12.2%
Built 1980 to 1989	3,702	9.2%
Built 1970 to 1979	5,279	13.2%
Built 1960 to 1969	3,578	8.9%
Built 1950 to 1959	4,432	11.1%
Built 1940 to 1949	1,912	4.8%
Built 1939 or earlier	11,850	29.6%

Median year built 1965

Value for Specified Owner-Occupied Housing Units

	Number	Percent
Specified owner-occupied housing units	26,231	100.0%
Less than \$20,000	1,246	4.8%
\$20,000 to \$39,999	768	2.9%
\$40,000 to \$59,999	1,772	6.8%
\$60,000 to \$79,999	3,663	14.0%
\$80,000 to \$99,999	4,088	15.6%
\$100,000 to \$124,999	4,028	15.4%
\$125,000 to \$149,999	2,923	11.1%
\$150,000 to \$199,999	3,908	14.9%
\$200,000 to \$299,999	2,626	10.0%
\$300,000 to \$499,999	842	3.2%
\$500,000 to \$999,999	258	1.0%
\$1,000,000 or more	109	0.4%

Median value \$109,800

House Heating Fuel

	Number	Percent
Occupied housing units	36,366	100.0%
Utility gas	23,049	63.4%
Bottled, tank or LP gas	2,572	7.1%
Electricity	7,333	20.2%
Fuel oil, kerosene, etc	1,588	4.4%
Coal, coke or wood	1,368	3.8%
Solar energy or other fuel	406	1.1%
No fuel used	50	0.1%

Percentages may not sum to 100% due to rounding.

Gross Rent

	Number	Percent
Specified renter-occupied housing units	10,135	100.0%
Less than \$100	42	0.4%
\$100 to \$199	102	1.0%
\$200 to \$299	328	3.2%
\$300 to \$399	571	5.6%
\$400 to \$499	1,348	13.3%
\$500 to \$599	1,536	15.2%
\$600 to \$699	1,654	16.3%
\$700 to \$799	1,417	14.0%
\$800 to \$899	1,001	9.9%
\$900 to \$999	609	6.0%
\$1,000 to \$1,499	651	6.4%
\$1,500 or more	147	1.5%
No cash rent	729	7.2%

Median gross rent \$653

Median gross rent as a percentage of household income 29.1

Selected Monthly Owner Costs for Specified Owner-Occupied Housing Units

	Number	Percent
Specified owner-occupied housing units with a mortgage	15,394	100.0%
Less than \$400	215	1.4%
\$400 to \$599	1,110	7.2%
\$600 to \$799	2,256	14.7%
\$800 to \$999	3,518	22.9%
\$1,000 to \$1,249	3,089	20.1%
\$1,250 to \$1,499	2,500	16.2%
\$1,500 to \$1,999	1,909	12.4%
\$2,000 to \$2,999	590	3.8%
\$3,000 or more	207	1.3%

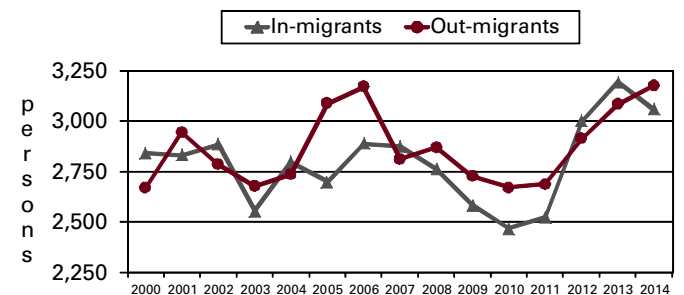
Median monthly owners cost \$1,048

Median monthly owners cost as a percentage of household income 20.9

Vital Statistics

	Number	Rate
Births / rate per 1,000 women aged 15 to 44	1,140	70.8
Teen births / rate per 1,000 females 15-19	87	31.5
Deaths / rate per 100,000 population	998	1,075.6
Marriages / rate per 1,000 population	537	5.9
Divorces / rate per 1,000 population	425	4.7

Migration



Agriculture

Land in farms (acres)	138,083
Number of farms	1,014
Average size (acres)	136
Total cash receipts	\$92,341,000
Per farm	\$91,066
Receipts for crops	\$23,668,000
Receipts for livestock/products	\$68,673,000

Education

Public schools buildings	41
Students (Average Daily Membership)	15,514
Teachers (Full Time Equivalent)	883.2
Expenditures per student	\$8,187
Graduation rate	84.6
Non-public schools	4
Students	392
4-year public universities	0
Branches	1
2-year public colleges/satellites	0
Private universities and colleges	0
Public libraries (Main / Branches)	5 / 5

Transportation

Registered motor vehicles	116,603
Passenger cars	67,623
Noncommercial trucks	20,999
Total license revenue	\$3,517,413.92
Interstate highway miles	34.97
Turnpike miles	0.00
U.S. highway miles	38.83
State highway miles	141.06
County, township, and municipal road miles	1,388.80
Commercial airports	1

Health Care

Physicians (MDs & DOs)	99
Registered hospitals	2
Number of beds	182
Licensed nursing homes	9
Number of beds	866
Licensed residential care	6
Number of beds	420
Persons with health insurance (Aged 0 to 64)	88.2%
Adults with insurance (Aged 18 to 64)	86.4%
Children with insurance (Aged Under 19)	92.9%

Voting

Number of registered voters	58,825
Voted in 2014 election	24,156
Percent turnout	41.1%

Communications

Television stations	0
Radio stations	2
Daily newspapers	1
Circulation	15,069
Weekly newspapers	2
Circulation	12,950

Crime

Total crimes reported in Uniform Crime Report	1,040
Violent crime	49
Property crime	989
Arson	2

Finance

FDIC insured financial institutions (HQs)	4
Assets (000)	\$593,875
Branch offices	40
Institutions represented	16

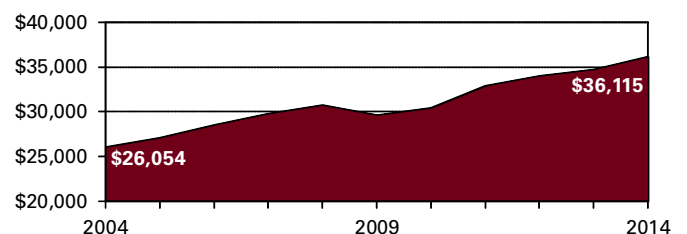
Transfer Payments

Total transfer payments	\$794,178,000
Payments to individuals	\$775,158,000
Retirement and disability	\$303,837,000
Medical payments	\$361,488,000
Income maintenance (Supplemental SSI, family assistance, food stamps, etc)	\$65,332,000
Unemployment benefits	\$7,688,000
Veterans benefits	\$21,723,000
Federal education and training assistance	\$9,348,000
Other payments to individuals	\$5,742,000
Total personal income	\$3,351,031,000
Dependency ratio	23.7%
(Percent of income from transfer payments)	

State Parks, Forests, Nature Preserves, Scenic Waterways, And Wildlife Areas

Areas/Facilities	1
Acreage	393.22

Per Capita Personal Income



Civilian Labor Force

	2011	2012	2013	2014	2015
Civilian labor force	45,400	45,000	45,100	45,300	45,600
Employed	41,200	41,700	41,800	42,800	43,200
Unemployed	4,200	3,300	3,300	2,500	2,400
Unemployment rate	9.3	7.4	7.3	5.5	5.4

Establishments, Employment, and Wages by Sector: 2014

Industrial Sector	Number of Establishments	Average Employment	Total Wages	Average Weekly Wage
Private Sector	2,096	31,190	\$1,097,377,347	\$677
Goods-Producing	483	9,882	\$484,749,239	\$943
Natural Resources and Mining	61	932	\$56,061,787	\$1,157
Constuction	208	1,409	\$70,152,099	\$958
Manufacturing	214	7,541	\$358,535,353	\$914
Service-Providing	1,613	21,308	\$612,628,108	\$553
Trade, Transportation and Utilities	543	7,135	\$223,667,283	\$603
Information	21	255	\$10,132,131	\$765
Financial Services	181	991	\$39,744,639	\$771
Professional and Business Services	232	2,615	\$93,144,279	\$685
Education and Health Services	200	5,288	\$170,949,929	\$622
Leisure and Hospitality	254	3,964	\$49,253,021	\$239
Other Services	182	1,061	\$25,734,826	\$466
Federal Government		250	\$13,057,302	\$1,005
State Government		478	\$23,645,874	\$952
Local Government		4,159	\$147,053,137	\$680

Private Sector total includes Unclassified establishments not shown.

Change Since 2009

Private Sector	-2.9%	10.4%	34.2%	21.5%
Goods-Producing	-2.6%	15.1%	46.5%	27.3%
Natural Resources and Mining	22.0%	40.4%	92.9%	37.6%
Construction	-4.6%	11.0%	53.6%	38.4%
Manufacturing	-6.1%	13.3%	40.0%	23.5%
Service-Producing	-2.9%	8.4%	25.9%	16.2%
Trade, Transportation and Utilities	-1.6%	10.6%	33.2%	20.4%
Information	-12.5%	-28.4%	-9.6%	26.2%
Financial Services	2.8%	-4.0%	18.8%	23.6%
Professional and Business Services	0.9%	16.9%	37.2%	17.3%
Education and Health Services	-6.5%	6.4%	19.2%	12.1%
Leisure and Hospitality	-2.3%	13.7%	27.7%	12.2%
Other Services	-9.9%	-5.5%	6.7%	12.8%
Federal Government		13.1%	23.1%	8.9%
State Government		14.9%	3.9%	-9.4%
Local Government		-0.3%	6.7%	7.1%

Business Numbers

	2011	2012	2013	2014	2015
Business starts	121	207	149	172	167
Active businesses	2,030	2,058	2,083	2,096	2,117

Major & Notable Employers

Alamo Group/Gradall Industries	Mfg
Allied Machine & Engineering	Mfg
Dover City Schools	Govt
Lauren Manufacturing	Mfg
Marlite, Inc.	Mfg
New Philadelphia City Schools	Govt
Union Hospital	Serv
Wal-Mart Stores Inc	Trade
Zimmer Orthopedic	Mfg

Residential Construction

	2011	2012	2013	2014	2015
Total units	42	62	62	59	68
Total valuation (000)	\$5,375	\$8,964	\$9,680	\$9,573	\$11,997
Total single-unit bldgs	28	48	62	53	60
Average cost per unit	\$157,872	\$163,417	\$156,126	\$173,028	\$187,791
Total multi-unit bldg units	14	14	0	6	8
Average cost per unit	\$68,214	\$80,000	\$0	\$67,167	\$91,250

Appendix B

POWER Initiative

Core Project Narrative

CORE PROJECT NARRATIVE
FY15 Appalachian Ohio POWER Initiative Project

Prepared by:

John Molinaro
President and CEO
Appalachian Partnership for Economic Growth (APEG)

G. Jason Jolley, Ph.D.
Assistant Professor and MPA Director
George V. Voinovich School of Leadership and Public Affairs (GVS)
Ohio University

I. DEFINITION OF SERVICE REGION

The service region covered by this Core Narrative is composed of the 32 Appalachian Counties of Ohio. Taken together, these counties are the location of virtually all of Ohio's coalfields. In addition, nearly all of the currently operating and decommissioned coal-fired power plants in Ohio are located within this region along the Ohio River or its tributaries.

This region is divided into four sub-regions that are each served by a separate organization that hosts both the EDA Economic Development District and ARC Local Development District for their respective areas (EDD/LDD). All four of these organizations have participated in the planning leading up to submission of this core narrative. The EDD/LDD's and their counties in Appalachian Ohio include:

Buckeye Hills Hocking Valley Regional Development District (Buckeye Hills) – *Athens, Hocking, Meigs, Monroe, Morgan, Noble, Perry and Washington Counties*

Eastgate Regional Council of Governments (Eastgate) – *Ashtabula, Mahoning and Trumbull Counties*

Ohio Mid-Eastern Governments Association (OMEGA) – *Belmont, Carroll, Columbiana, Coshocton, Guernsey, Harrison, Holmes, Jefferson, Muskingum, and Tuscarawas Counties*

Ohio Valley Regional Development Commission (OVRDC) – *Adams, Brown, Clermont, Fayette, Gallia, Highland, Jackson, Lawrence, Pike, Ross, Scioto and Vinton Counties*

In addition to the EDD/LDD's serving the region, the entire region is served by two anchor-organizations with missions that span all 32 counties of Appalachian Ohio: Appalachian Partnership for Economic Growth (APEG) and The George V. Voinovich School of Leadership and Public Affairs (GVS) at Ohio University. At the request and with the cooperation of the EDD/LDD's and other partners in the Appalachian Ohio POWER Initiative Partnership, APEG and GVS have teamed up to write this core narrative. The missions of these two anchor institutions and the relevance of their missions to POWER are discussed in Section V, REGIONAL PARTNERSHIP, below.

II. QUALIFYING EVENTS

A. Summary of Qualifying Events and Economic and Community Impacts

As documented under supporting data (Section B), between 2011 and 2013, Ohio lost 201 coal-mining jobs. As documented in the WARN notice data in this section, additional employment declines in 2014 and 2015 have occurred, but are not yet captured in the Bureau of Labor Statistics Quarterly Census of Employment and Wages annual employment statistics. As described in detail in Section B, for every coal job lost in Ohio an additional 1.38 jobs are lost throughout the broader economy.

Ohio lost 1,260 jobs in the fossil fuels electric power generation industry between 2011 and 2014. Modeling demonstrates that for every power plant job lost an additional 2.29 jobs are lost throughout the broader economy.

Four coal-fired power plants have been decommissioned in Ohio in 2015 alone. These closures are described in more detail in Section B. Two of these facilities are located in Appalachian Ohio. One of these closures resulted in \$1.2 million and \$1.4 million in lost property tax revenue for two local school districts.

Additionally, many coal-fired electric generation facilities have closed entirely or closed generators in Ohio and in adjacent regions of West Virginia. These impact Ohio coalfields, state residents working in the facilities in West Virginia, and Ohio companies working with these utilities. Closures, since 1995 include: ^{1, 2, 3}

- *AEP Generation Resources Inc. Muskingum River (Washington County, OH). Scheduled for closure 2015*
- *AEP Generation Resources Inc. Conesville (Coshocton, OH). Generator closed 2005, 2012).*
- *American Municipal Power Ohio, Inc. Richard Gorsuch/AMP Ohio (Washington County, OH). Closed 2010*
- *Duke Energy Walter C. Beckjord (Clermont County, OH). Generators closed in 2012, 2013).*
- *FirstEnergy Ashtabula (Ashtabula County, OH), closed in 2002.*
- *FirstEnergy R. E. Burger Plant (Belmont County, OH) generators closed in 1995, 2010, and 2012, but backup diesel generators still used for some generation purposes*
- *FirstEnergy Generation Corp. FirstEnergy Toronto (Jefferson County, Ohio). 2003*
- *NRG Power Midwest LP (Trumbull County, OH). Generators closed 2012*
- *Willow Island, (closing) (Pleasants County, WV) closed 2012*
- *Kanawha Valley Power Plant (Kanawha, WV) WARN 2015*
- *Kammer Plant (Marshall County, WV) WARN 2015*
- *Philip Sporn (Mason County, WV) WARN 2015*
- *Allbright (Preston, WV) closed 2012*

¹ Data compiled by Rick Hindman at Buckeye Hills-Hocking Valley Regional Development District from WARN notices.

² Information from John Molinaro, Appalachian Partnership for Economic Growth based on company reports.

³ Data compiled by Policy Matters Ohio from US Energy Information Administration 2013 EIA-860 forms.

- *Rivesville Power Plant (Marion County, WV) closed 2012*

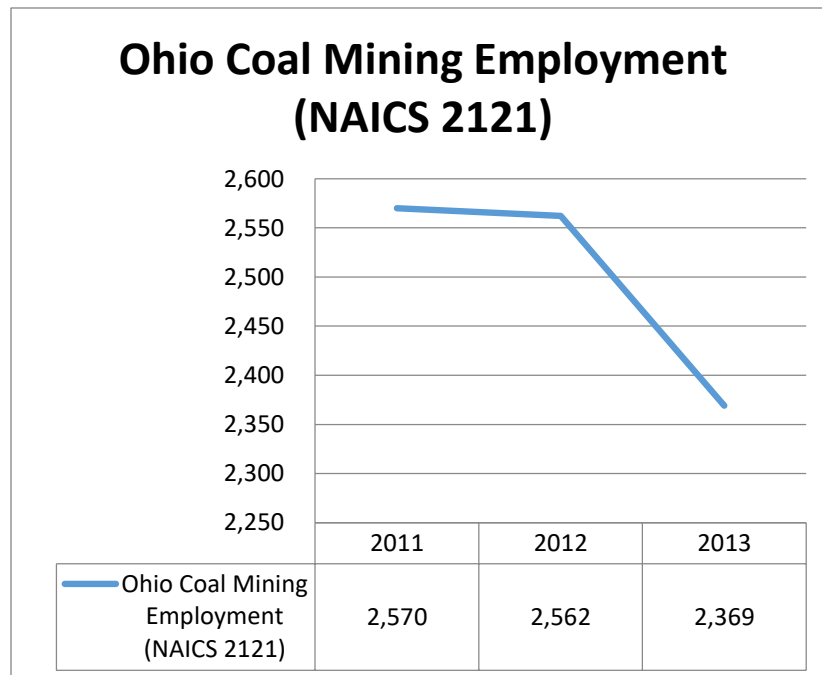
Associated mine/plant/facility closures include:

- *Rhino Partners LP (Jackson, Vinton, Gallia Counties, Ohio) coal mining layoff, 2012*
- *Yellowbrush (Meigs County, Ohio) mine closed, 2012*
- *Buckingham Coal (Athens County, Ohio) mine closed, 2015*
- *Oxford Coal (Jackson County, Ohio) mine closed, 2014*
- *Kraton Industries (Athens County, Ohio) replaced coal-fired process steam plant with gas, 2014*
- *Glatfelter Paper (Ross County, Ohio) replaced coal-fired process steam plant with gas, 2015*

B. Supporting Data

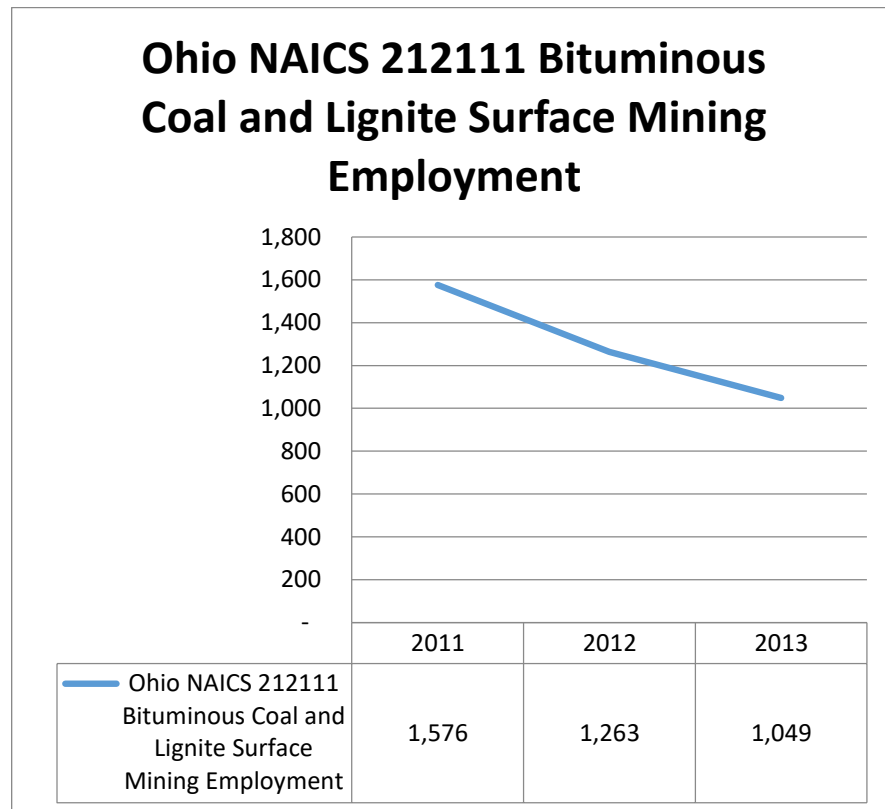
Coal Mining and Fossil-Fuel Electricity Generation Employment Trends

This section of the narrative describes the employment changes in the coal industry, as a whole and in surface and underground mining, and in fossil fuel electricity generation. These data are derived from 2011 to 2013 Bureau of Labor Statistics Quarterly Census of Employment and Wages annual employment statistics. In some instances, 2014 employment estimates are also available and reported. As requested in the FFO, the primary focus of these data from 2011 to date. However, as noted elsewhere in this narrative, coal industry employment has been declining or relatively flat for decades. Ohio experienced a decline in coal mining employment from 2011 to 2013 with employment declining from 2,570 to 2,369. Over the three-year period this amounts to a net loss of 201 jobs.



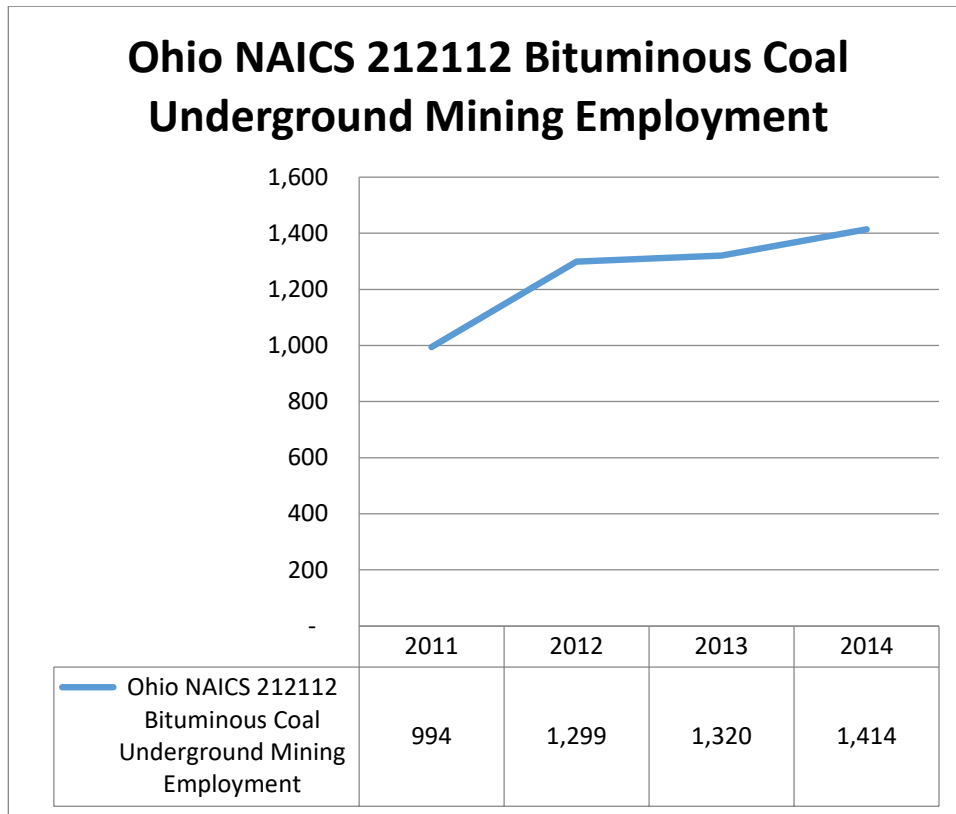
Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages

Employment change was not uniform within the coal-mining sector. Bituminous coal and lignite surface mining saw a decline from 1,576 jobs in 2011 to 1,049 jobs in 2013. Employment decline will likely continue in the surface mining industry due to environmental regulations.



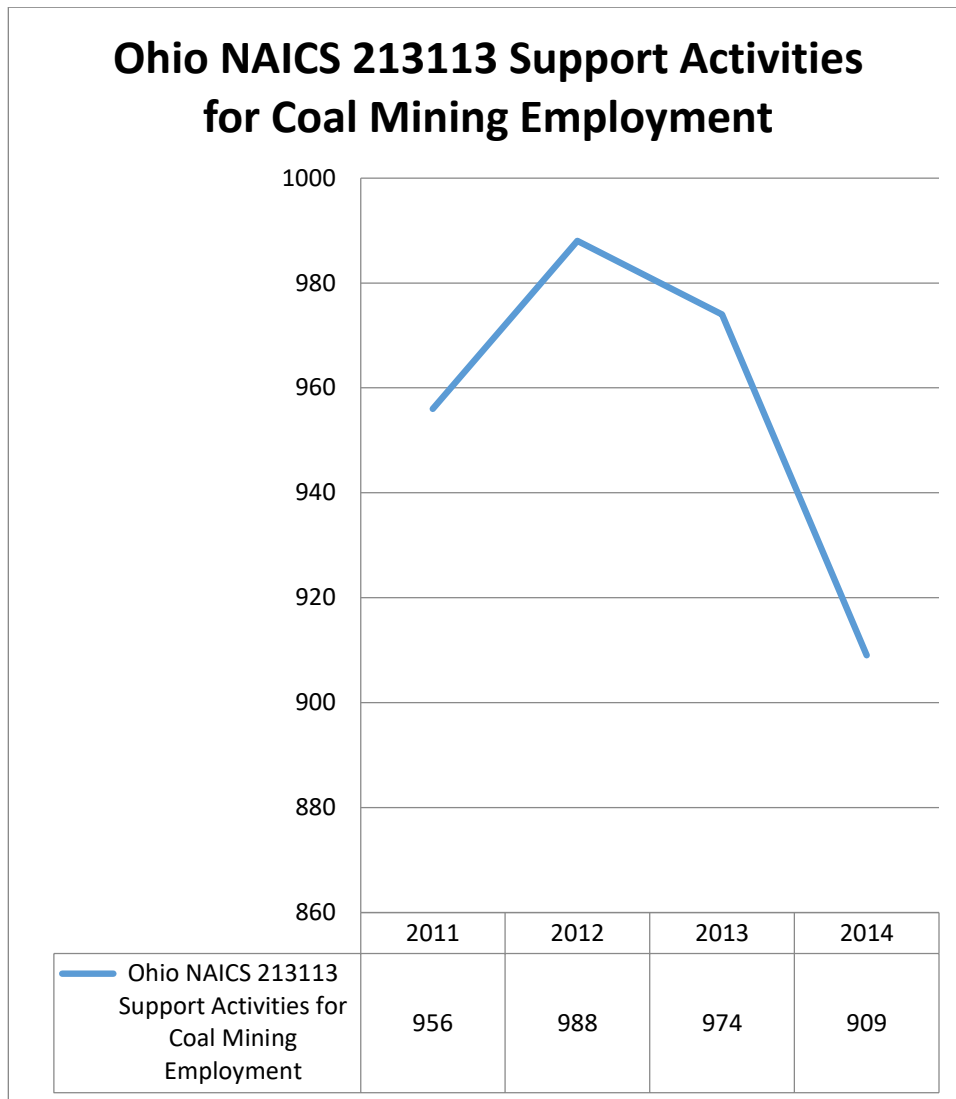
Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages

Employment decline in surface mining was partially offset by increases in bituminous coal underground mining. Between 2011 and 2013, 326 new jobs were added as employment rose from 994 to 1,320. Preliminary 2014 annual employment estimates from BLS were available for this sector, which estimate employment of 1,414.



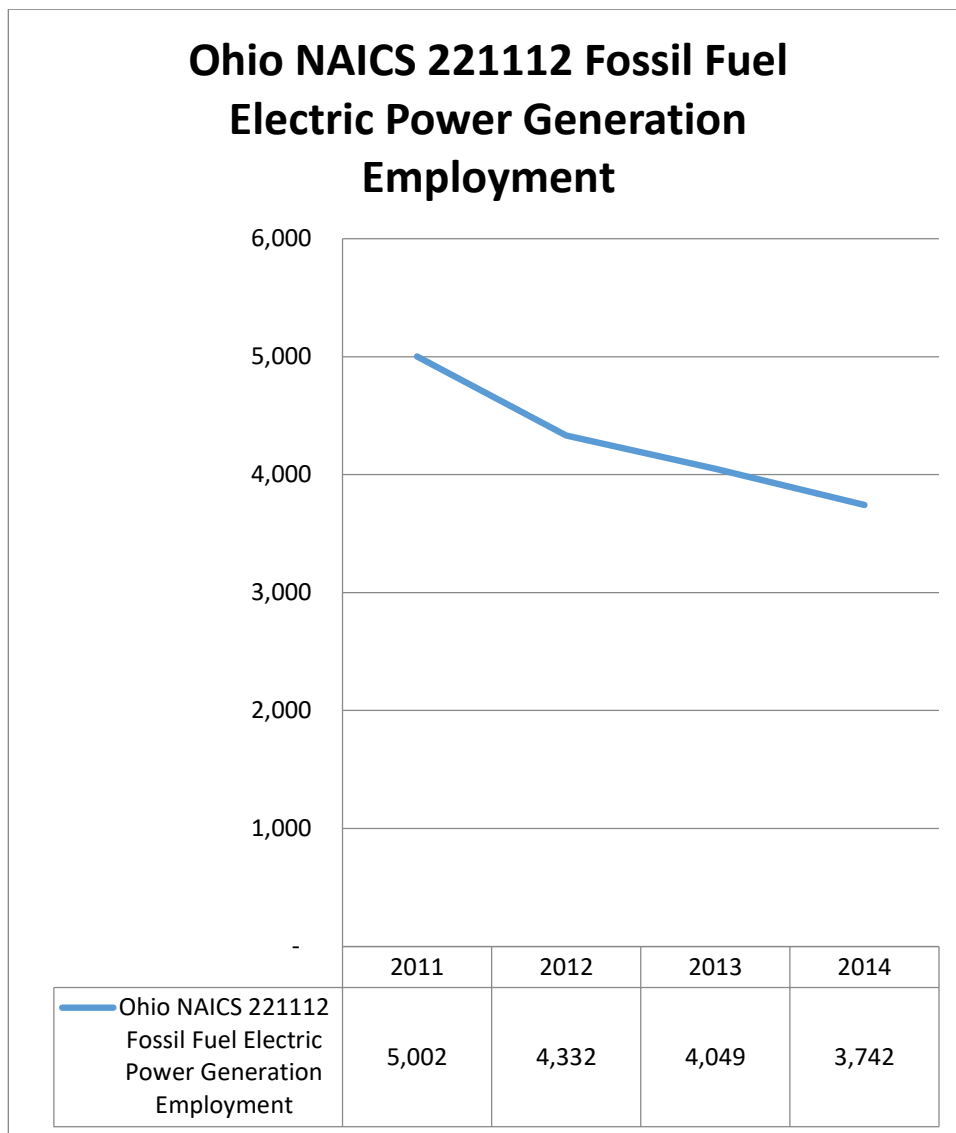
Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages

Employment in coal mining support activities has remained relatively flat. From 2011 to 2013, employment grew from 956 jobs to 974 jobs. 2014 estimates show a decline to 909 jobs, which represents a net loss of 47 jobs from 2011-2014.



Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages

Employment in fossil fuel, primarily coal-fired, electric power generation facilities shows sharp decline from 2011 to 2014 as employment fell from 5,002 jobs to 3,742 jobs. This represents a loss of 1,260 jobs. Job loss in this sector is likely to continue as aging coal-fired power plants are taken offline and replaced with non-coal sources and as energy production shifts to less labor-intensive facilities.



Estimating Economic Impact of Job Losses in Coal Mining and Coal-Fired Power Generation Facilities

Direct employment loss in coal mining and coal-fired power generation facilities has a significant economic impact that ripples across Ohio. To demonstrate the magnitude of these impacts, an economic impact model was developed using IMPLAN, a standard input-output modeling tool.⁴ Two models were constructed.

The first examined the loss of 100 coal mining jobs in Ohio while the second examined the loss of 100 electricity generation jobs. As demonstrated in the table below, for every 100 jobs lost in the coal mining industry, another 57 jobs are lost in the broader coal supply chain (indirect jobs). Induced jobs, those jobs created/lost as a result of labor income spending from direct/indirect jobs, are also impacted by a reduction of 82 jobs. In total, the loss of 100 coal jobs leads to 139 additional jobs lost in the state of Ohio across a broad spectrum of industry sectors. For each coal job lost in Ohio, an additional 1.38 jobs are lost throughout the broader economy.

Employment Impact of Losing 100 Coal Jobs in Ohio

<i>Description</i>	<i>Direct</i>	<i>Indirect</i>	<i>Induced</i>	<i>Total</i>
<i>Total</i>	-100.00	-56.96	-81.84	-238.80
<i>11 Ag, Forestry, Fish & Hunting</i>	0.00	-0.10	-0.27	-0.38
<i>21 Mining</i>	-100.00	-4.51	-0.08	-104.59
<i>22 Utilities</i>	0.00	-0.87	-0.26	-1.13
<i>23 Construction</i>	0.00	-0.91	-0.57	-1.49
<i>31-33 Manufacturing</i>	0.00	-2.53	-1.17	-3.70
<i>42 Wholesale Trade</i>	0.00	-2.94	-2.52	-5.46
<i>44-45 Retail trade</i>	0.00	-1.31	-15.05	-16.36
<i>48-49 Transportation & Warehousing</i>	0.00	-6.16	-1.75	-7.90
<i>51 Information</i>	0.00	-0.78	-1.14	-1.91
<i>52 Finance & insurance</i>	0.00	-9.46	-4.82	-14.28
<i>53 Real estate & rental</i>	0.00	-2.75	-3.91	-6.65
<i>54 Professional- scientific & tech svcs</i>	0.00	-10.00	-2.89	-12.90
<i>55 Management of companies</i>	0.00	-4.06	-0.41	-4.47
<i>56 Administrative & waste services</i>	0.00	-6.35	-4.27	-10.62
<i>61 Educational svcs</i>	0.00	-0.03	-3.14	-3.17
<i>62 Health & social services</i>	0.00	0.00	-18.76	-18.76
<i>71 Arts- entertainment & recreation</i>	0.00	-0.42	-2.56	-2.98
<i>72 Accommodation & food services</i>	0.00	-1.15	-10.20	-11.35
<i>81 Other services</i>	0.00	-2.01	-7.04	-9.05
<i>92 Government & non NAICS</i>	0.00	-0.62	-1.03	-1.65

⁴ G. Jason Jolley, Ph.D., Assistant Professor of Economic Development at the George V. Voinovich School of Leadership and Public Affairs constructed the model using IMPLAN 3.0. When citing these numbers, please reference: Jolley, G. J. (2015). Economic Impact of Coal Mining and Coal-Fired Power Plant Job Losses in Ohio. Voinovich School of Leadership and Public Affairs, Ohio University.

As high paying jobs are lost in the economy, the decline in labor income reduces spending and impacts other sectors. Losing 100 coal jobs results in a reduction of \$8.8 million in labor income in the coal industry and over \$16 million in total labor income.

Labor Income Impact of Losing 100 Coal Jobs in Ohio

Description	Direct	Indirect	Induced	Total
<i>Total</i>	<i>-\$8,822,098</i>	<i>-\$3,852,096</i>	<i>-\$3,588,683</i>	<i>-\$16,262,877</i>
<i>11 Ag, Forestry, Fish & Hunting</i>	<i>\$0</i>	<i>-\$8,303</i>	<i>-\$12,377</i>	<i>-\$20,680</i>
<i>21 Mining</i>	<i>-\$8,822,098</i>	<i>-\$390,774</i>	<i>-\$4,464</i>	<i>-\$9,217,335</i>
<i>22 Utilities</i>	<i>\$0</i>	<i>-\$123,750</i>	<i>-\$36,519</i>	<i>-\$160,269</i>
<i>23 Construction</i>	<i>\$0</i>	<i>-\$54,331</i>	<i>-\$34,050</i>	<i>-\$88,381</i>
<i>31-33 Manufacturing</i>	<i>\$0</i>	<i>-\$189,588</i>	<i>-\$81,416</i>	<i>-\$271,005</i>
<i>42 Wholesale Trade</i>	<i>\$0</i>	<i>-\$239,187</i>	<i>-\$205,183</i>	<i>-\$444,370</i>
<i>44-45 Retail trade</i>	<i>\$0</i>	<i>-\$44,947</i>	<i>-\$495,781</i>	<i>-\$540,728</i>
<i>48-49 Transportation & Warehousing</i>	<i>\$0</i>	<i>-\$444,326</i>	<i>-\$94,701</i>	<i>-\$539,027</i>
<i>51 Information</i>	<i>\$0</i>	<i>-\$55,658</i>	<i>-\$75,861</i>	<i>-\$131,519</i>
<i>52 Finance & insurance</i>	<i>\$0</i>	<i>-\$482,012</i>	<i>-\$299,970</i>	<i>-\$781,982</i>
<i>53 Real estate & rental</i>	<i>\$0</i>	<i>-\$162,430</i>	<i>-\$97,632</i>	<i>-\$260,062</i>
<i>54 Professional- scientific & tech svcs</i>	<i>\$0</i>	<i>-\$723,745</i>	<i>-\$193,293</i>	<i>-\$917,038</i>
<i>55 Management of companies</i>	<i>\$0</i>	<i>-\$543,567</i>	<i>-\$54,780</i>	<i>-\$598,348</i>
<i>56 Administrative & waste services</i>	<i>\$0</i>	<i>-\$230,732</i>	<i>-\$150,028</i>	<i>-\$380,760</i>
<i>61 Educational svcs</i>	<i>\$0</i>	<i>-\$981</i>	<i>-\$98,750</i>	<i>-\$99,731</i>
<i>62 Health & social services</i>	<i>\$0</i>	<i>-\$26</i>	<i>-\$1,059,256</i>	<i>-\$1,059,282</i>
<i>71 Arts- entertainment & recreation</i>	<i>\$0</i>	<i>-\$9,362</i>	<i>-\$62,055</i>	<i>-\$71,416</i>
<i>72 Accommodation & food services</i>	<i>\$0</i>	<i>-\$24,438</i>	<i>-\$216,337</i>	<i>-\$240,775</i>
<i>81 Other services</i>	<i>\$0</i>	<i>-\$76,844</i>	<i>-\$241,300</i>	<i>-\$318,144</i>
<i>92 Government & non NAICS</i>	<i>\$0</i>	<i>-\$47,095</i>	<i>-\$74,931</i>	<i>-\$122,026</i>

In addition to the employment and labor income impacts, losing 100 coal jobs in Ohio results in a loss of \$3.4 million in local and state tax revenue and \$28.7 million in total value added to the economy (i.e. gross state product).

The second model examined the economic impact of job losses in coal-fired electricity generation facilities. Ohio has experienced greater job losses and has more projected job loss in this industry. The economic impact of job losses is much larger in this sector.

For every 100 jobs lost in the electricity generation industry, another 96 jobs are lost in the broader supply chain (indirect jobs). Induced jobs, those jobs created/lost as a result of labor income spending from direct/indirect jobs, are also impacted by a reduction of 133 jobs. In total, the loss of 100 electricity generation jobs leads to 229 additional jobs lost in the state of Ohio across a broad spectrum of industry sectors. For each electricity generation job lost in Ohio, an additional 2.29 jobs are lost throughout the broader economy.

Employment Impact of Losing 100 Electricity Generation Jobs in Ohio

Description	Direct	Indirect	Induced	Total
Total	-100.00	-96.36	-132.56	-328.92
11 Ag, Forestry, Fish & Hunting	0.00	-0.09	-0.44	-0.53
21 Mining	0.00	-8.79	-0.14	-8.92
22 Utilities	-100.00	-0.13	-0.42	-100.55
23 Construction	0.00	-21.73	-0.93	-22.66
31-33 Manufacturing	0.00	-1.80	-1.89	-3.70
42 Wholesale Trade	0.00	-1.65	-4.08	-5.73
44-45 Retail trade	0.00	-1.80	-24.38	-26.18
48-49 Transportation & Warehousing	0.00	-6.82	-2.83	-9.65
51 Information	0.00	-2.02	-1.84	-3.86
52 Finance & insurance	0.00	-6.19	-7.81	-14.00
53 Real estate & rental	0.00	-2.37	-6.33	-8.70
54 Professional- scientific & tech svcs	0.00	-14.17	-4.69	-18.86
55 Management of companies	0.00	-0.68	-0.66	-1.34
56 Administrative & waste services	0.00	-9.23	-6.91	-16.14
61 Educational svcs	0.00	-0.08	-5.08	-5.16
62 Health & social services	0.00	0.00	-30.40	-30.40
71 Arts- entertainment & recreation	0.00	-0.91	-4.14	-5.05
72 Accommodation & food services	0.00	-14.66	-16.51	-31.17
81 Other services	0.00	-2.39	-11.40	-13.79
92 Government & non NAICS	0.00	-0.87	-1.67	-2.54

As high paying jobs are lost in the economy, the decline in labor income reduces spending and impacts other sectors. Losing 100 electricity generation jobs results in a reduction of \$15.2 million in labor income in the power industry and over \$26 million in total labor income.

Labor Income Impact of Losing 100 Electricity Generation Jobs in Ohio

Description	Direct	Indirect	Induced	Total
Total	-\$15,205,467	-\$5,342,398	-\$5,813,116	-\$26,360,981
11 Ag, Forestry, Fish & Hunting	\$0	-\$3,646	-\$20,049	-\$23,695
21 Mining	\$0	-\$503,473	-\$7,232	-\$510,705
22 Utilities	-\$15,205,467	-\$17,824	-\$59,173	-\$15,282,465
23 Construction	\$0	-\$1,291,038	-\$55,158	-\$1,346,196
31-33 Manufacturing	\$0	-\$135,371	-\$131,886	-\$267,256
42 Wholesale Trade	\$0	-\$133,925	-\$332,531	-\$466,456
44-45 Retail trade	\$0	-\$61,965	-\$802,940	-\$864,904
48-49 Transportation & Warehousing	\$0	-\$615,494	-\$153,361	-\$768,856
51 Information	\$0	-\$138,630	-\$122,895	-\$261,525
52 Finance & insurance	\$0	-\$370,979	-\$485,804	-\$856,783

53 Real estate & rental	\$0	-\$78,822	-\$158,231	-\$237,053
54 Professional- scientific & tech svcs	\$0	-\$1,066,923	-\$313,075	-\$1,379,997
55 Management of companies	\$0	-\$90,944	-\$88,745	-\$179,689
56 Administrative & waste services	\$0	-\$330,738	-\$243,030	-\$573,768
61 Educational svcs	\$0	-\$2,809	-\$159,756	-\$162,565
62 Health & social services	\$0	-\$47	-\$1,716,173	-\$1,716,220
71 Arts- entertainment & recreation	\$0	-\$25,195	-\$100,490	-\$125,685
72 Accommodation & food services	\$0	-\$310,658	-\$350,414	-\$661,072
81 Other services	\$0	-\$97,764	-\$390,803	-\$488,567
92 Government & non NAICS	\$0	-\$66,154	-\$121,371	-\$187,525

In addition to the employment and labor income impacts, losing 100 electricity generation jobs in Ohio results in a loss of \$15 million in local and state tax revenue and \$84.5 million in total value added to the economy (i.e. gross state product). Note that these fiscal impacts relate to job loss and not to entire plant closures, which have great fiscal and economic impacts as described in the next section.

Reported and Estimated Impacts of Specific Closures

Recent decommissioned coal-fired power plants and projected decommissioning of plants will negatively impact not only employees, but also pose significant fiscal harm to impacted communities. American Electric Power (AEP) closed the Muskingum River facility located in Washington County in 2015. Of the 80 remaining employees at the plant, 18 were reported to have relocated to other facilities while 62 were voluntarily or involuntarily given severance packages.⁵ The fiscal impacts of the closure greatly impacted these communities due to loss of property tax revenue. Media reports cite school officials in the two impacted school districts as estimating annual revenue loss of \$1.2 million and \$1.4 million, respectively.

First Energy Corporation also closed three coal-fired power plants located along Lake Erie in 2015.⁶ One of these facilities, the Ashtabula Plant, was located in Appalachian Ohio. The Public Utilities Commission of Ohio (PUCO) is currently considering a request by First Energy to charge customers more to subsidize two older facilities, including the W. H. Sammis coal-fired plant in Appalachian Ohio.⁷ An economic impact assessment for the Sammis plant submitted to the PUCO demonstrates that the facility is responsible for over 1,000 jobs, including over 500 directly associated with the facility. The facility

⁵ <http://www.thenewscenter.tv/home/headlines/UPDATE-AEP-Muskingum-River-Plant-Closing-Will-Affect-Local-Schools.html>

⁶ First Energy 2014 Annual Report. <https://www.firstenergycorp.com/content/dam/investor/files/annual-reports/2014/2014-FirstEnergy-Annual-Report.pdf>

⁷ <http://www.craigslist.com/article/20150226/FREE/150229871/pucos-rejection-of-aep-plan-to-subsidize-old-power-plants-is>

contributes \$5.5 million in annual property tax revenues to local governments.⁸ Decisions by the PUCO may impact the operational capacity and future of this facility.

III. PROJECT SUMMARY AND INTEGRATED APPROACH

Since the fall of 2012, all of the regional and sub-regional economic and community development organizations serving Appalachian Ohio have been collaborating to jointly address the underlying economic decline of the region. While there have been many local- and state-funded efforts that have grown from this collaboration, its most notable previous project was the successful regional application for a *Make It In America* (MIIA) grant. All major partners collaborated in the design of the MIIA project and Buckeye Hills and APEG served as lead co-applicants on behalf of the collaboration. More information about this successful collaboration may be found in Section V, REGIONAL PARTNERSHIP, below.

While there have been many factors for the region's long economic decline, the loss of coal mining jobs has been a major contributing factor to the decline since the 1950's. For the past two decades, the closure of coal-fired power plants have also contributed to the region's economic decline. These closures have been driven, in large part, by the shift of power companies from cheap, abundant Ohio coal to more expensive low-sulfur western coal in order to meet toughening environmental standards. Recent tightening of EPA rules has greatly accelerated the closure of the region's coal-fired power plants, with many recent announcements of closures or potential closures.

This core narrative describes a constellation of collaborative efforts that have been developed by the regional partners to address the decline in the coal-economy. Planning for these efforts began well prior to the release of the POWER FFO.

A. Project Overview

This overview describes a set of interrelated projects derived from several years of collaboration and planning by all major regional organizations involved in community and economic development in Appalachian Ohio to address the region's economic decline and coal-related layoffs. Those ongoing collaborative planning efforts have led to identification of several high-impact strategies that are clearly ripe for implementation, as well as identification of several issue areas where additional planning is required to identify and refine additional high-impact strategies. Therefore, our regional plan for FY15 POWER funds includes some implementation and some planning issues.

This approach, that mixes implementation of clearly identified high-impact strategies with planning for additional impact, is adapted from the core premises the "Strategic Doing" model promulgated by Purdue University's Center for Regional Development⁹. Strategic Doing is a model for collaboration based on the premise of moving quickly to action on high-impact, high-consensus strategies while simultaneously undertaking deeper analysis of longer term, more divisive and less obvious solutions. By doing so, partners remain better engaged in the collaborative process. The process strengthens collaboration by building trust through early mutual successes. It also make progress towards long term

⁸ <http://dis.puc.state.oh.us/TiffToPdf/A1001001A14H04B62707A83979.pdf>

⁹ <https://www.pcrd.purdue.edu/signature-programs/strategic-doing.php>

goals far earlier than in traditional approaches that require a plan for all strategies to be in place before action commences on any.

The collaborative partners in Appalachian Ohio believe that this approach is eminently suited for an issue that is both complex and urgent, such as coal-related layoffs in the mining and power industries. The underlying economic restructuring driving these layoffs is extremely complex. It will take much study and effort to develop strategies that are tailored to the full range of issues and opportunities created. Even so, there are many immediately obvious and impactful strategies that can be implemented now to begin the process of alleviating the economic damage and putting the displaced workers back to work.

The Appalachian Ohio POWER Initiative Plan for FY15 incorporates 2 planning and 10 implementation activities. These include:

POWER PLANNING ACTIVITIES	
Ohio University – George V. Voinovich School of Leadership and Public Affairs (GVS)	EDA Economic Assistance Program Skillshed Analysis and Case Studies of Coal-Fired Power Plant/Coal Mine Closures
	Utilize a skillshed analysis to determine relevant occupational skills of displaced coal and power plant workers and how these skills crosswalk to emerging and existing high growth industries across the 32 county Appalachian Ohio region. Prospective new occupations will not be restricted to energy related jobs and will include health care, manufacturing, etc. with the goal of addressing immediate job loss impacts with high quality employment opportunities for displaced workers. This approach builds on recently completed skillshed analysis in Appalachian Kentucky conducted by GVS. Additionally, detailed case studies of 4-5 coal and/or power plant closures will be developed along with and skillshed and economic/fiscal impact analysis at the laborshed level.
Buckeye Hills-Hocking Valley Regional Development District/Policy Matters Ohio (PMO)	EDA Economic Assistance Program Energy Facility and Workforce Repurposing Study
	<p>Convene key community, labor, research, economic and energy development stakeholders to identify short-term needs during transition period of the changing energy economy, and develop a long-term plan to identify and pro-actively take advantage of opportunities in the new energy economy.</p> <p>To assist in the long-term energy development planning process, project partners will conduct asset mapping of power sector capital, facilities, and other resources for areas adversely impacted by shifts away from dependency on coal for power generation. These geographic areas include Ohio counties adjacent to power plant closings: Gallia, Meigs, Athens, Morgan, Washington, Noble, Monroe, and Belmont.</p> <p>The project will also conduct an assessment of the potential for, and feasibility of, repurposing and reemploying existing capital, land, facilities and job skills for use in a new energy economy. This would include: repurpose power plant equipment and facilities; take advantage of various combined heat and power technologies (including waste-heat-to-power); recover methane from shale development operations and abandoned coal mines/fields; employ wood pulp waste from the wood product industry for use as fuel in heat and power production, identify workforce skills required to transition into, and function in, this new energy environment.</p>

POWER IMPLEMENTATION ACTIVITIES	
Appalachian Partnership for Economic Growth (APEG)	SBA Innovation Cluster Program Appalachian Ohio Wood Products Innovation Cluster Project
	Working in partnership with Ohio University's Voinovich School, APEG will build upon the region's wood products supply chain work begun as a part of its Make It In America project. As part of MIIA, APEG has identified more than 500 supply chain firms in the region ranging from loggers to high-end custom hardwood furniture manufacturers. APEG will work promote adoption of new productivity systems and technologies, improve workforce skills, strengthen business management, launch market new and improved products, access new markets, and increase exports. GVS will support these efforts with research supporting the overall effort and meeting the specific information needs of cluster firms.
Appalachian Partnership for Economic Growth (APEG)	Ohio Manufacturing Extension Partnership (Ohio MEP) Coal-fired Power Plant Supplier Support Project
	On behalf of Ohio MEP, APEG will take a leadership role in designing and implementing a strategy to assist suppliers of coal-fired power plants in Ohio that have closed or announced plans to close. The project will involve outreach to supply chain companies, assessment and strategy development, MEP assistance to qualifying companies, and linkages to economic development resources to help companies with transition activities. (Will utilize state match for federal NIST/MEP system funding – no federal funds required.)
Southern Ohio-Kentucky Regional Training Center (SOKRTC)	EDA Economic Assistance Program Bricklaying Apprenticeship Program
	SOKRTC is the premier training program for the bricklayer trades in 16 Appalachian Counties of Ohio impacted by coal mine and power plant closures. Funds will be used to allow programs to enroll additional apprentices and offer an expanded selection of continuing educational courses program to journeymen members, including members displaced from coal- and power-industry jobs.
Canton Electrical Joint Apprenticeship and Training Program (CE-JATC)	EDA Economic Assistance Program Electrical Apprenticeship Program - CE-JATC
	CE-JATC is the premier training program for the electrical trades in seven Appalachian Counties impacted by coal mine and power plant closures. Funds will be used to expand the program to enroll additional apprentices and offer an expanded advanced skill certification program to journeymen members, including members displaced from coal- and power-industry jobs.
Ohio University Innovation Center (OUIC)	EDA Economic Assistance Program and ARC Area Development Program Innovation Hub Project
	OUIC will expand its current space and capabilities adding prototyping, additive manufacturing, training and ancillary services to assist regional firms in bringing new products to market. New products will allow companies to expand, providing quality jobs and training opportunities for displaced workers. Expanded company sales will bolster economies hurt by coal-industry layoffs.
The United Association of Plumbers and Pipe Fitters Local 495 Joint Apprenticeship Training Center (UA 495-JATC)	EDA Economic Assistance Program Pipefitting Apprenticeship Program
	UA 495-JATC is the premier training program for the pipefitting trades in 10 Appalachian Counties impacted by coal mine and power plant closures. With additional funding UA 495-JATC programs will be able to enroll additional apprentices and offer an expanded advanced skill certification program to journeymen members, including members displaced from coal- and power-industry jobs.

Rural Action (RA)	ARC Area Development Program Emerging Social Enterprises Development Support
	Expand social enterprise development in emerging sectors by providing technical assistance and support to non-profit and for-profit partners in idea generation, market assessment, and business modeling. Selected sectors include restoration, forestry, food systems, tourism, and secondary materials. This investment builds on several decades of increasingly market-based activity to scale asset based sectors that provide employment and revenue benefits to local communities and households. Energy assets identified through the Buckeye Hills' EDA POWER planning process would provide additional resources for this Director to expand the existing social enterprises that Rural Development has established around wood products, local food economy, and zero waste.
Southeast Ohio Public Energy Council (SOPEC)	ARC Area Development Program Regional Expansion of Municipal Aggregation/Energy Efficiency
	As a strategy within the Appalachian Ohio region's Core Project Narrative, Southeast Ohio Public Energy Council (SOPEC) will expand the council's capacity to share its innovative approach to municipal aggregation with regional communities. SOPEC's model uses community choice aggregation to create an array of energy efficiency programming and promotes local generation of renewable power. ARC Funds will allow SOPEC to invest in staff resources to: <ol style="list-style-type: none"> 1. Extend SOPEC's regional base to a 6-county area and provide consultation for municipal aggregation paired with the development of energy efficiency programming and renewable energy projects. 2. Connect statewide talent with local workforce for regional development in the energy efficiency and renewable energy sector.
Wheeling Electrical Joint Apprenticeship Training Center ("WE-JATC")	EDA Economic Assistance Program Electrical Apprenticeship Program – WE-JATC
	<p>The Wheeling Electrical Joint Apprenticeship Training Center (WE-JATC) is the premier training program for the electrical trades in Ohio, Marshal, Wetzel counties in West Virginia and Belmont County in Ohio. Most of these counties have been identified by the U.S. Department of Commerce, Economic Development Administration as having been negatively impacted by coal mine and power plant closures.</p> <p>The Wheeling Electrical JATC is a joint trust between International Brotherhood of Electrical Workers, Local 141, a local labor union, and the National Electrical Contractors Association (NECA), an employer trade association. The apprenticeship program offered by is a Wheeling Electrical JATC five year tuition free program. Apprentices learn through both the classroom and on-the-job training.</p>
Workforce Investment Boards (various WIBs – primarily WIA 15 & 16)	ETA National Emergency Grant(s) Various Layoff Responses including National Emergency Grants
	Workforce Boards from areas impacted by current mining and power plant layoffs will use existing displaced worker funds and national emergency grants as needed and available to retrain and displaced workers for new and emerging fields in the regional economy, and place workers in available positions. This activity is already underway and will be supplemented and adapted as additional layoffs are experienced throughout these industries.

B. Economic Development Activities

Economic development activities to be undertaken under this POWER Plan (and the lead organizations for each) include:

- a. Skillshed Analysis and Case Studies of Coal-Fired Power Plant/Coal Mine Closures (GVS)
- b. Energy Facility and Workforce Repurposing Study (Buckeye Hills/PMO)
- c. Appalachian Ohio Wood Products Innovation Cluster Project (APEG and GVS)
- d. Coal-fired Power Plant Supplier Support Project (APEG with Ohio MEP)
- e. Innovation Hub Project (OUIC)
- f. Emerging Sectors Social Enterprise Development Project (RA)
- g. Regional Expansion of Municipal Aggregation/Energy Efficiency (SOPEC)

Each of these efforts is summarized below. With the exception of Item c., detailed information about each component is included in each effort's respective federal POWER grant application. Item c. is described in detail in Ohio MEP's work plan for its re-competition period (7/1/2015 – 9/30/16), which is under review at NIST/MEP or may be obtained directly from APEG.

1. Specific Activities to Be Undertaken

- a. Skillshed Analysis and Case Studies of Coal-Fired Power Plant/Coal Mine Closures

Ohio University's Voinovich School of Leadership and Public Affairs (GVS) will utilize a skillshed analysis to determine relevant occupational skills of displaced coal and power plant workers and how these skills crosswalk to emerging and existing high growth industries across the 32 county Appalachian Ohio region. The project does not assume a one-to-one reemployment of displaced coal/power workers in energy industries, but aims to encourage economic diversification. Prospective new occupations will not be restricted to energy related jobs and will include health care, manufacturing, etc. with the goal of addressing immediate job loss impacts with high quality employment opportunities for displaced workers. This approach builds on recently completed skillshed analysis in Appalachian Kentucky conducted by GVS. Additionally, detailed case studies of 4-5 coal and/or power plant closures or prospective closures will be developed along with and skillshed and economic/fiscal impact analysis at the laborshed level. These case studies will include economic and fiscal impacts of the closure, analysis of reemployment options, and identification of skills upgrades that may be required. This information will be shared with economic development and worker training organizations participating in the POWER grant.

- b. Energy Facility and Workforce Repurposing Study

Buckeye Hills and PMO will partner to request EDA planning funds to convene key community, labor, research, economic and energy development stakeholders to identify short-term needs during transition period of the changing energy economy, and develop a long-term plan to identify and pro-actively take advantage of opportunities in the new energy economy.

To assist in the long-term energy development planning process, the project partners will conduct asset mapping of power sector capital, facilities, and other resources for areas adversely impacted by shifts

away from dependency on coal for power generation. These geographic areas include Ohio counties adjacent to power plant closings: Gallia, Meigs, Athens, Morgan, Washington, Noble, Monroe, and Belmont.

The project will also conduct an assessment of the potential for, and feasibility of, repurposing and reemploying existing capital, land, facilities and job skills for use in a new energy economy. This would include: repurpose power plant equipment and facilities; take advantage of various combined heat and power technologies (including waste-heat-to-power); recover methane from shale development operations and abandoned coal mines/fields; employ wood pulp waste from the wood product industry for use as fuel in heat and power production, identify workforce skills required to transition into, and function in, this new energy environment.

c. Appalachian Ohio Wood Products Innovation Cluster Project

Working in partnership with Ohio University's George Voinovich School, the Ohio Forestry association, Rural Action, and other partners, APEG will apply for \$500,000 in SBA Innovation Cluster funding (with potential for annual renewal for a total of up to five years' support). This project will build upon and expand the region's wood products supply chain work begun as a part of its Make It In America project.

As part of its MIIA efforts, APEG has identified more than 500 supply chain firms in the region ranging from loggers to high-end custom hardwood furniture manufacturers. APEG will work with the sector to promote adoption of new productivity systems and technologies, improve workforce skills, strengthen business management, launch new and improved products, access new markets, and increase exports. GVS will support these efforts with research supporting the overall effort and meeting the specific information needs of cluster firms.

Appalachian Ohio retains what we believe is the largest remaining cluster of hardwood furniture manufacturers remaining in the US. These firms utilize the region's abundant sustainable supply of high-quality hardwoods, including Appalachian White Oak – the most prized oak species globally. A 2012 study by The Ohio State University estimates that, in 2010, Ohio's forests and wood products sector directly created 47,905 jobs and had direct annual economic impact in excess of \$12.7 billion.¹⁰ The vast majority of this industry is located in Appalachian Ohio and the footprint of this industry is nearly identical to the footprint of the mining and power industries in Appalachian Ohio.

Currently this industry suffers from old and inadequate technologies, poor adoption of modern productivity and quality systems, and critical skill shortages. Companies have little experience with marketing their products and almost no export experience. Lack of critical components in the supply chain result in loss of business opportunities. For instance, lack of kiln drying capacity, results in export of green logs while local manufacturing firms must periodically curtail operations, decline orders or go outside the region for raw materials because of a lack of locally produced dry lumber.¹¹

¹⁰ Ohio's Forest Economy, Eric McConnell, Ph.D., Forest Operations and Products Specialist, Ohio State University Extension, 2012

¹¹ Craig Rosenlund, Manufacturing Extension Partnership Wood Products Sector Supply Chain Specialist at the Appalachian Partnership for Economic Growth (APEG), statements about industry deficiencies are based on

For two years, under its federal Make It In America grant, APEG has been working to inventory the industry supply chain, map its capabilities and gaps, understand its obstacles and challenges, and work with companies to begin the process of bringing the industry into the 21st century. In July, utilizing a small pending ARC export assistance grant (if approved), APEG anticipates beginning an export project to connect industry partners to foreign markets. All this work is proceeding under the direction of a project leader with more than three decades of industry experience working on four continents.

The SBA grant will build upon these early efforts and expand them into a full-blown sector initiative, strengthening and expanding the industry. Given that the footprint of this industry essentially coincides with that of the mining and power industries in Appalachian Ohio, further development of the industry will both alleviate the economic distress from the decline in the coal economy and provide additional jobs that are highly suitable for workers transitioning from mining.

d. Coal-fired Power Plant Supplier Support Project

Beginning on July 1, 2015, Appalachian Partnership for Economic Growth will utilize approximately \$50,000 in funds committed by Ohio Development Services Agency as matching support for federal NIST/MEP funding for a project that will design and implement a strategy to assist suppliers of coal-fired power plants in Ohio that have closed or announced plans to close. APEG will coordinate this activity for all Ohio MEP regional partners (NIST/MEP sub-recipients) allowing the services to be delivered to all 32 counties of Appalachian Ohio (APEG's 26 MEP counties plus 6 counties served by other regional partners).

The project will involve outreach to supply chain companies, assessment and strategy development, MEP assistance to qualifying companies, and linkages to economic development resources to help companies with transition activities. Some of the services available through MEP available to affected companies include:

- Expert assistance to help with business planning associated with the transition to new markets
- Identification of supply chain opportunities in other industries
- Technical assistance with productivity and efficiency issues to help the affected companies maintain financial viability with a lower sales volume
- Identification of new technologies and product or service lines that would help open new markets
- Innovation engineering to assist with new product or service design
- Assistance in plant layout and technology adoption to facilitate introduction of new products or services
- Workforce retraining to adapt to new markets

Power companies in Ohio with announced coal-fired plant closures will assist in this project. For instance, American Electric Power, the state's largest electric supplier, has committed to invite suppliers

structured interviews of more than 100 wood products supply chain companies operating in Appalachian Ohio as part of APEG's federal Make It In America grant project.

to project kickoff meetings where resources available to supply chain companies through the project will be explained and companies will be able to sign-up for eligible assistance.

e. Innovation Hub Project

Ohio University Innovation Center will seek EDA Economic Assistance Program and ARC Area Development Program funds to support facility expansion to develop an Innovation Hub for Appalachian Ohio. The proposed hub will provide expertise and access to appropriate equipment to develop, design, produce and test working prototypes and train displaced workers in new technologies. Funding will secure sufficient staff, programmatic initiatives, software, hardware and equipment to create and sustain a successful space benefiting the research and development of users in defined industries, including but not limited to Electric Power Generation and Transmission (NAICS 221112), Biopharmaceuticals (NAICS 325413), Wired Telecommunications Carriers (NAICS 517110), Chemical Products (NAICS 325120) and Oil and Gas Production (NAICS 486210) and R&D in the Physical, Engineering and Life Sciences (NAICS 541712). In addition, this project will serve to bolster the existing attraction of new capital in conjunction with partner entities such as TechGROWTH Ohio (TGO), the East Central Ohio Tech Angel Funds, the Ohio TechAngels and others.

In the planned building expansion, proof of concept (product design, development and testing) space as well as additive manufacturing space will afford users access to expensive and specialized equipment and expertise. The center will be the only regional facility that provides manufacturers with access to advanced equipment, affordable workforce development and technical training programs to deliver diversification of the regional economy; create comparably high-paying jobs to replace those lost in the coal and power sectors, and train workers for jobs in new and existing industries.

With these expanded facilities, the OUIC will build upon the historical successes already achieved and the networks already in place within Appalachian Ohio entrepreneurial ecosystem to continue to provide assistance to founders and small businesses in access to capital, business assistance / mentoring and in intellectual property development and protection. In addition to the continuation of these services, the OUIC will implement an array of complementary and integrated programs with accompanying facilities, expertise and equipment. The center will play an important role by collaborating with partners, entrepreneurs, manufacturers, artists, academics and engineers to focus on the needs of innovation and technology-based opportunities.

Similar product development spaces - like the Robert C. Byrd Institutes in West Virginia - have had a dramatically positive impact on local, regional and state economies. A center in the Appalachian Ohio region, which builds upon the current success of the OUIC, will have an incredible impact on continued economic and workforce development. The expected economic impact is a 25-50% increase in the OUIC's independent, third-party economic impact report of 2014 which equates to 35-70 new jobs generating \$1.525M to \$3.05M in labor income.

f. Emerging Sectors Social Enterprise Development Project

Rural Action will seek \$75,000 in ARC Area Development Program funds to continue growing social enterprises connected to emerging sectors that are important to the region's entrepreneurial ecosystem

and that take advantage of the region's assets and comparative advantages in the new energy economy. This will address coal industry impacts by providing jobs and entrepreneurial opportunities for displaced workers and replacing economic activity lost to the coal-industry decline.

Funds will be matched and will allow Rural Action to hire a Director of Social Enterprise to:

- Expand existing social enterprises and launch new ones in transition sectors such as energy, brownfield and coalfield restoration, sustainable forestry, zero waste in energy and industry, local food systems, eco-tourism, and;
- Take strategic advantage of assets and opportunities identified in energy sector asset mapping and planning process proposed by Buckeye Hills – Hocking Valley Regional Development District; and,
- Provide direct technical assistance to nonprofit and for-profit social enterprises with idea generation, market assessment, and business modeling.

To accomplish these objectives, investing in staff resources with project funds would:

- Assess the potential of existing and new businesses within the identified sectors in a timely fashion;
- Provide hands-on assistance to evaluate and improve marketing, market access, collaboration, equipment and infrastructure, and investment;
- Bring together entrepreneurs within sectors to identify market and service delivery options;
- Identify expansion opportunities within existing Rural Action social enterprises and the necessary investment to move them to independence and profitability;
- Assist with business modeling for Rural Action and other social enterprises;
- Coordinate with other business partners, and funding resources for project sustainability.

g. Regional Expansion of Municipal Aggregation/Energy Efficiency (SOPEC)

Southeast Ohio Public Energy Council (SOPEC) will expand the council's capacity to share its innovative approach to municipal aggregation with regional communities. SOPEC's model uses community choice aggregation to create an array of energy efficiency programming and promotes local generation of renewable power. ARC Funds will allow SOPEC to hire a Regional Expansion Director to:

1. Extend SOPEC's regional base to a 6-county area and provide consultation for municipal aggregation paired with the development of energy efficiency programming and renewable energy projects.
2. Connect statewide talent with local workforce for regional development in the energy efficiency and renewable energy sector.

Since 2013, SOPEC has pioneered a vision for the new energy economy that utilizes aggregation as a tool for not only affordable energy, but also for community mobilization for energy efficiency services and local generation of renewable power. This comprehensive approach facilitates the development of demand for energy conservation services, strengthening business and employment opportunities in Southeast Ohio.

SOPEC has demonstrated success in developing public-private partnerships with energy service providers, working collaboratively on innovative energy projects in the region. The Green Schools

Collaborative lean launch has brought together top industry engineers, developers and financiers from across the state to provide a one-stop shop for municipal grade building improvements in Athens County. Through regional develop of the supply chain, SOPEC can expand market opportunities in energy efficiency and renewable energy by bridging state-level expertise with local workforce training and deployment.

The Regional Expansion Director would assist SOPEC's Executive Director in:

1. Assessing the potential for SOPEC's expansion in Athens, Morgan, Meigs, Perry, Vinton and Washington counties, identifying opportunities and barriers to development.
2. Customize SOPEC's model of community mobilization to bring energy efficiency and local generation programs to emerging regional partners.
3. Coordinating public-private partnerships that bring together statewide expertise with local skilled labor.
4. Supporting current aggregation programming in Athens County.

2. Integration of Activities

Integration of all POWER-related economic and workforce development activities is spearheaded and supervised by the Core Membership of the Appalachian Ohio POWER Initiative Partnership as discussed below in Section V, REGIONAL PARTNERSHIP. APEG, as the economic development organization with the broadest regional footprint and largest dedicated economic development staff in the region will take the lead in ensuring that coordination meetings and activities occur and will serve as the communications hub for the effort.

APEG has served in this role for previous regional partnership and planning efforts related to the region's economic decline and recovery since these efforts began 2012 in response to the Make It In America federal funding opportunity. Sub-regional organizations such as the EDD/LDD's and local economic development organizations rely on APEG to fill this role for issues that cross local and sub-regional jurisdictional boundaries.

C. Workforce Development Activities

Workforce development activities to be undertaken under this POWER Plan include various layoff responses conducted by individual WIBs with jurisdiction over the geographic areas where the layoffs have occurred, as well as specific training programs developed by the region's Union partners in response to coal- and power-industry layoffs. In addition, most of the Economic Development POWER projects listed above have direct impact on workforce development issues related to coal-related layoffs.

Union-sponsored projects proposed by this implementation plan include:

- Bricklaying Apprenticeship Program (SOKRTC)
- Electrical Apprenticeship Program (CD-JATC)
- Electrical Apprenticeship Program (WE-JATC)

- Pipefitting Apprenticeship Program (UA 495-JATC)

A summary of the WIB layoff and responses under POWER, descriptions of the Union-sponsored projects and a brief description of the workforce development-related activities of the economic development projects is provided below.

1. Specific Activities to Be Undertaken and Funding Sources for Each

a. WIB Responses to Coal-Related Layoffs

WIBs across Appalachian Ohio have been responding and will continue to respond to coal mining and coal-fired power plant layoffs in their respective service areas. These responses are compliant with DOL ETA and Ohio workforce system practices, procedures, and regulations. Like other significant layoffs, the funding for these responses comes first from the annual budget of the Ohio Department of Jobs and Family Services (ODJFS) workforce system, then, as these funds are depleted or as qualifying events occur, is supplemented with funds from National Emergency Grants submitted through ODJFS. Where warranted, responses to several similar displacements in a particular geographic area may be combined into one larger project. Common elements of WIB responses to these events include but are not limited to:

- Establishment of an event-specific multi-agency task force to oversee the response
- Establishment of one or more event-specific local offices onsite or in the proximity of the layoff location (and/or near concentrations of laid off workers)
- Research and assessment of the dimensions of the layoff, skillsets of the workers and other factors determining the level and nature of the appropriate response
- Development of an overall event-specific plan
- Development, in consultation with affected workers, individual retraining and placement plans
- Placement and financial support of workers in training/apprenticeship programs or other eligible activities (e.g. entrepreneurial self-employment)
- Administration and promotion of employer incentives for hiring and training displaced workers

b. Bricklaying Apprenticeship Program

The Southern Ohio-Kentucky Regional Training Center (SOKRTC) is requesting an implementation grant of \$116,882 from the U.S. Economic Development Administration's Partnership for Opportunity and Workforce Revitalization ("POWER"). These funds will match the annual \$116,882 budget of the Southern Ohio-Kentucky Regional Training Center. With additional funding, our programs will be able to enroll additional apprentices and offer an expanded selection of continuing educational courses program to our journeymen members, including members that may have been displaced from coal- and power-industry jobs.

SOKRTC is the premier training program for the bricklayer trades in 16 Appalachian Counties of Ohio impacted by coal mine and power plant closures. It is a joint trust between the International Masonry Institute ("IMI"), Joint Apprenticeship and Training Committee (JATC), The Ohio/ Kentucky Administrative District Council, ACI of Cincinnati, AGC of West Central Ohio, Mason Contractors Association of Dayton Ohio, Parkersburg Marietta Contractors Association, Ohio Valley Construction

Employers Council and The Tri State Contractors Association, all of which are employer trade associations.

The apprenticeship program offered by the SOKRTC is a four-year tuition free program. Apprentices learn through both the classroom and on-the-job training. The four-year apprenticeship program includes 6,000 hours of on-the-job-training and 640 hours of Related Technical Instruction, which includes classroom instruction and learning essential theory.

The education offered by the SOKRTC is also affiliated with Cuyahoga Community College, so that by the end of the four-year program, an apprentice will have earned half of the required credits to earn an associate's degree. An apprentice can choose to enroll in classes during their program in order to complete an associate's degree simultaneously while earning journeyworker status.

Equipment, codes and related technologies continuously change in the bricklaying trades. Therefore, in addition to apprenticeship training, SOKRTC also offers continuing education to journeyworkers (those individuals that have graduated from the apprenticeship program). SOKRTC offers the following courses to its members:

- OSHA Safety Training (10 hour and 30 hour)
- Foreman Training Levels I & II
- Certifications in Grouting and Reinforced Masonry
- Blueprint Readings
- Instructor Certification Program
- New Contractor Start-Up Courses
- Safety upgrade training
- Guniting training
- Estimating
- Refractory Training
- Historical masonry preservation training
- Fireplace building I & II
- Caulking

SOKRTC also offer classes outside of respective trade areas, for instance if you're a bricklayer we have tile classes as well as for the tile setter can take bricklaying courses. SOKRTC teaches Bricklaying, Tile, Marble setting, polished stone, Terrazzo, Block, Masonry Restoration, Cement, and the above mentioned to all members and Apprentices.

The Southern Ohio-Kentucky Regional Training Center has partnered with the International Union of Bricklayers & Allied Craftworkers, the IMI, JATC, The Ohio/ Kentucky Administrative District Council, Allied Construction of Cincinnati, Associated General Contractors of West Central Ohio, Mason Contractors Association of Dayton Ohio, Parkersburg Marietta Contractors Association, Ohio Valley Construction Employers Council, Tri State Contractors Association and with 178 individual employers in the region.

Additionally, the Southern Ohio-Kentucky Regional Training Center is planning on partnering with local Workforce Development Boards and other local economic development partners to recruit individuals for our apprenticeship programs.

c. Electrical Apprenticeship Program – CE-JATC

The Canton Electrical Joint Apprenticeship and Training Program (CE-JATC) is requesting an Implementation Grant of \$800,000 from the U.S. Economic Development Administration's Partnership for Opportunity and Workforce Revitalization ("POWER"). These funds will match the annual \$800,000 budget of the Greater Stark County JATC. With additional funding our programs will be able to enroll additional apprentices and offer an expanded advanced skill certification program to our journeymen members, including members displaced from coal- and power-industry jobs.

CE-JATC is the premier training program for the electrical trades in Stark, Wayne, Holmes, Tuscarawas, Carroll, Columbiana, and Mahoning Counties. Most of these counties have been identified by the U.S. Department of Commerce, Economic Development Administration as having been negatively impacted by coal mine and power plant closures.

CE-JATC is a joint trust registered in the 1940's between International Brotherhood of Electrical Workers Local 540, a local labor union, and the North Central Ohio Chapter of the National Electrical Contractors Association, an employer trade association. The Inside Apprenticeship Program offered by Greater Stark County JATC is a five year tuition free program. Apprentices learn through both classroom and on-the-job training. In anticipation of skilled labor shortages, CE-JATC has invested in capital upgrades and instructor training.

The CE-JATC offers apprenticeship training for the electrical careers of Inside Wiremen, Installer Technician and Residential Wiremen. The five year apprenticeship program requires a minimum of 180 hours of classroom instruction per year and at least 8,000 hours of on-the-job training.

CE-JATC partners with Northwest Community College to allow students to work toward an Associate Degree in Technical Studies while simultaneously completing the requirements of the apprenticeship program.

Equipment, codes and related technologies continuously change in the electrical trades industry. Therefore, in addition to apprenticeship training, the Greater Stark County JATC offers training to journeymen (those individuals that have graduated from the apprenticeship program). Greater Stark County JATC offers the following training certifications to its journeymen members:

- Instrumentation and Process Controls
- Infection Control and Risk Assessment in Construction
- OSHA 30-hour training
- NFPA 70E Electrical Safety and Hazard Certification
- Rigging, Hoisting and Signaling
- Welding
- Solar Photovoltaics

The Canton Electrical JATC has partnered with the International Brotherhood of Electrical Workers Local 540, the North Central Ohio Chapter of the National Electrical Contractors Association, and the following employers in the region: Abbott Electric, Hilscher-Clarke Electric, Wolgamott Electric, Carroll County Constructors, Jake's Electric, Beck Electric, Wood Electric, Speelman Electric, Schaub Electric, Burden Electric, Bart Lee Electric, and S&L Electric.

d. Electrical Apprenticeship Program – WE-JATC

The Wheeling Electrical JATC is requesting an Implementation Grant of \$300,000 from the U.S. Economic Development Administration's Partnership for Opportunity and Workforce Revitalization ("POWER"). These funds will match the annual \$300,000 budget of the Wheeling Electrical JATC. With additional funding its programs will be able to enroll additional apprentices and offer an expanded advanced skill certification program to our journeymen members.

The Wheeling Electrical Joint Apprenticeship Training Center ("Wheeling Electrical JATC") is the premier training program for the electrical trades in Ohio, Marshal, Wetzel counties in West Virginia and Belmont County in Ohio. Most of these counties have been identified by the U.S. Department of Commerce, Economic Development Administration as having been negatively impacted by coal mine and power plant closures.

The Wheeling Electrical JATC is a joint trust between International Brotherhood of Electrical Workers, Local 141, a local labor union, and the National Electrical Contractors Association (NECA), an employer trade association. The apprenticeship program offered by is a Wheeling Electrical JATC five year tuition free program. Apprentices learn through both the classroom and on-the-job training.

The Wheeling Electrical JATC offers apprenticeship training for the electrical careers of outside wiremen, inside wiremen, installer technician and residential wiremen. The five year apprenticeship program requires 180 hours of classroom instruction per year, and at least 8,000 hours of on the job work experience.

Equipment, codes and related technologies continuously change in the electrical trades industry. Therefore, in addition to apprenticeship training, the Wheeling Electrical JATC offers training to journeymen (those individuals that have graduated from the apprenticeship program). The Wheeling Electrical JATC offers the following training certifications to its journeymen members:

- -OSHA 10 & 30
- -MSHA
- -Drug Free Workplace
- -First aid / CPR
- -NFPA 70e

The Wheeling Electrical JATC has partnered with the International Brotherhood of Electrical Workers, Local 141, NECA, and the following employers in the region: Erb Electric Company, United Electric Company, Yahn Electric Co., Davison Electric Company, Chapman, Carol Electric, Stewart Electric and many other electrical contractors working in our area.

e. Pipefitting Apprenticeship Program

The United Association of Plumbers and Pipe Fitters Local 495 Joint Apprenticeship Training Center (UA 495-JATC) is requesting an implementation grant of \$750,000 from the U.S. Economic Development Administration's Partnership for Opportunity and Workforce Revitalization ("POWER"). These funds will supplement the annual \$1,000,000 budget of the UA 495-JATC. With additional funding our programs will be able to enroll additional apprentices and offer an expanded advanced skill certification program to our journeymen members, including members displaced from coal- and power-industry jobs.

UA 495-JATC is the premier training program for the pipefitting trades in Carroll, Columbia, Coshocton, Guernsey, Harrison, Muskingum, Tuscarawas, Holmes, Noble, and Morgan Counties in Ohio. The program also services the residents of Brooke and Hancock Counties in West Virginia. Most of these counties have been identified by the U.S. Department of Commerce, Economic Development Administration as having been negatively impacted by coal mine and power plant closures.

UA 495-JATC is a joint trust between UA Local 495, a local labor union, and the Southeastern Ohio Mechanical Contractors Association, an employer trade association. The apprenticeship program offered by UA 495-JATC is a five year tuition free program in which Apprentices learn through both the classroom and on-the-job training.

The five year apprenticeship program is divided into one-year segments, each of which includes a minimum 1,700 hours of on-the-job training and minimum of 240 hours of related classroom instruction. All apprentices receive a strong general education background in the trade, with core basics such as mathematics, mechanical drafting, blueprint reading, and related science. Soft skills are one part of the training, hard skills or performance skills are the other, welding, brazing, rigging, torch cutting etc... During the program apprentices can choose a specific curriculum to pursue with the goal of becoming a journeymen plumber, pipefitter, or service technician in the air conditioning/refrigeration field, or any of the other many service related opportunities in the industry.

The education offered by the UA 495-JATC has been assessed by the American Council on Education and other organization and colleges so that an apprentice can complete an associate of arts or associate of science degree simultaneously while earning journeyman-level credentials in the craft of their choice. These steps also allow for progression of degrees to move up into construction management and related fields.

Equipment, codes and related technologies continuously change in the pipe trades. Therefore, in addition to apprenticeship training, UA 495-JATC offers training to journeymen (those individuals that have graduated from the apprenticeship program). The UA 495-JATC offers the following training certifications to its journeymen members and apprentices:

- UA Welder Certification – within this certification there are currently 84 different UA Weld Tests.
- UA/NCCCO Crane Signalperson Certification
- UA Green System Awareness Certification Program
- UA/MCAA Foreman Certification
- UA/EPRI Industrial Rigging Certification
- UA/EPRI Valve Technician Certification Program
- UA/EPRI Instrumentation Technician Certification Program
- AWS Certified Welding Inspector
- State of Ohio Backflow Certification
- OSHA Outreach Training
- Confined Space Training
- UA Medical Gas Technician Certification Program
- EPA Section 608 Technician Certification Program
- Authorized Testing Representative

- UA Plastic Piping Installer
- UA STAR Certification
 1. HVACR Service Technicians
 2. Plumbers
 3. Pipefitters
 4. Sprinkler fitters

A variety of events is leading the area to shortage of qualified craft workers. Economic recovery means new construction. New construction dollars waned for years and many crafts workers have not been on new large construction sites for some time. They have been on maintenance activities. These members need to have more training available to them so they can continue to be productive. New craftspeople must be trained to replace a rapidly retiring workforce. An aging workforce in labor intensive work leads to more injuries and less production. The area needs to retrain and retool to meet the changing industry needs.

f. Workforce Components of POWER Economic Development Projects

Workforce-related components of POWER Economic Development Projects include:

- Skillshed Analysis and Case Studies of Coal-Fired Power Plant/Coal Mine Closures (GVS) – Sector research being conducted by GVS will partially focus on determining which industries with high location quotients for the region (and therefore good prospects for regional economic development activities) have workforce needs compatible with the skillsets of displaced workers from coal-related layoffs. This information will be provided to all POWER partners, including WIBs, to help guide and plan long-term efforts with a high likelihood of providing quality re-employment opportunities. Additionally, significant wage differences likely exist between higher wage coal and power plant jobs and likely lower wage jobs requiring similar skills. These wage differences must be addressed.
- Energy Facility and Workforce Repurposing Study (Buckeye Hills/PMO) – Site-specific research concerning the skillsets of workers affected by individual power plant shutdowns will be used to help develop specific reuse plans for each site that are compatible with the skillset of the displaced workers.
- Appalachian Ohio Wood Products Innovation Cluster Project (APEG/GVS) – Innovation cluster work will include workforce training (primarily using curriculum developed in conjunction to APEG’s MIIA project) to help both incumbent workers and new hires in the wood products industries adapt to upgraded technologies and productivity systems adopted by sector firms. This will help displaced workers from coal-related layoffs qualify for and perform in the expanding regional wood products industry.
- Innovation Hub Project (OUIIC) – The OUIIC project will provide training facilities and equipment that can be used by manufacturing firms in a range of subsectors to train new hires and existing workers on new processes, technologies and products. This will help displaced workers from coal-related layoffs qualify for and perform the duties required in a variety of manufacturing environments.
- Emerging Social Enterprises Development Support (RA) The Emerging Sectors Social Enterprise Development Project will assist workers from coal-related layoffs to gain the entrepreneurial skills to create self-employment opportunities and/or workforce skills necessary to qualify for

jobs in emerging and growing sectors such as energy, brownfield and coalfield restoration, sustainable forestry, zero waste in energy and industry, local food systems and eco-tourism.

2. Integration of Activities

Integration of all POWER-related economic and workforce development activities is spearheaded and supervised by the Core Membership of the Appalachian Ohio POWER Initiative Partnership as discussed below in Section V, REGIONAL PARTNERSHIP. Most of the coal-related layoffs in the region have occurred in counties assigned to WIA-15 and WIA-16. These two workforce areas contract fiscal and/or administrative services from the same source, Ohio Valley Employment Resource (OVER).

OVER representatives have been at the table for planning efforts related to the region's economic decline and recovery since these efforts began 2012 in response to the Make It In America federal funding opportunity. OVER has consulted with and involved other workforce areas and workforce boards as appropriated and needed throughout this process, and has served as fiscal administrator for the region's Make It In America project that serves 28 of Appalachian Ohio's 32 counties, regardless of which WIB may be formally responsible for a county benefitting from the MIIA grant's activities.

Various responses by Ohio WIBs to coal-related layoffs are routinely integrated through ODJFS; and WIBs serving various counties routinely work together when employees from layoffs in one WIB area live in another. OVER and other WIBS also work extensively in day-to-day cooperation with area Union apprenticeship programs, including all four that are submitting POWER implementation grant applications. These mechanisms for integration are very well developed and effective in dealing with layoffs with broad geographic implications.

With the movement of the workforce system from WIA to WIOA, new mechanisms for regional collaboration and integration became available through the creation of Workforce Regions that include multiple Workforce Investment Areas governed by multiple WIBs. With leadership from Workforce Area 15, APEG and WIBs are scheduling initial meetings with regional community, economic and workforce development partners to explore creation of one or two WIOA "Regions" to cover Appalachian Ohio. If successful, these efforts will provide an even more effective mechanism for coordinating and integrating workforce development activities across the Workforce Investment Areas. POWER-related activities will benefit from this additional integration.

D. Consistency with POWER Funding Principles

1. Economic and Workforce Development Integration

Since coming together in 2012 to develop Appalachian Ohio's Make It In America project, workforce and economic development efforts in the region have been deeply engaged in a partnership that includes Appalachian Partnership for Economic Growth, the areas' four EDD/LDDs, other relevant local and regional economic development organizations, workforce agencies and organizations and education and training institutions. These joint efforts have allowed an unprecedented level of integration among the region's economic and workforce development organizations and this POWER plan builds and expands upon these previous efforts.

Through APEG and its Manufacturing Extension Partnership services, WIBs and other workforce organizations have gained access to a range of employers and industry stakeholders and a channel that provides a clear path for meeting the human resources needs of local firms and the employment needs of dislocated workers. Conversely, through partnership with the WIBs and other workforce organizations, the region's economic development organizations have gained access to workforce resources that have allowed them to build the competitiveness of the region's existing manufacturing businesses by increasing worker productivity, training for new technologies and processes and increased worker buy-in as employers employ more collaborative, team-oriented approaches that value workers as partners with companies in the manufacturing process.

These joint efforts have proven that integrating efforts between economic development and workforce development reduces transaction costs, better connects the supply and demand sides of the labor market and allows for greater opportunities to create and fill high demand jobs. An example of the effectiveness of this approach as applied in this region is that the workforce training component of the region's Make It In America grant is on track to exceed the number of workers trained and placed in jobs promised by the other ten Make It In America grants combined. This is accomplished, in large part, by eliminating the need to expend DOL resources for industry outreach and company intake by piggybacking on existing Manufacturing Extension Partnership outreach calls and JobsOhio business retention and expansion calls.

A second example of the value of this approach is the June 29, 2015 announcement of Corvac Composites that it intends to expand in Appalachian Ohio adding 200 jobs. A major factor in this expansion was the ability of the region's workforce and economic development partnership to provide a commitment of \$75,000 in workforce training resources for tailored industry- and job-specific skill training for new hires. The partnership will provide a turnkey service to the company that will determine the specific training that will be of most value, identify appropriate curriculum and qualified trainers, conduct a bidding process to ensure the company gets the most for its training dollar, award the contract, supervise the training, certify worker completion and issue industry recognized credentials.

This POWER plan builds from and expands upon these highly successful workforce and economic development efforts piloted under the region's Make It In America project.

2.High Quality Jobs and Worker Advancement:

The primary focus of this plan is to diversify and expand the economic activities in other (not coal-related) sectors, to foster creation of additional stable and enduring, high-quality jobs in those sectors and to move workers into these jobs. Because coal-mining and power-generation are two of the highest paying sectors in the region's economy we do not anticipate that new jobs created will have an equivalent or greater level of quality compared to the coal economy jobs lost.

The manufacturing jobs that are the focus of most elements of this plan are among the best paying jobs in the region's economy outside of the coal economy, and this plan is focused on helping both industries and workers improve their economic futures. The Innovation Hub proposed by OUIIC, in helping regional firms with prototyping, additive manufacturing, training and ancillary services to assist in bringing new products to market, is an excellent example of how the plan will simultaneously help companies

improve profitability and competitiveness, and provide higher-quality jobs to workers. This is also an excellent time to be focusing on these jobs because Ohio's strategic location in relationship to North American markets provides opportunities to capture industries that are reshoring.

Similarly, the SBA Innovation Cluster work with the Wood Products Sector will take an underperforming sector and help it adopt new technologies, incorporate new processes and productivity systems, improve business practices, build supply chain relationships, access new markets and export more and higher value products. This should improve the quality and quantity of jobs in a sector that has been part of Appalachian Ohio's economy since European settlement and that will likely remain because of the abundant, sustainable, high-quality hardwood forest resources of the region. Given the nature of the sector, there are also numerous entry-points for entrepreneurial-minded displaced workers that would prefer to create their own jobs by building small businesses.

[NOTE: Reviewers familiar with the current Shale-related drilling activity in the region may question why this proposal does not focus on jobs in that industry. The industry certainly pays well, and some of these jobs may be eminently suitable for those transitioning from coal-related jobs. However, drilling-related shale energy jobs are neither stable nor enduring. At best, this region has a 15-20 year window of drilling activity, after which associated jobs will disappear. In addition, as evidenced by the effects of the recent price drop for crude oil, these jobs are extremely volatile. Between October 2014 and January 2015 drilling rig counts in Appalachian Ohio dropped by more than 50% with a proportionate decline in related jobs. By focusing on somewhat less lucrative jobs in emerging and relatively stable industries with longer-term growth potential, the Regional Partnership hopes to dampen the boom and bust cycles of extractive industries that have wreaked havoc on region's economy for more than a century.]

3.Planning Foundation

Section IV, below discuss consistency of this plan's workforce development components with the Power Funding Principles related to Planning Foundation.

4.Strategy Implementation:

The Project Overview in Section III A, above discusses the incorporation of the principles underlying Purdue's "Strategic Doing" approach in development of this plan. Strategic Doing is a collaborative approach that focuses on early implementation of high-impact, high-consensus strategies while simultaneously undertaking deeper analysis of longer term, more divisive and less obvious solutions. By doing so, partners remain better engaged in the collaborative process. The process strengthens collaboration by building trust through early mutual successes. It also make progress towards long term goals far earlier than in traditional approaches that require a plan for all strategies to be in place before action commences on any.

As described in Section V, below, the collaboration that proposes this plan represents a strong and diverse coalition of local economic development organizations, regional planning organizations (and the units of government that comprise their memberships and boards), labor unions, state and local workforce agencies, institutions of higher education, other job training and adult education providers, and other partners. All are supportive of an implementation focused approach that takes strong action on identified high-impact solutions while simultaneously conducting ongoing planning and analysis to

develop additional strategies that are tailored to the full range of issues created by the economic decline of the coal-industry's and opportunities created by new, emerging and expanding economic drivers.

E. Overall Budget for All POWER Funding Requests

Project	Applicant	Funding Agency	Funding Request
Appalachian Ohio Wood Products Innovation Cluster Project	Appalachian Partnership for Economic Growth	SBA	\$500,000 (annually renewable)
Bricklaying Apprenticeship Program	Southern Ohio-Kentucky Regional Training Center	EDA	\$116,882
Coal-fired Power Plant Supplier Support Project	Appalachian Partnership for Economic Growth	Ohio MEP	\$50,000
Electrical Apprenticeship Program – CE-JATC	Canton Electrical Joint Apprenticeship & Training Program	EDA	\$800,000
Electrical Apprenticeship Program – WE-JATC	Wheeling Electrical Joint Apprenticeship & Training Program	EDA	\$300,000
Emerging Social Enterprises Development Support	Rural Action	ARC	\$75,000
Energy Facility and Workforce Repurposing Study	Buckeye Hills-Hocking Valley Regional Development District / Policy Matters Ohio	EDA	\$75,000
Innovation Hub Project	Ohio University Innovation Center (OUIC)	ARC EDA	\$75,000 \$1,000,000
National Emergency Grants	Workforce Investment Boards (various WIBs – primarily WIA 15 & 16)	ETA	TBD
Pipefitting Apprenticeship Program	United Association of Plumbers and Pipe Fitters Local 495 Joint Apprenticeship Training Center	EDA	\$750,000
Regional Expansion of Municipal Aggregation/Energy Efficiency	Southeast Ohio Public Energy Council	ARC	\$75,000
Skillshed Analysis and Case Studies of Coal-Fired Power Plant/Coal Mine Closures	Ohio University - George Voinovich School	EDA	\$100,000
Total of all POWER 2015 Funding Requests			\$3,941,882

IV. CONNECTEDNESS WITH PLANNING EFFORTS

A. Connection to CEDS

All four Economic Development Districts serving Appalachian Ohio have been at the table for the region's POWER project planning activities and have helped drive an overall POWER Core Plan for the region that is consistent with the goals and activities in the four sub-regional CEDS plans.

As outlined in the table below many of the clusters and economic focus areas identified in the Comprehensive Economic Development Strategies for the four local/economic development districts are tied closely to the strategies outlined in the multi-faceted proposals. Mining and natural resource production are key clusters for several of the regions and, as such, are important components to the region's economic competitiveness.

Additionally, manufacturing in multiple sectors, including advanced manufacturing, is a key cluster across the region. Ensuring that a skilled workforce exists for this industry through apprenticeship programs and identification of transferable skills (Voinovich School, Workforce Investment Boards, and Apprenticeship program grants) from the coal and power industry important to the competitiveness of these industries. The skillshed analysis from the Voinovich School will identify gaps necessary for transition to the healthcare sector for displaced workers as this is a growing cluster in the region.

The wood products industry is a major cluster area for the region and stands to benefit and be strengthened by the APEG/Voinovich School SBA clusters of innovation proposals. Agribusiness and food processing are key clusters that stand to be strengthened through the Buckeye Hills-Hocking Valley RDD and Rural Action efforts proposed here. The Buckeye Hills-Hocking Valley RDD/Policy Matters Ohio/Rural Action efforts to identify reuse opportunities for decommissioned electricity generation facilities and more sustainable energy sources represent repositioning of the region for long-term growth.

Cluster and Economic Focus Areas in Comprehensive Economic Development Strategies	
Economic/Local Development District	Cluster/Economic Focus Area in CEDS
Buckeye Hills-Hocking Valley Regional Development District	Manufacturing
	Health Care
	Education
	Metals/Polymers
	Natural Resource Production
Eastgate Regional Council of Governments	Advanced Manufacturing
	Automotive
	Healthcare
	Agriculture
Ohio Mid-Eastern Governments Association	Primary Metal Manufacturing
	Glass and Ceramics
	Fabricated Metals Product Manufacturing
	Mining
	Forest and Wood Products
	Electrical Equipment, Appliance, and Component Manufacturing
	Chemicals and Chemical Based Products
	Machinery Manufacturing
	Advanced Materials
	Agribusiness, Food Processing, and Technology
Ohio Valley Regional Development Commission	Manufacturing Super cluster
	Agriculture Related Businesses
	Healthcare Related Businesses
	Wood Industry and Related Businesses
	Total Manufacturing Sector
Sources:	

Buckeye Hills-Hocking Valley Regional Development District. 2010. *Comprehensive Economic Development Strategy*.
http://buckeyehills.org/pub/pdf/publications/CEDS2010_Ch4.pdf

Eastgate Regional Council of Governments 2013. *Comprehensive Economic Development Strategy*.
http://www.eastgatecoq.org/Portals/Eastgate/Uploaded_Documents/RegionalPlanning/Economic%20Development/CEDS%202013-2016.pdf

Ohio Mid-Eastern Governments Association. 2014. *Comprehensive Economic Development Strategy Annual Performance Report*.
<http://www.omegadistrict.us/PDF/CEDS2014report/Full%20Report%20-%20All%20Components%20and%20Appendices.pdf>

Ohio Valley Regional Development Commission. 2014. *Comprehensive Economic Development Strategy Performance Report*.
<http://www.ovrdc.org/media/2014-CEDS-Final.pdf>

While not outlined as a specific cluster, small business development and entrepreneurship are also identified in multiple CEDS as strategic goals for the region. The Innovation Center proposal is a key to strengthening the entrepreneurial and innovation ecosystem as a strategy for economic diversity and increased economic resilience. The respective proposals generated from the region tied closely to existing economic focus areas.

B. Connection to Other Planning Efforts

The State of Ohio has delegated its business-focused (as contrasted with infrastructure and community-readiness-focused) statewide and regional economic development planning and implementation activities to JobsOhio for statewide planning and implementation and to six regional JobsOhio partners for regional planning and implementation. Appalachian Partnership for Economic Growth serves as the JobsOhio partner for 25 Appalachian Ohio Counties. Five of the remaining seven counties are affiliated with Team NEO in Cleveland and two with REDI in Cincinnati.

APEG takes the lead on issues of broader Appalachian importance in Ohio, and all JobsOhio regional partners collaborate with APEG in planning on issues that cross regional boundaries. As the lead convener for the Appalachian Ohio POWER Initiative Partnership, and as coauthor of this plan, APEG has ensured that the plan is consistent with JobsOhio's plans and strategies for Appalachian Ohio and integrated with strategies in that plan.

In addition, APEG serves as the regional NIST Manufacturing Extension Partnership (MEP) sub-recipient for Appalachian Ohio. APEG is also the author and lead of the Ohio MEP plan and strategies related to coal-related layoffs. In this role, it has ensured that this plan is consistent with the Ohio MEP system plans and strategies.

C. Connection to Economic Diversification Goals

The projects connected to this POWER core narrative/plan assist in diversifying the region's economy in a broad variety of ways. The principle connections to diversification goals include:

- Both planning proposals will help the region identify and understand additional options for economic diversification by looking deeply at ways the sites, facilities and workforce may serve as assets to attract or expand other industries to the region.

- The Appalachian Ohio Wood Products Innovation Cluster Project will help maintain and strengthen an important sector that provides diversity to the region's economy. It accomplishes this, by identifying supply chain gaps that could be strengthened in the region, products that can be produced here rather than overseas and sales opportunities into the global wood products marketplace that should allow existing firms to strengthen sales of current products and provide a diverse array of new products to meet global demand for the region's high-quality hardwood products.
- The MEP Coal-fired Power Plant Supplier Support Project will help firms currently dependent on the declining coal industry identify new markets and realign their businesses to provide products and services needed in them.
- The four apprenticeship programs will help address severe shortages in workers in the associated skilled trades across the region, addressing workforce shortages that are hampering growth in a variety of economic sectors reliant these trades.
- The Emerging Sectors Social Enterprise Development Project in addressing emerging sectors and new entrepreneurs is, by definition of "emerging" and "entrepreneur" focusing on sectors and firms that diversify the economy.
- Innovation Hub Project, by focusing on helping companies bring new technologies to their production and launch new and improved products is clearly focused on diversifying the economic underpinnings of the new and existing companies that will it will serve. With its additional emphasis on entrepreneurs it will further encourage diversification.
- The Regional Expansion of Municipal Aggregation/Energy Efficiency, with its focus on new and emerging energy technologies directly diversifies the power generation and supply industry that currently suffers from an over-dependence on coal-fired generation capacity.

V. REGIONAL PARTNERSHIP

The Appalachian Ohio POWER Initiative Partnership (POWER Partnership) is an outgrowth from and expansion upon the Appalachian Ohio Make It In America Partnership (MIIA Partnership) developed in 2012 in advance of the release of the federal Make It In America FFO in the spring of 2013.

Core members of the original MIIA Partnership included APEG, three of four Appalachian Ohio regional EDD/LDDs (Buckeye Hills, OMEGA and OVRDC), Ohio Valley Employment Resources (Workforce Area 15 WIB and Area 16 fiscal administrator) and Ohio Development Services Agency. Additional program partners with roles or subcontracts as part of the MIIA Partnership included Rural Action, Ohio Forestry Association, the Voinovich School at Ohio University, Holmes County Furniture Guild, Contraxx Furniture and Washington State Community College. In addition, virtually every college, university, and private sector training provider serving Appalachian Ohio has been a vendor for one or more incumbent workforce training projects funded under the regional MIIA grant.

Since 2012, the number of organizations involved in ongoing regional planning has steadily expanded to include the core members described below. These partners have been meeting regularly (as a whole and in various configurations and subgroups) to plan and implement a variety of economic and

workforce development strategies across the region. Topics of these meetings have included the decline in the region's coal economy. Since early April, 2015, these partners have been conferring and meeting to develop this plan and the associated funding proposals for POWER.

A. Partners, Resources and Capabilities

The table below lists the core members of the region's POWER partnership and briefly summarizes the resources and capabilities they bring to the table.

Core Members - Appalachian Ohio POWER Initiative Partnership	
MEMBER	CAPABILITIES AND RESOURCES
Appalachian Partnership for Economic Growth	<p>APEG brings a \$3 million annual budget and 16 staff with deep experience in economic development and business assistance to the project. As the JobsOhio regional partner for Appalachian Ohio, APEG is responsible for developing the plans, strategies and tactics for Ohio's efforts to attract, expand and retain new businesses that substantially contribute to the region's GDP. Since its founding in 2012, APEG has helped more than 80 companies to locate or expand in the region. These companies have pledged to create more than 6,000 new jobs and make more than \$8 billion in new capital investment within three years.</p> <p>APEG is also the NIST/MEP regional sub-recipient and program lead for Appalachian Ohio. In that capacity, APEG has worked with hundreds of regional manufacturers to help them improve their technologies, strengthen their productivity and process, improve profitability, train their workforce, and address a wide variety of barriers and challenges to their successful operation in the region.</p> <p>APEG is led by its President and CEO, John Molinaro, who has more than 35 years of experience in rural economic and workforce development. He has consulted with or advised economic, community and workforce development partnerships in more than 35 states as well as the ARC, EDA, USDA, the White House Rural Council, Domestic Policy Council and the (international) Organization for Economic Cooperation and Development. He is also a frequent speaker at regional and national economic and workforce development events.</p>
Buckeye Hills Hocking Valley Regional Development District	<p>Buckeye Hills-Hocking Valley Regional Development District helps local communities work cooperatively to improve its region in Appalachian Ohio. A voluntary organization of local government political subdivisions, Buckeye Hills serves eight counties securing financial resources to translate ideas into action. It serves as both the ARC Local Development District and the EDA Economic Development District for this region.</p> <p>Whether reaching out to the region's aging in need of in-home assistance, providing communities with planning support, or serving as advocates on the state and national level, the professional staff at Buckeye Hills serves with dedication and compassion. Since its inception, Buckeye Hills has secured over \$500 million for education, health care, infrastructure, training and social services programs in the region.</p> <p>Buckeye Hills assists communities in identifying urgent needs and securing grant and loan dollars to improve their infrastructure and the overall quality of life for their residents. Its 18 professional staff often act as the 'adjunct staff' of the communities of the District by providing technical assistance, grant writing, and project administration.</p>
Canton Electrical Joint Apprenticeship & Training Program	<p>CE-JATC is the premier training program for the electrical trades in Stark, Wayne, Holmes, Tuscarawas, Carroll, Columbiana, and Mahoning Counties. Most of these counties have been identified by the U.S. Department of Commerce, Economic Development Administration as having been negatively impacted by coal mine and power plant closures.</p> <p>CE-JATC is a joint trust registered in the 1940's between International Brotherhood of Electrical Workers Local 540, a local labor union, and the North Central Ohio Chapter of the National Electrical Contractors Association, an employer trade association. The Inside</p>

	<p>Apprenticeship Program offered by Greater Stark County JATC is a five year tuition free program. Apprentices learn through both classroom and on-the-job training. In anticipation of skilled labor shortages, CE-JATC has invested in capital upgrades and instructor training.</p> <p>The CE-JATC offers apprenticeship training for the electrical careers of Inside Wiremen, Installer Technician and Residential Wiremen. The five year apprenticeship program requires a minimum of 180 hours of classroom instruction per year and at least 8,000 hours of on-the-job training.</p> <p>CE-JATC partners with Northwest Community College to allow students to work toward an Associate Degree in Technical Studies while simultaneously completing the requirements of the apprenticeship program.</p>
Eastgate Regional Council of Governments	<p>Eastgate Regional Council of Governments is directly responsible for a variety of federal, state, and local planning and project implementation programs. As the Metropolitan Planning Organization and Areawide Water Quality Management Agency for Mahoning and Trumbull Counties, and the EDA designated Economic Development District, Eastgate continues to maintain required certifications and planning documents to qualify the region for federal and state funding.</p> <p>Eastgate's 15 staff also support a variety of other major areas of responsibility include: air quality planning and air advisory day programs, State Capital Improvement Program administration for the District 6 Public Works Integrating Committee, Intergovernmental review, administration of the regional Rideshare program, administration of the Clean Ohio Conservation & Revitalization Funds, and administration of the Local Development District of the Appalachian Regional Commission.</p>
George V. Voinovich School of Leadership and Public Affairs, Ohio University	<p>Ohio University's George V. Voinovich School of Leadership and Public Affairs finds researched-based solutions to challenges facing communities, the economy and the environment. Its public-private partnerships encourage growth and stability. And its students learn by doing as they prepare for careers serving the public interest in Ohio University's rural region and beyond.</p> <p>The Voinovich School is entering its 20th year as a U.S. Economic Development Administration University Center. The Rural Universities Consortium (RUC) University Center is a joint endeavor of Bowling Green State University's (BGSU) Center for Regional Development and Ohio University's (OU) Voinovich School of Leadership and Public Affairs. It seeks to address gaps in services for entrepreneurs and small businesses, local economic data, and channels for information sharing; this Center is meeting the disparate needs of two economically distressed regions within the state of Ohio.</p> <p>The School integrates a number of programs into a seamless continuum of business services for entrepreneurs under the overarching Center for Entrepreneurship. The flagship of the Center's portfolio is the State-supported technology start-up program TechGROWTH Ohio, a Third Frontier Entrepreneurial Signature Program. Other important state and federally-supported programs include business start-up assistance for all small businesses through the Small Business Development Center, and assistance through the Procurement Technical Assistance Center to companies of any size seeking to work with the federal government.</p>
Ohio Mid-Eastern Government Association	<p>OMEGA is a collaborative body of member governments that serves as a facilitator between state and federal government agencies and local entities to provide opportunities in economic and community development through networking, education, planning, research, and allocation of resources. It serves ten Appalachian counties in eastern Ohio: Belmont, Carroll, Columbiana, Coshocton, Guernsey, Harrison, Holmes, Jefferson, Muskingum, & Tuscarawas. It serves as the EDA-designated Economic Development District and ARC-designated Local Development District for this region.</p> <p>OMEGA's main objective is to foster a cooperative effort in planning, development and implementation of local and regional plans, programs and projects which will increase the economic activity in the area and improve the quality of life of its citizens.</p> <p>OMEGA's 7-member staff provides grant research and planning assistance to local</p>

	governments, conducts studies for regional services and facilities affecting health, safety, welfare, human resources, education, economics, population, housing, land use and development, administers a district-wide comprehensive economic development plan and promotes cooperative arrangements among its members and other parties.
Ohio Valley Employment Resource	<p>Ohio Valley Employment Resource, OVER, is the administrative entity for the WIOA Area of Monroe, Morgan, Noble and Washington Counties in Ohio. OVER operates through the Ohio Means Jobs centers in each county. WIOA offers employment and training opportunities. OVER is also a partner in the Appalachian Ohio Make It In America grant, administering the grant for all 28 counties in Appalachian Ohio. Through this grant, OVER offers incumbent worker and on-the-job training in the polymers and chemicals, metal fabrication and wood furniture manufacturing industries throughout Appalachian Ohio.</p> <p>OVER is the front door for workers, employers, communities and organizations in its region to access all of the workforce services available within the “Ohio Means Jobs” workforce development system. OVER, through its Ohio Means Jobs affiliation, takes the lead on ensuring that the Appalachian Ohio POWER Initiative Partnership appropriately coordinates its planning and projects with other WIOA regions serving the region.</p>
Ohio Valley Regional Development Commission	<p>The Ohio Valley Regional Development Commission is a public regional planning commission. Acting in the capacity of a regional economic and community development agency, OVRDC coordinates federal, state and local resources to encourage development in 12 Appalachian southern Ohio counties: Adams, Brown, Clermont, Fayette, Gallia, Highland, Jackson, Lawrence, Pike, Ross, Scioto and Vinton.</p> <p>Established in 1967, OVRDC serves as a Local Development District for the Appalachian Regional Commission and as an Economic Development District for the US Department of Commerce, Economic Development Administration. Its 10 staff provide professional assistance, support and services to its member units of government on a wide variety of economic and community development issues.</p>
Ohio University Innovation Center	<p>The Innovation Center provides valuable business incubation resources to fuel the economy in Athens, Ohio and the surrounding Appalachian region. Created in 1983, the Ohio University Innovation Center was the first university-based business incubator in the State of Ohio and just the 12th in the United States. The current 36,000 square foot facility, which opened in 2003, is now home to 19 prospering member companies. In 2014 alone, the Innovation Center activities created 140 jobs with an estimated \$6.1 million in labor income in Athens County. Innovation Center businesses also generated an estimated \$656,113 in state and local tax revenues. Companies have access to shared conference and lab space, executives-in-residence, and other support services. The Center also houses a 3-D printer for rapid creating and testing of manufacturing prototypes.</p>
Policy Matters Ohio	<p>Policy Matters, a 15-year-old non-profit policy research institute, creates a more vibrant, equitable, sustainable and inclusive Ohio through research, strategic communications, coalition building and policy advocacy. PMO’s 11 experienced staff and 10 interns manage a variety of projects across Ohio. This work falls into four major and related areas:</p> <ul style="list-style-type: none"> • Quality public structures: adequate and fair taxes to support the schools, neighborhoods and infrastructure we all need. • A fair economy: good jobs, worker rights, smart training, and opportunity for all. • Pathways out of poverty: reasonable regulations to help families earn and save, build assets, avoid unfair loans, and build a better future for themselves and their children. • Sustainable communities: investments in transit, renewable energy, conservation and other smart solutions that create jobs and support communities.
Rural Action	<p>Since 1991, Rural Action has worked to build a more sustainable economy and environment across all 32 counties of Appalachian Ohio. Recognized nationally and internationally as one of the foremost regional sustainable development organizations in the US, Rural Action has been at the forefront of developing innovative and effective sustainable development practices in sectors such as alternative energy, forestry, sustainable agriculture and food</p>

	<p>systems, secondary (recycled) materials and heritage- and eco-tourism. Rural Action's programs are currently supported by its 18 staff. In addition, RA operates one of the largest AmeriCorps programs in the US with 26 volunteers currently placed through Rural Action.</p> <p>Its 20 years of work in food systems development has increased food security in the region and strengthened farm incomes, while landowner education has diversified forests and supported landowner revenues.</p>
Southeast Ohio Public Energy Council	<p>SOPEC is a Council of Governments that combines the pooled purchasing power of Athens, Athens County and county villages, starting with Amesville, to acquire reasonably priced electricity and other energy services. SOPEC has demonstrated success in developing public-private partnerships with energy service providers, working collaboratively on innovative energy projects in the region.</p> <p>Since 2013, SOPEC has pioneered a vision for the new energy economy that utilizes aggregation as a tool for not only affordable energy, but also for community mobilization for energy efficiency services and local generation of renewable power. This comprehensive approach facilitates the development of demand for energy conservation services, strengthening business and employment opportunities in Southeast Ohio.</p>
Southern Ohio-Kentucky Regional Training Center	<p>SOKRTC is the premier training program for the bricklayer trades in 16 Appalachian Counties of Ohio (as well as numerous counties across Kentucky) impacted by coal mine and power plant closures.</p> <p>It is a joint trust between the International Masonry Institute ("IMI"), Joint Apprenticeship and Training Committee (JATC), The Ohio/ Kentucky Administrative District Council, ACI of Cincinnati, AGC of West Central Ohio, Mason Contractors Association of Dayton Ohio, Parkersburg Marietta Contractors Association, Ohio Valley Construction Employers Council and The Tri State Contractors Association, all of which are employer trade associations.</p> <p>The apprenticeship program offered by the SOKRTC is a four-year tuition free program. Apprentices learn through both the classroom and on-the-job training. The four-year apprenticeship program includes 6,000 hours of on-the-job-training and 640 hours of Related Technical Instruction, which includes classroom instruction and learning essential theory.</p> <p>The education offered by the SOKRTC is also affiliated with Cuyahoga Community College, so that by the end of the four-year program, an apprentice will have earned half of the required credits to earn an associate's degree. An apprentice can choose to enroll in classes during their program in order to complete an associate's degree simultaneously while earning journeyworker status.</p>
United Association of Plumbers and Pipe Fitters Local 495 Joint Apprenticeship Training Center	<p>UA 495-JATC is the premier training program for the pipefitting trades in Carroll, Columbia, Coshocton, Guernsey, Harrison, Muskingum, Tuscarawas, Holmes, Noble, and Morgan Counties in Ohio. The program also services the residents of Brooke and Hancock Counties in West Virginia.</p> <p>UA 495-JATC is a joint trust between UA Local 495, a local labor union, and the Southeastern Ohio Mechanical Contractors Association, an employer trade association. The apprenticeship program offered by UA 495-JATC is a five year tuition free program in which Apprentices learn through both the classroom and on-the-job training.</p> <p>The education offered by the UA 495-JATC has been assessed by the American Council on Education and other organization and colleges so that an apprentice can complete an associate of arts or associate of science degree simultaneously while earning journeyman-level credentials in the craft of their choice. These steps also allow for progression of degrees to move up into construction management and related fields.</p>
Wheeling Electrical Joint Apprenticeship & Training Program	<p>The Wheeling Electrical Joint Apprenticeship Training Center ("Wheeling Electrical JATC") is the premier training program for the electrical trades in Ohio, Marshal, Wetzel counties in West Virginia and Belmont County in Ohio. Most of these counties have been identified by the U.S. Department of Commerce, Economic Development Administration as having been negatively impacted by coal mine and power plant closures.</p>

	<p>The Wheeling Electrical JATC is a joint trust between International Brotherhood of Electrical Workers, Local 141, a local labor union, and the National Electrical Contractors Association (NECA), an employer trade association. The apprenticeship program offered by is a Wheeling Electrical JATC five year tuition free program. Apprentices learn through both the classroom and on-the-job training.</p> <p>The Wheeling Electrical JATC offers apprenticeship training for the electrical careers of outside wiremen, inside wiremen, installer technician and residential wiremen. The five year apprenticeship program requires 180 hours of classroom instruction per year, and at least 8,000 hours of on the job work experience.</p>
--	---

B. Alignment of Partners' Efforts

Integration of all POWER-related activities is spearheaded and supervised by the Core Membership of the Appalachian Ohio POWER Initiative Partnership. The core members of Appalachian Ohio POWER Partnership have all committed to meet regularly (at least quarterly and more often as needed) through the funding period for POWER in order to ensure that alignment of the various plan components is maintained. The partners have also committed to continue to meet as far beyond as required to ensure sustainability of efforts and compliance with metrics and reporting standards for associated grants.

APEG, as the economic development organization with the broadest regional footprint in the region, and as the state-designated liaison for the region with state (JobsOhio) economic development efforts will take the lead in ensuring that coordination meetings and activities occur and will serve as the communications hub for the effort. APEG has served in this role for previous regional partnership and planning efforts related to the region's economic decline and recovery since these efforts began 2012 in response to the Make It In America federal funding opportunity. Sub-regional organizations such as the EDD/LDD's and local economic development organizations rely on APEG to fill this role for issues that cross local and sub-regional jurisdictional boundaries.

C. Complimentary Resources

Each of the core members of the partnership has a wealth of connections to additional networks, partners and resources and is in a position to bring these connections to the table as needed to support and expand upon these POWER Initiative plans. A summary of some of the more important connections brought by the partners appears below.

Core Members Connections - Appalachian Ohio POWER Initiative Partnership	
CORE MEMBER	MAJOR COMPLIMENTARY NETWORKS, PARTNERS AND RESOURCES
Appalachian Partnership for Economic Growth	<ul style="list-style-type: none"> JobsOhio (statewide economic development lead for Ohio) JobsOhio Network (regional economic development providers similar to APEG) Ohio MEP (Manufacturing Extension Partnership services and capabilities) Rural Policy Research Institute (rural policy analysis and best practices) Aspen Institute Community Strategies Group (rural development best practices) Leading industrial employers across Appalachian Ohio Workforce training providers participating in Make It In America grant Ohio Forestry Association and various wood products associations Ohio Development Service Agency and Governor's Office of Appalachia
Buckeye Hills Hocking	<ul style="list-style-type: none"> Member local units of government

Valley Regional Development District	<ul style="list-style-type: none"> • Local elected leaders • NADO and other national rural development organizations • Appalachian Regional Commission and Governor's Office of Appalachia
Canton Electrical Joint Apprenticeship & Training Program	<ul style="list-style-type: none"> • Union locals across their service region • State and national union organizations • Employers partnering with unions to address workforce needs
Eastgate Regional Council of Governments	<ul style="list-style-type: none"> • Member local units of government • Local elected leaders • NADO and other national rural development organizations • Appalachian Regional Commission and Governor's Office of Appalachia
George V. Voinovich School of Leadership and Public Affairs, Ohio University	<ul style="list-style-type: none"> • Four Local/Economic Development Districts in Appalachian Ohio • Appalachian Partnership for Economic Growth (APEG) • Ohio Manufacturers' Association • Ohio Economic Development Association • US Economic Development Administration • Ohio Environmental Protection Agency • Appalachian Regional Commission and Governor's Office of Appalachia • Mayor's Partnership for Progress (consortium of mayors and city managers from 11 counties (over 60 communities) in southern and southeastern Ohio. • TechGROWTH Ohio (Third Frontier Program—statewide technology-based economic development initiative) • Ohio Procurement and Technical Assistance Program (PTAC)
Ohio Mid-Eastern Government Association	<ul style="list-style-type: none"> • Member local units of government • Local elected leaders • NADO and other national rural development organizations • Appalachian Regional Commission and Governor's Office of Appalachia
Ohio Valley Employment Resource	<ul style="list-style-type: none"> • Ohio Means Jobs • Ohio Dept. of Jobs and Family Services • Ohio Workforce Boards • US Dept. of Labor
Ohio Valley Regional Development Commission	<ul style="list-style-type: none"> • Member local units of government • Local elected leaders • NADO and other national rural development organizations • Appalachian Regional Commission and Governor's Office of Appalachia
Ohio University Innovation Center	<ul style="list-style-type: none"> • BioOhio (statewide biotechnology assistance program/network) • TechGROWTH Ohio (Third Frontier Program—statewide technology-based economic development initiative) • Local and state economic development officials •
Policy Matters Ohio	<ul style="list-style-type: none"> • State Fiscal Analysis Initiative of the Center on Budget and Policy Priorities • Economic Analysis and Research Network of the Economic Policy Institute • Working Poor Families Project • CFED Assets and Opportunity Scorecard • Mott Foundation State Asset Building Cluster • Good Jobs First • National Employment Labor Project
Rural Action	<ul style="list-style-type: none"> • Sustainable development organizations across Ohio, nationwide and globally • Sustainable forestry organizations across Ohio, nationwide and globally • Appalachian Funders Network • Center for Rural Entrepreneurship • US Department of Agriculture

	<ul style="list-style-type: none"> • Department of the Interior Office of Surface Mining Corporation for National and Community Service
Southeast Ohio Public Energy Council	<ul style="list-style-type: none"> • Alternate and sustainable energy industry organizations across Ohio and nationwide
Southern Ohio-Kentucky Regional Training Center	<ul style="list-style-type: none"> • Union locals across their service region • State and national union organizations • Employers partnering with unions to address workforce needs
United Association of Plumbers and Pipe Fitters Local 495 Joint Apprenticeship Training Center	<ul style="list-style-type: none"> • Union locals across their service region • State and national union organizations • Employers partnering with unions to address workforce needs
Wheeling Electrical Joint Apprenticeship & Training Program	<ul style="list-style-type: none"> • Union locals across their service region • State and national union organizations • Employers partnering with unions to address workforce needs

D. Regional Partnership Effectiveness and Past Collaboration

The Appalachian Ohio Regional POWER Partnership is an outgrowth of and expansion upon the partnership originally put in place to apply for the successful regional Make It In Appalachian Ohio project under the federal interagency Make It In America initiative. This partnership successfully attracted \$2.1 million from EDA, ETA and NIST. In addition, ARC financially supported the work of the partnership in developing the successful MIIA plan and application.

Like this POWER effort and plan, the regional Make It In America plan successfully integrated both economic and workforce development activities into a single unified project and brought resources and expertise to the table from all partnership members. With fifteen months remaining in the grant period for the Make It In America award, the regional partnership has exceeded the workforce training objectives for the entire 3-year project, identified and catalogued more than twice as many hardwood furniture and wood products industry supply chain partners as projected (more than 800 total, 500+ in the region) and is on track to meet or exceed every other grant-related metric. Further, by successfully capitalizing on the field staff from other funded programs to increase the effective use of available resources, the Appalachian Ohio partnership has already in trained and placed more workers for high-skill in-demand jobs than the other ten MIIA grant recipients combined pledged to train and place in their grant applications.

Members of the partnership have also come together in different configurations to tackle other efforts. For instance, regional partners have successfully collaborated on several USDA grants from the RBAG and RBOG grant programs, and have joined together to develop principles and a regional consensus on a plan for effective utilization of severance tax resources from the Utica and Marcellus natural gas formations in eastern Appalachian Ohio. Every major regional and sub-regional economic development group has endorsed the principles developed by the partnership as a basis for informing policy deliberations concerning severance tax revenues. The state municipal and county commissioners associations are also on record with positions in alignment with the principles and both the governor's biennial budget proposal and introduced legislation in the Ohio General Assembly have addressed these consensus principles.

The Voinovich School, Innovation Center and other programs and units at Ohio University also have a long and successful history fostering regional partnerships and seeking and receiving federal support to support them. In addition to its nearly 20 year history as an EDA University Center (joint with Bowling Green State University), Ohio University's Voinovich School of Leadership and Public Affairs has successfully managed and implemented other recent federal grants. In 2009, the Voinovich School received a three-year grant from the U.S. Department of Commerce Economic Development Administration (EDA) through the Regional Economic Advancement Program (REAP) to assist communities in developing industry-targeted economic growth strategies that will help sustain current jobs and lead to the creation of future ones. REAP was funded by the Economic Development Administration to provide technical assistance to communities in the Appalachian Region around economic development issues, provide services to communities free of charge, and also deliver workshops that have been identified as areas of interest from stakeholders.

EDA also funded a Rural Acceleration Program (April 2010 – March 2013) at Ohio University's Voinovich School of Leadership and Public Affairs leveraged existing resources to create a regional system for entrepreneurial support to early-stage technology companies. The program brought innovation economy opportunities into our rural regions. EDA support enabled critical match for accessing State funds to further leverage reach and impact. The Rural Acceleration Program succeeded in establishing a regional system for entrepreneurial support where none existed previously. Entrepreneur education inspired new startups; operational assistance accelerated venture development; organizing and educating angel networks provided access to capital; sustainable businesses were created, funded, and grown; the region's capacity for effective entrepreneurial support was enhanced. For every dollar of EDA funding, Rural Acceleration raised \$72.78 on behalf of companies.

ATTACHMENTS:

Regional Partner CEDS:

- A. *Buckeye Hills Hocking Valley Regional Development District***
- B. *Eastgate Regional Council of Governments***
- C. *Ohio Mid-Eastern Governments Association***
- D. *Ohio Valley Regional Development Commission***