

Responding to Displacement and Economic Restructuring in the Athens region of Ohio¹

I. Introduction

The Athens region of southeastern Ohio includes Ohio University and a predominantly very poor surrounding area encompassing Athens, Hocking, Perry, Meigs, and Vinton counties. With non-agricultural employment that now stands at 35,000, the region has lost about 900 manufacturing jobs since 1993 (and 1,700 since 1990) and another nearly 900 mining jobs. Employment growth has been mostly in education and health services, construction, and professional and business services.

II. Summary of Key Findings

- The region had a history in the 1990s of effective response to the needs of dislocated workers. However, the restructuring of the state and local workforce system within a combined welfare and employment agency has made the system less responsive to the needs of dislocated workers. Few services are delivered on site at plant closings, and the region now draws down few dollars for training dislocated workers. Workforce services in general appear to be balkanized and supply-side focused, without a regional level dual customer approach that links with economic development strategies.
- The Athens region houses a number of innovative economic development entities that have implemented promising strategies for creating new employment and income opportunities. These include the following.
 - Adena Ventures, a Central Appalachian regional venture capital fund that finances small startup, early- and growth-stage businesses, and that provides technical assistance to large numbers of small companies.
 - AceNet, an organization that fosters the creation of networks of small businesses in industries that use locally produced raw materials such as food products and now floors, cabinets, stairs, and home furnishings made with local wood. It also created a local independent restaurant association that buys from local food suppliers.
 - Casa Nueva, a worker-owned restaurant launched by AceNet in 1985, the worker-owners of which have now spun off a number of other restaurants which also offer high-quality jobs by the standards of the industry. One of the founders of the restaurant is interested in advancing the idea of a

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- “living wage” ordinance for Athens and/or the University that would raise wages for workers covered above the state and national minimum wage.
- A University-based incubator linked with the Voivonich Center at Ohio University.
 - An Information Technology Alliance of Appalachian Ohio which includes 41 Athens Ohio organizations, including computer software, repair, retail, internet, web design, and consulting firms.
 - An academic program in interactive digital technology – games and simulations -- at Shawnee State University and others planned at Ohio University and Hocking community college, all aimed at fostering a games and simulations industry cluster.
- Historically Ohio University has been an island of prosperity and higher educational attainment. It is seen by most observers as having little interest in or connection to the economic development of the region.
 - While there are connections and some partnerships among the innovative organizations listed above, there is no common, overall strategy guiding the individual efforts that emanates from either economic or workforce development entities.
 - The potential exists in Athens for innovative activities to come together in a synergistic way with the addition of a more integrated overall vision. This possibility might be advanced through a formal regional economic development planning process which the Athens Chamber sees as a need; reform of the state’s workforce development system; and/or further development of Voivonich Center or other Ohio University programs into a previously missing strategic regional economic capacity.

III. Regional Economic and Demographic Context

The five adjoining rural counties of Athens, Hocking, Perry, Meigs, and Vinton in southeastern Ohio form a single Workforce Investment Area. Athens, Meigs, and Vinton counties were classified in 2004 as “distressed” in economic status according to Appalachian Regional Commission criteria, while Hocking and Perry counties were classified as “transitional.”

The major economic and cultural center of the region is Athens (population about 21,000), the county seat of Athens County and home of a 19,000-student state-supported Ohio University. Athens is about 75 miles from Columbus, a one-and-a-half hour drive. About 9 percent of the region’s working residents commute to the county in which Columbus is located and this number is expected to grow once a highway bypass, currently under construction around a town between Athens and Columbus, is completed.

The five-county region had a population of about 160,000 in the year 2000, of which 62,000 was in Athens County. Economic and demographic indicators show that the region remains disadvantaged (Table 1). Even Athens County fares poorly despite its large population of university professionals. In 2000, the region's per capita income remained only slightly above half the national level and its poverty rate was 60 percent above the national average. Except for Athens County, the share of adults with a college degree is well under half of the national average.

In December 2004, the unemployment picture in the region remained comparable to that for 1999-2001 reported in Table 1. Athens County's unemployment rate in December 2004 (4.7 percent) was actually below that of the state (5.5 percent) and nation (5.1 percent), but the unemployment rates of other counties in the region were considerably higher, ranging from 8.9 percent to 13.9 percent. Workforce and economic developers report that commuting into Athens County from the region's other counties, and even from rural areas up to an hour and a half away, is not uncommon. They believe that Athens County's ability to draw workers from surrounding areas with high unemployment rates keeps wages in Athens County from rising despite its own low unemployment rate.

Athens County has a different industry mix from the rest of the region (Table 2). Because of the presence of Ohio University, education and health services is the region's and Athens County's largest major industry, employing just under one-third of the region's workers and slightly more than one-third of those employed in Athens County. The region's largest industry concentrations, relative to the nation as a whole, are in natural resources and mining, and in education and health services; the percentage of workers in each of these industries in the region is about half as large as in the nation as a whole. Athens County has an even larger relative concentration of employment in education and health services (nearly 70 percent greater than the national average) as well as a large relative concentration of workers in leisure and hospitality (about 40 percent greater than the national average). The latter reflects employment in downtown Athens' many restaurants, which serve the university population. Natural resources and mining is not important in Athens County, where it makes up less than one percent of employment and has a low relative employment concentration. The overall manufacturing employment share in the field site region remains above U.S. levels at 15 percent (Figure 1).

Table 1. A Profile of the Ohio Field Visit Counties and Comparison Regions Indexed to U.S. = 100

County / Region	ARC County Classification	Three Year Average Unemployment Rate (1999-2001)	Per Capita Market Income (2000)	Poverty Rate (2000)	Labor Force Participation Rate	Labor Force Participation Rate (Women)	Percent Change in Participation of Women (1980-1990)	Percent Population Change (1990-2000)	Percent of Adults with High School Diploma	Percent of Adults with College Degree	Population (2000) - not indexed
United States		4.3	25,676	12.4	64%	58%	27%	13%	80%	24%	281,421,906
Variables Below Are All Indexed to U.S. = 100											
Appalachian United States		109	77	110							
Ohio		98	93	85	101	102	65	36	103	86	11,353,140
Appalachian Ohio		133	68	110							
All 5 Counties in FV Region			56	161				50			160,420
Counties											
Athens	Distressed	105	59	221	89	92	104	34	103	105	62,223
Hocking	Transitional	174	65	109	92	91	114	81	97	40	28,241
Meigs	Distressed	240	50	160	85	78	113	3	91	30	23,072
Perry	Transitional	177	51	95	95	91	102	61	98	28	34,078
Vinton	Distressed	272	47	161	87	85	103	118	88	25	12,806

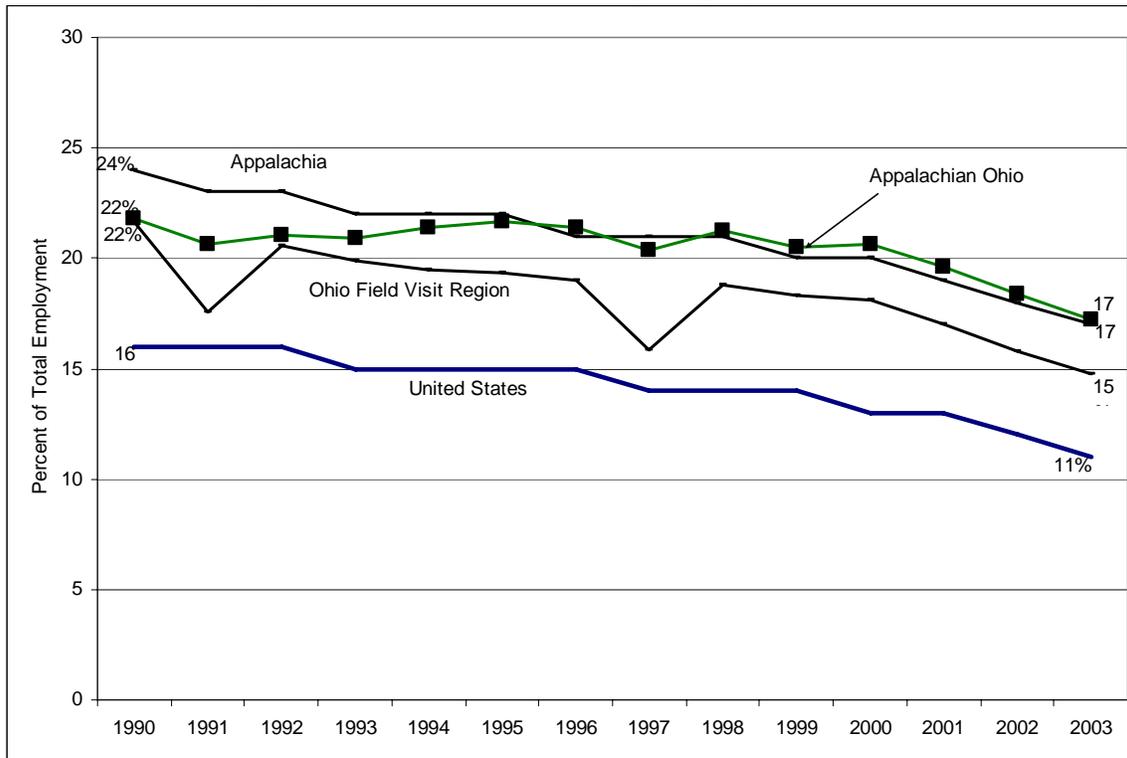
Source: Keystone Research Center (KRC) based on Census data and other data downloaded from www.ARC.gov.

Table 2. Industry Composition of Athens, Hocking, Perry, Meigs, and Vinton

	Employment 2003	Percent of Total 2003	Location Quotient 2003	Employment Change 1993-2003	Percent Change 1993-2003
Construction	2,028	6%	1.1	1,146	130%
Education and Health Services	11,001	32	1.5	2,274	26
Financial Activities	1,591	5	0.7	312	24
Information	415	1	0.5	-80	-16
Leisure and Hospitality	3,782	11	1.1	854	29
Manufacturing	4,022	12	1.0	-909	-18
Natural Resources and Mining	711	2	1.6	-855	-55
Other Services	971	3	0.8	149	18
Professional and Business Services	1,465	4	0.3	446	44
Public Administration	1,789	5	0.9	87	5
Trade, Transportation, and Utilities	6,845	20	1.0	134	2
TOTAL NONAGRICULTURAL	34,620	100.0		3,558	12

Source: KRC analysis of ES-202 data found on the University of Georgia's "Shift-share Analysis of Regional Employment" Web site: www.rcr.uga.edu/guide/ssshare1.html.

Figure 1. Ohio Manufacturing Employment Share

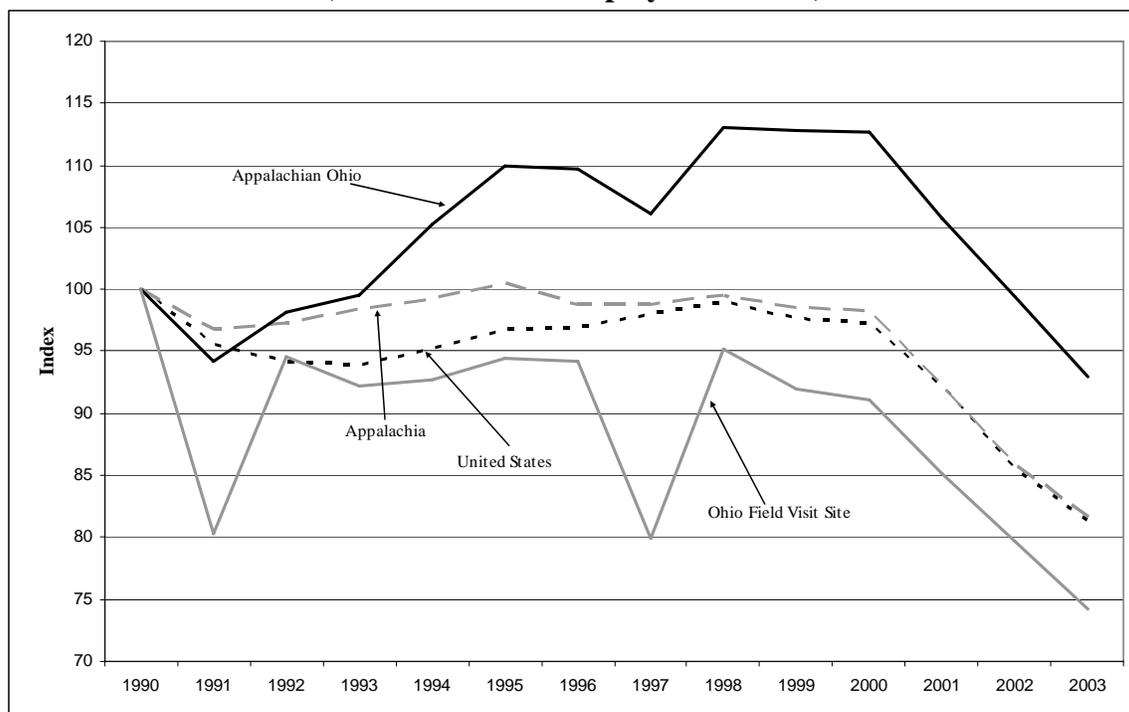


Source: Table A4.

Like many other parts of Appalachia, the region has suffered losses of manufacturing and mining jobs and, to a lesser extent, information jobs (Table 1 and Figure 2). It has gained service and construction jobs. During the 1993-2003 period the area lost more than half of its (already small number of) natural resources and mining jobs, nearly one in five of its manufacturing jobs, and about one in six of its information jobs. Jobs in professional and business services increased by more than 40 percent, jobs in education and health services and financial activities each increased by about a quarter, and jobs in construction more than doubled. The region's manufacturing job losses during this period exceeded those of the state and the nation in percentage terms (Figure 2).

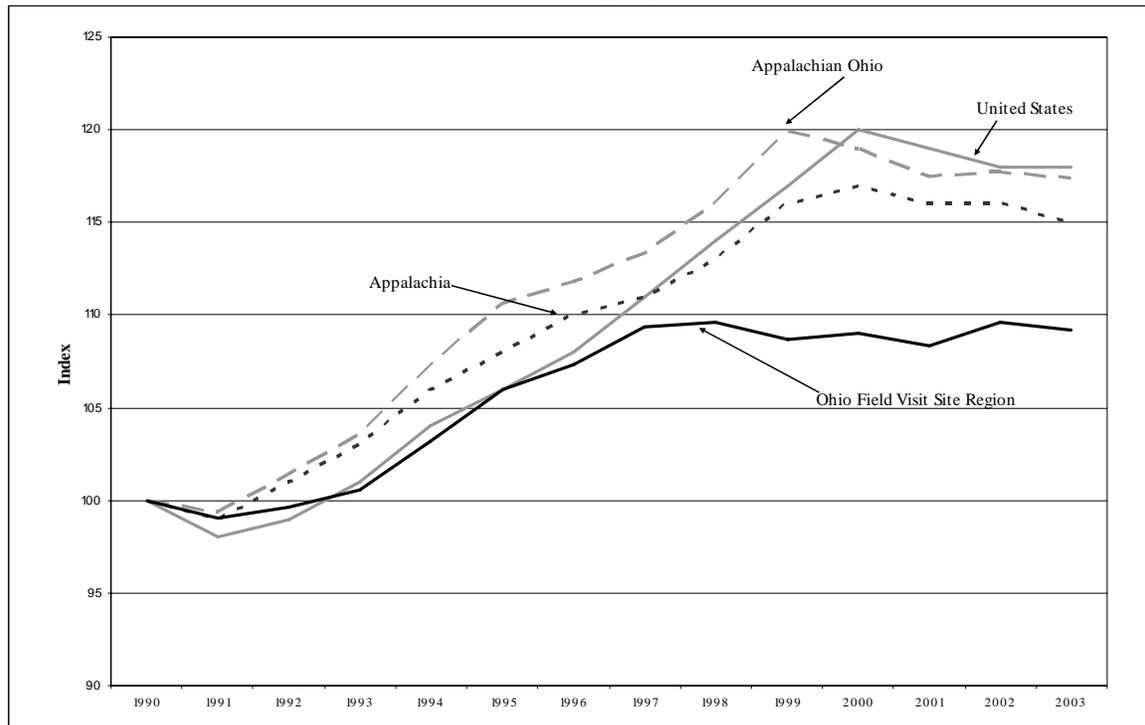
Athens County experienced different trends from the region as a whole (Table 1). From 1993-2003 it gained jobs in every major industry except information, in which it lost jobs, and natural resources and mining, where employment was unchanged over the decade. Athens County jobs in construction increased by 45 percent, jobs in professional and business services by nearly 40 percent, jobs in education and health services, leisure, and hospitality by about a third each, and jobs in manufacturing and public administration by more than a quarter each.

**Figure 2. Ohio Manufacturing Employment
(Indexed to 1990 Employment = 100)**



Source: KRC derived from data in Table A2.

**Figure 3. Ohio Total Covered Employment
(Indexed to 1990 Employment = 100)**



Source: Table A1.

In part because of job losses in manufacturing and mining, total covered employment in the region climbed more slowly in the field site region since 1990 than in Appalachian Ohio, Appalachia, or the United States (Figure 3).

IV. Overview of Responses to Displacement

Displaced Worker Assistance

The Ohio Department of Job and Family Services is responsible for workforce services in the state. This agency was formed through a merger of the state's human services and employment departments as an outgrowth of welfare reform. There are county-level Job and Family Services agencies in addition to the five-county Workforce Investment Board (WIB). WIB and One Stop Career Center staff members see the former human services department as dominant in setting policies and procedures. This leads to a focus on "work first" with less attention to training and providing good jobs.

The Athens County One Stop Career Center's services include Workforce Investment Act (services for adult, youth and displaced workers), high school equivalency diploma, job-matching, adult literacy, child care assistance, and income tax preparation assistance. Welfare eligibility determinations are done elsewhere and unemployment insurance claims are handled by phone or Internet. The One Stop Career Center seems to

emphasize the provision of workforce services to people on or about to leave welfare over the provision of services to displaced workers.

One-stop members go onsite to provide displaced worker services at employers that have announced mass layoffs or closings. However, the One Stop Career Center does not have any formal or informal means of learning about planned layoffs or closings before they are publicly announced. The One Stop Career Center staff learns about these through the newspapers. In contrast, Hocking-Athens-Perry Community Action, a social service agency that was the area's primary provider of displaced worker services under the Job Training Partnership Act (the Workforce Investment Act's predecessor), was able to use its contacts with employed clients and relationships with employers to find out about planned closings before they were publicly announced. It was sometimes even able to go onsite at a company before layoffs at the firm were publicly announced.²

Community Action's response to the closing of a mine in Meigs County illustrates what was accomplished in this region when a provider of displaced worker services was able to obtain access to the employer's premises well in advance of a planned closing. In this case the employer announced the closing two years in advance. It allowed Community Action to set up a school on the premises at that time. Community Action obtained a U.S. Department of Labor grant to operate the school. Four educational institutions offered classes. Miners felt comfortable in this environment because they could go to school with their peers and felt that the training was responsive. Both miners and their spouses were eligible for the program. As in some other mining-dependent parts of Appalachia, the high wages of mining jobs here had enabled married women to stay at home. The new jobs available and accessible to the laid-off miners did not pay equivalent wages and spouses needed to work outside the home to replace the lost income. Therefore, the spouses as well as the miners needed training to find employment.

The project was able to enroll 400 of the 650 workers being laid-off in education programs. 87 percent of their students were on the honor roll. The project ended up with a 97 percent placement rate with placement jobs averaging \$17.92 an hour. Reflecting the multiple types of training provided through the school, the placement jobs were varied and included employment as registered nurses, a Ferrier (nailing horseshoes on horses), skilled craftsmen, and a hunting guide. Some miners with previous education as engineers and architects finished degrees. Another individual achieved a Ph.D. and is now teaching at Marshall University. Also, the area has one of the few universities offering a degree in woodworking and several workers received this degree and went to work for a firm producing custom cabinets. Two of these individuals later quit that firm to begin their own business in fine wood crafting.

The WIB determines demand occupations using state projections and then makes modifications to the projections based on staff knowledge of the local economy. At present the demand occupations are mostly low-wage retail and service jobs. According to One Stop Career Center staff, few of these jobs pay a living wage. The staff perceives that high-wage manufacturing and mining jobs are not being replaced with other high-

wage jobs and does not see any growing high-wage industries that could replace the good jobs that are being lost. According to the staff, most of the living wage jobs in the area are in the public sector (Ohio University and local government) and these are not growing. Workers laid-off from manufacturing and mining jobs need retraining to obtain many of the lower-paying jobs that are available. One Stop Career Center staff finds it difficult to know what to train workers for other than health care, a field that is growing and that offers some moderate-wage jobs to people without college degrees. Unlike some economic development organizations in the area, the WIB has not thought in terms of industry clusters; the closest thing to that has been a discussion of prisons as a source of employment.

Many of the displaced workers interviewed during the site visit seemed demoralized and did not know where good jobs would come from in the future. Some perceived trade with low-wage countries such as China as a major reason for the loss of high-wage manufacturing jobs. Workers expressed a willingness to commute to Columbus.

Economic Development

Neither the region as a whole nor any portion of it has a strategy guiding overall economic development activities. The state of Ohio and a variety of local organizations have conducted studies of the region's economic condition but these studies have, for the most part, not led to concerted action in addressing local economic challenges. Moreover, there is no person, organization, or forum that brings the various economic development organizations together and several economic developers perceive the county-level economic development organizations as competing with one another within the region. Instead, each of the economic development organizations active in the area has its own strategy or objectives guiding the work that they do. Several of these separate strategies are based on sophisticated analyses of local needs and the possible ways in which the region could develop, and have ultimately led to innovative initiatives. The major economic development entities in the region and their initiatives are described in more detail below.

Appalachian Center for Economic Networks (AceNet) is an economic development intermediary that creates networks of small businesses, mostly in Athens County. Since 1985 it has provided technical assistance, a food business incubator, classes for new entrepreneurs (in cooperation with Hocking College, the local community college), and peer learning and networking opportunities for small business owners. It helps small businesses take advantage of scale economies from shared facilities (as in the food incubator) and joint purchasing and marketing arrangements.

AceNet concentrates on industry clusters that use locally produced raw materials to make products that can be sold at a premium in the local area or nearby metropolitan areas because consumers value the use of local raw materials (such as locally grown ingredients in food products). These clusters have the potential to generate job and income growth in the Athens area in two ways: (1) through the substitution of locally produced goods and services for goods and services that are now imported (e.g., the use

of locally produced food products in local restaurants rather than ones produced outside the region) and (2) export of locally produced goods and services to nearby areas (including consumption by tourists and students). The jobs in these clusters are not likely to leave the area because the industries need to produce locally and/or use raw materials that are perishable or expensive to transport. The jobs are potentially high-wage (relative to others in the same industry in the local area) because of the price premium that firms may be able to receive.

The food industry cluster is AceNet's oldest and largest cluster. AceNet has been involved in more than 200 startups and 100 expansions of small food-related businesses. Its food incubator enables small businesses to rent kitchen, storage, and/or retail sales space through a time-sharing arrangement. It created a regional food brand for small, independent food businesses. It also created a local independent restaurant association that buys from local food suppliers. A prominent local worker-owned restaurant, Casa Nueva, was an early AceNet venture. This restaurant pays wages above the local standard and relies on its use of local ingredients as a source of competitive advantage, but thus far it has not raised prices above the local standard. The restaurant has also spun off a large number of other restaurants which also operate with a similar job quality philosophy. One of the founders of Casa Nueva is interested in advocating a living-wage ordinance for Athens that would raise wages in low-end service industries.

AceNet is now starting to create a network in the "house and home" cluster (locally produced floors, cabinets, stairs, and home furnishings that use locally grown wood).

AceNet has had a modest impact on local job growth. Its director estimates that the businesses it has assisted have created a total of 500 jobs. The potential for future job growth may come from the expansion into new clusters, accelerated growth of existing clusters once they reach a threshold size, and/or interaction of these clusters with other sources of growth in the region.

Adena Ventures is a venture capital fund that finances small startup, early-, and growth-stage businesses in Appalachian Ohio, West Virginia, Kentucky, and Maryland. It typically invests \$200,000 to \$2 million in a company for a three- to seven-year period. It views its portion of Appalachia as having a population and small business base comparable to those of some large metropolitan areas but as having a shortage of venture capital. Metropolitan Washington, with a population of 4.7 million, invested \$2.7 billion in venture capital in the year ending in September 2000, whereas Central Appalachia, with a population of 4.1 million, invested less than 1 percent as much, \$23.6 million.

It tries to fill capital gaps that it can identify using local knowledge (obtained in cooperation with Ohio University's business school) that venture capitalists outside the region do not have. Adena is not a "social" fund; its standards for investing are the same as those of other funds. However, it provides technical assistance to help firms meet those standards and gives feedback to firms that it rejects so that they can improve. In cooperation with Ohio University's Voinovich Center, it provides technical assistance to firms in which it does not invest as well as to those in which it does invest. Adena

Ventures portfolio companies currently employ 114 people and have collectively experienced job growth of 61 percent.

Ohio University. Until relatively recently the university did not play a central role in regional economic development (other than through its presence). Through its Voinovich Center the university provides technical assistance to small businesses, including startups. The university has long had a business incubator. The most successful company in the incubator is the 140-employee (and growing) Diagnostic Hybrids, a biotechnology firm that exports worldwide. Diagnostic Hybrids has a mixture of manufacturing operative and professional jobs. Other businesses in the incubator include information technology and solar power firms, none of which has more than 50 employees.

Athens Area Chamber of Commerce. The Chamber's role in local economic development appears to be more supportive and brokering rather than leading or coordinating. Its young, energetic economic developer, a former staff person for Ohio linked with the Appalachian Regional Commission, has good relationships with all economic and workforce development organizations in the area and believes all their strategies have a role to play in the region's economic development, but that none will be the primary strategy. The Chamber does not try to compete with these organizations or with its counterparts in nearby counties. It tries to fill perceived economic development gaps that other local organizations are unable to fill. For example, its economic developer sees the need to attract another large manufacturing company to replace McBee Industries, an Athens manufacturer that recently closed and laid-off 360 workers after it was bought by an out-of-town company.

Neither the Chamber nor any other economic development organization in the region has a formal economic development planning process. However, the Chamber's economic developer sees a need for such a process.

The Chamber's economic developer has a general view of economic development based on building on existing strengths, and having a balance of professional and non-professional jobs. She describes the local economy in terms of industry clusters and has an analysis of those that hold promise for growth. The clusters she expects will create the most jobs are in biotechnology and wood products. The growth in biotechnology jobs is expected to be stimulated by the presence of a strong biology program at Ohio University and Diagnostic Hybrids. Employment in wood products is expected because of the existing wood exporting firms. Two other existing clusters that she expects will grow are specialty food products sparked by AceNet and information technology.

The expectation of growth in the information sector is based on Ohio University's academic program and the presence in Athens of the Information Technology Alliance of Appalachian Ohio. This Alliance has 392 member organizations, 41 of which are in Athens County including computer software, repair, retail, Internet, Web design, and consulting firms. She also expects interactive digital technology (games and simulations) to develop in the future. Cultivation of local IT industries is advanced by the IT officer for Ohio University, a former Silicon Valley entrepreneur. The projections of growth in

this sector are also based on the impacts of local universities. There is currently an academic program in interactive digital technology at nearby Shawnee State University and a planned program at Ohio University. The region has a major hospital in Athens, and she views growth in health care employment as important if the region is to attract and retain high technology industries.

The Chamber relies on local “champions” (including the other economic development organizations described here) to grow the industries in the clusters they favor. It consults with these “champions” to help attract, retain, and expand the customer and supplier industries that each cluster needs.

Although it does not rely on locational incentives exclusively, the Chamber uses these incentives to attract, retain, and grow businesses. The locational incentive packages it uses come mostly from the state. Enterprise zones have a requirement that firms receiving assistance repay the assistance if they do not create the number of jobs they promise. Specific job creation targets are also required, and Athens County has set \$10 per hour as the minimum wage for jobs to be created by companies in enterprise zones. The Chamber’s economic developer believes in these restrictions. She does not think that a firm should take public economic development assistance and then leave.

The Chamber’s approach to helping new business startups is to create an environment that allows them to grow. This may include helping them get access to capital or connecting them with the Voinovich Center’s technical assistance services.

The Chamber’s economic developer says she will be successful “if families can come here and support themselves.” Pulling people out of poverty is her primary goal.

Local Development District. The Appalachian Regional Commission’s Buckeye Hills-Hocking Valley Local Development District (LDD) covers an eight-county area that includes the five WIB counties and three adjacent rural counties. It assists local governments and economic development agencies with development projects, especially in the areas of infrastructure and site preparation. It helps these governments and agencies write grant proposals for infrastructure and downtown revitalization projects, and is able to access federal economic development grant programs.

According to the LDD staff, highway access in the region has improved greatly over the last few decades but is still a problem in one county. Water and sewer infrastructure are still major unmet needs in much of the region. Flat land is at a premium. Fewer than ten large sites are ready for new business right now, according to the staff. The staff believes that it would be impossible to market the region to businesses from elsewhere if not for industrial parks, since large sites are not “naturally ready” because of the hilly terrain and lack of infrastructure. In addition to infrastructure, the staff believes that schools, health care, and police services must be improved if development is to occur.

The LDD staff believes that the region requires a mix of development strategies. Economic developers in the area used to consider recruitment of manufacturing to be the

most important strategy but, although they still recruit manufacturers, they no longer emphasize this strategy as much as they once did. The LDD staff believes that it is more important to retain and expand existing manufacturing than to recruit new firms to the region. To do this, the staff says, it is necessary first to gain manufacturers' trust by meeting with them and listening to their expressed needs and then to offer a package of financial incentives and/or technical assistance to meet those needs.

The LDD staff believes that the promotion of entrepreneurship should be part of the development mix but that it cannot create enough jobs to be the core strategy. In its "Trickle Up" program the LDD has given 50 entrepreneurs grants of \$700 each to develop new businesses. The amount of direct job creation from this initiative has been modest.

The LDD staff perceives that some residents of the region resist economic growth. For example, some university employees in Athens oppose development because of quality-of-life concerns. Residents of a rural county opposed water and sewer improvements that would benefit a planned (and subsequently built) local prison because they saw no personal benefit to these improvements.

V. Conclusion

As an older industrial community with a University that also has a progressive cultural flavor, Athens has an unusually rich set of not-for-profits and economic development organizations. The sophistication of some of these organizations and the individuals who run them is high by any standard.

So far the individual initiatives advanced by these innovative organizations have not "come together." They might do so, however, if assisted by an economic development planning process, a reform of workforce development based on best practice (e.g., borrowing from neighboring Pennsylvania with its industry-cluster and industry partnership-based workforce strategy), and/or further development of the catalytic or technical assistance role of Ohio University in regional planning and development.

With these added dimensions, the Athens region of Ohio might be able to lead the nation toward a comprehensive, dynamic, and equitable next generation economic development approach based on:

- Dynamic small industries built on local inputs.
- Expanded IT and biotechnology sectors fueled by venture capital investment and University research, and staffed by graduates of specialized higher education programs.
- A "high end" restaurant, retail, and hospitality sector with wages elevated through worker ownership, quality job organizational philosophies, and possibly a city or University living wage law.
- The expansion of professional services and higher education based on the amenities of Athens, and the beauty and accessibility of the surrounding area.

- Reform of workforce programs to better support remaining manufacturers to improve competitiveness and jobs as well as to raise skills and performance in other industries, such as health care.

Table A1. Total Employment in Ohio Field Visit Counties and Comparison Regions (Indexed to 1990=100)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
United States	100	98	99	101	104	106	108	111	114	117	120	119	118	118
Appalachia	100	99	101	103	106	108	110	111	113	116	117	116	116	115
Non-Appalachian Ohio	100	99	99	101	104	106	108	110	111	113	114	114	112	111
Appalachian Ohio	100	99	101	104	107	111	112	113	116	120	119	117	118	117
All 5 Counties in Field Visit Region	100	99	100	101	103	106	107	109	110	109	109	108	110	109
Individual Counties														
Athens	100	98	99	100	103	105	108	109	110	110	111	113	114	115
Hocking	100	98	99	102	103	107	113	114	113	112	107	107	109	108
Meigs	100	98	97	94	97	99	101	103	104	102	102	100	88	78
Perry	100	96	96	99	103	109	110	111	110	109	111	108	110	108
Vinton	100	94	89	89	90	91	89	88	90	89	89	89	96	89

Source: KRC analysis of QCEW data.

Table A2. Manufacturing Employment (1000s), Ohio Field Visit Counties and Comparison Groups

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
United States	17797	17007	16756	16725	16950	17235	17245	17448	17617	17391	17314	16386	15209	14460
Appalachia	1826	1769	1778	1798	1814	1835	1805	1804	1818	1799	1794	1682	1569	1491
Non-Appalachian Ohio	994	956	913	892	909	939	934	936	932	928	924	865	797	765
Appalachian Ohio	85	80	84	85	90	94	94	91	97	96	96	90	85	79
All 5 Counties in Field Visit Region	15	12	14	14	14	14	14	12	14	13	13	12	12	11
Individual Counties														
Athens	1.0	0.9	0.8	0.7	0.9	0.7	0.7	0.8	0.8	0.8	1.1	1.0	0.9	0.9
Hocking	2.4	2.2	2.2	2.2	2.1	2.1	2.2	2.2	2.1	2.0	1.7	1.5	1.4	1.3
Meigs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Perry	1.4	1.4	1.4	1.4	1.6	1.9	1.8	1.8	1.8	1.7	1.6	1.5	1.5	1.3
Vinton	0.6	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2

Source: KRC analysis of QCEW data.

Table A3. Manufacturing Employment, Ohio Field Visit Counties and Comparison Groups (Indexed to 1998=100)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
United States	101	97	95	95	96	98	98	99	100	99	98	93	86	82
Appalachia	100	97	98	99	100	101	99	99	100	99	99	93	86	82
Non-Appalachian Ohio	107	103	98	96	98	101	100	100	100	100	99	93	85	82
Appalachian Ohio	88	83	87	88	93	97	97	94	100	100	100	93	88	82
All 5 Counties in Field Visit Region	105	84	99	97	97	99	99	84	100	97	96	89	84	78
Individual Counties														
Athens	120	111	100	88	103	80	88	97	100	93	128	120	115	111
Hocking	112	105	101	104	98	96	101	104	100	96	78	68	64	61
Meigs	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Perry	78	78	76	78	91	106	101	100	100	92	91	85	83	75
Vinton	103	98	90	95	101	104	101	104	100	92	86	80	80	73

Source: KRC analysis of QCEW data.

Table A4. Manufacturing Employment Share, Ohio Field Visit Counties and Comparison Groups

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
United States	16	16	16	15	15	15	15	14	14	14	13	13	12	11
Appalachia	24	23	23	22	22	22	21	21	21	20	20	19	18	17
Non-Appalachian Ohio	23	22	21	20	20	20	20	20	19	19	19	17	16	16
Appalachian Ohio	22	21	21	21	21	22	21	20	21	20	21	20	18	17
All 5 Counties in Field Visit Region	22	18	21	20	19	19	19	16	19	18	18	17	16	15
Individual Counties														
Athens	6	6	5	4	5	4	4	4	4	4	6	5	5	5
Hocking	38	36	34	34	32	30	30	31	30	29	25	22	20	19
Meigs	0	0	0	0	0	0	0	0	0	0	0	3	0	0
Perry	22	23	23	23	26	28	26	26	26	24	24	23	22	20
Vinton	24	24	23	25	26	26	26	27	26	24	22	21	19	19

Source: KRC analysis of QCEW data.