

INVENTORY OF EXISTING CONDITIONS RAVENSWOOD, WEST VIRGINIA

Spring 2004



*A Report Sponsored by the
Ravenswood Development Authority*

Prepared by:

Dr. Sarah J. Brinegar
Marshall University

Research Assistants:

David Beaman, James Binder, Brian
Brown, Michael Farley, Rodney
Fincham, Joey Rogers, Donnie
Robinson, Joshua Walker

Contents

	Page
Preface.....	ii
List of Tables and Figures.....	iii
1. Introduction.....	1
2. Population Characteristics	2
3. Economic Structure.....	4
4. Socio-Economic Conditions	9
5. Housing.....	11
6. Transportation System	13
7. Community Services.....	16
8. Recreational And Historical Resources	21
9. Conclusion	23
10. Recommendations.....	24

Preface

Mr. Mark Gorman of the Ravenswood Development Authority (RDA) contacted the Geography Department at Marshall University the summer of 2003 to inquire after an assessment of the City of Ravenswood. He indicated that the RDA confronts a challenging environment of limited resources and economic change, and suggested that an external review would be helpful to their efforts.

Commitment to community service and student service learning motivated faculty involvement in the RDA's efforts. The assessment of Ravenswood was launched as a class project under the direction of Dr. Sarah Brinegar. The students of GEO410/510 Urban Geography (Fall 2003) visited the city on at least two occasions during the course of their work. They collected data on different community aspects and some of their findings are included in this report. They also conducted a land use survey of the community, the results of which were converted to digital format as a GIS (Geographical Information System) project in another geography class.

A comprehensive assessment of the community, this report represents the first phase in the planning process. Different aspects are explored in detail with a summary of strengths and weaknesses included in the report's conclusion. The next phase of the planning process involves determining community goals and planning a strategy to achieve those goals.

The faculty and students would like to thank Mr. Gorman and the RDA for the opportunity to become involved with their community and also the many residents and officials of Ravenswood who cooperated and assisted in the student's work.

List of Tables and Figures

	Page
Table 1. Selected Population Characteristics (2000)	3
Table 2. Business Establishments by Sector and Employment-size Class (2001)	6
Table 3. Selected Socio-economic Characteristics (2000)	10
Table 4. Selected Housing Characteristics (2000).....	12
Table 5. Comparative School Statistics: District, State, and Nation (2000-2001)	18
Table 6. Selected Statistics for Ravenswood Public Schools (2000-2001)	18
Figure 1. Ravenswood Population Cohorts (2000).....	3
Figure 2. Employment and Earnings by Major Sector: Jackson County in 2000.....	7
Figure 3. Employment Trends by Sector: Jackson County 1970-2020	8

1. Introduction

The City of Ravenswood is a small community located along the Ohio River in West Virginia. It occupies a land area of 1.84 square miles and contains a population of just over 4,000. The town is the largest in rural Jackson County, the next largest community being the county seat of Ripley with about 3,200 residents, located approximately seven miles to the southeast.

The city was incorporated as Ravenswood, Virginia in 1852 (later to become part of West Virginia). The name Ravenswood strikes one as a whimsical town name and its origin remains one of speculation. Several possible sources of the name have been put forth and one of the most likely stories involves the Fitzhugh family, some of the earliest permanent settlers in the area. They were related to President George Washington, who had been deeded the land where present-day Ravenswood sits in return for his service in the French and Indian War. At least one source suggests that the name Ravenswood is actually a cartographer's error in the spelling of "Ravensworth" the name of the Fitzhugh family estate in Virginia. Other sources suggest that the town was named for Lord Ravenswood, the romantic but ill-fated hero of Sir Water Scott's novel, *The Bride of Lammermoor*.

Since its early days, Ravenswood's economy has benefited from the transportation and commercial opportunities provided by the Ohio River. The early settler Henry Fitzhugh reportedly built a gristmill and sawmill south of present-day Ravenswood on Sandy Creek. His mill supplied lumber that was used for boat building, one of the area's first industries.

Today, Ravenswood resides in a predominantly rural county of West Virginia featuring many of the characteristics of rural areas across the nation: small, close-knit communities rich in culture and social fabric but experiencing population and economic decline, particularly through the loss of manufacturing jobs. Its location within the chronically depressed Appalachian region, in a rural state lacking the resources of its neighbors, however, presents distinct challenges to the community's leadership. This report investigates major aspects of the community in some detail to allow a comprehensive and objective evaluation of its strengths and weaknesses.

2. Population Characteristics

The population of Ravenswood totals 4,031 individuals according to the 2000 Census. That figure represents a 5% decline in population since the 1970 Census (see Table 1). In comparison, West Virginia has shown a 4% increase during the same time frame, although lagging considerably behind the U.S., which has experienced population growth of about 30%.

The population structure of Ravenswood reveals further divergence from national norms when viewed by age and sex. The comparably small size of the 20-29 and 30-39 age cohorts suggest significant emigration of young adults (see Figure 1). While the first three cohorts contain greater or equal numbers of males, every cohort beyond the age of 30 contains more females than males, suggesting that females stay in greater numbers and survive longer than males. There are more females overall in Ravenswood, females comprise 54.4% of Ravenswood's population while the national ratio is 50.9% female. In addition, Ravenswood contains relatively fewer young children and a disproportionately large number of elderly, as compared to the state and country. Almost one-fourth of the population is 65 or more years old (see Table 1).

Compared to the country as a whole, West Virginia exhibits significantly less racial and ethnic diversity (95% of West Virginians are white, while 75% of Americans are white). Ravenswood is even more homogenous with white non-Hispanics comprising 98% of the population (Table 1). Furthermore, the majority of people in Ravenswood (79.6%) were born in West Virginia, compared to 74.2% of West Virginia residents born in the same state. In contrast, only 60% of U.S. residents live in the state in which they were born. Less than one percent of Ravenswood's population is foreign-born further illustrating its indigenous and homogenous character (Census 2000).

According to the 2000 Census, Ravenswood contains 1,692 households with an average size of 2.29 people. Household structure consists primarily of married family households (52%), householders living alone (30.4%), and female-headed families (12.4%). Family households are similar to those of the country in terms of structure; however, fewer include children under the age of 18, i.e. less than one-third of family households in Ravenswood contain dependent children. Households also differ from the country in that a greater proportion of non-family households contain one individual, and more of those individuals are older than 65 years in age. One-half of householders living alone in Ravenswood are greater than 65 years in age.

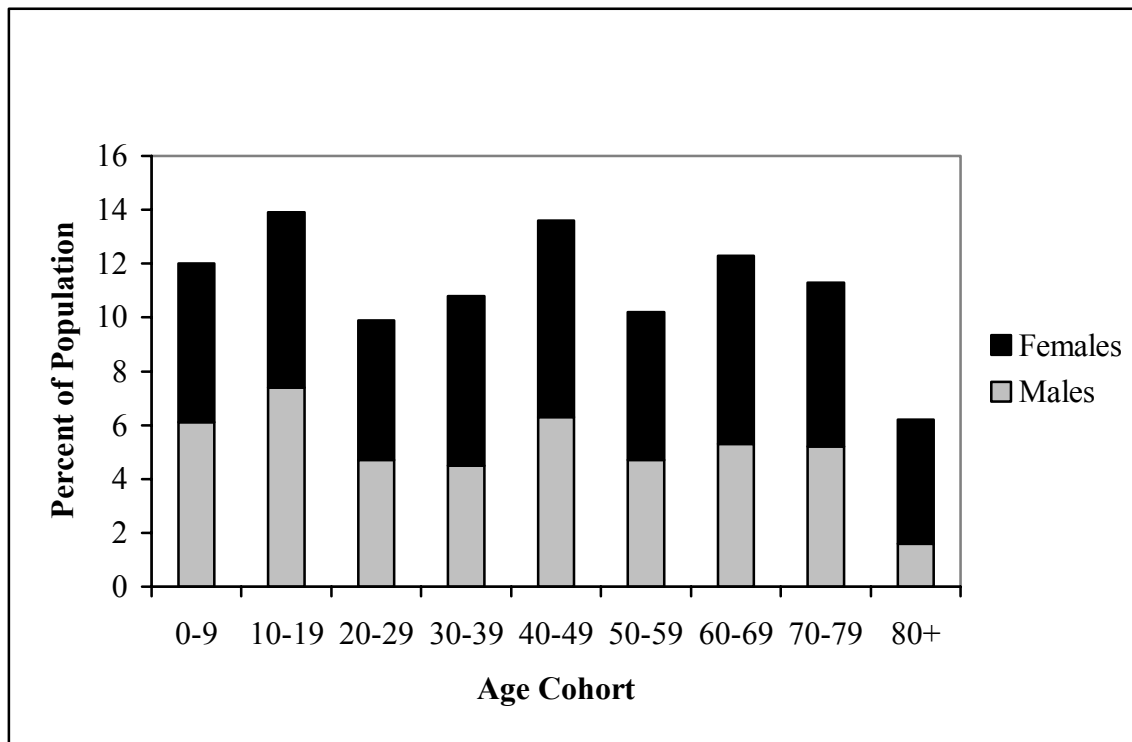
SUMMARY: Ravenswood features an aging white population composed primarily of individuals born in West Virginia and presumably from the community and surrounding area. The community's population structure, together with the slowly declining size, indicates a pattern of young adult emigration possibly augmented with retirement immigration. The loss of young adults accounts for the lower rate of families with dependent children in the community.

Table 1. Selected Population Characteristics (2000)

	RAVENSWOOD	WEST VIRGINIA	UNITED STATES
Population change 1970-2000	-5%	+4%	+30%
Median age	42.5 yrs	38.9yrs	35.3 yrs
Population cohorts:			
Under 5 years	5.9%	5.6%	6.8%
18 years and over	76.4%	77.7%	74.3%
65 years and over	23.5%	15.3%	12.4%
Race = white	98%	95%	75%
Avg. household size	2.29	2.40	2.59

Data Source: U.S. Census Bureau, 2000 Census

Figure 1. Ravenswood Population Cohorts (2000)



Data Source: U.S. Census Bureau, 2000 Census

3. Economic Structure

The City of Ravenswood functions as a service center and industrial hub in Jackson County, drawing employees and consumers from the local area. According to the latest figures (2001), the community contains 148 business establishments employing 3542 employees, with an annual payroll totaling \$120,410,000 (Census Bureau). Services and retail trade comprise the majority of establishments in this central place; however, manufacturing establishments employ greater numbers of workers, with the exception of one health care center (see Table 2).

Four manufacturing plants in the Ravenswood area employ more than 100 workers in their production of primary metals, electronics, or rubber/plastics (1997 data, Census Bureau). The two largest manufacturers in terms of employment are Century Aluminum and Pechiney Rolled Products, each of which are predecessor companies of the Kaiser Aluminum and Chemical Corporation primary aluminum reduction and rolling mill that was established in 1957. The Century Aluminum facility employs approximately 660 employees and Pechiney Rolled Products employs approximately 900 employees, down from 1100 in 2001. Pechiney Rolled Products was established in 1999 when the French parent company bought 500 acres and manufacturing capital from Century Aluminum. The two aluminum producers occupy a 2,100-acre site approximately 3 miles south of Ravenswood on the Ohio River.

The community is well positioned to benefit from state and local development efforts promoting regional specialization in plastics and recycling in Wood, Jackson, and Mason Counties. The Polymer Alliance Zone (PAZ) features a public-private partnership of the plastics industry, government, and higher education fostering favorable conditions for industrial concentration and expansion.

Future growth in the manufacturing sector is not limited by space or capital in the region. Ravenswood and Jackson County contain a number of vacant buildings and Greenfield sites suitable for commercial or industrial expansion. The Greenfield sites range in size from 9 to 502 acres and feature access to various transportation modes (Jackson County Development Authority). Industrial sites available in the Jackson County Maritime & Industrial Center near Ravenswood are particularly well served by transportation lines (river, rail, and highway access) and modern utilities. For commercial and manufacturing development, in excess of 400 acres are available along a three-mile segment of US Route 33 connecting Interstate 77 with the William S. Ritchie Bridge in Ravenswood.

Despite county and state efforts to promote industrial development, the attraction of new manufacturing firms and the retention of existing plants constitute a significant challenge to the region. The county's economy is undergoing structural change stimulated in part by macroeconomic restructuring on the national scale and rapid expansion of international trade. Like many cities in the past two decades, Ravenswood has experienced significant job growth in the service sector and decreasing jobs in the manufacturing sector. The decline in the manufacturing sector causes concern for future

economic development because of the loss of well-paid jobs. The manufacturing sector of the county's economy ranks the most important in terms of worker income, i.e. manufacturing workers command the highest wages (see Figure 2).

The transformation from a manufacturing based economy to one based on services is illustrated using Census data at the county level.¹ As indicated in Figure 3, several sectors of the economy have experienced job growth since 1970. Agriculture and construction show modest growth and their employment numbers are expected to stabilize. Local and state government jobs have gradually increased in the past three decades and that moderate growth is projected to continue. But the greatest job growth has occurred in retail trade and services; these sectors have more than doubled in employment since 1970 and this growth is projected to increase steadily. By the year 2020, the service sector is projected to account for the majority of jobs in Jackson County (~4,500 employees) followed by retail trade (~3,000).

In 1970 and 1980, manufacturing was by far the most important sector in the economy in terms of employment. But the sector has experienced significant decline from a high of 4430 jobs in 1980 to 2770 in 2000. Both retail trade and services currently account for almost as many jobs as manufacturing and, by 2010, they are projected to exceed manufacturing. According to Woodes & Poole's (2003) projections, the number of manufacturing jobs in Jackson County will slightly decrease during the next two decades.

SUMMARY: Ravenswood is a blue-collar community whose economy currently benefits from high-wage employment in local manufacturing plants. Barring protectionist trade actions taken at the national level, significant growth and/or diversification in manufacturing seems unlikely. In contrast, service positions have increased significantly and this growth is projected to continue. These results suggest that long-term economic health may depend upon the attraction of well-paid service jobs rather than expansion of the manufacturing sector.

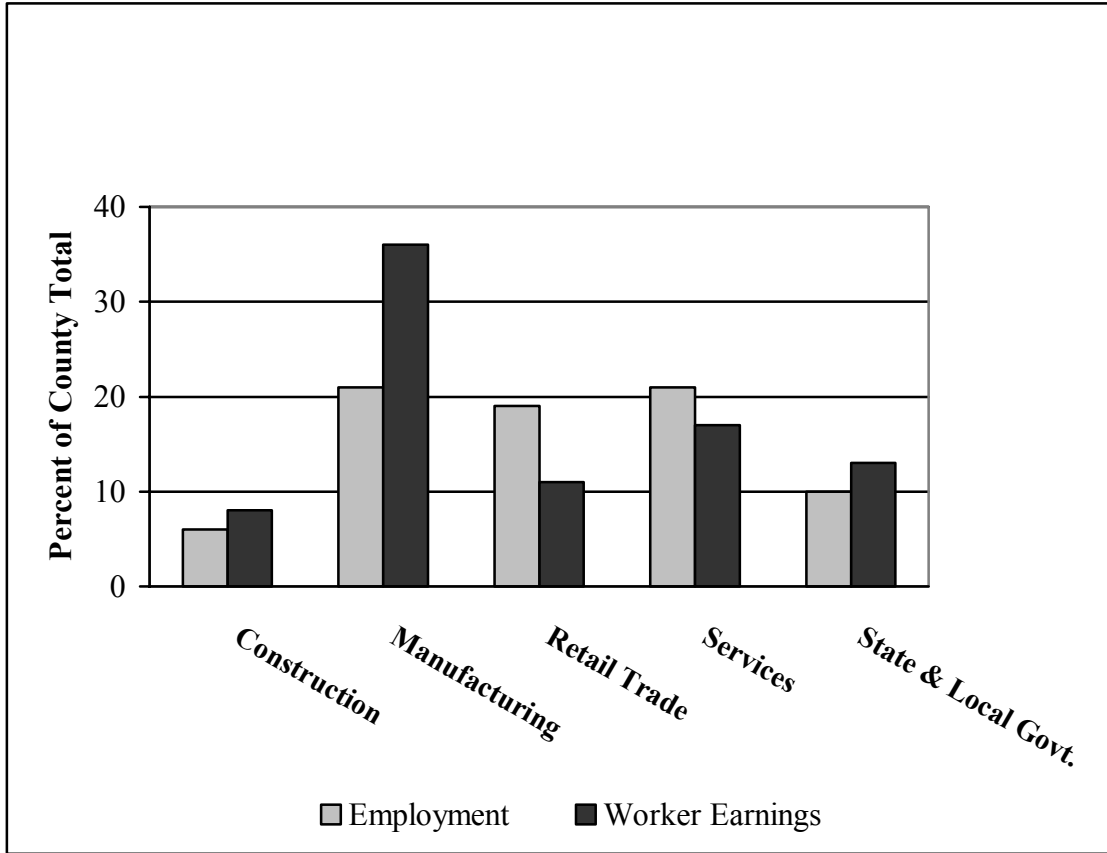
¹ The analysis of structural change presented here focuses on six economic sectors accounting for 85% of all jobs in Jackson County for the year 2000: agriculture, construction, manufacturing, retail trade, services, and local/state government.

Table 2. Business Establishments by Sector and Employment-size Class (2001)

ECONOMIC SECTOR	TOTAL FIRMS	NUMBER OF WORKERS								
		1-4	5-9	10-19	20-49	50-99	100-249	250-499	500-999	> 1000
Mining	3	1	1			1				
Utilities	1		1							
Construction	16	9	3	2	2					
Manufacturing	6	2					1	1	1	1
Wholesale Trade	11	3	4	1	1	2				
Retail Trade	31	16	9	4	2					
Transport & Warehousing	4	3			1					
Information	2		2							
Finance & Insurance	11	7		3		1				
Real Estate & Rental	3	3								
Professional & Technical Service	8	6	2							
Administrative & Support Service	1	1								
Educational Services	1			1						
Health Care & Social Assistance	13	7	2		3		1			
Arts, Entertain, & Recreation	2	1		1						
Accommodation & Food Service	10	5	1	1	2	1				
Other services	23	16	4	2	1					
Auxiliaries & Unclassified	2	2								
Total	148	82	29	15	12	5	2	1	1	1

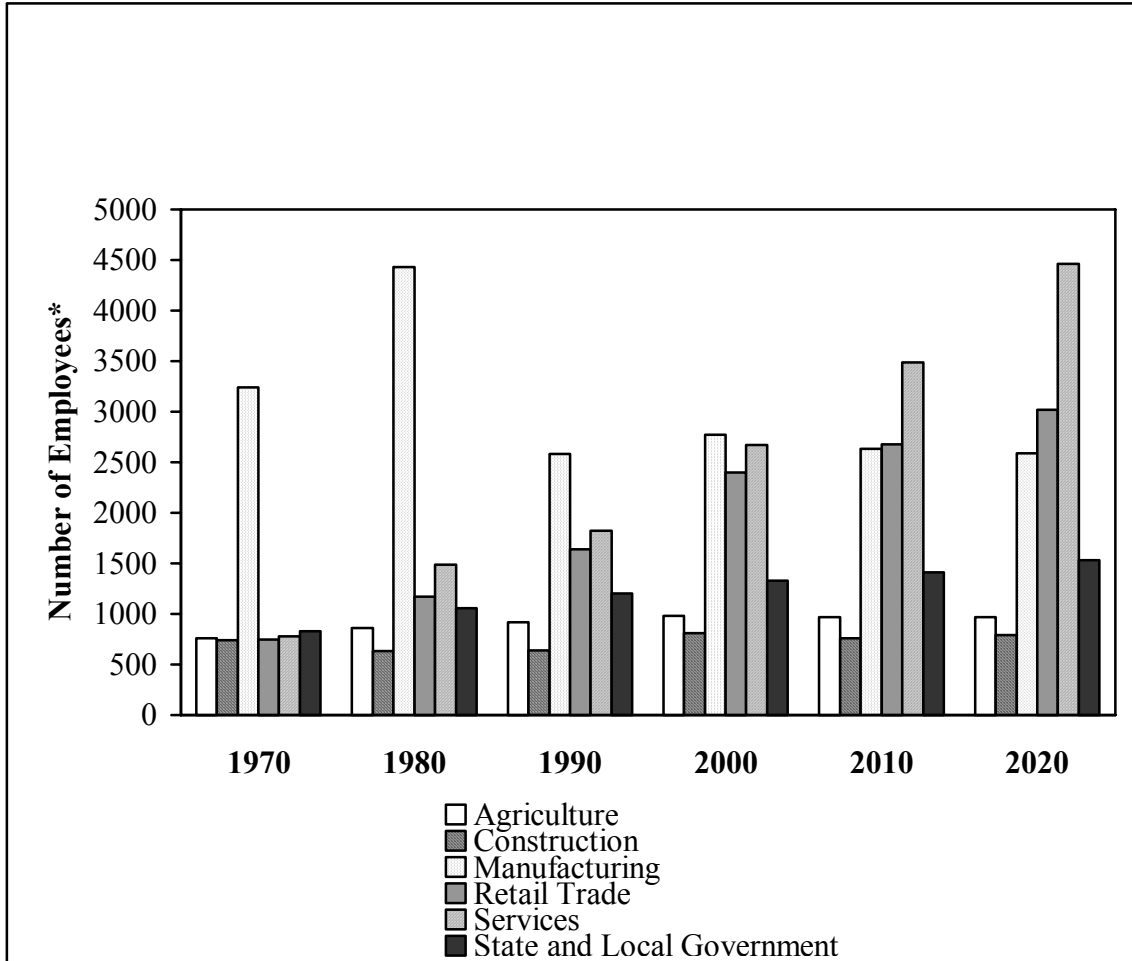
Data Source: U.S. Census Bureau (2001 figures for ZIP code 26164)

Figure 2. Employment and Earnings by Major Sector:
Jackson County in 2000



Data Source: Woodes & Poole, 2003 State Profile

Figure 3. Employment Trends by Sector:
Jackson County 1970-2020



Data Source: Woodes & Poole Economics, 2003 State Profile

* Sectors with low employment numbers omitted; data listed for years 2010 and 2020 are projections subject to change.

4. Socio-Economic Conditions

Analysis of socio-economic conditions provides insight to the quality of life for community residents. Variables considered here include levels of education, income, and employment. The following information details the community's situation in those aspects and provides a comparison to state and national figures.

Educational achievements of the community's population compare favorably with those of West Virginia overall but unfavorably with national figures in the case of college graduates (see Table 3). Approximately 80% of Ravenswood's adult population has a high school degree, a figure similar to national rates and superior to those of West Virginia. In addition, the community surpasses the state rate of residents with college degrees, but national rates exceed those of Ravenswood in Bachelor degrees and above.

During the economic expansion of the 1990s, income grew significantly in Ravenswood. For example, per capita income increased 58% from \$9923 in 1989 to \$15,696 in 2000 (Census Bureau). Despite this growth, the city's income level compares unfavorably with national figures; the median household income for the country was \$41,944 in 2000, a figure considerably more than Ravenswood's median household income of \$30,308.

Lower income figures for the city and state correspond with higher poverty rates. Ravenswood's family poverty rate at 15.4% is higher than both the state (13.9%) and national figures (9.2%). While one-third of the nation's female-headed families live in poverty, almost one-half do so in West Virginia and Ravenswood. Senior poverty rates are the exception to the higher poverty rates in Ravenswood, at 9.7% they compare favorably with the national figure of 9.9%.

Unemployment and employment figures are not available for Ravenswood; therefore, the figures discussed here are for Jackson County. Employment in Jackson County and West Virginia experienced modest growth from 1980 to 2000. Job losses during the recession years of the 1980s were largely balanced by employment growth of the 1990s.

Before the latest recession began in 2001, both the county and state experienced higher unemployment rates than the country. Jackson County's unemployment rate of 6.9% was significantly higher than country's at 4.0%. Once the 2001 recession began, economic conditions worsened in the county with a decline in jobs and increase in unemployment. In 2002, Jackson County experienced a 7.3% unemployment rate, a figure that ranked 28th in severity amongst West Virginia counties. It was significantly higher than the state's 2002 figure of 6.1% unemployment while the country stood at 5.8%.

SUMMARY: The analysis of socio-economic conditions in Ravenswood indicates mixed results. On the positive side, Ravenswood surpasses the state as a whole in terms of educational achievement, median income, and poverty rates (with the exception of family poverty rates). Rural in character and located in Appalachia, the community and state lag considerably behind the country in almost all factors examined here. In particular, the high unemployment rates for Jackson County indicate a struggling economy and economic hardship for many residents.

Table 3. Selected Socio-economic Characteristics (2000)

	RAVENSWOOD	WEST VIRGINIA	UNITED STATES
Education of adults:			
No high school degree	19.9%	24.8%	19.6%
High school graduate	35.5%	39.4%	28.6%
Some college or Associate's degree	28.3%	20.9%	27.3%
Bachelor's degree	9.8%	8.9%	15.5%
Master's, professional, or Doctoral degree	6.5%	5.9%	8.9%
Median household income	\$30,308	\$29,696	\$41,944
Poverty rate:			
All families	15.4%	13.9%	9.2%
Female-headed family w/children	47.3%	48.8%	34.3%
Seniors	9.7%	11.9%	9.9%
Employment growth 1980-2000¹	0.89% ²	0.66%	1.93%
Unemployment (2000)¹	6.9% ²	5.5%	4.0%

Data Source (unless otherwise indicated): U.S. Census Bureau, 2000 Census

¹ Data from Woods & Poole Economics, 2003 State Profile

² Data for Jackson County

5. Housing

According to the 2000 Census, Ravenswood contains a total of 1,842 housing units, only 7.4% of which were vacant during the canvassing period (Table 4). The majority of occupied housing units are owner-occupied (68.2%) with the remainder rental units (31.8%). The primary housing type found in Ravenswood consists of single-family one unit detached homes, representing 66% of all housing units. Other types of housing available to residents include: duplexes and multi-family housing structures designed for multiple living quarters such as apartment buildings and institutional or group homes.

The city's housing tenure and housing type resemble national housing characteristics; however, the rate of owner-occupied housing in Ravenswood lags behind the state, as does the proportion of single-unit housing. One explanation for these differences rests with the smaller proportion of mobile homes in Ravenswood and a greater proportion of multi-unit housing compared to the state.

Ravenswood contains an aging housing stock, older than the housing stock at both the state and national levels. Most of the community's housing was built before 1980 (86%) with the greatest expansion occurring during the 1960s. Many of the older buildings provide character and charm, but they also present problems to the property owners in terms of maintenance and compliance with building codes. Since most of the homes in Ravenswood were built before 1970, some of these older homes may contain lead paint, raising health concerns for the community. Nevertheless, Ravenswood's housing stock is generally of good quality with very few substandard units, e.g. only 0.4% lack modern plumbing.

The older age of Ravenswood's housing stock is reflected in housing values. The median value of owner occupied homes is \$70,900 with 67% of all housing units ranging in price from \$50,000 to \$99,999. Although the state contains a greater proportion of housing units valued at less than \$50,000, housing values overall at both the state and national level exceed those found in Ravenswood.

The median rent for a housing unit in Ravenswood is \$391, slightly lower than the state figure but substantially less than the national median rent. Nevertheless, more than one-fourth of renters pay in excess of 35% of their income on rent, a figure that reflects the high rates of poverty found in Ravenswood and West Virginia.² As indicated on Table 4, the community's proportion of renters with a high housing burden is less than state and national figures but both the community and state exclude a significant proportion of rental housing units in their calculations (represented as 'not computed' in Table 4).

SUMMARY: Ravenswood contains a wide variety of housing types and styles but in general, most neighborhoods contain housing typical of small cities across the country;

² According to a widely accepted standard for affordable housing, the cost of housing should not exceed 30% of a household's income.

i.e. owner-occupied single family housing spread throughout an interconnected street grid. Also typical of other regions of the country, the figures presented here suggest that affordable housing for the less-affluent is in short supply, a significant proportion of renters devote much of their household income to pay rent. The housing stock has not expanded much in the past two decades and it is primarily composed of older homes, albeit in fairly good condition. Housing values lag behind the state and nation but the community's current reassessment of property will provide more information regarding building conditions and value.

Table 4. Selected Housing Characteristics (2000)

	RAVENSWOOD	WEST VIRGINIA	UNITED STATES
Housing tenure:			
Owner occupied	68.2%	75.2%	66.2%
Renter occupied	31.8%	24.8%	33.8%
Vacancy rate	7.4%	12.8%	9.0%
Housing type:			
Single unit *	66.0%	70.7%	65.9%
Multi-unit			
2-9 units	18.8%	8.1%	13.7%
10 or more units	6.9%	3.9%	12.6%
Mobile homes	8.3%	16.9%	7.6%
Housing age:			
1980-March 2000	14.3%	29.9%	32.8%
1960-1979	47.5%	29.5%	32.2%
1940-1959	18.3%	21.4%	20.0%
1939 or earlier	19.9%	19.3%	15.0%
Median year built	1964	1969	1971
Value of owner-occupied housing units:			
Less than \$50,000	14.4%	26.7%	9.9%
\$50,000-\$99,999	66.6%	47.0%	30.4%
\$100,000-\$299,999	17.5%	24.9%	50.2%
\$300,000 and above	1.6%	1.3%	9.5%
Median value	\$70,900	\$72,800	\$119,600
Gross rent as percentage of household income:			
Less than 15	19.0%	18.9%	18.1%
15-34	40.9%	35.9%	44.8%
35 or more	25.6%	28.3%	29.5%
Not computed	14.5%	16.9%	7.5%
Median rent	\$391	\$401	\$602

Data Source: U.S. Census Bureau, Census 2000

* State and national figures include attached and detached single units; Ravenswood does not contain any attached single units (per Census data).

6. Transportation System

Ravenswood features a relatively well-developed transportation system offering multiple transportation modes: road, rail, waterway, and air. The internal and external links of these different modes form a transportation network connecting the community to the Ohio River valley region, the country, and globe.

The highway system provides access in all four directions and connections to the capitols of Ohio and West Virginia. From the south, State Highway 2 winds along the Ohio River in West Virginia linking Ravenswood with the port cities of Point Pleasant and Huntington. Merging with US Highway 33 for a short distance, SH 2 skirts the southern reaches of the community and turns eastwards towards Interstate 77 less than 3 miles away, then merges with the interstate northwards. State Highway 68 stretches the length of the community as a major arterial road extending northward from SH 2. It exits the community to parallel the Ohio River for some distance, then diverges from the river and connects Ravenswood to the cities of Washington and Parkersburg, West Virginia. For the most part, these two highways providing direct N-S access to Ravenswood feature winding and narrow stretches not conducive to quick transportation of people and goods.

Improvements have been made in east-west highway connections, in particular, the long-planned Ravenswood Connector (a.k.a. the Ohio portion of the Blue-Gray Highway³) is nearing completion. A joint project between West Virginia and Ohio, the Ravenswood Connector provides a short high-quality route between the two state capitols. Leaders in both states seek to stimulate economic development along the highway's stretch through the Appalachia foothills.

West Virginia began building the transportation line more than two decades ago with the construction of the William S. Ritchie Bridge in Ravenswood.⁴ More recent work has occurred on the Ohio side: upgrades from the bridge to US 33 in Meigs County were finished in December 2003; two other projects in progress will be completed by 2005; and a final phase begins in the next few years. When road construction is concluded, the Ohio route will extend westward along US 33, and then turn northward to Columbus. In West Virginia, the improved highway extends northwest along I77 from Charleston, diverts west as US 33 (merging for a short distance with SH 2, then SH 68) and crosses the Ohio River at the William S. Ritchie Bridge.

Not only does the Ravenswood Connector provide the shortest route between the two capitols, it is being built to interstate standards. Called a 'Super 2-lane' highway, the route features a four-lane right-of-way, limited access with turn lanes, wide shoulders, and the possibility of lane expansion to fulfill future transportation needs. In addition, weight limits for trucks are not those of a two-lane road but of an interstate, thus allowing

³ During the Civil War, Union and Confederate soldiers used the route to move supplies and troops, but more importantly, to get to the hospital located in Ravenswood.

⁴ The bridge features the 19th largest cantilever truss in North America.

ready transport of both primary (unprocessed natural resources) and secondary (processed or manufactured) goods.

Another transportation mode providing direct access to Ravenswood is the railroad. A rail line runs through the community as it follows the Ohio River, in cities north and south it connects to the regional rail system. Operated by the CSXT, the railroad serves industrial customers transporting goods across the region, but an obstacle to double-stacking trailers on flatbed rail cars in West Virginia limits its full use. Double-stacking allows companies to save significantly on transportation costs, currently they may use the technique on a limited basis due to low railroad tunnels in the state.

Moving more tonnage of goods than any other waterway in the United States, the Ohio River forms the western border of Ravenswood. The community contains both public and private ports for recreational purposes and the transport of industrial goods. One public dock used primarily to launch recreational and fishing boats is found in the Washington Lands Park. A second, smaller launch area is located at the former Ohio River Ferry Landing at the end of Walnut Street. Nearby Jackson County Maritime & Industrial Center provides river access for industrial purposes, it is the state's first local public port district featuring terminal facilities suitable for shipment of diverse products.

A number of private docks service barges for local industrial companies. Barges mainly transport natural resources, especially timber, but also other area products. For example, the Dravo Basic Materials Company operates the Ravenswood Yard Dock for the receipt of limestone, sand, stone metal, timber and gravel. Century Aluminum also uses the river for transportation of their raw materials and products.

Air transportation to Ravenswood is provided at nearby Jackson County Airport, owned and operated by the Jackson County Commission. At the present time, the airport averages 10-15 flights a day, primarily flown by owner-pilots for private purposes. The runway stretches approximately 4,000 feet limiting use to smaller aircraft, but upgrades are planned and funded. The airport received a \$1.5 million grant from the state to build hangars, an access runway, and an extension to the existing runway. The access runway will provide space for planes to wait and taxi without interfering with landing aircraft and the extension will increase the runway's overall length to 5,000 feet, permitting usage by larger planes with heavier loads.

Improvement to airport facilities enhances Ravenswood's access to the greater region by allowing rapid transport of people and products. It's expected that local companies will expand their use of air transport and new firms will be attracted to the county through the advantage of airport services. In particular, shipping companies like UPS and FedEx, may utilize the airport to provide their services to the area.

The community's local road system is aging but remains in fairly good condition. On an average day there is not an existing traffic problem or congestion. Some main roads, however, would benefit from additional traffic signs and lights, particularly the US 33/SH 68 spur to the William S. Ritchie Bridge. The new highway spur may increase local traffic flow significantly, posing a potential safety problem and traffic congestion.

The two main thoroughfares of the community, Walnut Street and Washington Street (SH 68), feature the majority of Ravenswood's commercial activities and nearby public facilities. Commercial establishments line the length of Washington Street as it stretches north and south across the community. The intersection of the two arteries occurs in the heart of Ravenswood's downtown area where a number of successful businesses reside.

SUMMARY: Ravenswood's transportation system provides access through multiple modes including waterway, rail, air, and highway. Ports along the Ohio River and the rail lines have long provided for the transport of raw materials. The road system features interstate highway access north and south, and improving E-W connections via the Ravenswood Connector. The local airport is experiencing upgrades, further increasing the community's accessibility.

7. Community Services

A. Educational Services

Educational services are provided to Ravenswood residents through public and private schools, adult education classes, and the public library. The Heritage Christian Academy, a small private school supported by the Second Baptist Church of Ravenswood, provides a preK-12 education to 90-100 students. But most children in the community attend local public schools administered by the Jackson County School District. During the 2000-2001 school year there were approximately 1,700 students enrolled in Ravenswood public schools, a figure that includes children from the surrounding rural area.

Ravenswood contains four public schools, each providing instruction for three to four grade levels. Located on Kaiser Avenue, Henry J. Kaiser School provides instruction for pre-kindergarten to 2nd grade students. Ravenswood Grade School is located on Rural Route 2 within Ravenswood's corporate limits, near the boundary with unincorporated Eastwood. It provides elementary education for 3rd through 5th grade students. Located on Sycamore Street near the high school, Ravenswood Middle School provides instruction for grades 6th through 8th students. Ravenswood High School (grades 9 through 12) is located on Plaza Drive in the heart of Ravenswood.

According to a report released by *Education Week* (web access 2004), public K-12 education in the State of West Virginia demonstrates excellence in 1) the application of standards and accountability; and, 2) adequacy in resources with virtually all districts spending close to national averages. West Virginia ranks third amongst other states in spending equity across districts with the greatest proportion of funds provided by the state. Education reform began in West Virginia before the passage of the No Child Left Behind Act of 2001 and the state was one of the first to obtain compliance with the federal mandates.

The achievements of rural and less affluent West Virginia are reflected in the comparative statistics listed in Table 4. Based on data available from the West Virginia Department of Education, the state and Jackson County schools feature experienced and well-educated teachers, and lower pupil/teacher ratios than the national figures. Despite these advantages, college testing scores are slightly lower than national scores.⁵

Ravenswood schools and the district lag behind the state in terms of assessment measures. Student achievement in Ravenswood schools and the district is lower as measured by SAT-9 scores (Table 5). Five district schools, including Ravenswood Grade School, Ravenswood Middle School, and Ravenswood High School have been identified by the state as 'needing improvement' under West Virginia Achieves school standards.⁶ The three Ravenswood schools failed to meet assessment (test) standards for students in the low socio-economic status (SES) group for the last two years.

⁵ College bound students in West Virginia generally take the ACT rather than the SAT.

⁶ *West Virginia Achieves* is the state program fulfilling No Child Left Behind mandates.

In general, the physical condition of Ravenswood's schools is good with recent improvements and more planned. Some recent renovations include the Henry J. Kaiser cafeteria, funded by a \$2 million grant. Ravenswood High School has also received funding for renovations and work begins in 2004. Currently, the county has requested \$2 million dollars from the West Virginia Building Authority (WVBA) for the building of a multi-purpose room at Ravenswood Grade School. Other plans include the renovation the interior conditions of the Ravenswood Grade School and connecting the schools to the public sewer system (it is currently served by an on-site package treatment plant).

Educational opportunities beyond high school include adult education courses offered in the community and courses/programs of regional colleges and universities. High School graduates seeking higher education have a number of options within a 100-mile radius of Ravenswood, including Marshall University in Huntington, various branches of West Virginia University, the University of Charleston, and Ohio University in Athens, Ohio. The closest college is a division of West Virginia University Parkersburg (WVUP) located in Ripley.

Adults can enroll in basic skills classes held at Ravenswood High School and Ravenswood Annex to prepare for the GED or they can enroll in other courses devoted to the development of applied and technical skills. In addition, the library offers many programs for the community throughout the year including American Retired Income Tax Programs (provided through AARP), a 5-week summer reading program, and holiday food drives.

A branch of the main library in Ripley, Ravenswood features a well-equipped public library located at 323 Virginia Street. The library provides various resources, publications, and personal assistance in their efforts to create a learning environment for community residents. Resources found at the library include 10 computers for patron use, 5 computers with Internet access, 1 copier, 2 microfilm viewers, books, cassettes, videos, and periodical subscriptions. The Ravenswood library features a collection of approximately 12,600 books, 640 cassettes, 500 videos, and 40 periodicals. A special addition to the library is the West Virginia Collection, which contains, for example, texts and records of West Virginia genealogy.

B. Protective Services

The Ravenswood Police Department (RPD) provides law enforcement for the community with a force of nine officers (2 part-time). In addition to its centrally located offices on Virginia Street, the department possesses five police vehicles to support law enforcement activities. Regular shift operation consists of one supervisor and two or three on-duty officers; one officer conducts road patrol, while the others remain at the department to take community complaints. The RPD is dispatched through Ravenswood's 911 services, responding to community calls for assistance.

Table 5. Comparative School Statistics: District, State, and Nation (2000-2001)

	SCHOOL DISTRICT*	WEST VIRGINIA	UNITED STATES
Pupil/Teacher Ratio	14.6	13.8	16.0
Teachers with Master's Degree or higher	65.6%	62.8%	47.4%
American College Testing (ACT) Composite Score	20.3	20.2	21.0

Data Sources: National Center for Education Statistics, U.S. Department of Education; West Virginia Report Cards 2000-2001, West Virginia Department of Education

* Data for Jackson County, counties form school districts in West Virginia.

Table 6. Selected Statistics for Ravenswood Public Schools (2000-2001)

	ENROLLMENT 2000-2001	PROFESSIONAL STAFF EXPERIENCE (YRS)	TEACHERS WITH MASTER'S DEGREE	AVERAGE CLASS SIZE	STUDENT ACHIEVEMENT SAT-9 2000-2001*	DROPOUT RATE
Henry J. Kaiser (grades PK-2)	377	15.0	59.3%	18.8	--	0
Ravenswood Grade School (grades 3-5)	331	15.2	65.5%	21.2	58.7	0
Ravenswood Middle School (grades 6-8)	404	17.8	64.1%	21.6	61.0	0
Ravenswood High School (grades 9-12)	562	19.3	65.1%	14.5	59.3	5.2%
School District (Jackson County)	5055	16.9	65.6%	19.7	60.8	2.9%
West Virginia	286,248	18.0	62.8%	19.4	62.8	3.2%

Data Source: West Virginia Report Cards 2000-2001, West Virginia Department of Education

*Student achievement figures indicate the percent of students scoring in the top two quartiles (at or above 50%) of Stanford-9 Achievement Test (SAT-9). The mean for each grade level's score is reported as the school's overall percent.

Compared to other regions of the country, Ravenswood's crime rate is low with very few violent crimes. Nevertheless, the police force may need augmentation in the future to provide optimum service, especially with the recent completion of the Ravenswood Connector and anticipated increases in local traffic.

The Ravenswood Volunteer Fire Department (RVFD) maintains its fire station at a central location on Virginia Street. The all-volunteer department has five well-trained fire fighters leading a staff of more than 30 area residents. Vehicles at their disposal include three rescue boats (heavy and light) providing access to water fires, and three full size fire engines well-equipped to handle virtually any type of fire. In addition, the RVFD has an aerial platform, command center, and light plant providing aerial support for fighting forest fires.

The RVFD area of support includes the City of Ravenswood and much of northern Jackson County. The RVFD posts an average response time of five minutes to fires in the local area. The Insurance Service Organization has assigned Ravenswood a respectable Public Protection Classification (PPC) of 6.⁷ According to officials, the RVFD would like to increase training and development for the volunteer fire fighters.

C. Health Services

Ravenswood contains several independent doctor offices and three immediate medical care facilities to provide healthcare for community residents. The nearest hospital is Jackson General Hospital, an acute care hospital located 11.4 miles away in Ripley. Local ambulance service is provided for residents through the RVFD while individuals experiencing life-threatening injuries and illnesses receive services from the Jackson General Hospital medical evacuation unit.

D. Water Treatment

Owned and operated by the community, the water treatment plant located on Virginia Street provides potable water to Ravenswood and the Silverton Public Service District (SPSD). Five wells currently supply water for the plant's automated ground water system. Water is stored in three 500,000 gallon elevated water tanks, about 2.5 days' supply in the case of a power failure.

Two new wells and other improvements are planned to meet increasing demand. The city would like to increase the size of water supply lines in some sections of the town but the greatest motivation to expand facilities is external. Ravenswood agreed to increase water supply to SPSD when they renewed their contract in 2001. Under the new contract the city will double the amount of water provided to the SPSD, an increase of more than 4 million gallons per month. The city proposes to drill two wells in a new well field, pipe the water to the water plant, and expand the clear well. The plan also includes the construction of a water lab, fluoride room, an air stripper cover, and installation of

⁷ A PPC of 1 represents the best fire protection while 10 represents a community that does not meet minimal standards. A community's PPC depends on fire alarm and communications systems, the fire department, and the water supply system.

new pipelines to the Silverton Water Tank. The drilling of the new water wells, the installation of pumps, the laying of water lines between the wells and the water plant, and the civil engineering will be paid for by US EPA.

8. Recreational And Historical Resources

Ravenswood contains three public parks, various sports amenities, and a number of historic sites. Sports facilities include an eighteen-hole semi-private golf course at Greenhills Country Club, a bowling alley, a public swimming pool, soccer fields (located on private property), track facilities (located on the Ravenswood Grade School campus), a football stadium (used by youth leagues and all local school teams), tennis courts, and several baseball/softball fields. Additional recreational opportunities are found within a 10 mile radius of Ravenswood: a movie theatre, skating rink, shooting range, paintball range, nine-hole golf courses (2), and several public recreation areas. A premier recreational resource of Jackson County, located near Ripley, the Cedar Lakes Conference Center features a natural setting on 450 acres and multiple buildings to accommodate a range of recreational activities and programs including the popular Mountain State Art & Craft Fair held each summer.

Ravenswood's public parks are notable community assets. Washington Western Land Park (also known as Riverfront Park) consists of fourteen acres adjacent to the Ohio River in the southern area of the town. The park features river views, a number of recreational facilities, and well-preserved historical buildings. Services include two furnished pavilions, shuffleboard courts, picnic tables and grills, bathrooms and a public phone, a large public boat landing for the Ohio River, and public parking (approximately 100 spaces). Dispersed stone benches and paved trails stretching the length of the park offer excellent opportunities for exercise and relaxation.

Located adjacent to Ravenswood Middle School and High School campuses, Veterans Memorial Park (also known as the Old City Park) is designed for use by children and youths. The park contains a Veteran's memorial, a basketball court, a baseball field and bleachers (used by the High School and local softball leagues), a high-quality enclosed playground for youngsters, and a pavilion with picnic tables and grills.

The third public park suffers from aging facilities and lack of development. Located in the eastern region of Ravenswood, North Park covers 14.5 acres. A target for renovation and development, the park contains an underutilized and deteriorating Olympic size swimming pool built in 1969. The rest of the park facilities are in operational condition: two baseball fields and a T-Ball field, a refreshment stand, two asphalt tennis courts, a small pavilion, and approximately 60 parking spaces. The remainder of the park consists of undeveloped green space with limited access.

Historical resources of the community include the Washington Lands on the Western Waters Museum and Sayre Log House located in Washington Western Land Park. Donated to the town by the Quentin Sayre family and moved to the park grounds, the Sayre Log House is a well-preserved family home dating from 1875. Outfitted with period furniture and household implements, the house provides a glimpse of local farm life as it would have been in the late 19th century. The Jackson County Historical Society maintains the structure and its contents, the Society also operates the museum and its gift shop from an old lock building. The museum hosts school tours, supports special

events, and allows public access on Sunday afternoons from May to October. Its collection features various items characteristic of the early settlers of the area; objects representing those early inhabitants include tools, clothing, furniture, dishes, photographs, and toys. Indian artifacts, World War I and WWII memorabilia are also exhibited. A plaque displayed in the park notes that the grave of Jesse Hughes, a scout of George Washington, is located in the park vicinity.

Many additional historical homes and buildings are found within the community. The Ravenswood Development Authority is pursuing an initiative to gain Historic District Designation for a portion of the downtown area and is encouraging private homeowners to investigate the benefits of National Register designation for their historic homes.

SUMMARY: Ravenswood contains ample recreational opportunities including a well-maintained park system. In particular, Washington Western Lands Park is a notable and valuable community resource. But, the full potential of other city resources such as North Park and the community's historical sites/buildings has not been realized. These latent resources provide an area of emphasis for future development efforts.

9. Conclusion

Ravenswood is a small city of West Virginia confronting serious challenges in the 21st century. Most troubling are the population and economic trends affecting most rural communities across the nation, i.e. an aging population and loss of manufacturing jobs. The community's location on the Ohio River in the traditional manufacturing belt of the U.S. facilitated its development of a manufacturing based economy in the 20th century. But continued specialization in manufacturing is doubtful in view of the outsourcing, plant closings, and downsizing occurring across the region now known as the 'Rustbelt.' The loss of manufacturing jobs is a salient issue to Ravenswood residents; in particular, concern focuses on the two largest manufacturing firms in the area, Century Aluminum and Pechiney Rolled Products, who are not immune to the macro-economic forces of the global economy.

The decline in the manufacturing sector causes anxiety for the economic future of Ravenswood because manufacturing jobs rank the most important in terms of worker income, i.e. manufacturing workers command the highest wages. In addition, manufacturing firms are basic industries bringing outside monies into the community in the form of worker wages. These monies circulate or multiply in the local economy, stimulating for example, the service sector. Thus a community's overall economy can be severely affected by the loss of well-paid manufacturing jobs.

Chronically suffering from high unemployment and poverty, the recession of 2001 caused considerable hardship for the people of West Virginia, and the residents of Jackson County and Ravenswood were not spared. Data available for 2003 suggest that the recession may be at an end, i.e. unemployment rates have peaked and appear to be declining, and there are signs of modest job growth (U.S. Department of Labor: Bureau of Labor Statistics). But, it is difficult to forecast when economic recovery at the national level will improve employment conditions in Jackson County.

In sum, Ravenswood faces an enormous challenge to successfully shift from a manufacturing based economy to a service economy that provides relatively well-paid jobs capable of sustaining the local economy and stemming emigration. Nevertheless, some of the key factors important for this transformation are in place: high accessibility through a well-developed transportation system, a quality school system and educated work force, and a strong sense of community/civic pride to make the short-term sacrifices necessary to achieve long-term goals.

10. Recommendations

The greatest chance for success depends upon the determination and teamwork of city officials, the RDA, the Chamber of Commerce, other city leaders, and concerned citizens. Together this team can develop a comprehensive city plan (a.k.a. a master plan) in open dialogue with community residents. A comprehensive plan detailing strategies to promote economic diversification and development provides the blueprint to target and coordinate development efforts. The plan would identify and detail the steps necessary to achieve economic specializations appropriate to future demand and which build upon community strengths. Because implementation of the plan will (most likely) require additional community resources, citizen input in the planning process is crucial for their steady support.

While the planning process can be difficult, the implementation of a comprehensive plan can be even more challenging; therefore, a recommended course of action is to hire a full-time economic development officer/city planner. This city employee would be charged with pursuing grant monies and other resources, coordinating projects, and communicating with the public. In addition, the planner can shoulder the primary responsibility for attracting major service establishments to the community (commercial or institutional, private or public).

A secondary area of emphasis would be the promotion of tourism. The Ohio River, North Park, historic events/buildings, the downtown, other sporting events, and natural recreational sites should be investigated as possible avenues for increasing tourism. For example, a mountain biking course could be developed in North Park and used to attract competitors and tourists from miles around for state qualifying contests. Community aesthetics can be improved through the development and implementation of a district plan for the downtown area aimed at enhancing its accessibility and appeal. A formal district plan focuses development efforts, improves efficiency, and provides the basis for grant proposals. Finally, community leaders should explore the possibility of developing the vast acreage and prime riverfront property currently owned by Century Aluminum and Pechiney Rolled Products.