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Staff Paper

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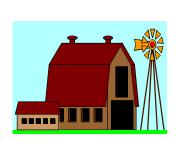
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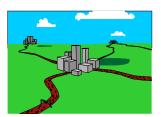
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Analysis of Socioeconomic Data for the Southern Tier Cluster of Michigan Counties







By Jon C. Phillips

Graduate Research Assistant, Department of Agricultural Economics, M.S.U. "Enhancing Rural Economies Through Comprehensive Extension Research & Partnering Approaches Using Multi-County Clusters in Michigan With Application to National Rural Settings", a United States Department of Agriculture Fund for Rural America Grant

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Analysis of Socioeconomic Data for the Southern Tier Cluster of Michigan Counties¹

Abstract

This paper presents an analysis of socioeconomic data for a cluster of four Michigan counties that lie on its southern border. These adjacent counties (Branch, Hillsdale, Lenawee, and St. Joseph) are part of a three-year rural development project. Data for individual counties as well as averages for the cluster are given. Topics covered include population growth, age of residents, educational attainment, unemployment, employment/jobs, sources of personal income, household income, poverty rates, and household composition. An executive summary is also provided.

Executive Summary

Following is an analysis of socioeconomic data for the Southern Tier Cluster of Michigan counties, i.e. Branch, Hillsdale, Lenawee, and St. Joseph. These counties were combined into a group for a Michigan State University economic development project. The project, called Enhancing Rural Economies, involves concentrating extension programming and research programs, as well as using partnering approaches to improve economic conditions in local areas. The key findings of this analysis are listed below.

Population Growth:

All four cluster counties are growing in population at a higher rate than that of Michigan.

Age of Residents:

The population in this cluster is aging, but not as quickly as for Michigan. St. Joseph's median age has been increasing the most.

Educational Attainment:

¹ This analysis was prepared by Jon C. Phillips, Graduate Research Assistant, Department of Agricultural Economics, M.S.U. Data for this analysis was organized and provided by Mary Lou McPherson, Extension Specialist, Department of Resource Development. Additional information pertaining to the operation of the Southern Tier Cluster of the Enhancing Rural Economies project may be obtained from Sally Carpenter, Cluster Administrator, M.S.U. Extension St. Joseph County, (616)467-5522.

The residents of this cluster are well educated, but educational attainment lags behind the state average by a small margin.

Unemployment:

The unemployment rate in the Southern Tier Cluster is low - even lower than Michigan's rate. The number of unemployed has dropped significantly throughout the Cluster since 1990.

Employment/Jobs:

The number of jobs in the cluster increased substantially from 1990 to 1996. The average percentage increase in jobs in the cluster was greater than Michigan's increase.

Sources of Personal Income:

Compared to Michigan, residents of the cluster receive a smaller portion of their personal income as net earnings, and larger portions from other sources.

Household Income:

A larger fraction of the households in the cluster are in the lower income categories, and a smaller fraction of the households in the cluster are in the higher income categories than for Michigan.

Poverty Rate:

The poverty rate in the Southern Tier Cluster is lower than in Michigan and the other three Enhancing Rural Economies clusters².

Household Composition:

In the cluster, there has been a decline in the fraction of households in the following two categories: "Married With Children" and "Married Without Children". The other categories have increased.

A more detailed discussion of each of the variables mentioned above follows.

² The other three clusters are the Value-Added Agriculture Cluster (Gratiot, Mecosta, and Montcalm), the Western U.P. Cluster (Baraga, Gogebic, Houghton, Iron, Keweenaw, and Ontonagon), and I-75 Cluster (Cheboygan, Crawford, Ogemaw, Otsego, and Roscommon).

Analysis of Socioeconomic Data for the Southern Tier Cluster of Michigan Counties³

Following is an analysis of socioeconomic data for the Southern Tier Cluster of Michigan counties, i.e. Branch, Hillsdale, Lenawee, and St. Joseph. These counties were combined into a group for a Michigan State University economic development project. The project, called Enhancing Rural Economies, involves concentrating extension programming and research programs, as well as using partnering approaches to improve economic conditions in local areas.

Population

Regarding population, the following analysis focuses on changes from 1990 to 1996. As indicated in Table 1 below, the overall population in the Southern Tier Cluster grew at a rate of 5%. This was greater than the overall rate for Michigan, which was 3.2%. The growth rate of population for the Southern Tier Cluster lagged behind the national rate of 6.6%, however.

Lenawee is nearly twice as large in population as any other county in the cluster. It also had the highest population growth rate. This is likely a result of an expansion of the Detroit metropolitan area. The municipalities in Lenawee with the highest rate of growth are those that adjoin Adrian and those that adjoin Washtenaw County. The second highest rate of population growth was experienced by Hillsdale, which borders Lenawee to the west. Hillsdale's rate of population growth was higher than that of Michigan. Branch and St. Joseph also enjoyed positive population growth. The rate of growth for these two counties was close to Michigan's growth.

Age of Residents

In 1990, the median age⁴ of residents of the cluster was 32.8 years. This is approximately the same as the median age for Michigan as a whole in that year, as indicated in Table 2 below. The median age in the cluster counties is projected to increase by 2.2 years from 1990 to 2000. This is slightly less than the projected increase for Michigan for the same period.

The counties in this cluster have few residents from 18 to 24 years, and the number has been decreasing since 1980. This is especially true for Branch and St. Joseph. The older age

³ This analysis was prepared by Jon C. Phillips, Graduate Research Assistant, Department of Agricultural Economics, M.S.U. Data for this analysis was organized and provided by Mary Lou McPherson, Extension Specialist, Department of Resource Development. Additional information pertaining to the operation of the Southern Tier Cluster of the Enhancing Rural Economies project may be obtained from Sally Carpenter, Cluster Administrator, M.S.U. Extension St. Joseph County, (616)467-5522.

⁴ This number was calculated by taking the arithmetic mean of the medians of the four counties in the cluster.

categories (i.e. between 65 and 74 years and 75 years and older) tend to be growing, however. It should be noted that the 1996 age distribution in Lenawee is very similar to the that of Michigan.

Table 1: Population Changes for the Southern Tier Cluster, Michigan, and the United States

Population						
County	1990	1996	Raw Change	% Change		
Branch Hillsdale Lenawee St. Joseph	41,502 43,431 91,476 58,913	42,991 45,887 97,133 60,977	1,489 2,456 5,657 2,064	3.6% 5.7% 6.2% 3.5%		
Cluster Total Michigan U.S.	235,322	246,988	11,666	5.0% 3.2% 6.6%		

Table 2: Median Age Information for the Southern Tier Cluster and Michigan.

	Median A			
County	1990	2000	Raw Change	% Change
Branch Hillsdale Lenawee St. Joseph	33.4 32.6 32.5 32.8	35.3 34.4 33.9 36.2	1.9 1.8 1.4 3.4	5.69% 5.52% 4.31% 10.37%
Cluster	32.8	35.0	2.2	6.47%
Michigan	32.5	35.3	2.8	8.62%

Educational Attainment

The available educational attainment data lists percentages of the population, age 25 and over, who have attained three levels of education. The three levels are: high school graduate, some college, and college degree (or greater). First of all, the percentage of residents in each category of educational attainment increased from 1980 to 1990 for the state of Michigan. Further, the people of Michigan have higher educational attainment than the average for the United States.

As shown in Table 3 below, the educational attainment for the counties of the Southern Tier Cluster is generally consistent across the categories. It is also apparent that the educational attainment of the Southern Tier Cluster is slightly lower than that of Michigan as a whole. This gap has also tended to increase between 1980 and 1990. The cluster average⁵ in each category is lower than the state's average, for both time periods.

Table 3:	Educational	Attainment for	the Southern	Tier	Cluster	and Michigan	
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County	High Scl	nool Grad	Some C	College	Colle	ege+
	<u>1980</u>	<u>1990</u>	1980	<u>1990</u>	<u>1980</u>	<u>1990</u>
Branch Hillsdale Lenawee St. Joseph	65.3% 68.7% 67.8% 65.7%	73.8% 75.2% 76.3% 73.8%	11.5% 11.7% 13.0% 13.0%	23.6% 21.6% 25.2% 24.8%	8.7% 9.8% 11.9% 9.3%	10.3% 11.3% 12.9% 10.9%
Cluster Average	66.9%	74.8%	12.3%	23.8%	9.9%	11.4%
Michigan	68.0%	76.8%	15.7%	27.1%	14.3%	17.4%

Unemployment Rate and Labor Force Participation Rate

Table 4 below contains information about unemployment in the Southern Tier Cluster in 1997. It paints a fairly rosy picture of the unemployment situation in these counties.

⁵ This number was calculated by taking the arithmetic mean of the medians of the four counties in the cluster.

⁶ The Cluster Average for the 1997 unemployment rate and the percentage change in number was calculated by taking an arithmetic mean of the respective figures for each of the four

Unemployment was low in Michigan in 1997, and it had decreased since 1990. The unemployment rate in each of the four cluster counties has been quite close to the state's rate⁷ in recent years. The unemployment outlook in these counties was even better than the in the state as a whole in 1997, however. The rate of unemployment has been declining in all counties in this cluster since about 1992. There is no problem with too high of an unemployment rate in these four counties.

Table 4: Unemployment Information for the Southern Tier Cluster and Michigan

County	Number 1997	Rate 1997	% Change in Number 1990 to 1997
Branch Hillsdale Lenawee St. Joseph	775 875 1,800 1,225	3.7% 3.8% 3.8% 3.7%	-47.5% -52.1% -49.3% -51.5%
Cluster Average		3.75%	-50.10%
Michigan		4.20%	-39.10%

Except for St. Joseph, the labor force participation rate in the cluster counties has been close to, but generally below, Michigan's participation rate. St. Joseph's participation rate has been above the state's rate for the past seven years, and has been increasing. Considering women only, the participation rate increased in all four cluster counties from 1980 to 1990. This was true for women with no children under age 18, as well as for women with children under age 18. In all four counties in 1990, over three quarters of the women with children between ages 6 and 18 participated in the labor force. In 1990, the participation rate for women in the cluster with children under age 18 was higher than the average rate for women with children under age 18 for Michigan as a whole.

Employment/Jobs

All counties in this cluster had a healthy increase in the amount of jobs (measured on a percentage basis) during the period from 1985 to 1996. In terms of raw numbers, Lenawee and

cluster counties.

⁷ As a point of reference, the U.S. unemployment rate was 4.9% in 1997.

St. Joseph added the most jobs. They increased by over 9,000 and over 7,000, respectively, in this time period.

Table 5 below contains information about the change in full- and part-time employment in the Southern Tier Cluster and Michigan from 1990 to 1996. It should be noted that the most recent recession in Michigan occurred approximately from 1990 through 1991. As shown in the table, the percentage increase in jobs in each of the counties in the cluster exceeded the percentage increase in jobs that occurred in Michigan.

Table 5: Change, Both in Number and on a Percentage Basis, in Full- and Parttime Employment in the Southern Tier Cluster and in Michigan.

County	Change (number) '90-'96	% Change '90-'96
Branch Hillsdale	1,803 3,259	10.7% 18.0%
Lenawee St. Joseph	5,330 4,538	13.5% 16.8%
Cluster Average		14.75%
Michigan		9.90%

On a proportional basis, it should be noted that St. Joseph and Hillsdale have larger fractions of jobs in the manufacturing sector, compared to the other counties in this cluster, to counties in the other Enhancing Rural Economies clusters, and to Michigan. In 1996, they had manufacturing fractions of 38.1% and 32%, respectively. These two counties also exhibited a growth trend in the number of manufacturing jobs over the past 25 years. Branch and Lenawee have had stagnant levels of manufacturing jobs over this period of time. All four counties have shown steady growth in the number of service jobs over the past 25 years. Between 1985 and 1996, Branch and St. Joseph each added over 1,000 service jobs, and Lenawee and Hillsdale each added about 2,000 service jobs. In this same time period, all counties in the cluster experienced an increase in the amount of retail jobs.⁸

⁸ The percentage increases in "Retail Trade" jobs in the Southern Tier Cluster counties from 1985 to 1996 were: Branch (40.7%), Hillsdale (41%), Lenawee (43.3%), and St. Joseph (17.1%).

Personal Income

A dollar-denominated time series of data can be presented in two ways. One is in current year form, i.e. the actual figure for each year is presented. This does not account for inflation, however, which can have a distortional effect on figures such as prices and incomes. If time series data is adjusted for inflation, the resulting time series is called "real". Such series give a better indication of relative purchasing power over time. In the "All Cluster Counties" data book⁹ for the Enhancing Rural Economies project, personal income for each county is presented in both ways for the years from 1970 to 1996. All four counties showed at least some growth in real personal income both before and after the recession of the early 1980s.

There are three broad categories of sources of personal income: 1) net earnings, 2) dividends, interest and rent, and 3) transfer payments. Net earnings are the wages, salaries and tips from employment. Dividends, interest, and rent are self-explanatory, and are sometimes referred to as "unearned income". Transfer payments include such things as pensions, social security and other federal benefits, and the like. Table 6 below lists the major sources of personal income in 1996 for the Southern Tier Cluster.

Table 6: Major Sources of Personal Income for the Southern Tier Cluster and Michigan

Percent of Total Personal Income - 1996							
Dividends, Interest, County Net Earnings & Rent Transfer Payments							
Branch Hillsdale Lenawee St. Joseph	63.6% 65.3% 67.2% 66.6%	20.0% 19.1% 16.5% 17.3%	16.4% 15.6% 16.3% 16.1%				
Cluster Average	65.7%	18.2%	16.1%				
Michigan	67.0%	17.5%	15.4%				

⁹ Information from the Enhancing Rural Economies "All Cluster Counties" data book pertaining to the Southern Tier Cluster counties may be obtained by contacting Sally Carpenter, Cluster Administrator, M.S.U. Extension, St. Joseph County, Centreville, Michigan.

As shown in the table, the cluster average¹⁰ percent of personal income from net earnings is 1.3 percentage points lower than that of Michigan. The cluster averages for the other two categories are slightly higher than the respective percentages for Michigan. A possible explanation for this is that there are more retirees per capita in the Southern Tier Cluster than in Michigan. Retirees tend to receive a larger fraction of their incomes from dividends, interest, and pensions than other people receive.

Information regarding earnings by industry is given in the Enhancing Rural Economies "All Cluster Counties" data book. This information is closely related to the employment by industry which was covered in the Employment/Jobs section earlier in this paper, so it will not be discussed here.

Household Income

Households may be divided into categories with respect to the amount of income they receive per year. Charts containing this information for each county in the Southern Tier Cluster and for Michigan are included in the Enhancing Rural Economies "All Cluster Counties" data book. The income categories used are: \$0 - \$14,999, \$15,000 - \$34,999, \$35,000 - \$49,999, \$50,000 - \$74,999, and \$75,000 and above.

It would facilitate analysis if the extreme categories were examined. To accomplish this, the lowest two categories and the highest two categories were combined. The percentage of households in these two combined categories are listed in Table 7 below. The overall message of these figures is that household income in the Southern Tier Cluster is below that of the state of Michigan in two measures. First, the average percentage¹¹ of the households in the Southern Tier Cluster with incomes less than \$25,000 is 12.3% greater than the average in Michigan. The other measure is related to households with incomes greater than \$50,000. The percentage of households in the Southern Tier Cluster with incomes in this upper income category is one third less than the average for the state of Michigan as a whole. Both of these measures indicate that household incomes in the Southern Tier Cluster are less than the average for Michigan.

¹⁰ The Cluster Average for the percent of personal income for each category was calculated by taking an arithmetic mean of the respective figures for each of the four cluster counties.

¹¹ The Cluster Averages in this table are calculated by taking an arithmetic mean of the applicable values for the four counties in the cluster.

¹² As indicated in Table 7, the percentage of households in the Southern Tier Cluster with an income less than \$25,000 is 45.6%. The percentage of households in this income category in Michigan is 40.6%. If the difference between these percentage values (i.e. 5%) is divided by the percentage of households in this income category in Michigan, the result is 12.3%. The figure for the percentage difference between the Southern Tier Cluster and Michigan in the upper income category was calculated similarly.

Poverty

As shown in the Enhancing Rural Economies "All Cluster Counties" data book, there is a lot of variation in the poverty rate among the minor civil divisions in the Southern Tier Cluster. A smaller fraction of the residents of the Southern Tier Cluster are in poverty compared to the other three clusters that are part of the project. Table 8 below lists the average poverty rate for the counties in the Southern Tier, as well as a cluster average and the rate for Michigan as a whole in 1990.

Table 7: Percentages of Households in the Southern Tier and Michigan in Certain Income Categories

Household Income - 1990		
County	% of Households \$0 - \$24,999	% of Households \$50,000+
Branch Hillsdale Lenawee St. Joseph	49.4% 47.8% 40.0% 45.0%	14.6% 14.5% 22.0% 16.7%
Cluster Average	45.6%	17.0%
Michigan	40.6%	25.5%

Table 8: Poverty Rate in 1990 for the Southern Tier Cluster and Michigan

County	Rate (in Percent)
Branch Hillsdale Lenawee St. Joseph	14.1% 12.8% 10.4% 11.5%
Cluster Average	12.2%
Michigan	13.1%

Household Composition

The composition of households in the Southern Tier Cluster changed between 1980 and 1990. As shown in Table 9 below, the percentage of households consisting of married couples with children decreased by at least 4 percentage points in each of the four cluster counties. In each of the counties except Lenawee, the percentage of households consisting of married couples without children also decreased, but by a smaller amount. The cluster average¹³ percentage of households in each of the other categories¹⁴ increased from 1980 to 1990.

Table 9: Household Composition for the Southern Tier Cluster for the Years 1980 and 1990

	Married w	//Children	Married w/d	Children	Single Par	ent Family
County	1980	1990	1980	1990	1980	1990
Branch Hillsdale Lenawee St. Joseph Cluster Average	33.4% 35.0% 36.5% 34.2% 34.8%	29.2% 30.5% 32.0% 29.3% 30.2%	32.7% 33.9% 31.9% 33.0% 32.9%	31.5% 32.9% 31.4% 31.6% 31.8%	7.3% 6.0% 6.4% 6.5% 6.6%	9.1% 8.2% 8.7% 9.5% 8.9%
	Other Family HH		Single Person HH		Other Non Family	
County	1980	1990	1980	1990	1980	1990
Branch Hillsdale Lenawee St. Joseph	3.7% 3.4% 4.1% 3.7%	4.0% 3.6% 4.3% 4.0%	20.0% 19.1% 18.4% 20.0%	22.3% 21.1% 20.2% 21.6%	3.0% 2.7% 2.7% 2.6%	3.9% 3.7% 3.5% 3.9%
Cluster Average	3.7%	4.0%	19.4%	21.3%	2.7%	3.8%

¹³ The cluster average for the percent of households in each category was calculated by taking an arithmetic mean of the applicable values for each of the individual counties.

¹⁴ The other categories include: single parent family, other family households, single person households, and other non-family households.