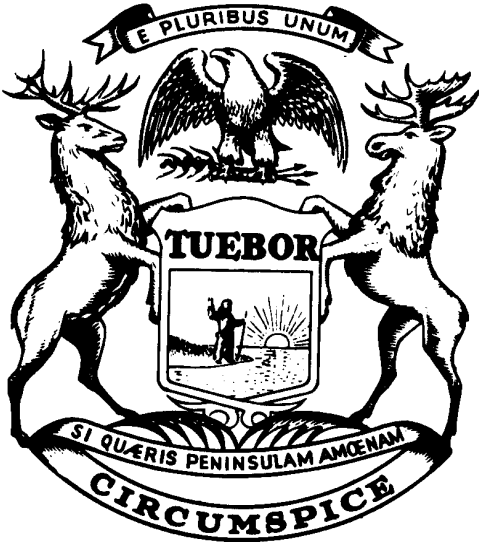


# 2000 ECONOMIC REPORT OF THE GOVERNOR

PROGRESS IN THE 1990s

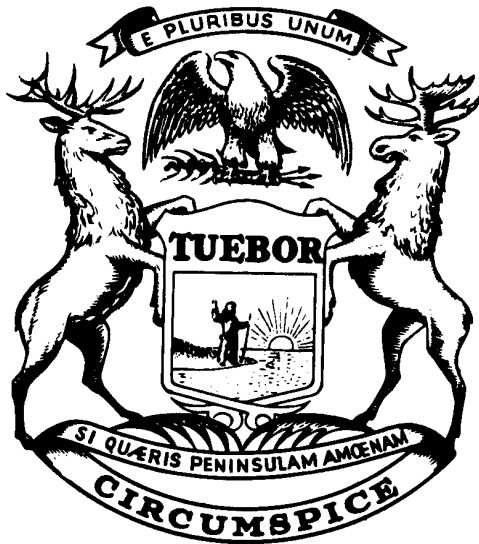


John Engler  
Governor of Michigan

**State of Michigan**

**2000 ECONOMIC REPORT  
OF THE GOVERNOR**

**PROGRESS IN THE 1990s**



**John Engler, Governor**

Transmitted to the Michigan Legislature  
February 2001



February 2001

Members of the Michigan Legislature and the People of the State of Michigan:

The 1990s were years of success for Michigan. Our economy has become stronger and more diverse, the incomes of our citizens have risen substantially, and their tax burden has been reduced. School spending has been reformed to ensure that all of Michigan's students get their fair share. Michigan's progress in the 1990s has not gone unnoticed. In the fall of 2000, Moody's Investor's Service and Standard and Poor's upgraded Michigan's bond rating to AAA, making Michigan the largest state and one of only 10 with a AAA rating.

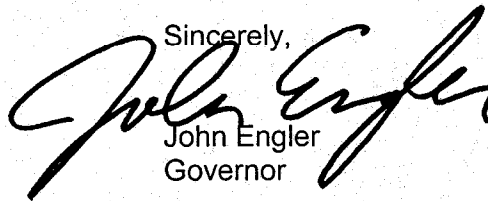
This *Economic Report* documents some of the many improvements that occurred during the 1990s, including:

- Michigan set a new employment record in 1999, with 4.9 million people working.
- Michigan's unemployment rate has now been below the national unemployment rate for seven consecutive years. The last time Michigan's rate was below the national rate was 1966.
- Michigan's unemployment rate in 2000 was 3.4 percent, the lowest ever recorded.

- Michigan's state and local taxes were cut by \$15 billion in the 1990s with the average Michigan household saving \$3,000. Tax cuts reduced Michigan's tax burden from 17th highest in 1990 to 30th highest in 1996, making Michigan a better place to live and do business.
- Michigan led the nation in economic development, winning *Site Selection* magazine's coveted Governor's Cup in 1997, 1998, and 1999. Michigan attracted 2,174 major new projects in 1999, more than any other state in the history of the magazine's rankings.
- Michigan's economy became more diversified in the 1990s with more workers working in high-tech jobs. Michigan has the highest percentage of highly-skilled technical workers in the nation.
- Michigan has the third highest homeownership rate in the nation. Property taxes were cut by \$7.5 billion in the 1990s making it easier for Michigan families to afford to own their own home.

Although we made great strides in the 1990s, we must continue our efforts to make Michigan a better place to work, live, and invest. We need to continue to cut the cost of doing business in Michigan, increase the skills of our workers, and spread the word that our economy is vital and flourishing.

Sincerely,

A handwritten signature in black ink, appearing to read "John Engler". The signature is fluid and cursive, with the first name "John" being particularly prominent and stylized.

John Engler  
Governor

STATE OF MICHIGAN



JOHN ENGLER, Governor

**DEPARTMENT OF TREASURY**

TREASURY BUILDING, P.O. BOX 15128, LANSING, MICHIGAN 48901  
MARK A. MURRAY, State Treasurer

February 2001

The Honorable John Engler  
Governor of Michigan  
State Capitol  
Lansing, MI 48909

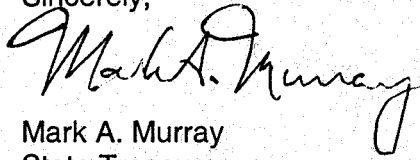
Dear Governor Engler:

It is our pleasure to present to you the *2000 Economic Report of the Governor – Progress in the 1990s*. The *Report* documents the remarkable progress Michigan has made in the 1990s. Among these achievements are the reduction in Michigan's unemployment rate, the diversification of Michigan's economy, school finance reform, and a series of responsible tax cuts.


The *Report* discusses broad economic indicators such as employment, inflation, and personal income, and examines various economic sectors important to the state, such as agriculture, manufacturing, and services. Several special topics including revenue sharing, school finance reform, and tax changes are addressed as well.

Although Michigan will continue to face challenges as it moves into the twenty-first century, we believe that this *Report* demonstrates that Michigan is well situated to meet these challenges. We hope this *Report* provides useful information that will help individuals, businesses, and policy makers with their decisions as they work to make Michigan a better place.

Sincerely,



Mark A. Murray  
State Treasurer



Mark P. Haas, Director  
Office of Revenue  
and Tax Analysis

## Acknowledgements

This *Report* was prepared under the direction of Mark Haas by the staff of the Office of Revenue and Tax Analysis, Michigan Department of Treasury. Sections of the report were written by Scott Darragh, Jeffrey Guilfoyle, Denise Heidt, Howard Heideman, Dan Kitchel, Andrew Lockwood, Constance Ross, and Thomas Patchak-Schuster. Eric Krupka reviewed the chapter drafts. Frances Goff, Marjorie Morden, and Lori Osypczuk formatted the report. Karen Yurchak provided editorial assistance.

Useful suggestions and comments were provided by Ken Darga of the Michigan Information Center; James Folkening, Elaine Madigan Mills, and Glenda Rader of the Michigan Department of Education; and Kathleen Kissman, Sara Linsmeier, Vicki Pontz, and Lee Wilcox of the Michigan Department of Agriculture; and John Nevin of the Governor's Office.

The Michigan Department of Treasury is solely responsible for the accuracy of the information presented in this *Report*.

# 2000 Economic Report of the Governor

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**2000 Economic Report  
of the Governor**

**Progress in the 1990s**

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## Introduction

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# Introduction

## Overview

The *2000 Economic Report of the Governor* highlights the impressive improvements in Michigan's economy that occurred during the 1990s. During this past decade, Michigan went from being a high-unemployment state to one that is consistently below the national unemployment rate. Michigan set records for employment and housing starts, and enjoyed both low inflation and high income growth. Michigan's economy became more diversified, less reliant on manufacturing, and is expected to be more stable in future business cycles. Michigan has led the nation in business investment in new and expanding facilities for the past three years, winning *Site Selection* magazine's Governor's Cup. Michigan attracted 2,174 new projects in 1999, more than any other state in the history of the magazine's rankings. Michigan is a leader in the new "high-tech" economy. In a recent study, Michigan ranked 6<sup>th</sup> among the states in terms of the number of patents received, 4<sup>th</sup> in employment in Bureau of Labor Statistics high-tech industries, and 2<sup>nd</sup> in private spending on research and development.

In the 1990s, Michigan was also a leader in the implementation of school finance reform and responsible tax cuts. Michigan's 1994 school finance reforms were a model for the rest of the nation to follow. Every major tax rate and base was changed during the decade.

This report provides an overview of the current state of Michigan's economy with an emphasis on changes occurring in the 1990s. The report is divided into four sections. The first section reviews various facets of Michigan's economy with chapters on Employment and Unemployment, Personal Income, Gross State Product, Prices and Inflation, Consumer Spending, and Population.

The second section discusses some special topics with chapters on Diversification and Stability, Major Tax Changes, School Finance Reform, and Revenue Sharing.

The third section discusses several economic sectors important to Michigan with chapters on the Motor Vehicle Industry, Manufacturing and Services, Agriculture, and Housing and Construction.

The final section provides an overview of the U.S. and Global economies.

## Highlights

This report documents many of the strengths of Michigan's economy and many of the impressive improvements and accomplishments of the 1990s. Some of the many highlights from this report are:

- Michigan's unemployment rate has now been below the national rate for over six years after three decades as a "high" unemployment state.
- In 1999, Michigan's workforce reached an all-time high of 5.1 million workers, a 12 percent increase over 1990.
- The number of unemployed workers in Michigan decreased 45 percent between 1990 and 1999.
- Tax cuts enacted in the 1990s have cut state and local taxes by \$15 billion through FY 2000. Michigan's tax burden dropped from 17<sup>th</sup> highest in 1990 to 30<sup>th</sup> in 1996.
- Michigan dramatically improved its method of funding public schools in 1994. The property tax burden on Michigan homeowners was decreased substantially and school spending became more equitable.
- While the overall economy has become more diversified, Michigan is still a powerhouse in the automotive industry. In 1999, Michigan produced more cars and light trucks than any other state.

- Michigan is a leader in research and development ranking 2<sup>nd</sup> among the 50 states in private spending on research and development, 6<sup>th</sup> among the states in patents received from 1994-98, and 4<sup>th</sup> among the states in total employment in high-tech industries.
- Michigan is the 4<sup>th</sup> leading exporter among the 50 states.

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## **The Michigan Economy**

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# Employment and Unemployment

## Overview

More people are employed in Michigan than at any other time in her history. The Michigan economy is much more diversified and stable than it was 20 years ago, and the state's unemployment rate has been below the national rate for the past six years.

Favorable economic conditions and an improved business climate allowed business to develop and better adapt to the global market place. Across-the-board tax reductions have helped businesses to expand in Michigan. An improved educational system and continuing job training programs have improved the quality of the labor force and eased the transition of jobs among different economic sectors. All those factors promoted formidable employment growth in Michigan in the 1990s and made Michigan a premier destination for businesses, with over 9,000 new firms establishing in the state during the past decade.

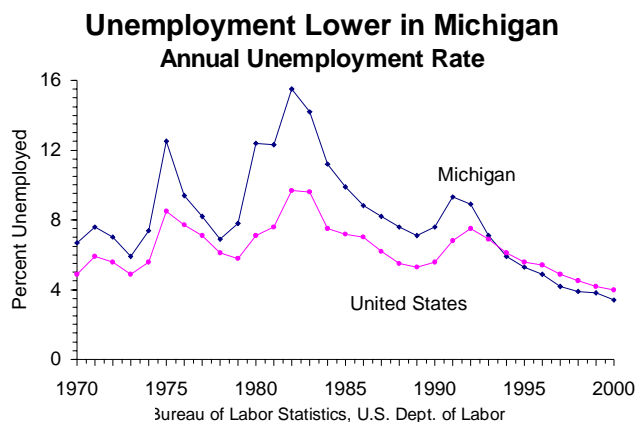
Michigan's unemployment rate has been below the national rate since 1994, with the state monthly rate below the national average for 69 straight months. Not even the major 1998 labor dispute was strong enough to curb the observed trend of the lower-than-national unemployment rate, a clear example of the soundness of the more diversified Michigan economy. This turnaround occurred after three decades of annual unemployment rates significantly above the national rate.

## General Employment Trends

Michigan employment set a new record in 2000, with 5.0 million people working. Employment growth averaged 1.5 percent per year in the 1990s, compared to 0.7 percent per year in the 1980s.

Michigan's annual unemployment rate declined sharply over the last two decades. In 1994, Michigan's annual unemployment rate dropped below the national rate for the first time since 1966. Michigan's rate has remained below the nation's rate since 1994,

ending the 1990s at 3.8 percent, 0.4 percentage points below the U.S. annual rate. Previously, Michigan's unemployment annual rate peaked in 1982 at 15.5 percent, 5.8 percentage points above the national annual rate. In 2000, the Michigan unemployment rate of 3.4 percent was the lowest ever recorded.



In 2000, Michigan's civilian labor force reached 5.1 million people, a 12.1 percent increase from 1990. Job growth in the 1990 to 2000 period was 16.8 percent, with 5.0 million people being employed in the state in 2000, while the total number of unemployed people plummeted to 176,000 in 2000, a 49.8 percent decrease from 1990.

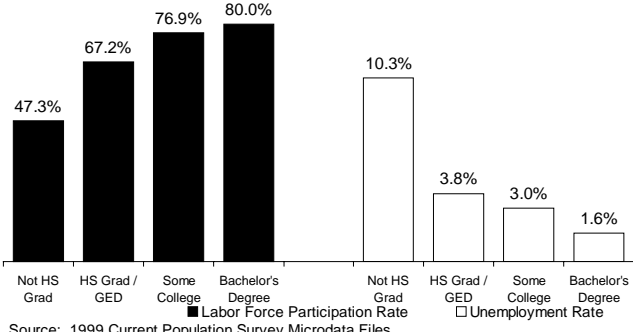
Nationally, the labor force increased 11.9 percent from 1990 to 2000, to 140.9 million people in 2000. The number employed increased to 135.2 million (13.8 percent) in 2000 while unemployment decreased to 5.7 million (19.8 percent).

In recent years, to cope with the ever-shrinking pool of unemployed workers and the modest increase of the working-age population, Michigan has relied heavily on the increasing labor force participation rate of working-age people. Michigan's labor force participation rate rose from 65.4 percent in 1990 to an estimated 68.5 percent in 2000.

Higher educational levels are associated with greater success in the labor market. People that have a bachelor's degree or more have a higher labor force participation rate than people with less educational attainment. In 1999, 80 percent of

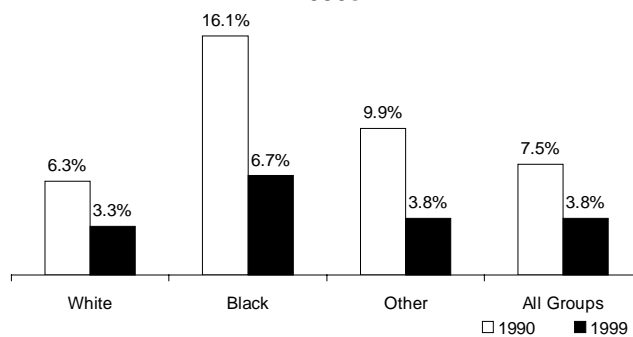
Michigan college graduates were in the labor market and their unemployment rate was 1.6 percent. Thus, 79 percent of college graduates (1,169,000) were employed in 1999. As the level of education decreases, the labor force participation rate is lower and the unemployment rate is higher. When looking at those that have not graduated from high school, only 42 percent (568,000) were employed in 1999.

**More Education Results In  
Higher Labor Force Participation - Lower Unemployment**



The reduction in unemployment among different segments of the population was not uniform in the 1990s. Among Whites there was a 3.0 percentage point reduction in their unemployment rate, falling from 6.3 percent in 1990 to 3.3 percent in 1999. The unemployment rate for Blacks decreased 9.4 percentage points, to 6.7 percent in 1999. The composite Other group (primarily Asian and Hispanic) unemployment rate decreased 6.1 percentage points to 3.8 percent in 1999. Not only did non-White Michigan residents have the largest reduction in their unemployment rate during the 1990s, they also had the largest employment gains as their labor force participation rate increased by over 10 percentage points compared to the 1.8 percentage point increase for White workers.

## Michigan Unemployment Decreases 1990s



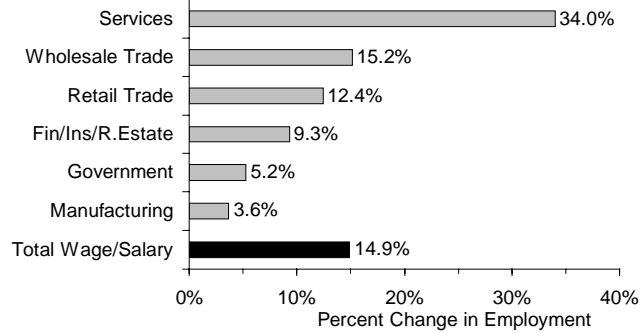
The unemployment rate for males went down 4.5 percentage points in the 1990s to 3.6 percent in 1999. For females, the reduction in the unemployment rate was smaller, 2.9 percentage points to 3.9 percent in 1999. However, females had a 5 percentage point increase in their labor force participation rate compared to the 1 percentage point increase for males. The biggest reduction in unemployment rate by age group was among 16-24 year olds, from 14.5 percent in 1990 to 9.1 percent in 1999. Among 25-44 year olds and the over 65 group, the decline in the jobless rate was the same as the overall decline. The 45-64 year age group had the lowest unemployment rate in both 1990 (4.5 percent) and 1999 (1.9 percent) and only experienced a 2.6 percentage point reduction. However this age group had the largest increase in its labor force participation rate, 7.6 percentage points.

### Michigan Wage and Salary Employment

The diversification of the Michigan economy can be seen in the change in employment among the various economic sectors. Continuing the trend observed in the 1970s, jobs have steadily migrated away from the manufacturing sector in the 1990s, notably to services and trade.

## Michigan Employment Changes

1990-1999



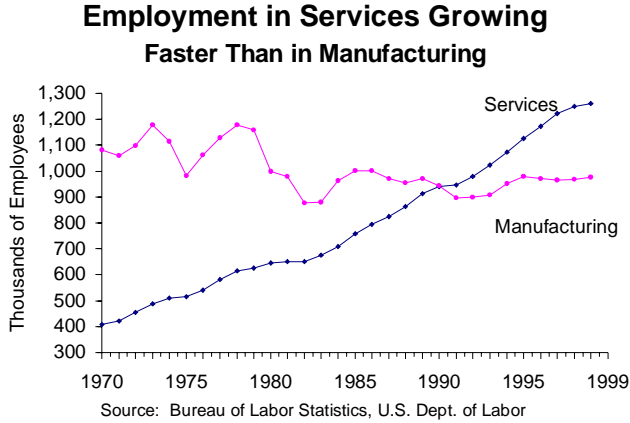
Source: Bureau of Labor Statistics, U.S. Dept. of Labor

Michigan wage and salary employment, which excludes agricultural workers and self-employed individuals, rose 14.9 percent from 1990 to 1999, setting a record high of 4.6 million employed in 1999. In that period, a total of 592,400 wage and salary employment jobs were created, compared to 479,500 jobs from 1980 to 1989, and 638,100 jobs in the 1970 to 1979 period.

Most of the wage and salary employment growth from 1990 to 1999 occurred in the private service-producing sector of the economy with 479,400 new jobs, on a par with the 490,900 jobs created in the 1980 to 1989 period, and 422,100 jobs from 1970 to 1979. Of all the private service-producing sector new jobs created, most went to services (320,000 jobs), wholesale (30,600 jobs) and retail (92,800 jobs). Construction added 48,200 new jobs for the same period.

The manufacturing sector made major advances in using new technology to make labor more productive. The sector gained 34,300 jobs from 1990 to 1999 but remained below the total number of manufacturing jobs in 1978. New technology is allowing fewer workers to produce more output in 1999 than a larger number of workers produced in the 1970s and 1980s. Most of the 1990 to 1999 period job growth occurred in durable goods industries: fabricated metal (9,300 jobs), furniture and fixtures (8,100 jobs), and industrial machinery (5,200 jobs). Substantial capital investment in the transportation equipment industry allowed employment to remain steady between 1990 and 1999,

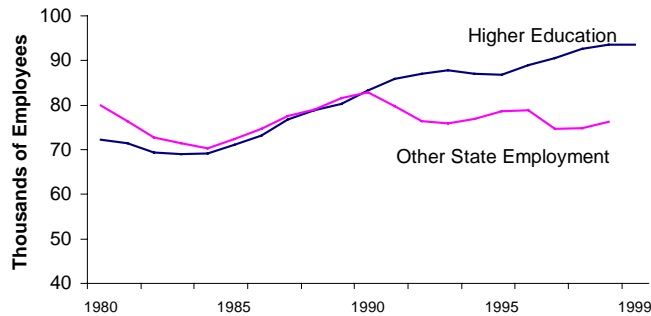
reaching 295,000 jobs in 1999, but notably fewer workers than in the 1970s. Most of the nondurable goods manufacturing industries registered a decrease in employment for the 1990 to 1999 period, with the exception of rubber/plastic products and leather and leather products, which together added 15,500 new jobs over the period.



Total government employment increased 5.2 percent from 1990 to 1999, rebounding from the decreases that occurred in the 1980s, particularly at the local government level. Local government gained 33,600 jobs in the period, employing 440,000 people in 1999, while federal government jobs in Michigan decreased by 3,900 jobs, ending the decade employing 57,300 people. State government (which includes state colleges and universities) continued to increase its number of employees in the 1990s, although at a much slower pace than in the previous two decades. Only 3,600 new jobs were created from 1990 to 1999, compared to 31,800 jobs gained in the 1970 to 1979 period and 9,400 from 1980 to 1989.

All of the state government employment increase over the period was in higher education. Higher education employment at the state's public colleges and universities grew from 83,300 in 1990 to 93,600 in 1999 (16.0 percent). During the same period, other state government employment declined from 82,900 to 76,200 (an 8.1 percent decline).

## Higher Education Employment Grows



### Regional Differences in Employment

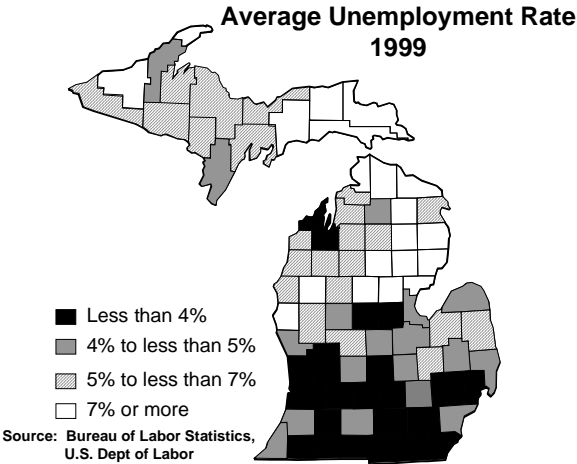
Employment differences among the various Metropolitan Statistical Areas (MSAs) and the Upper Peninsula occur since the different economic bases in each area cause different employment patterns. As the Michigan economy became more diversified, those differences declined over the 1990s.

Employment in the nine major metropolitan areas plus the Upper Peninsula grew on average 1.6 percent annually from 1990 to 1999, slightly below the 1.7 percent average annual growth rate observed for the whole state, as employed people moved to more rural locations. The Grand Rapids MSA, the Ann Arbor MSA, and the Upper Peninsula MSA had the highest average annual growth rates over the period, at 2.9 percent, 2.2 percent, and 1.7 percent, respectively. At 0.5 percent, the Flint MSA exhibited the weakest average annual employment growth, followed by the Benton Harbor MSA at 0.9 percent. In the 1990 to 1999 period, the Detroit MSA had the highest increase in employed population among all 10 areas, with 264,300 more people being employed, or 38.1 percent of the total employment increase in Michigan. The Grand Rapids MSA, with a 133,600 increase in employment or 19.2 percent of the total employment added in Michigan, ranked second.

Unemployment in the 10 areas decreased at an average annual rate of 6.0 percent from 1990 to 1999, slightly faster than

the state average of 5.7 percent. The Lansing, Ann Arbor, and Detroit MSAs exhibited the fastest unemployment decreases, with average annual rates of 7.9, 7.2, and 6.7 percent, respectively. Unemployment decreased slower in the Upper Peninsula and in the Grand Rapids MSA, at 2.3 and 3.6 percent annual averages, respectively.

For Michigan's 83 counties, 23 had unemployment rates below the state annual average of 3.8 percent in 1999. Usually, high unemployment rates tend to be associated with counties in northern lower Michigan and the Upper Peninsula, while low rates tend to be associated with more metropolitan counties. The exceptions to this pattern were Leelanau, Grand Traverse and Genesee Counties. Leelanau and Grand Traverse Counties are northern lower Michigan counties registering low unemployment rates of 3.3 percent and 3.6 percent respectively. Genesee County is a metropolitan county responsible for 5.6 percent of the state's unemployed population, with an unemployment rate of 5.5 percent in 1999.





# Personal Income

## Overview

Michigan personal income was higher in 1999 than at any time in the state's history. Income totaled \$277.3 billion, an increase of 5.3 percent from 1998. During the 1990s Michigan personal income grew at an average annual rate of 5.1 percent. The fastest growth of the decade was in 1994 when income surged 7.5 percent making Michigan's growth sixth fastest among the states.

Record levels of income combined with low inflation and numerous tax cuts have provided Michigan residents with more income available to spend and a higher standard of living than ever before. The higher income has allowed more to be spent on important public services such as education and transportation infrastructure and allowed individuals to have more money in their pockets after taxes.

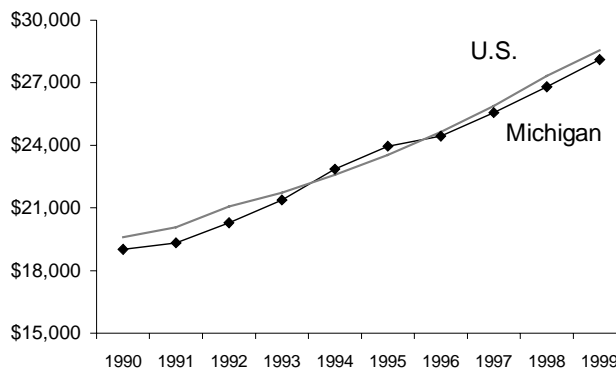
While Gross State Product may be a better measure of a state's economic output, state personal income is released on a more timely basis. Personal income estimates for counties and metropolitan areas are released one year behind state personal income estimates.

Of the major components of personal income, wage and salary income is the largest. In 1999, 60 percent of Michigan personal income came from this source. Dividends, interest, and rent made up 18 percent of personal income followed by transfer payments (such as social security and public assistance) at 13 percent. At the national level, wages and salaries comprised 57 percent of personal income, while dividends, interest, and rent made up 19 percent of personal income, and transfer payments comprised 13 percent of national personal income. Wages' share of personal income has declined over time. In 1970, the share of income provided by wages was 67 percent in Michigan and 65 percent nationally.

## Michigan Personal Income Per Person

Personal income per person is a measure of the economic well-being of a state's citizens. From 1990 to 1999, Michigan income per person has been very close to the national average. In 1999, Michigan had the 18<sup>th</sup> highest level of income per person among the states. Michigan income per person grew 4.9 percent to \$28,113, just below the national average of \$28,542. In 1999 only 17 of the 50 states had income per person above the national average.

**Michigan Income Per Person  
Near U.S. Average**

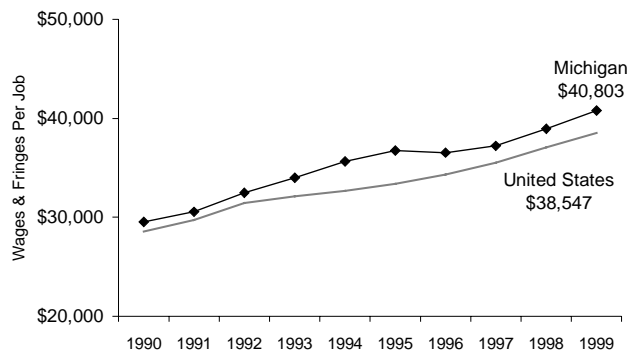


Source: Bureau of Economic Analysis, U.S. Dept. of Commerce

Michigan income growth per person topped all states from 1992 to 1995 growing an average of 5.7 percent per year, nearly 2 percentage points faster than the 3.8 percent rate recorded by the nation. From 1990 to 1999 income growth in Michigan has averaged 4.4 percent per year, above the U.S. growth rate of 4.3 percent per year.

The largest component of personal income is wages and salaries. Michigan has good paying jobs with good fringe benefits. Michigan workers' wages and fringe benefits have grown 38.1 percent in the 1990s, 3.2 percentage points faster than the U.S. average. The average worker in Michigan earned \$40,803 in 1999 compared to \$38,547 for the U.S.

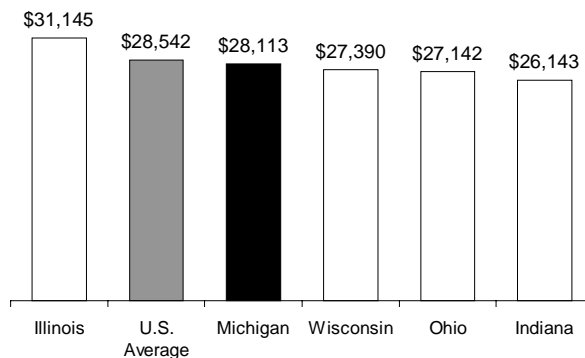
### Michigan Has Good Paying Jobs Outpaces U.S. in 1990s



Source: Bureau of Economic Analysis, Bureau of Labor Statistics

Compared to the other states in the Great Lakes Region, Michigan income per person was second highest behind Illinois and ahead of Wisconsin, Ohio, and Indiana. Connecticut ranked first in the nation in income per person with \$39,300, while Mississippi ranked last at \$20,688.

### Michigan Income Per Person Second Highest in Great Lakes 1999



Source: Bureau of Economic Analysis, U.S. Dept. of Commerce

The Great Lakes region experienced the second fastest growth in income per person among the regions in the first half of

the 1990s, and while growth was slightly faster in the second half of the decade, it ranked 7<sup>th</sup> among the eight regions. From 1990 to 1999, the Rocky Mountain region's per-person personal income growth of 5.0 percent per year topped the U.S. average of 4.3 percent and was faster than any other region in the nation.

### **Real Income Per Person**

The rate of inflation affects an individual's purchasing power. How much an individual's purchasing power has increased can be estimated by adjusting personal income using the Consumer Price Index (CPI). In 1999, Michigan inflation-adjusted (real) income per person grew 2.2 percent. In the 1990s, Michigan real income per person has grown at an annual rate of 1.7 percent, slightly faster than the national annual average rate of 1.5 percent.

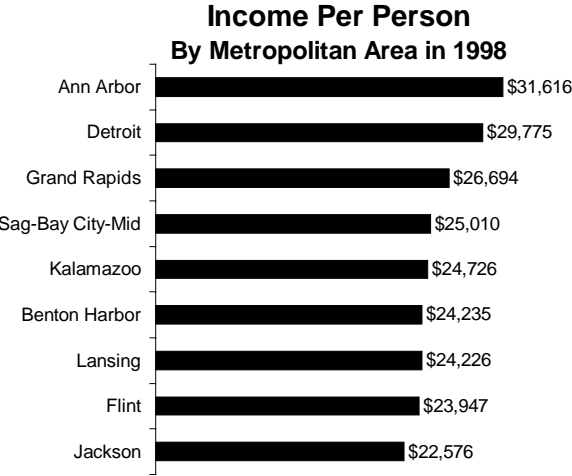
During the last recession in 1990-1991, Michigan real income per person declined less severely than in previous recessions. This suggests that Michigan's economy is becoming more diversified and less dependent on cyclical industries like the auto industry.

### **Metropolitan Area Income**

The Ann Arbor area reported the highest income per person of any Michigan metropolitan area in 1998 (the latest year data are available) at \$31,616. This income level ranked Ann Arbor 29<sup>th</sup> nationally in personal income per person for metropolitan areas. The Jackson area registered the state's lowest income per person at \$22,576, and ranked 231<sup>st</sup> out of the 318 areas nationwide.

The Detroit metropolitan area (6 counties) had the fastest growth in income per person from 1997 to 1998, 5.4 percent, while the Ann Arbor area ranked second with growth of 5.2 percent. The Flint area had the slowest growth in 1998 at just 1.6 percent, while the Lansing area reported growth of 2.1 percent. The low growth for Flint and Lansing that year was likely due in part to a labor dispute that shut down much of the motor vehicle industry for six weeks in the summer of 1998. All of the other Michigan

metropolitan areas saw increases in real income per person in 1998 as growth rates exceeded the 2.2 percent rise in the Detroit Consumer Price Index CPI.



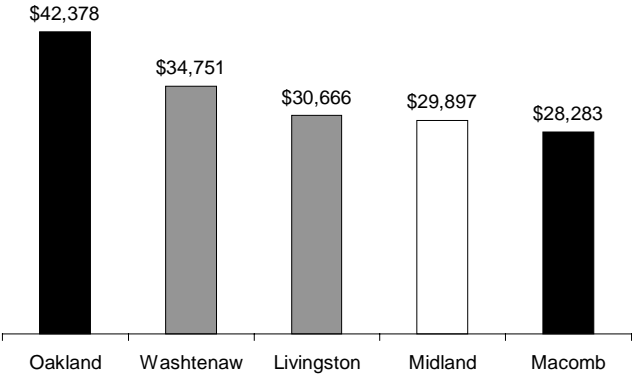
From 1990 to 1998, all Michigan metropolitan areas experienced increases in income faster than the rate of inflation. The Benton Harbor area exhibited the fastest income-per-person growth among Michigan’s metropolitan areas, a 5.0 percent average annual rate. The Ann Arbor area ranked second with growth at a 4.9 percent rate. The Lansing area had the slowest income growth over this period, with a 3.9 percent rate. All Michigan metropolitan areas had growth in real income per person from 1990 to 1998 as growth rates exceeded the 2.8 percent average annual increase in the Detroit CPI.

**County Income Per Person**

Oakland County, at \$42,378, recorded the highest county income per person among Michigan’s 83 counties in 1998 (the latest year for which data are available). Washtenaw County was next at \$34,751 followed by Livingston County at \$30,666. Oscoda County recorded the state's lowest income per person at

\$13,888. Oakland County also recorded the fastest growth in income per person in 1998, an increase of 8.2 percent.

**Highest County Income Per Person  
1998**



Source: Bureau of Economic Analysis, U.S. Dept. of Commerce

From 1990 to 1998, Mackinac County registered the fastest growth in income per person for Michigan counties with a 5.8 percent average annual rate. Luce County experienced the slowest income-per-person growth with an average increase of 1.7 percent per year over this period.

# Gross State Product

## Overview

Gross State Product (GSP) equals the value of goods and services produced within a state's economy. Therefore, GSP is the state equivalent of U.S. Gross Domestic Product (GDP). Michigan nominal GSP for 1998, the latest year for which data are available, totaled \$294.5 billion, an increase of 5.1 percent from 1997. Michigan GSP is comprised of employee compensation (\$189.0 billion), indirect business tax and nontax liability (\$23.1 billion), and property-type income (\$82.5 billion). For 1998, Michigan GSP was the ninth largest in the nation. Since 1990, Michigan GSP has grown at an annual rate of 5.6 percent, faster than the national average growth of 5.5 percent per year.

## Gross State Product Per Person

GSP per person (GSP divided by population) provides a useful measure of the relative economic performance of U.S. states and regions. Michigan's recent surge in economic growth has helped draw the state's GSP per person close to the national average. From 1990 to 1998, Michigan's nominal GSP per person increased at an annual rate of 4.9 percent, an average of 0.5 percentage points higher than the national average.

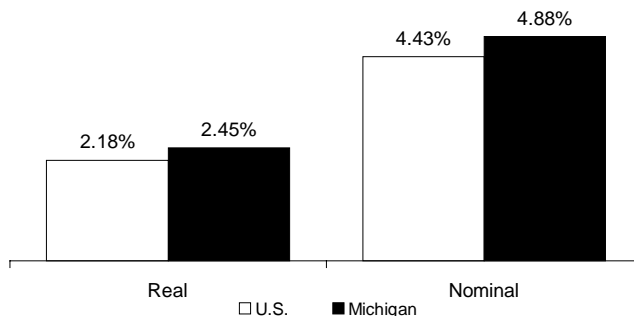
Michigan's real GSP per person (adjusted for inflation) rose 2.5 percent annually from 1990 to 1998, faster than the national average of 2.2 percent. Over the past year, Michigan's real GSP per person increased by 3.6 percent, below the U.S. average growth rate of 4.2 percent.

Michigan total real GSP grew 3.1 percent annually between 1990 and 1998 and at an even higher rate between 1992 and 1998, 4.1 percent annually. The U.S. averages were 3.2 percent from 1990 to 1998 and 3.9 percent from 1992 to 1998.

## Regional Comparisons

From 1990 to 1998, Michigan GSP grew at an annual rate of 5.6 percent, the third highest in the Great Lakes region. However, Michigan has led the region in GSP growth since the recession at the beginning of the decade, averaging nominal GSP growth of 6.1 percent per year since 1992. From 1990 to 1998, GSP grew in the Great Lakes region at an annual average of 5.5 percent, equaling the national average over that time period.

### Gross State Product Growth Per Person, 1990 - 1998



Source: U.S. Bureau of Economic Analysis

Over the past year, the Great Lakes region's nominal GSP grew 5.5 percent, below the national average of 6.1 percent. Growth in the Great Lakes region exceeded only the Plains region, which grew 5.1 percent. From 1997 to 1998, the Rocky Mountain region's nominal GSP grew the fastest at 7.2 percent followed by the Far West region at 7.1 percent.

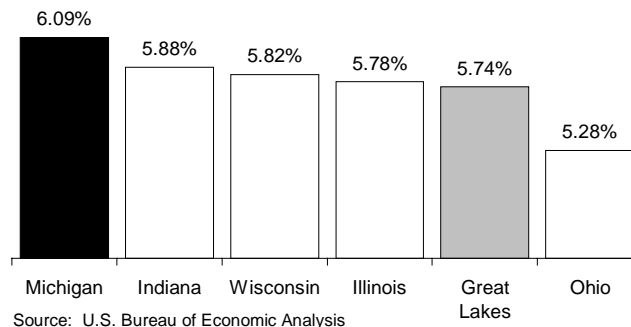
Faster population growth in the western areas of the nation has contributed to faster GSP growth compared to other areas. The eastern part of the country, along with the Great Lakes region, has experienced slow population growth throughout the 1990s (see Population chapter). Slow population growth limits the increase in potential workers, thus constraining economic growth.

GSP per person, however, grew at an annual rate of 4.8 percent in the Great Lakes region from 1990 to 1998, the third highest growth rate of the eight regions in the country. Only the Rocky Mountain region (5.3 percent) and the Plains region (4.9



percent) have experienced faster growth in GSP per person than the Great Lakes region during the 1990s.

### Michigan's GSP Growth Strongest in Great Lakes, 1992 - 1998



### Components of Michigan's GSP

Michigan, along with the rest of the nation, is moving toward a service-oriented economy. Since 1990, the service sector has increased its share of Michigan GSP by almost two percentage points from 17.5 percent to 19.2 percent. The retail and wholesale trade sectors have also shown strong growth, increasing from a combined share of 15.3 percent in 1990 to 17.1 percent in 1998. By contrast, the manufacturing sector has become less important, dropping from 27.9 percent to 26.5 percent of GSP. The long-term trend is even more dramatic with manufacturing dropping by almost 1/3 from 39.0 percent of Michigan GSP in 1977 to its 1998 level of 26.5 percent.

From 1997 to 1998, manufacturing's share of GSP dropped by 0.3 percentage points. The share of Michigan GSP attributable to manufacturing has declined 4.0 percentage points since 1994 while the share attributable to services has increased by 1.9 percentage points.

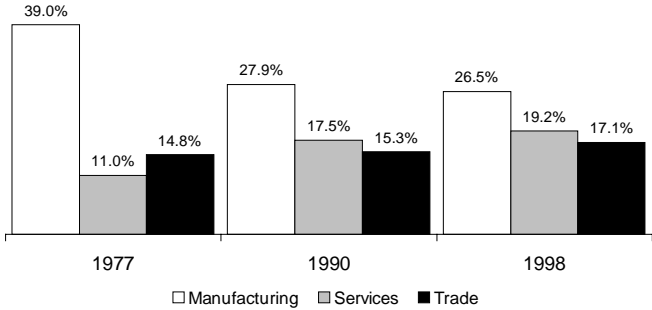
Durable goods manufacturing is the largest component of Michigan's manufacturing sector, comprising 75.8 percent of 1998 Michigan manufacturing GSP. The motor vehicle sector comprised 46.2 percent of total durable goods manufacturing, making it the largest component of the durable goods sector.

Fabricated metals comprised 16.2 percent and industrial machinery 13.7 percent of durable goods GSP in 1998.

Health services comprised the largest share of Michigan service GSP at 31.0 percent in 1998. Business services ranked second at 25.4 percent of total Michigan service GSP.

Between 1997 and 1998, health services share declined from 32.4 percent to 31.0 percent of Michigan service GSP. From 1997 to 1998, the business services share increased from 24.1 percent to 25.4 percent of Michigan service GSP.

### Michigan's Economy More Balanced (GSP Shares)



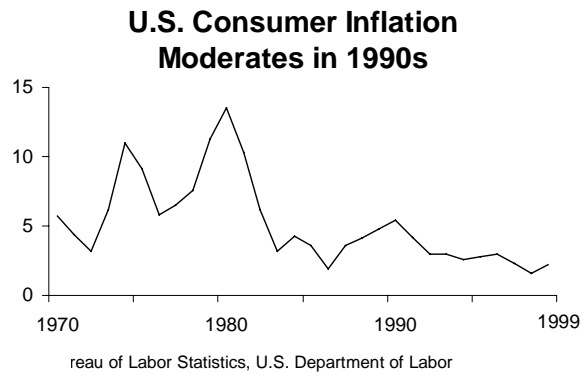
Source: U.S. Bureau of Economic Analysis

For more data on Michigan's economic diversification over the past several decades, please see the discussion which begins on page 42.

# Prices and Inflation

## Overview

Michigan and the U.S. have experienced moderate overall price increases during the 1990s. For 1999 the U.S. annual average Consumer Price Index (CPI) increased 2.2 percent. From 1990 to 1999, the average annual change was 2.7 percent. This moderate inflation is in sharp contrast to the turbulent 1970s and early 1980s where energy supply shocks and the falling dollar contributed to double-digit rates of inflation for four years between 1973 and 1982 and a 9.0 percent average annual increase over this period. The dramatically lower inflation rates of the 1990s are still above the 1.2 percent annual rate of increase for the CPI from 1958 to 1965.



The most frequently used price index is the Consumer Price Index for all Urban Consumers (CPI-U). Introduced in 1978, this Index represents the buying patterns for approximately 87 percent of the U.S. population. The CPI uses a representative “fixed market basket” as it compares prices over time and is thus not a true “cost of living” index. However, the CPI is the best measure currently available and the simplicity of a “fixed” basket is an underlying strength. As new products become available and people’s preferences change over time, the fixed market basket

concept may not reflect what people are actually buying. This may lead to the CPI overstating actual increases in the cost of living.

The Bureau of Labor Statistics (BLS) uses the Consumer Expenditure Survey to periodically select a new market basket and determine relative importance of CPI components and derive new cost weights for the basket. The CPI has the overall “all items” index, and reports index values for eight major subgroups: Food and Beverages, Housing, Apparel, Transportation, Medical Care, Recreation, Education and Communication, and Other Goods and Services.

The CPI is an economic indicator of the general level of prices in the economy, which is used in developing economic policy and understanding changes in the economy. The Federal Reserve uses this type of information to determine whether to change interest rates. Second, the CPI and its components are used to adjust other economic data into inflation-free dollars. Examples include personal income, retail sales, and state expenditures and revenues. Third, the CPI is used to adjust food stamp allotments, Social Security payments, wages under some collective bargaining agreements, and rents which are tied to the CPI. Additionally, federal income tax brackets, Michigan’s personal income tax exemption, property taxable values, and some government fees are indexed to CPI increases.

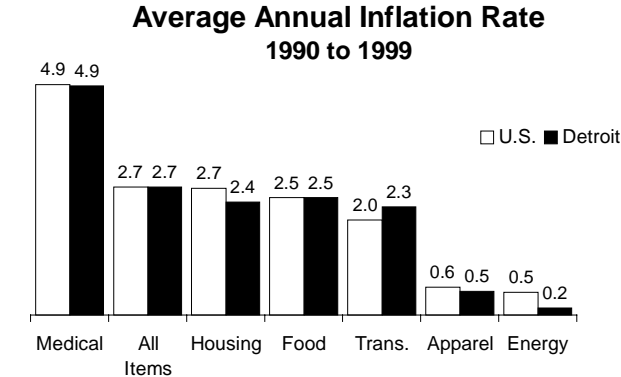
Two CPI components have shown dramatic and different price movements over the past two decades. During the high inflation period from 1973 to 1982, the medical care CPI component increased at a 10.1 percent annual rate, just slightly faster than the 9.0 percent rate for All Items. Since 1980, medical care prices have risen at a 6.6 percent rate, over one and one-half times as fast as the 3.8 percent rate for all items. In the 1990s, medical care prices have increased at a 4.9 percent rate, over one and three-fourths times as fast as the 2.7 percent rate for all items. From 1996 to 1998, the rate of increase for medical prices slowed to a 3.0 percent annual rate as the savings from managed health care were realized.

After pushing inflation rates from 1973 to 1982, energy price inflation moderated until 1999. On average, energy prices have increased at just a 0.4 percent annual rate from 1982 to 1999.

The world oil glut of the mid-1980s was responsible for some of the low average rate of increase. From 1986 to 1990, energy prices rose at a 3.7 percent rate. After the Persian Gulf war, energy prices rose at an average rate of 1.3 percent until the Asian currency crisis led to a decline in world energy demand and prices fell by 7.7 percent in 1998. After the world economy stabilized and began growing again, energy demand rebounded but production lagged behind as producers tried to make up for the heavy losses recently incurred. With demand moving forward and supply slow to respond, energy prices rebounded by 3.6 percent in 1999 and were up at an 27 percent annual rate for the six-month period ending in June 2000 with gasoline prices up at a 46 percent annual rate.

**Michigan Prices**

During the 1990s, the increase in the Detroit CPI was at the same 2.7 percent rate as the U.S. CPI. The Detroit CMSA Consumer Price Index measures price changes sampled in Southeast Michigan.



Source: Bureau of Labor Statistics, U.S. Department of Labor

Over the past decade, the movements in major components of the Detroit CPI have been similar to the national trends. As shown in the graph above, the differences in inflation rates are 0.3 percentage points or less. The most dramatic difference in the

component inflation rates is energy. In this case, the 0.5 percent rate for the U.S. was over three times that observed in the Detroit area. As of June 2000, U.S. energy prices are up 21 percent from one year ago, while in Detroit the energy component has increased 31 percent, with gasoline prices up 67 percent.

In the preceding decade (1980 to 1990), the Detroit inflation rate was 0.5 of a percentage point per year less than for the U.S. Most of the components had lower average inflation rates in Detroit compared to the nation. However, over the 1980s, energy prices in Detroit grew at an average 0.4 of a percentage point per year faster than nationwide.

### **Michigan Tax Law**

Several Michigan tax laws are indexed to changes in the CPI to protect tax breaks from being eroded by inflation. Most notably, both a property's taxable value and the Headlee millage rollback use inflation to limit property tax increases not approved by voters. Taxable values are allowed to increase by the rate of inflation or five percent, whichever is lower. Also, the individual income tax personal exemption and the pension and senior dividend, interest, and capital gain exemption amounts are increased yearly by the inflation rate. Colleges and universities must keep tuition and fee increases below the previous calendar inflation rate for their students to qualify for the tuition tax credit.

### **Producer Price Index**

Another measure of inflation is the Producer Price Index (PPI) which measures the selling prices received by producers of goods and services. In contrast to the CPI, the PPI measures price changes from the seller's perspective. The PPI is used as an economic indicator since it measures price changes before the retail level. Other uses include deflating other economic data and commodity pricing contracts.

The PPI consists of three main indexes covering the stages of production. From 1990 to 1999, the PPI for *crude materials* declined at an average annual rate of 1.1 percent. Over this same

period, the PPI for *intermediate materials* rose at a 0.8 percent rate, while the PPI for *finished goods* increased at a 1.2 percent rate.

### **Employment Cost Index**

The Employment Cost Index measures changes in total compensation costs (wages and benefits) for the economy except for agriculture, the self-employed, and the Federal government. The Index reports values for two sub-components of compensation: wages and salaries, and benefits. The Index is reported on a quarterly basis.

Overall compensation for civilian workers during the 1990s (1990 to 1999) increased at a 3.3 percent annual rate. This is down slightly from the 4.4 percent rate of growth reported from 1981 to 1990. During the 1990s benefits have grown at a slightly faster 3.5 percent rate, compared to wages and salaries. Comparing increases in wages and benefits over each half of the decade presents a contrast in movements. In the first half of the decade (1990 to 1995), benefits increased at a 4.2 percent rate compared to the 3.0 percent rate shown for wages. Since 1995, the growth in benefit costs slowed to a 2.5 percent rate as the increased use of managed health care helped hold down spending on benefits, while wages and salaries have grown at a 3.6 percent rate since 1995.

# Consumer Spending

## Overview

Consumer spending plays a major role in the strength of the U.S. economy, representing two-thirds of GDP. U.S. consumer spending reflects the standard of living enjoyed by its citizens. With strong growth in income and wealth, consumer confidence at or near record levels, and readily available credit, consumers have driven U.S. economic growth by purchasing goods at record levels. Michigan particularly benefited from record sales of durable goods and light vehicles in 1999. With continuing income growth and strong labor markets, consumer spending continues to be a major part of the continued economic expansion.

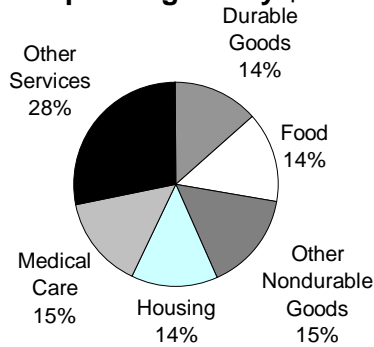
## National Spending Data

National real (inflation-adjusted) personal consumption expenditures were \$5,983.6 billion in 1999, an increase of 5.3 percent from the prior year. However, in the 1990s, real personal consumption expenditures have not grown as fast as in previous decades. Personal consumption expenditures grew at an annual average rate of 3.3 percent in the 1990s, slower than the 1980s annual average growth rate of 3.6 percent and the 1970s annual average growth rate of 3.7 percent.

Services were the largest component of personal consumption expenditures at \$3,400.1 billion. Medical care and housing are the two largest service expenditures at \$877 billion and \$826 billion, respectively. Nondurable goods expenditures totaled \$1,776.1 billion with food purchases the largest part at \$852 billion. Durable good purchases were \$815.7 billion in 1999. Furniture and household equipment was the largest component of durable goods purchases at \$342 billion followed by motor vehicles and parts at \$318 billion.



## Consumer Spending Nearly \$6 Trillion



Source: Bureau of Economic Analysis

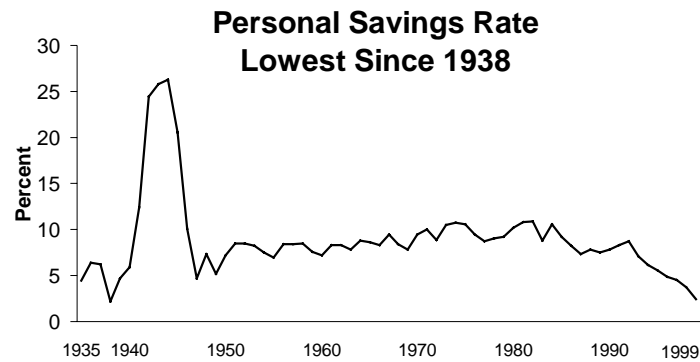
### Factors Affecting Consumer Spending

Stock market gains have been one of the main reasons consumer spending has been strong these past few years. Consumers have enjoyed increases in wealth from increased stock prices. The Dow Jones industrial average increased at an annual average of 16 percent from 1990 to 1999, and at an annual average of 24 percent from 1995 to 1999. Recent large increases in income tax revenue provide evidence of Michigan residents receiving capital gains from the stock market.

Consumer confidence as measured by the University of Michigan's Index of Consumer Sentiment reached record levels at the beginning of 2000. Over the 1990s consumer confidence has surged as the economy came out of the early 1990s recession. Because of strong employment, consumers felt confident they could sustain a high level of spending. The recent slowdown in the economy has caused consumer confidence to fall.

The decline of the personal savings rate is another factor that may be driving increasing consumer spending the past few years. As measured by the U.S. Department of Commerce, the personal savings rate is defined as annual personal savings as a percentage of disposable income. During the 1990s, the personal savings rate exhibited a steady decline from 7.8 percent in 1990 to 2.4 percent in 1999. Additionally, the 1999 personal savings rate

is at its lowest since 1938. For the beginning months of 2000, the personal savings rate has been between 0 and 1 percent.



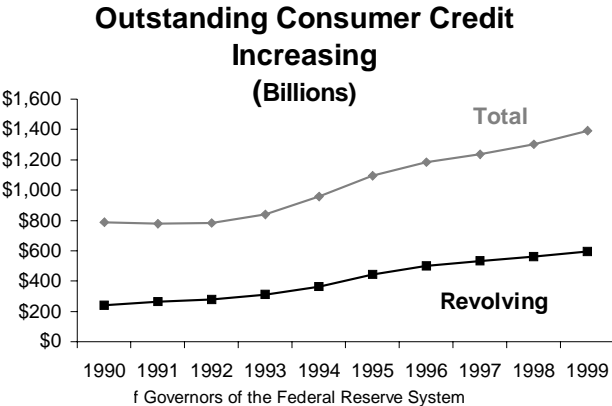
Source: Bureau of Economic Analysis

Lower interest rates in the mid-1990s have allowed consumers to refinance mortgages with lower payments, freeing up money to finance consumer spending. In 1998, the refinancing share of mortgage applications was 50 percent, the second highest share in the 1990s next to the 1993 mark of 55 percent. As interest rates have increased in 1999 and 2000, the refinancing share has decreased. While the refinancing share of mortgage applications was still high at 36 percent, it still represents a sharp decline from 1998.

Low inflation has also increased consumer purchasing power. The Fed is credited with keeping inflation at low levels throughout the 1990s. In the late 1970s and early 1980s high inflation curtailed economic growth by decreasing consumer purchasing power. (For further discussion see the Prices and Inflation chapter.) Strong income growth coupled with low inflation will result in increased purchasing power and continued robust consumer spending.

Increased amounts of credit available to consumers have allowed spending to grow. In December 1999 total consumer credit outstanding was \$1,393.7 billion. Revolving credit outstanding comprised \$595.6 billion of the total. From 1990 to 1999, total consumer credit outstanding grew at an annual average rate of 6.5 percent. More prominently, revolving credit

outstanding grew at an annual average rate of 10.7 percent over the same time period.



**Michigan Statistics**

Michigan's strong economy has helped fuel consumer spending in the state. Strong job growth has propelled Michigan's unemployment rate below the U.S. average the past few years. (See Unemployment chapter.) Additionally, Michigan autoworkers received record profit-sharing checks in 1999, which was a bonus for Michigan consumer spending.

Total 1999 Michigan retail sales are estimated to be over \$104 billion. Automotive sales comprise the largest share of total retail sales at 28 percent while general merchandise sales comprise 16 percent of overall retail sales. Over the past ten years, Michigan total retail sales have increased at an annual average of 5.4 percent.

The vibrant health of the Michigan economy is also reflected in sales tax collections, which are the primary source of funds used to support K-12 public education and a major funding source for local governments. From FY 1995 to FY 1999 sales tax collections grew at an annual average rate of 4.8 percent (FY 1995 is the first full year of the 6 percent state sales tax). Even though most services are not taxable, sales tax collections do provide a measure of economic activity.

## **Consumer Spending Data**

The Consumer Expenditure Survey measures consumption patterns of households to determine amounts spent on various items. Nationally for all households in 1998, the latest data available, expenditures on housing comprised the largest part of total expenditures at 33.0 percent. Transportation expenditures were next at 18.6 percent, followed by food at 13.5 percent.

When comparing households of different income levels, the percentage spent on items may differ significantly. One breakdown compiled by the Consumer Expenditure Survey separates households into quintiles by income. For the lowest quintile, housing expenditures were the largest at 37.1 percent, with food expenditures next at 16.5 percent of total expenditures. For the highest income quintile, 30.2 percent of total expenditures were housing related while transportation expenditures were second at 17.7 percent of total expenditures.

# Population

Michigan's population is nearing the 10 million mark. According to the U.S. Census Bureau, an estimated 9,938,400 people resided in Michigan in April 2000. This represents a 6.9 percent increase over 1990, and an 11.9 percent increase over 1970. The population growth of 643,100 between 1990 and 2000 exceeded the growth of the 1970s and 1980s combined. Michigan's recent population gains are attributable to natural gains (births exceeding deaths) and a significant reduction in migration from the state.

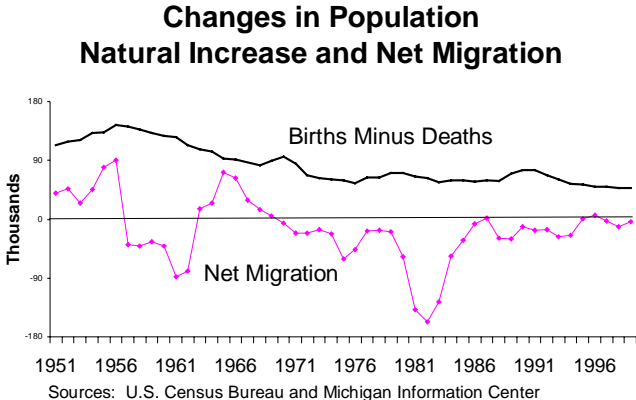
The overall population of the U.S. was 281,421,900 in April 2000, representing a 13.2 percent increase over 1990, and a 38.4 percent increase over 1970. Hence, Michigan's share of the U.S. population fell from 4.4 percent in 1970 to 3.7 percent in 1990. In April 2000, Michigan accounted for 3.5 percent of all U.S. residents. Despite this trend, Michigan remains the eighth most populous state, after California, Texas, New York, Florida, Illinois, Pennsylvania, and Ohio.

## **Recent U.S. and Michigan Demographic Trends**

Smaller families and continued migration to warmer climates have kept Michigan's annual population growth below one percent in the 1990s. Smaller families mean that population growth due to natural causes (births minus deaths) has also slowed. Population growth attributable to natural causes averaged 56,700 people per year between 1990 and 1999. During the 1950s, births in Michigan exceeded deaths by an average of 128,000 people per year, and in the 1960s by an average of 100,900 per year. By the 1980s, the rate of natural increase had fallen to an average annual increase of 61,900 people per year. In 1999, births in Michigan exceeded deaths by only 48,000.

Between 1990 and 1999, the net migration loss of population in Michigan slowed to an annual average of 21,560 people. This represents a substantial reduction in the rate of out-migration from recent decades. During the 1970s, Michigan experienced a net migration loss of 30,000 per year. In the early 1980s, the sharp

economic downturn in Michigan led to a higher rate of out-migration resulting in a population loss due to net migration of 58,790 per year.<sup>1</sup>



**Age Distribution and the Workforce**

Michigan’s population, like that of the rest of the nation, is growing older. For the U.S., the median age was 28.0 in 1970, 30.0 in 1980, 32.8 in 1990, and 35.5 in 1999. For Michigan, the median age is slightly younger than the U.S. average. Michigan’s median age was 26.3 in 1970, 28.8 in 1980, 32.5 in 1990, and 35.2 in 1999.

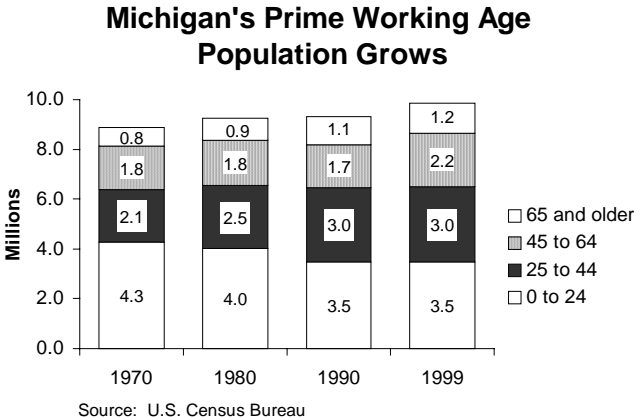
The percentage of Michigan’s population that is 65 or older has increased from 8.4 percent in 1970 to 12.4 percent in 1999. The rate of growth of the over-65 population has slowed in the 1990s, growing at a 1.1 percent annual rate between 1990 and 1999, and just 0.1 percent between 1998 and 1999. This compares with a 2.0 percent annual growth rate between 1970 and 1990. The low birth and immigration rates of the Great Depression and World War II eras account for the slower growth.

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<sup>1</sup> Michigan Department of Management and Budget, Michigan Information Center, *Michigan Population Update*, December 1996, Vol. 4(4).

From 1970 to 1999, Michigan's prime labor force age groups, defined as people ages 25 to 64, increased 1.3 million (34.0 percent) to 5.2 million, while Michigan's overall population increased only 11.1 percent. This increase in the prime labor force age groups, combined with higher labor force participation rates, has caused Michigan's workforce to grow substantially. Michigan's workforce grew from 3.8 million in 1970 to 4.6 million in 1990 and to 5.1 million in 1999, the largest workforce in Michigan's history. In 1970, 42.8 percent of Michigan's population was in the labor force. By 1999, 52.1 percent of Michigan's population was in the labor force.

The 18 to 24 year old age group decreased from 1,257,800 people in 1980, to 1,008,200 in 1990, and to just 927,900 in 1999. Many people in this age group have either just entered the workforce or are preparing to enter the workforce soon. The shrinking number of people in this age group has contributed to the tight labor market Michigan has experienced in the late 1990s.



**Counties, Metropolitan Areas, and Cities**

Between 1990 and 1999, 71 Michigan counties posted net population gains. The fastest growing counties were Livingston (31.0 percent), Otsego (26.5), Keweenaw (25.9), Benzie (25.1), and Lake (18.3). Oakland County saw the largest increase in

residents (96,400), followed by Macomb (74,700), and Kent (49,800).

Ten counties experienced a net loss in residents: Iosco (14.2 percent), Ontonagon (13.4), Marquette (11.5), Gogebic (5.6), Iron (2.7), Bay (2.0), Menominee (1.9), Saginaw (1.3), Berrien (1.0), and Wayne (0.2). The counties losing the largest number of residents were Marquette (8,100), Wayne (5,200), and Iosco (4,300). The large declines in Iosco and Marquette Counties were primarily due to the closings of Wurtsmith Air Force Base (Iosco) and K.I. Sawyer Air Force Base (Marquette). Two counties, Alpena and Houghton, essentially experienced no change in population during the 1990s.

All metropolitan areas except Benton Harbor experienced population gains from 1990 to 1998. Ann Arbor experienced the fastest growth at 11.8 percent, followed by Grand Rapids-Muskegon-Holland (10.7), Detroit (4.9), and Jackson (4.3).

Although Michigan's metropolitan areas generally increased in size, the population of four of Michigan's five largest cities has been decreasing. Between 1990 and 1998, Detroit lost an estimated 57,800 residents (5.6 percent), while Flint lost 9,300 (6.6 percent), Grand Rapids lost 3,700 (2.0 percent), and Warren 2,400 (1.7 percent). Recent estimates indicate that Michigan's fifth largest city, Lansing, has had a stable population since 1990.

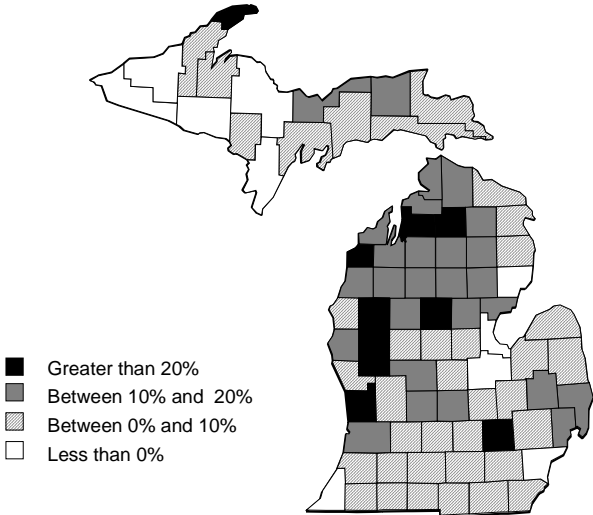
In percentage terms, the cities with the largest percentage gains between 1990 and 1998 were South Lyon (41.0), followed by Novi (35.6), Wixom (28.4), and Petoskey (26.5). The cities gaining the most residents between 1990 and 1998 were Novi (11,800), Sterling Heights (6,500), Troy (6,400), and Rochester Hills (5,600).

Almost all of Michigan's population growth during the 1990s is reflected in an increase in the number of residents living in townships. Between 1990 and 1998, the number of Michigan residents living in townships increased by 518,400, 98.8 percent of the total increase in Michigan's population for that period. In 1998, 44.4 percent of Michigan residents lived in a township, up from 41.3 percent in 1990. Eight of the ten townships with the largest increase in residents since 1990 are located in Macomb, Oakland, and Wayne Counties, suggesting that the population of southeast Michigan continues to expand away from Detroit and its



older suburbs. Macomb Township (18,900), Canton Township (18,200), Shelby Charter Township (15,400), and Clinton Township (12,000) all experienced a larger increase in residents between 1990 and 1998 than Novi, the city with the largest increase.

**Michigan Population Change  
1990-1999**



**Race and Ethnicity**

Like the rest of the nation, Michigan is becoming more racially diverse. The 1970 Census classified Michigan’s population as follows: 88.3 percent White, 11.2 percent Black, and 0.6 percent of the population was classified into other categories. By 1998, approximately 83.5 percent of Michigan’s residents were classified as White, 14.3 percent as Black, 1.6 percent as Asian or Pacific Islander, and 0.6 percent as American Indian.

Compared to the U.S., Michigan has a slightly larger White and Black population in percentage terms, and a smaller American Indian and Asian and Pacific Islander population. For the U.S., 82.5 percent of the population was classified as White in 1998, 12.7 percent Black, 0.9 percent American Indian, and 3.9 percent Asian and Pacific Islander. In Michigan and the U.S., the

Asian and Pacific Islanders category represented the fastest growing segment of the population.

The Census Bureau collects data on Americans (both White and non-White) who are of Hispanic descent. For the entire U.S., 11.2 percent of residents are of Hispanic descent while for Michigan, only 2.7 percent are of Hispanic descent. The Hispanic population has been growing dramatically both in Michigan and in the U.S. as a whole. Between 1990 and 1998, the Hispanic population grew 30.8 percent in Michigan and 35.2 percent for the U.S. as a whole. According to the U.S. Census Bureau's projections, by 2010 the Hispanic population will have become the largest minority population in the U.S.

Southeastern Michigan is also home to the largest concentration of Arab Americans in the U.S. Estimates prepared by Zogby International give Macomb County the highest concentration, 6.2 percent of resident population based on the 1990 Census, among the 20 counties in the U.S. with the largest Arab American populations.<sup>2</sup> Wayne (5.2 percent) and Oakland Counties (5.0 percent) have the second and third highest concentrations of Arab Americans.

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<sup>2</sup> Estimates prepared by Zogby International were obtained at the Web site of the Arab American Institute, [www.aaiusa.org](http://www.aaiusa.org). County population estimates were obtained from the U.S. Census Bureau. Concentration percentages were calculated by the Office of Revenue and Tax Analysis, Michigan Department of Treasury.

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## **Special Topics**

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# Diversity and Stability

## Introduction

Michigan's economy has become increasingly more diversified and better equipped to compete in the global economy. With these changes, Michigan's economy has become increasingly stable, better equipped to withstand national economic downturns and has improved its prospects for growth. Recent studies by three independent groups of economic researchers bear out Michigan's improved position.<sup>3</sup>

## Michigan's Economy More Diversified

Michigan's reduced reliance on the manufacturing sector and the accompanying greater importance of the state's services sector have played key roles in heightening Michigan's economic diversification. The shift has been dramatic. Anderson Economic Group (AEG) notes durable manufacturing's share of Michigan's employment has been cut in half since the early 1970s, while services' share of employment has doubled.

Economy.com's analysis also found that Michigan's economy has become increasingly more diversified over the past 30 years. Comparing the state's mix of industries against the nation's as a whole, Economy.com found that Michigan's economy has become more like the diverse U.S. economy between 1970 and 1999. Michigan's economic diversity rose from 80 percent to 94 percent of the U.S. state median. (See graph on next page.)

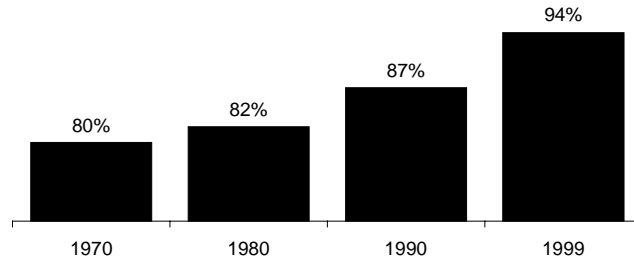
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<sup>3</sup> Patrick L. Anderson, Ian Clemens, and Robert Kleiman (Anderson Economic Group). *Michigan Economic Diversification Study*. July 19, 1999.

Mark Zandi (Economy.com). *The Michigan Economy in the Next Recession*. August 2000.

Abel Feinstein, George A. Fulton, and Donald Grimes (Institute of Labor and Industrial Relations, University of Michigan). *Employment Stability Analysis for the Michigan Economy*. August 2000.

## Michigan Approaches U.S. Median Diversity Index Gap Narrows



Source: Michigan as a Percent of U.S. State Median, Economy.com Diversity Index

Michigan's reliance on the automobile industry in particular has declined substantially. Michigan's economy has become less reliant upon the traditionally cyclical automobile industry in terms of gross product, employment, and income. Over the past 20 years, Michigan's reliance on automobile-related employment has been cut in half according to Economy.com.

Changes in the automobile industry have bolstered the industry's and Michigan's economic stability. Economy.com notes that an increasingly larger share of Michigan's automobile industry employment is managerial and professional. More stable through the business cycle, managerial and professional positions comprise a larger share of Michigan automobile sector employment than they did even 10 years ago. Over the past 10 years, these white collar positions' share of Michigan automobile sector employment has risen from 16 percent to 22 percent.

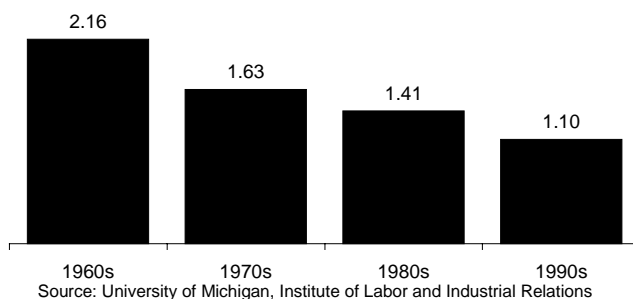
Improved vehicle demand and supply management will also help the automobile industry better weather an economic downturn, Economy.com notes. Leasing has helped with demand management. Lessees must make a leasing/buying decision at the end of their lease, regardless of economic conditions. In this way, a downturn's impact would be softened. On the supply side, improved information, transportation, and inventory management has substantially reduced automobile inventories relative to sales. As a result, the industry is now substantially less prone to inventory swings.

## Michigan's Economy More Stable

Increased diversification has made Michigan's economy increasingly stable. The Institute of Labor and Industrial Relations (ILIR) at the University of Michigan finds that Michigan's employment growth has become increasingly stable in each of the past three decades. Since the 1960s, Michigan's employment variability has been cut in half. As a result, Michigan's employment in the 1990s was as stable as that of the nation as a whole.

ILIR adapts a stability/risk measurement used in financial analysis (beta measure) to analyze the stability of Michigan's employment growth relative to total U.S. employment. Under beta analysis, a beta measure of 1.0 indicates that the variability of Michigan's employment growth matches that of the nation as a whole. The higher the beta measure, the more volatile employment growth. Conversely, the lower the measure the less volatile employment is. Between the 1960s and 1990s, Michigan's employment variability has fallen from a beta measure exceeding 2.0 to a measure not statistically different from 1.0.

### Michigan Economy Increasingly Stable



The shift from more cyclical industries and towards less cyclical ones has played a key role in increasing Michigan's economic stability. AEG finds that Michigan's shift away from the more cyclical durable manufacturing sector and toward the less

cyclical services sector has played a key role in increasing Michigan's economic stability.

Adapting portfolio theory analysis, AEG finds that Michigan's industrial portfolio has entailed increasingly less risk over the past 30 years. Compared to the period 1974-84, AEG finds that current expected annual variations in state employment have declined about 10 percent.

Michigan's employment in most major industries has also become more stable. The University of Michigan finds that employment variability declined in 8 of the 11 broad industry groupings between the 1980s and 1990s.

Since the last recession in the early 1990s, Michigan has become better able to cope with an economic downturn. Using its 50-state econometric model, Economy.com modeled a recession more severe than the 1990-91 recession with a correspondingly more severe light vehicle sales decline. Michigan's economy fared substantially better than in the 1990-91 recession in terms of both employment and real personal income impacts in this simulated recession. Economy.com also simulated an economic downturn and assumed a light vehicle sales decline more severe than the 1981-82 recession. Here again, both Michigan's employment and personal income declined substantially less than in the 1981-82 recession.

### **Improved Growth Prospects**

Even as Michigan's economy has become more stable, the state's economic growth relative to the nation has improved. University of Michigan researchers found that Michigan's employment growth lagged national growth by about 2.5 percentage points in the 1960s and 1970s. However, by the 1990s, Michigan's employment growth was only slightly slower than the U.S. as a whole. Furthermore, Michigan's employment growth improved relative to the nation as a whole in 9 of the 11 industries and declined only negligibly in the other two.

Similarly, AEG found that not only is Michigan's industrial portfolio less risky, it also yields a higher expected return as measured by expected employment and earnings growth. Since the period 1974-1984, Michigan's expected annual employment

growth has increased from 1.3 percent to 1.7 percent, about a 25 percent increase in expected returns.

### Michigan Economy Greater Stability and Higher Growth



Source: Approximate percent change, 1974-84 period to 1995-97 period.  
Anderson Economic Group. Michigan Economic Diversification Study, July 1999.

### Conclusion

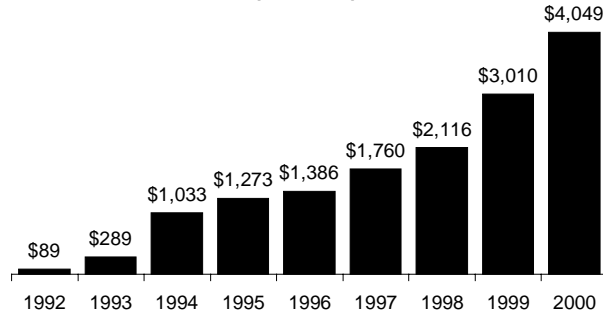
Recent independent economic research confirms that Michigan's economy has become increasingly more diverse over the past several decades. As a result, Michigan's economy has both increased its stability and improved its prospects for growth.



## Major Tax Changes in the 1990s

The 1990s began with Michigan taxpayers asking for tax relief and ended with every major tax rate and base being changed. Two taxes were eliminated and another one is being phased out. The Michigan legislature enacted tax cuts to improve school finance, reduce the tax burden, foster economic development, and limit the growth of state government.

**Michigan Tax Cuts Grow Every Year**  
(Millions)



Source: Office of Revenue and Tax Analysis, MI Dept. of Treasury

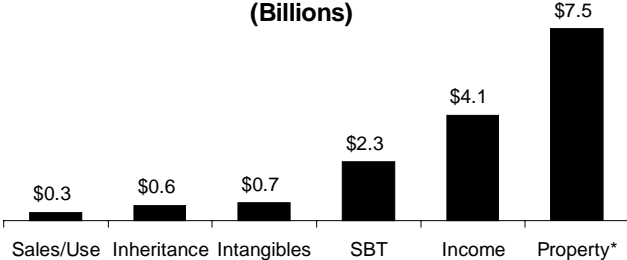
Through FY 2000, the tax cuts enacted in the 1990s have cut state and local taxes by \$15.0 billion. The FY 2000 tax cut is \$4.0 billion. Overall, Michigan's state and local taxes have been cut over 11 percent. In 1990, among the 50 states, Michigan's state and local tax burden as a percent of income ranked 17<sup>th</sup> highest. By 1996, the most recent data available, Michigan ranked 30<sup>th</sup> highest. Michigan's ranking should continue to improve as legislation enacted since 1996 phases in additional tax cuts in the future.

Michigan's state and local tax structure has undergone dramatic changes in the 1990s. Proposal A of 1994 led these changes, cutting school operating property taxes for a net savings of about \$440 million in FY 1995, increasing to over \$2 billion in FY 2000. A more complete explanation of Proposal A appears in the chapter on School Finance Reform.

Property taxes have been cut the most: \$7.5 billion, from school finance reform and the 1992 assessment freeze, followed

by \$4.1 billion in income tax cuts and \$2.3 billion in single business tax reductions through FY 2000. Savings from the elimination of the intangibles and inheritance taxes have totaled another \$1.3 billion. These cuts will continue to grow as additional rate reductions become effective in the future.

**Breakdown of Michigan Tax Cuts  
FY 1990 to FY 2000  
(Billions)**



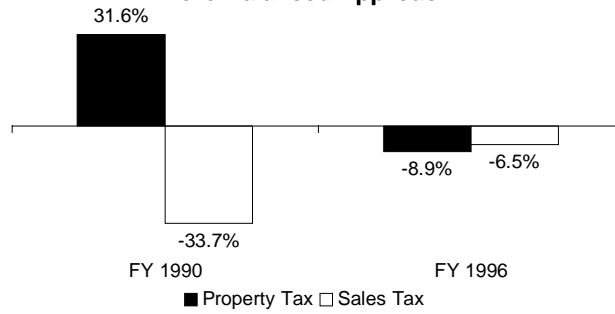
Source: Office of Revenue and Tax Analysis, MI Dept. of Treasury  
\* Net Proposal A Savings and 1992 Assessment Freeze

Both the rate and base of the personal income tax have been reduced several times. The income tax rate has been reduced from 4.6 percent in 1990 to 4.2 percent in 2000 with annual reductions of 0.1 percent to 3.9 percent by 2004. The personal exemption has increased 38 percent, from \$2,100 in 1990 to \$2,900 in 2000, and is now indexed to inflation.

The state's business tax, the single business tax (SBT), has been revamped and is being phased out over 23 years. The apportionment formula, used by multistate firms, has been changed dramatically. Tax relief for small firms has been expanded. Several business taxes have been removed from the SBT tax base. The capital acquisition deduction has been replaced with an investment tax credit.

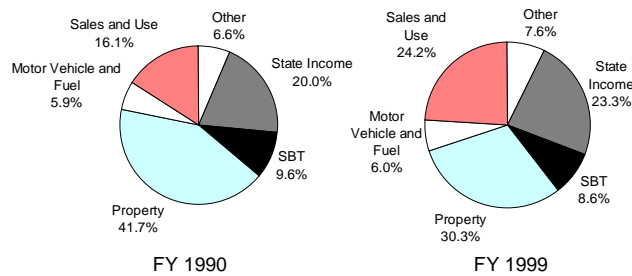
Michigan's state and local tax structure is now more like the national average. Property taxes in Michigan, which were 31.6 percent above the national average in 1990, were 8.9 percent below the national average in 1996; and the sales tax rate, which was 33.7 percent below the national average state and local rate in 1990, was 6.5 percent below the national average rate in 1996.

### Michigan Tax Structure Compared to U.S. Average A More Balanced Approach



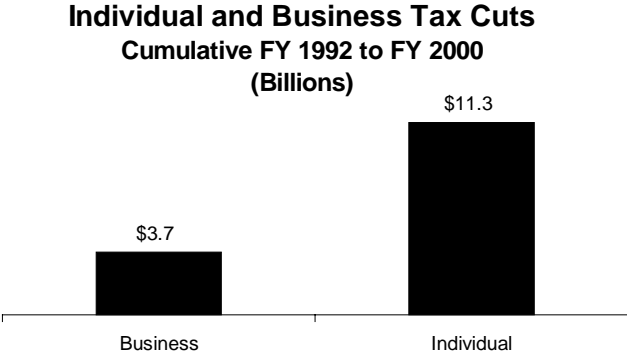
In FY 1990, property taxes made up 41.7 percent of total Michigan state and local taxes. By FY 1999, that percentage had dropped to 30.3 percent. In contrast, the share of Michigan state and local taxes raised by the sales tax increased from 16.1 percent in FY 1990 to 24.2 percent in FY 1999.

### Michigan's State/Local Tax Structure Changing Increased Reliance on Sales and Use Tax Less Reliance on Property Tax



Note: SBT includes insurance company taxes. Local taxes that are included are ad valorem property tax levies, and city income and utility users' tax collections for the calendar year that the fiscal year ends in.

Michigan individuals received most of the benefits of the tax cuts in the 1990s with reductions of over \$11.3 billion compared to job providers receiving \$3.7 billion in tax cuts. On average, Michigan households have saved \$3,000 from the 1990s tax cuts. The balanced tax cuts have put more money in residents' pockets and raised their standard of living, and job providers have been able to keep more of their earnings to invest in growing their businesses and creating jobs. The improved tax climate has helped keep those investments and jobs in Michigan.



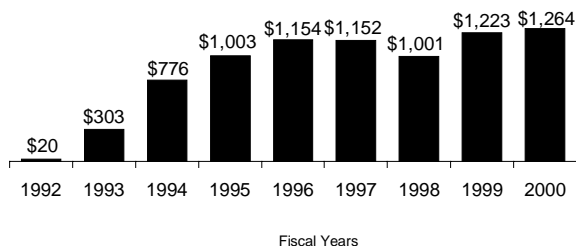
Source: Office of Revenue and Tax Analysis, MI Dept. of Treasury

The tax cut proposals were considered alongside spending proposals and presented in the Governor's Executive Budget. The Legislature enacted these changes with the goals of passing a balanced annual budget, staying within the constitutional revenue limit, and providing tax relief to Michigan's taxpayers.

Managing the impact of the tax cuts was accomplished by phasing them in over several years or deferring their implementation so that they are paid for by growth in revenue from other taxes. Examples of managed tax cuts include the 5-year phase-out of the intangibles tax, the 5-year phase-in of an income tax rate reduction, and the 23-year phase-out of the single business tax. Examples of limiting future growth include caps on property tax assessment increases and indexing many tax provisions to the rate of inflation. Proof of Michigan's management of tax cuts is the accumulation of the \$1.2 billion rainy day fund balance and the large positive balance in the

School Aid Fund during the same time as the tax cuts. (See graphs.)

**Budget Stabilization Fund Balance Grows  
to Over \$1.2 Billion  
(Millions)**



Source: Michigan Department of Management and Budget

Following is a discussion of the changes to each of Michigan's major state taxes.

### **Personal Income Tax**

Legislation tied to Proposal A of 1994 cut the income tax rate from 4.6 percent to 4.4 percent effective May 1, 1994. A five-year cut in the rate to 3.9 percent was passed in 1998. The personal exemption has increased from \$2,100 in 1990 to \$2,900 in 2000, and it will continue to increase because it is now indexed to inflation.

A new exemption for children has been added. For 2000 it will be \$600 for each child under age 19. Legislation approved in 2000 combines the special exemptions for the disabled, increases the exemptions and the senior citizen exemption from \$900 to \$1,800, provides a new \$1,800 exemption for disabled dependents, and increases the personal exemption for dependents from \$1,000 to \$1,500.

The deduction for nongovernment pensions has been increased and indexed to inflation. For 2000 the maximum deduction is now \$34,920 (\$69,840 for a joint return). Because

public pensions were previously exempt, almost all Michigan pension income is now exempt from the income tax.

Senior citizens may now claim a deduction for dividend and interest income. The maximum deduction for 2000, indexed to inflation, is \$7,785 (\$15,570 for a joint return) and now also applies to capital gains income. If a senior citizen has pension income and interest/dividend/capital gains income, the maximum interest/dividend/capital gains deduction is reduced by the pension deduction.

Beginning in 1997, residents of a renaissance zone may claim a deduction for income earned while living in a zone.

Income tax credits have also been expanded. Taxpayers may now claim a 50 percent credit for contributions to homeless shelters, food banks, and food kitchens up to a maximum credit of \$100 for a single filer and \$200 for joint filers. For tax year 1995 only, taxpayers claimed a credit for two percent of their total income tax liability. This credit was known as the Headlee Amendment refund. Legislation tied to Proposal A increased the percentage of rent used to calculate the homestead property tax credit for renters from 17 percent to 20 percent. A 2000 law increased the homestead property tax credit for disabled persons. Students or their parents may now claim a credit for 8 percent of college tuition costs, up to \$375, if the college or university kept tuition and fee increases below the rate of inflation. These income tax changes provided a tax cut of \$4.1 billion through FY 2000 and \$1.1 billion in FY 2000.

Large taxpayers now pay income tax withholding payments in the same manner and using the same schedule as used for federal income tax withholding.

### **Sales and Use Tax**

Legislation tied to Proposal A of 1994 increased the sales and use tax rates from 4 percent to 6 percent, and earmarked the increase to the School Aid Fund. Residential utilities are exempt from the 2-cent increase. The legislation also imposed the use tax on interstate phone calls, excluding WATTS calls and international calls.

The following sales/use tax exemptions were either enacted or expanded: trucks and parts owned by interstate motor carriers, aircraft and parts used to transport passengers or freight, telecommunications equipment, certain items sold from vending machines, coins sold for collection or investment, equipment purchased to perform industrial processing activities for a manufacturer, certain promotional items, church sanctuary construction materials, facilities owned by nonprofit hospitals, sales under \$5,000 by a nonprofit group, a use tax deduction for bad debts, and the portion of a vehicle price returned under the lemon law.

These changes to exemptions provided a tax cut of \$296 million through FY 2000, and \$92 million in FY 2000.

Laws passed in 1999 clarify that the industrial processing exemption is prorated for equipment used only partially for exempt purposes. Large retailers must now remit estimated sales and use tax on the on the 15<sup>th</sup> day and the last day of the month of sale, rather than in the following month.

Starting with tax year 1999, a line was added to the Michigan income tax form where taxpayers can report any use tax liability incurred as a result of mail order or internet purchases. This addition to the income tax form reduces the burden on taxpayers and will increase compliance with the use tax.

## **Property Tax**

In 1990, Michigan's property tax burden was 10<sup>th</sup> highest among all states, nearly 30 percent above the national average. From 1972 to 1993, Michigan voters rejected property tax reform ballot proposals on eight occasions.

A 1991 law froze property tax assessments in 1992 at their 1991 levels, cutting property taxes by an estimated \$238 million in 1992. The consequent large assessment increases in 1993 also triggered numerous Headlee millage rollbacks in 1993, and thus decreased millage rates that year and subsequent years. The one-year assessment freeze turned into a permanent cut in millage rates, cutting property taxes by \$2 billion through FY 2000.

Proposal A of 1994 cut school operating millage rates by 75 percent on homesteads and farms and by 30 percent for other

property. In addition, it limits property tax increases by limiting increases in taxable value to 5 percent or the rate of inflation, whichever is less, until the property is sold. A more complete explanation of Proposal A appears in the chapter on School Finance Reform.

The state has three new property tax abatement programs. Property located in the state's 112 designated renaissance zone areas is exempt from all property taxes, except for debt and school sinking fund millage. At least 85 communities with a designated distressed area may exempt from tax new personal property owned by an eligible business (engaged primarily in manufacturing, mining, research and development, wholesale trade, or office operations). Under the new obsolete property rehabilitation act, 88 designated communities can provide a property tax reduction for the rehabilitation of blighted, functionally obsolete, or environmentally contaminated property. For taxes other than school operating taxes, the community may effectively exempt from tax the increase in value for up to 12 years; the State Treasurer may exempt the increase in value from one-half of school operating taxes for up to six years.

Tax Increment Financing (TIF) programs have been revised in the 1990s. Legislation tied to Proposal A is phasing out the capture of school operating taxes under the state's three TIF laws: the Downtown Development Authority (DDA) Act, the Tax Increment Finance Authority (TIFA) Act, and the Local Development Financing (LDF) Act. A new law amends the LDF Act to allow the capture of one-half of school operating taxes for up to 15 years for up to 10 designated high-technology parks. The Brownfield Redevelopment Act allows the capture of school and nonschool taxes to pay for environmental clean-up costs. The Act was expanded in 2000 to allow school and nonschool tax capture to pay for infrastructure costs for blighted, functionally obsolete, or contaminated property in 88 designated communities.

### **Single Business Tax**

The SBT was enacted in 1975 to bring revenue stability, simplicity, and fairness to Michigan's business taxes. The first objective was achieved but changes over the past 25 years have



made the tax much more complicated. These changes eliminated or cut the tax for tens of thousands of small businesses and dramatically reduced the tax on many Michigan-based multistate firms. The changes to the SBT provided a tax cut of \$2.33 billion through FY 2000 and \$663 million in FY 2000.

Despite the tax cuts, the tax remained very unpopular with much of the business community, which never accepted the premise that it was fair for firms to pay the SBT even in years when they had no net income.

A 1999 law phases out the SBT over 23 years by reducing the rate by 0.1 percentage points per year beginning in 1999, except for years in which the Budget Stabilization Fund balance is under \$250 million.

The small business credit and alternate tax allow small businesses to pay a tax based on the owners' earnings, rather than the SBT's value-added tax base. The alternate tax rate has been cut from 4 percent to 2 percent. The provisions' limit on a firm's gross receipts has been increased to \$10 million. The limit on an owner's earnings has been increased from \$95,000 to \$115,000.

The gross receipts threshold has been increased from \$40,000 to \$250,000, which exempted 45,000 firms from the tax.

The SBT tax base no longer includes unemployment insurance, worker's compensation, and Social Security (FICA) payments. Several amounts have been excluded from the insurance company gross receipts tax.

The SBT requires multistate firms to report their national value-added tax base and to use an apportionment formula to apportion the national tax base to Michigan. From 1976-1991, the SBT used an equally weighted three-factor apportionment formula, 1/3-1/3-1/3, using a firm's Michigan share of sales, payroll, and property, respectively. Law changes in 1991, 1995, and 1999 changed the apportionment formula to 90-5-5 (sales, payroll, and property).

As enacted, the SBT provided a capital acquisition deduction (CAD) instead of an allowance for depreciation to promote investment in Michigan. A 1995 law limited the CAD to investments in Michigan (except for mobile property) and required multistate firms to multiply their Michigan investment by their

apportionment formula. The Michigan Court of Claims has ruled that this version of the CAD discriminated against interstate commerce. The case is now on appeal in the Court of Appeals. For all firms, for tax years beginning after 1999, a 1999 law replaces the CAD with a Michigan investment tax credit (ITC).

A 1999 law expanded the SBT tax base of foreign companies doing business in Michigan and clarifies that foreign firms doing business in Michigan are subject to tax even if they are not subject to U.S. corporate income tax.

SBT credits have also been expanded. For firms that would otherwise locate outside Michigan, the Michigan Economic Growth Authority (MEGA) may approve a credit for up to 20 years for the income tax paid each year by the firms' new employees and for the SBT attributable to their new investment and employees. Laws passed in 2000 allow MEGA to approve credits for high-technology firms and for firms that are retaining at least 500 jobs and making new investment in Michigan.

A 10 percent credit is now available for new investment on environmentally contaminated property included in a Brownfield plan. A 2000 law provides a revised Brownfield Credit, with a greater maximum, and adds investment on blighted and functionally obsolete property in 88 communities. A credit is now available for tax attributable to business activity in a renaissance zone.

Employers are now eligible for a youth apprentice credit of up to \$2,000 per high school student per year. The credit is for 50 percent of salaries and fringe benefits paid to apprentices and 100 percent of classroom instruction and related expenses.

### **Intangibles Tax**

The Michigan intangibles tax was phased out over a four-year period, starting in 1994. The tax was repealed as of January 1, 1998.

This action provided a tax cut of \$712 million through FY 2000, and \$206 million in FY 2000.

## **Inheritance Tax**

A 1993 law repealed Michigan's inheritance tax for persons who died after September 30, 1993, and replaced the tax with an estate tax. The Michigan estate tax is a "pick-up" tax, which is the maximum amount of state death tax credit allowed on the federal estate tax return. The state pick-up tax does not increase a taxpayer's total tax liability; it simply allows a portion of the federal estate tax to be paid to state government instead of the federal government. Note that if the federal government reduces or eliminates its estate tax, it will automatically reduce state pick-up tax revenues which were \$177 million in FY 2000. The Michigan estate tax law now conforms to changes in federal law from the Taxpayer Relief Act (TRA) of 1997. The TRA of 1997 raised the federal estate tax exemption.

Michigan joins 32 other states with a pick-up tax; only 17 states levy additional estate or inheritance taxes.

This change provided a tax cut of \$605 million through FY 2000 and \$102 million in FY 2000.

## **Motor Fuel Taxes**

Public Act 83 of 1997 increased the gasoline tax from 15 cents per gallon to 19 cents per gallon but did not increase the diesel tax rate. This change provided about \$200 million a year in additional funds for road construction and maintenance. The gasoline tax rate had not changed since 1984.

## School Finance Reform

In March 1994, the voters of Michigan approved the most significant tax reform in the state's history. Proposal A of 1994 replaced most local property taxes levied for school operating purposes with a variety of consumption tax levies and a new state education property tax. The state collects the new revenue and deposits it into the School Aid Fund for redistribution to local school districts.

Proposal A's objectives were two-fold. First, the new tax system provided substantial property tax relief and a cut in the income tax rate. Before Proposal A, Michigan residents paid nearly one-third more property taxes (7<sup>th</sup> highest among all states) compared to the average U.S. property taxpayer. Second, the new foundation grant funding system reduced substantial per-pupil funding disparities across school districts. Before 1994, most school operating budgets relied heavily on local property taxes. As a result, per-pupil funding levels were very uneven as they were related directly to the property wealth of the local school district.

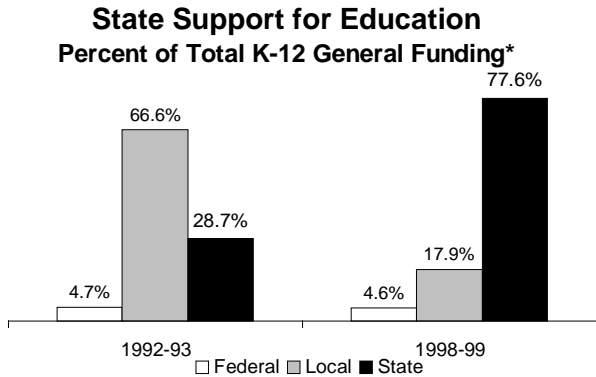
### **March 1994 Vote**

Public Act 145 of 1993 eliminated approximately \$7 billion of local property taxes levied for K-12 and Intermediate School District operating purposes. To replace these revenues, voters were presented with a choice between a sales tax increase or an income tax increase. Both plans made a new distinction between homestead (primary residence) and nonhomestead (vacation home or business) property and taxed the two classes of property at different rates. Under the Ballot Plan (a "yes" vote on Proposal A), both homestead and nonhomestead property would be subject to a 6-mill state education tax; nonhomestead property would also be subject to an additional 18-mill tax collected by the local school district. Under the Statutory Plan (a "no" vote), only nonhomestead property would be subject to a 12-mill state education tax; all property owners would pay a 12-mill tax to the

local school district. Voters approved Proposal A by a 69 percent to 31 percent margin.

**Major Tax Revenues**

Overall, Proposal A shifted the Michigan tax structure away from local property taxes toward state consumption taxes. Excluding the new 6-mill state education tax, all tax increases were levied on consumption. The increased levies took effect soon after Proposal A was enacted. The increase in the sales and use tax and the cigarette tax became effective May 1, 1994. The new real estate transfer tax became effective January 1, 1995. The 6-mill state education tax was first levied in July 1994.



\* Does not include General Fund transfers  
Source: MI Dept. of Education, Bulletin 1011

Because the state supplies much of the revenue for school operating purposes, there has been a significant reduction in the number of millage elections. In 1993, there were 756 separate millage elections for nondebt purposes held across Michigan. By 1997, only 119 nondebt millage elections were held. The significant decline in millage elections is attributable to the limitation on school operating millage rates.

## School Aid Fund

The additional revenue deposited into the School Aid Fund enables the state to provide more funding for local schools. Before Proposal A, the state provided less than one-third (28.7 percent) of total general funding for local schools. General funding excludes revenues for debt or building and site purposes, which are generated locally. After Proposal A, the state now distributes nearly four-fifths (77.6 percent) of total general funding for local schools.

### State School Aid Fund (millions)

<u>Tax Source</u>	<u>FY 1993</u>	<u>FY 1995</u>	<u>FY 1999</u>
Sales and Use	\$1,743	\$3,884	\$4,729
State Education	0	1,065	1,274
Income	0	883	1,848
Tobacco	20	397	394
Liquor	22	22	25
Industrial/Commercial Facilities	52	107	137
Real Estate Transfer	0	91	262
Other Tax Revenues	0	7	20
General Fund Transfer	1,086	665	420
Lottery	428	548	621
Federal Funds	57	63	107
Other Revenues	<u>3</u>	<u>8</u>	<u>113</u>
<b>TOTAL</b>	<b>\$3,411</b>	<b>\$7,738</b>	<b>\$9,950</b>

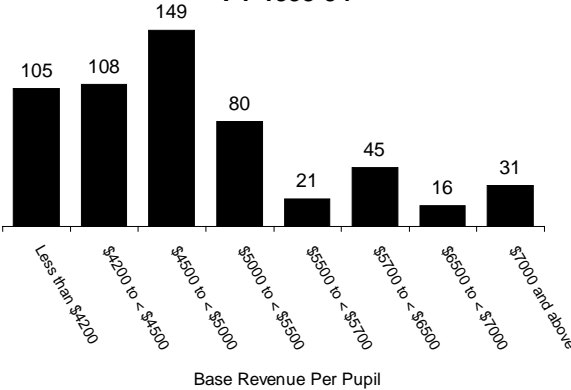
Source: State of Michigan, Comprehensive Annual Financial Report

## Per-Pupil Funding

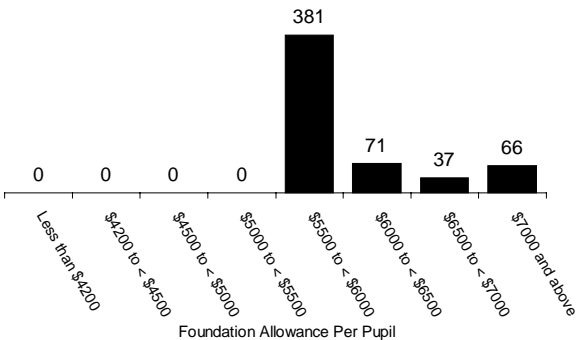
Greater centralization of school funding has reduced funding disparities among local school districts. To improve funding equity across districts, Proposal A implemented a new funding system called the foundation grant system. School funding equity is enhanced through a constitutionally-guaranteed minimum funding

level per student. For the 1999-00 school year, the minimum foundation grant was set at \$5,700 per student.

**Before School Finance Reform  
463 Districts Below \$5,700 Per Pupil  
FY 1993-94**



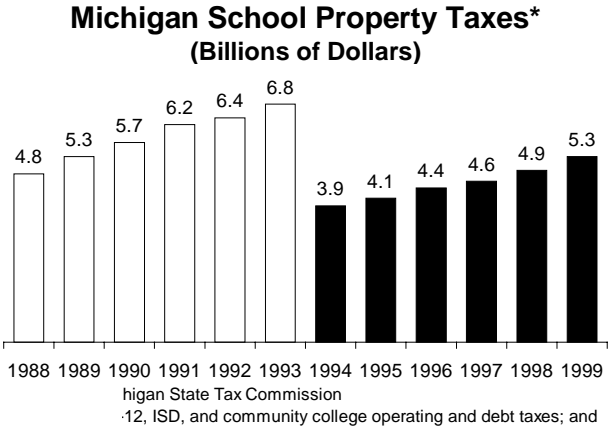
**After School Finance Reform  
No Districts Below \$5,700 Per Pupil  
FY 1999-00**



**Average Statewide Millage Rates**

For property owners, the most noticeable impact of Proposal A was the immediate reduction in property tax school operating millage rates. The average reduction for homestead property was

26 mills, or 76 percent. From 1993 to 1994, the average statewide total millage rate for all property (a weighted average of homestead and nonhomestead property) declined 18.45 mills, a 32.6 percent reduction. In addition, school districts can no longer ask voters for millage increases to support increased operating expenditures. Increases in other local millage rates have partially offset the reduction in school operating millage rates.



**Homestead and Nonhomestead Property**

Proposal A separated property into homestead and nonhomestead classes for tax purposes. Homestead property is property that a taxpayer declares as his or her primary residence. All other property such as businesses or vacation homes are nonhomestead property. Subject to voter approval, non-homestead property is assessed up to 18 additional mills for local K-12 operating purposes. Almost all school districts levy 18 mills on nonhomestead property. If a school district needs additional revenue to maintain its pre-Proposal A funding level, up to 18 additional mills may be levied on homesteads (“hold-harmless” millage). If this revenue is not sufficient, then additional mills may be levied against all property. Only 52 school districts are authorized to levy hold-harmless millage.



## **Taxable Value**

Before Proposal A, property taxes were levied on a property's state equalized value (SEV). State equalized value equals 50 percent of the true cash value of the property. Beginning in calendar year 1995, Michigan property taxes are levied on taxable value. A constitutional amendment requires that the taxable value of a residence or business cannot increase in any one year by more than 5 percent or the rate of inflation, whichever is less (excluding the value of new construction). Therefore, if the true cash value of a property increased by 8 percent, SEV would also increase by 8 percent but the taxable value would only increase by 5 percent or the rate of inflation. When property is sold, the tax base in the following year reverts to SEV and the subsequent annual growth is capped once again.

The cap on taxable value creates an ever-widening gap between SEV (old tax base) and taxable value (new tax base) and results in substantial tax savings. By calendar year 2000, taxable value was approximately \$44 billion (15.4 percent) less than SEV as a result of the cap on taxable value.

Agricultural property's 2000 taxable value is 30.3 percent lower than 2000 SEV. Residential property's taxable value is 18.0 percent lower than SEV. Business property's taxable value is 7.5 percent lower than SEV. As a result, the 2000 business share of the property tax base increased from 29.7 percent of SEV to 32.5 percent of taxable value.

# State Revenue Sharing

## Background on Revenue Sharing

Over \$1.5 billion in state revenue was shared with local governments in FY 1999 and more than \$10 billion in the 1990s. The state revenue sharing program distributes sales tax collected by the State of Michigan to local governments as unrestricted revenue which can be used for police and fire protection, parks and recreation or any other use. The program is specified in the Michigan Constitution and the 1971 State Revenue Sharing Act which authorizes the distribution of funds.

State revenue sharing originated to help local units of government meet the needs of their residents by sharing revenue raised by the state and as a means of compensating local governments for taxes collected at the state level that either were formerly collected at the local level or that preempted local collection of that tax. Prior to the enactment of Public Act 140 of 1971, state shared revenues were distributed to local units of government solely on a per-person basis. The Governor's Economic Report of 1971 proposed several changes for the state revenue sharing program after concluding that a total reliance on a per-capita method of distribution was an "ineffective and inequitable method of distributing this shared revenue." Under the law, a portion of revenue sharing payments were distributed using a "tax effort" formula.

Constitutional revenue sharing is distributed on a per capita basis to cities, villages, and townships. Statutory revenue sharing is distributed by five different formulas discussed in the next section.

Population is a component of every revenue sharing formula except the county inventory reimbursement payment. Population can be viewed as an indicator of service needs: the level of service to be provided being proportional to the number of people served. For the purposes of state revenue sharing, the population of a municipality is determined by the most recent federal decennial Census and then is adjusted by subtracting 50

percent of the number of patients, wards, and convicts confined to public tax-supported institutions in that locality.

Revenue sharing payments are made to municipalities each February, April, June, August, October, and December based on actual statewide sales tax collections for the prior two-month period.

### **Major Highlights From the 1990s**

Changes were made to the payment schedule and tax sources several times in the 1990s. In FY 1997-98 the most important changes made to state revenue sharing were: 1) Total revenue sharing payments were spread more evenly throughout the year and limited to a yearly appropriation enacted by the legislature; 2) income tax, single business tax, and intangibles tax revenues were eliminated as a revenue source for revenue sharing and replaced with an additional statutory earmarking of sales tax revenue; and 3) a bipartisan Revenue Sharing Task Force was created to review the distribution formulas.

The purpose of the Revenue Sharing Task Force was to review the revenue sharing sources and formulas and to make a recommendation to the legislature. In 1998 a criticism of the tax effort formula was that it provided an incentive for local governments to raise taxes because units that raised millage rates received more revenue sharing.

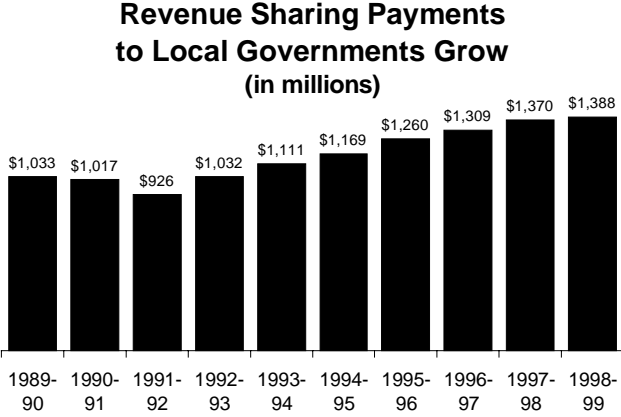
Although the task force did not agree on a revision to revenue sharing, starting in FY 1998-99 the revenue sharing distribution methods were altered by the legislature. The new method of distribution replaces the tax effort formula with a combination of formulas including a taxable value per capita formula, a unit type and population formula, and a yield equalization formula, which is designed to offset variances in taxable property wealth among local units. The changes are phased-in over a 10-year period to help local governments with transition beginning in FY 1998-99. Other changes include freezing Detroit's revenue sharing at \$333.9 million; elimination of the inventory reimbursement payment to cities, villages, and townships, and freezing the county inventory reimbursement at

the fiscal year 1997-98 amount; and an 8 percent per-year growth cap on revenue sharing payments to each city, village, and township. The formula revisions extend through June 30, 2007, at which time the new statutory distributions expire.

To help local governments, the Michigan Department of Treasury created a revenue sharing Web site, which includes actual bimonthly payments from FY 1997-98 to FY 1999-00.<sup>4</sup> The Web site allows auditors and government financial staff to confirm payments. Bimonthly payment projections are also available for FY 2001-02 for governmental staff to aid in development of budgets for the upcoming fiscal year. The estimated payments are based upon projected monthly sales tax collections. The revenue sharing payments are based on actual sales tax receipts and not on projections.

Funding for revenue sharing consists of the following:

- Constitutional – 15 percent of gross collections of the state sales tax at a 4 percent rate.
- Statutory – the lesser of 21.3 percent of gross collections of the state sales tax at a 4 percent rate or the amount appropriated by the legislature.



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<sup>4</sup> [www.treas.state.mi.us/apps/findrevshareinfo.asp](http://www.treas.state.mi.us/apps/findrevshareinfo.asp)

**Projections of State Revenue Sharing**  
 by Type of Local Unit of Government  
 (in millions)

	<b>1999-00</b>		<b>2000-01</b>	
	<b><u>Amount</u></b>	<b><u>Share</u></b>	<b><u>Amount</u></b>	<b><u>Share</u></b>
Counties	\$214.3	15%	\$235.4	15%
Townships	327.0	22%	392.9	25%
Cities	890.2	61%	936.7	58%
Villages	31.0	2%	35.6	2%
<b>TOTAL</b>	<b>\$1,462.5</b>	<b>100%</b>	<b>\$1,600.6</b>	<b>100%</b>

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## **Michigan Industry Sectors**

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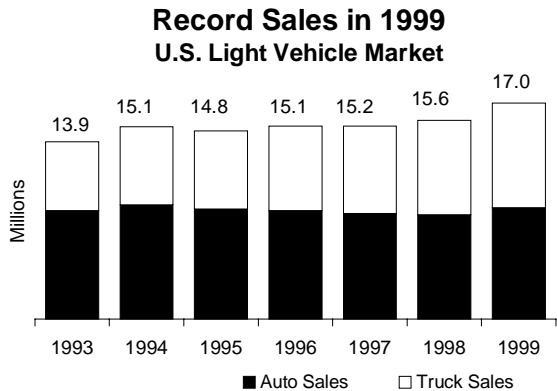
# Motor Vehicle Industry

## Overview

More light vehicles were sold in the U.S. in 1999 than in any other year. A more consolidated industry is taking shape with mergers and acquisitions. Chrysler and Daimler-Benz formed DaimlerChrysler in the largest merger in the industry. Ford acquired Jaguar, Volvo and Land Rover in the past few years. In 1997, U.S. factories produced more light trucks than cars for the first time ever, reflecting the popularity of light trucks. Michigan's tax incentives, skilled labor force, and state-sponsored training programs led to General Motors' first new vehicle plant to be built in the state in over a decade in Lansing. U.S. autoworkers are earning record profit-sharing checks.

## Sales

U.S. light vehicle sales registered a record of 17.0 million units in 1999, surpassing the previous record of 16.0 million units in 1986. Light trucks have led the record sales, growing from 4.6 million units in 1990 to 8.2 million units by 1999, an annual average increase of 6.7 percent.



Source: Automotive News Market Data Book

Car sales have been partially replaced by light trucks. U.S. sales of cars in 1990 were 9.3 million units while 1999 car sales were 8.8 million units, or an annual average decline of 0.7 percent. It is too soon to tell if an increase of 6.9 percent in U.S. car sales from 1998 to 1999 indicates a reversal of this trend.

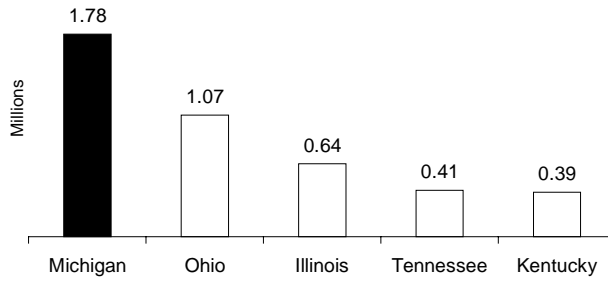
Import sales have decreased since the mid-eighties when imported car sales were 31 percent of the market and imported light truck sales were 20 percent of the market. In 1999, imported car sales were 20 percent of the U.S. market, while imported light truck sales were only 9 percent of the market in 1999. One recent trend in the U.S. light vehicle market is the increase in sales of transplant vehicles. Japanese automakers, partially due to weakness in the yen, have built several factories to produce foreign name plate vehicles in the U.S. In recent years, transplant light truck production has increased due to new factories and heavy demand.

### **Production**

Michigan continues to lead the nation in total light vehicle production. According to the latest state data available, Michigan produced more cars and light trucks than any other state during 1999. At 1.8 million units, Michigan built more cars than the next two highest states combined. This level of production has been accomplished with fewer workers than in the past because of increases in worker productivity made possible by new technologies and capital investments.



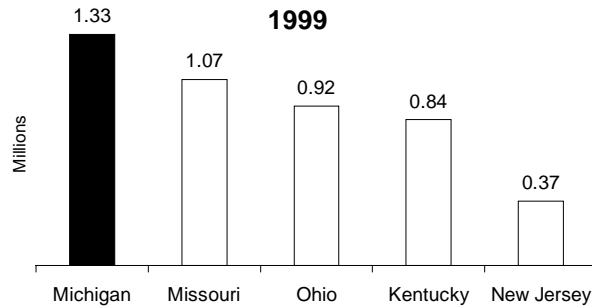
**Michigan's 1999  
Car Production Tops Nation  
More Than Next Two States Combined**



Source: Ward's Automotive Yearbook

Michigan factories produced approximately 1.3 million light trucks in 1999, most in the nation. The next highest state, Missouri, built 1.1 million light trucks in 1999. Light truck production in Michigan was curtailed during the period of 1996 through 1998 due to new model changeovers and business decisions. Michigan light truck production increased 24.8 percent from 1998 to 1999.

**Michigan Leading Producer of  
Light Trucks  
1999**



Source: Ward's Automotive Yearbook

U.S. factories now build more light trucks than cars. In 1999, there were 7.4 million light trucks built in the U.S. compared to 5.6 million cars. The popularity of light trucks became apparent in the

mid-1980s (see Table A-23) as gas prices dropped. By 1997 light truck production overtook car production.

World light vehicle production reached an all-time high with 56.3 million units produced worldwide. World production has slowly increased since 1990 at an annual average rate of 1.2 percent. U.S. production as a percentage of world production has risen through the 1990s, from 20 percent in 1990 to 23 percent in 1999. However, the U.S. percentage has dipped from the 1960s and 1970s when the U.S. was the dominant producer.

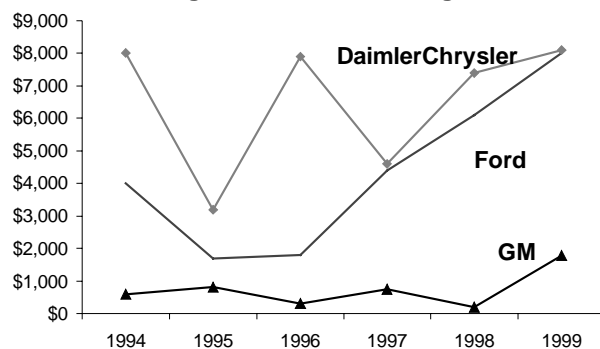
In 1999, North American light vehicle production plants were operating above 100 percent capacity. Capacity is the amount of total vehicles that can be built if labor and capital are optimally used. Because of increased sales for light trucks, many plants are using overtime to help meet demand.

With the world automotive industry capable of building more vehicles than demanded, many automotive companies are consolidating or acquiring smaller companies to reduce costs through higher efficiencies. The recent merger of Chrysler and Daimler-Benz into DaimlerChrysler magnified the importance of being able to compete globally. Ford Motor Company's acquisition of Jaguar, Volvo, and Land Rover is an example of how auto companies are also expanding to compete in world markets.

### **Profit Sharing Bonuses**

As a part of their negotiated contracts, U.S. autoworkers are entitled to profit-sharing checks from their respective employers. Just as 1999 was a record year for sales, autoworkers received record payouts from profit sharing. DaimlerChrysler employees received a record \$8,100 per autoworker from the 1999 production year. Ford autoworkers received \$8,000 per autoworker besting their previous record from the 1998 production year by nearly \$2,000. General Motors employees also received a record bonus of \$1,775 per worker which was more than double their previous high.

### **Autoworkers Receive Record Bonuses Big Three Profit Sharing**



Source: Detroit News and Detroit Free Press

Big Three profit-sharing checks have been steadily increasing during the past few years. Since profit sharing began in 1982 at Ford, profit-sharing checks have totaled \$40,575 per employee with \$26,000 paid in the last 6 years. As discussed earlier in the Consumer Spending chapter, profit-sharing checks bring substantial benefit to the Michigan economy.

### **Michigan Updates**

Several major developments in the motor vehicle industry will benefit Michigan in the future. Most importantly, the labor contracts between the UAW and the Big Three will effectively treat many hourly workers as salaried employees in the next economic downturn. This should greatly reduce the fluctuations of Michigan's economy over the business cycle.

In 1999, General Motors announced it was building a new plant in Lansing, the first new plant built by General Motors in a decade in Michigan. Investment in the plant is expected to be \$558 million. The new plant will produce Cadillac luxury vehicles. Additionally, in June 2000, General Motors announced it would build another assembly and component plant in Delta Township near Lansing. Investment of up to \$1 billion is expected for the new facility.

# Manufacturing and Services

## Overview

The composition of the Michigan economy has changed dramatically since 1970. The importance of the manufacturing sector has decreased steadily. The change has been especially dramatic in durable-goods manufacturing, where employment fell 21 percent between 1979 and 1999. The switch from a manufacturing-dominated economy to a more diversified one has long-run benefits. The diversification of Michigan's economy will help to reduce the impact of business cycle fluctuations that tend to be more severe in the manufacturing sector.

Furthermore, the make-up of manufacturing employment in Michigan differs from that of the U.S. as a whole. Michigan's manufacturing sector has many high-tech components.<sup>5</sup> Michigan is the headquarters for the three largest auto companies in the U.S. Therefore, most of the companies' high-tech research and design facilities and staff are located in Michigan. As a result, Michigan ranked 2<sup>nd</sup> among the 50 states in total research and development spending in 1997 and 6<sup>th</sup> in the number of patents received. Michigan ranked fourth in Bureau of Labor Statistics high-tech industry employment for 1997.

## Employment Composition in Michigan

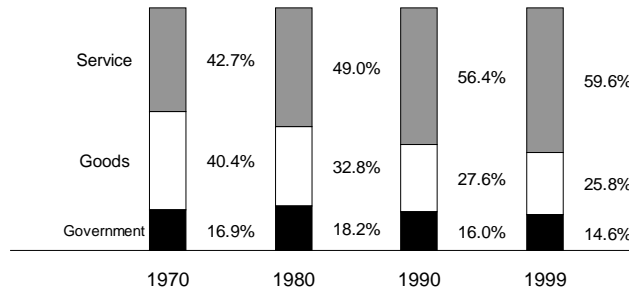
The employment shares of the Michigan economy have changed over the past three decades in response to increases in international trade and increases in consumption of services in the U.S. economy. In 1970, the goods-producing sector (manufacturing, construction, and mining) accounted for 40.4 percent of Michigan employment, while the private service-producing sector (transportation/public utilities, wholesale/retail trade, financial services, and miscellaneous services) had a slightly larger 42.7 percent share, and government employed 16.9 percent of

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<sup>5</sup> Sean McAlinden, Abel Feinstein and Brett C. Smith, *Michigan: The High-Technology Automotive State*, May 2000.

workers. Both the goods-producing sector's share and the government share of Michigan employment have declined over the past three decades, while the services employment share increased. It is worth noting that while the goods-producing sector lost 7.6 percentage points from its share from 1970 to 1980, 3.3 percentage points of that decline occurred in 1980 as the first of two recessions occurring in 1980-1982 had a large impact on Michigan's economy. By 1982, the goods sector share had lost another 2.2 percentage points.

**Service-Producing Sector Gains Share  
(Percent of Michigan Employment)**



Source: Employment Service Agency, Michigan Dept of Career Development

From 1990 to 1999, the private service-producing sector continued to gain share because of faster employment growth.<sup>6</sup> The private service sector now accounts for 59.6 percent of Michigan employment. The goods share in 1999 was 25.8 percent, and the government share was 14.6 percent.

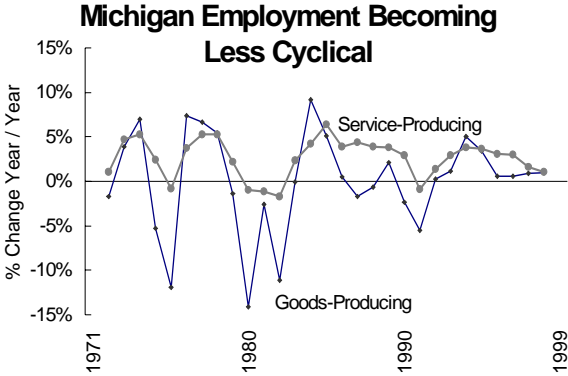
Nationally, employment composition has undergone similar changes. In 1970, the shares of U.S. employment were: goods-producing, 33.3 percent; private service-producing, 49.0 percent; and government, 17.7 percent.

By 1999, the service-producing employment share had grown to 64.6 percent, the goods-producing share was 19.8 percent, and the government employment share was 15.7 percent. The decline in government's employment share for

<sup>6</sup> The Employment and Unemployment chapter discusses the employment levels and changes by industry during the 1990s.

Michigan and the U.S. are essentially the same across the past 30 years.

The changing composition of Michigan's employment has made the state's economy more stable in business cycles. The demand for durable goods is sensitive to the overall level of economic activity. Goods-producing employment has been more volatile than private service-producing employment. As the service-producing sector gained employment share, its lower volatility has decreased the volatility in total employment. Additionally, the magnitude of the changes in goods-producing employment has decreased over time.



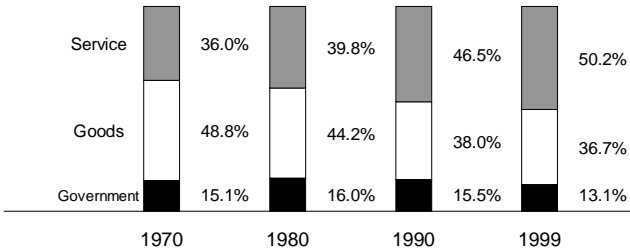
Source: Employment Service Agency, Michigan Dept of Career Development

### Earnings in Michigan

Just as the employment shares have changed over the past three decades, so has the income generated in those sectors. Different jobs pay different wages and provide different fringe benefits. For this reason, in 1970, the goods-producing sector was even more dominant in the Michigan economy, as wages earned in this sector represented 48.8 percent of the non-agricultural wages paid in the state. The service-producing sector had 36.0 percent of wages, and government contributed 15.1 percent. By 1999, the private service-producing sector's share of wages had risen to 50.2 percent, while the goods-producing share

declined to 36.7 percent and government paid only 13.1 percent of the wages.

**Service-Producing Wages Gains Share  
(Percent of Michigan Wages)**

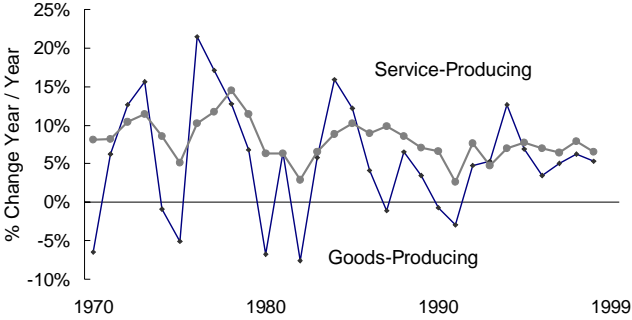


Source: Employment Service Agency, Michigan Dept of Career Development

The change in composition of national wages has followed a similar pattern since 1970. Three decades ago, goods-producing firms paid 36.6 percent of wages and service-producers paid 42.8 percent of the total, while government's share was 20.6 percent. By 1999, the sector shares were: goods-producing, 23.6 percent; private service-producing, 60.2 percent; and government, 16.2 percent. Much like Michigan, the decline in government's share occurred mainly in the 1990s. In the 1990s, government's share declined 2.3 percentage points out of the 4.4 percentage points lost over the past 30 years. From 1970 to 1999, Michigan's goods production share of wages went down by 12.0 percentage points, while nationally the share loss was 13.0 percentage points.

The more dominant roles played by services in Michigan's economy have benefits and will help to make Michigan's business cycles less severe. Historically, total wages in the private service-producing sector have been less volatile than in the goods-producing sector. Since 1970, the service-producing sector has not experienced an annual decline in total wages. The goods-producing sector has had eight years where overall wage growth was negative.

### Michigan Wages and Salaries Less Cyclical



Source: Bureau of Economic Analysis, U.S. Dept of Commerce



# Agriculture

## Overview

Agriculture is one of the three largest income-producing industries in Michigan along with manufacturing and tourism. Favored by varied climate and soil conditions, Michigan produces over 100 different commercial crops, second only to California in variety. From field crops, fruits and vegetables to dairy and livestock production, Michigan has solidified its position as an important agricultural state.

The traditional Michigan farm has changed considerably in recent years. Since the enactment of the Michigan Right to Farm Act (MRFA), the Michigan Commission of Agriculture has developed and adopted various Generally Accepted Agricultural and Management Practices (GAAMPs) for farms and farm operations in the state. Those practices, based on the latest technology and scientific research, were designed to protect the environment, while helping Michigan farmers and nonfarm residents alike adapt to new market conditions and new technology. The continued use of more modern farm equipment, irrigated lands, improved technology and farming practices, like global positioning systems, have allowed farmers to produce greater amounts of commodities using smaller amounts of land, thereby increasing the value of production.

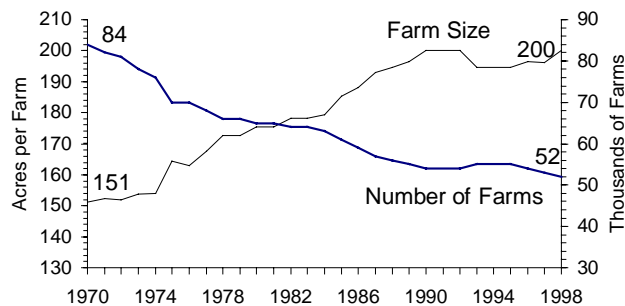
At the same time, pressure on farmland prices from urban sprawl and the decline in real prices of major commodities have contributed to the decrease in the number of farms. To ease the financial and development pressures put on farmers, various incentives have been instituted by Michigan's government. Farmers who agree to keep their land in agricultural use are eligible for special property tax credits. Under a new law, farmland property tax assessments do not revert to 50 percent of true cash value upon transfer as long as the transferred property remains in farm use.

## Farm Acreage

In the past three decades, the number of farms in the state and nation has declined substantially, accompanied by a more moderate decline in total farmland. The average size of Michigan farms has increased in this period. However, it was still a modest 200 acres in 1998.

In the 1970s and 1980s, the number of Michigan farms decreased by an average of 1,450 per year. However, from 1990 to 1998, the number of farms declined by 250 farms per year on average, from 54,000 to 52,000. Total farmland decreased slightly, from 10.8 million acres in 1990 to 10.4 million in 1998.

### Michigan Has Fewer Farms, Larger Farms



Source: Michigan Agricultural Statistics

Nationally, the number of farms increased slightly from 1990 to 1998, from 2.1 million to 2.2 million, but remains 24 percent below the country's 2.9 million farms in 1970. Total farmland decreased from 987 million acres to 954 million acres for the same period. The average farm size increased noticeably in the 1970s, followed by more moderate growth in the 1980s, reaching its peak in 1992 at 464 acres per farm. Since 1993, however, much of the gain has been eroded, with the national average farm size decreasing to 435 acres in 1998. Unlike Michigan, with mostly small family farms, western states tend to have fewer, very large commercial farms, thereby affecting the national average farm size.

## Farm Income

Between 1990 and 1998, the upward trend in nominal prices observed through the two previous decades lost much of its steam. Overall, the modest price increases of Michigan's major crops from 1990 to 1994 had already been lost by 1998. Prices for Michigan's major livestock and products showed a steady decline over the same period. In real terms, commodities' prices continued to decrease, maintaining the downward trend observed in the previous two decades. According to the 1999 Michigan Senate Agricultural Preservation Task Force report, agricultural prices, adjusted for inflation, are at their lowest levels since the Depression.

Output for most farm commodities was strong enough to offset lower prices and assure a continued increase in the value of Michigan's total agriculture production from 1990 to 1998.

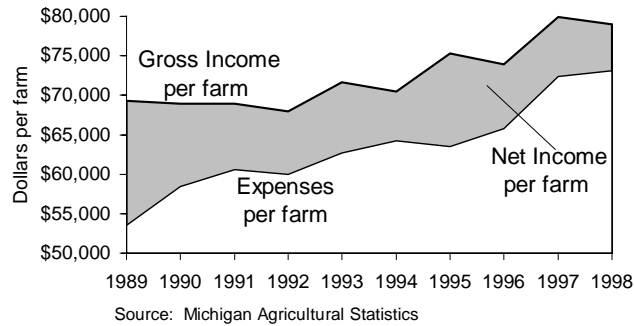
Michigan agriculture production value increased 9.7 percent from 1990 to 1998, to \$3.5 billion. Federal government farm commodities' price supports and other payments contributed \$208 million to farm income in 1998, while noncash and other farm-related income totaled \$462 million in 1998. As a result, total gross farm income in Michigan increased 10 percent, reaching \$4.1 billion.

In contrast, Michigan farm expenses in 1998 were \$3.8 billion, up 21 percent from 1990. This increase was primarily led by the 28 percent growth in expenses incurred from farm capital inputs.

The stronger increase in farm expenses relative to gross farm income resulted in a significant decrease in Michigan's net farm income, from \$568 million in 1990 to \$308 million in 1998.

As the value of national agriculture output increased 16 percent from 1990 to 1998, more than Michigan's 9.7 percent, and farm expenses increased at the same rate for both national and state levels, total income per Michigan farm remained below the national average. In 1990, the national net income per farm was \$20,853, compared to Michigan's net income of \$10,331 per farm. By 1998, the national average net income per farm was \$20,118, much above Michigan's average of \$5,818 per farm.

## Farm Expenses Outpace Income Michigan Net Income per Farm Falls



### Dairy, Livestock and Poultry

Dairy products remain the largest source of income for Michigan's agriculture industry. In 1998, dairy products total income was \$821 million, up 12.5 percent from 1990. Michigan milk production was the eighth largest in the country at 5,391 million pounds, representing 3.4 percent of U.S. production.

Over the years, the number of milk cow operations in Michigan has declined, while milk production has increased. In 1998, milk production per cow was 17,970 pounds, an increase of 17 percent from 1990. Meanwhile, milk cow operations declined from the 6,500 units in 1990 to 4,000 units by 1998.

Nationally, Michigan is one of the largest producers of eggs (12<sup>th</sup> in 1998) and honey (9<sup>th</sup> in 1998) and is an important producer of cattle and hogs. Combined, cattle and hogs account for nearly 70 percent of Michigan total livestock and poultry value production.

In 1998, cattle and calf production generated the most revenue for the livestock and poultry sector, with total cash receipts yielding \$197 million. However, this figure is down 31 percent from 1990 and represents the fourth consecutive year of decreased earnings. Nationally, Michigan ranks 32<sup>nd</sup> in number of head of cattle, at 1.1 million heads representing 1.1 percent of total U.S. production.

Michigan hog inventory in 1998 was 1.1 million heads, which represented 1.8 percent of total national production, making the state the 12<sup>th</sup> largest producer in the country. Hog and pigs production yielded revenues of \$141 million in 1998.

## **Field Crops**

Field crops remain the second largest source of income for the Michigan agricultural sector, with cash receipts totaling \$1.1 billion in 1998. Although barley, hay, oats, potatoes, rye, spearmint, and winter wheat are included in field crops, corn for grain, soybeans, sugar beets, and dry beans account for nearly 90 percent of all value produced in this sector.

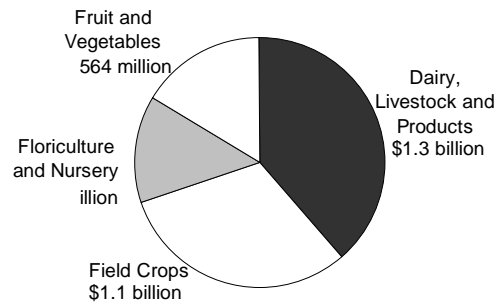
With a production of 228 million bushels valued at \$432 million in 1998, Michigan was the 11<sup>th</sup> largest producer of corn in the nation (2.3 percent of U.S. production). Since 1990, areas planted and harvested have been declining, while productivity gains have been enormous.

Michigan's soybean production in 1998 set a new record for the second year in a row. At 74 million bushels and a yield of 39 bushels per acre, it represented 2.7 percent of the country's total soybean production, contributing \$463 million to Michigan agriculture value in 1998. Michigan ranked 11<sup>th</sup> nationally in soybean production in 1998 and, unlike corn for grain, both areas planted and harvested have shown strong increases since 1970.

As the 5<sup>th</sup> largest sugar beet producer in 1998, Michigan production totaled 2.8 million tons, accounting for 8.5 percent of the national production. Total crop value amounted to \$106.6 million in 1998, lower than the \$117 million registered in 1997. Between 1970 and 1998, records were set of harvested acres (188,000 in 1995), yield per acre (21.3 tons in 1970) and production (3.3 million tons in 1990).

In 1998, Michigan produced 14 percent of the U.S. dry bean crop and was the second largest producer in the country. Michigan leads the nation in the production of black beans (59 percent of U.S. production) and dry cranberries (74 percent), and is the second largest producer of navy beans (30 percent of U.S. production).

### Michigan Agriculture Income by Commodity Group, 1998



Source: Michigan Agricultural Statistics, 1998-99

### Floriculture and Nursery

From contributing less than 5 percent of all Michigan's revenue generated from cash marketings in 1980, floriculture and nursery were responsible for 14 percent of the state's total cash receipts in 1998, totaling \$475 million. In 1998, Michigan led the nation in the production of potted geraniums (21 percent of U.S. production), flats of flowering bedding plants (14 percent), and in the number of flowering hanging baskets (9 percent). Michigan ranks 2<sup>nd</sup> nationally on the production of gladioli spikes (26 percent of national total) and Easter lily pots (13 percent), and 5<sup>th</sup> in the production of potted poinsettias (3 percent).

According to the Census of Horticultural Specialties, Michigan placed 3<sup>rd</sup> nationally in 1998 in terms of value of wholesale sales of floriculture products. Only California and Florida recorded larger sales than Michigan. Michigan also led the country in value of sales for 10 floriculture crops (including impatiens, petunias, and geraniums bedding) and flowering baskets, at a total value of \$78 million. Michigan ranks 2<sup>nd</sup> for another five crops, including vegetable type bedding plants and cut gladiolis, which totaled \$20 million in sales.

## **Fruit and Vegetables**

Accounting for 16 percent of Michigan's total cash receipts in 1998, fruit and vegetables receipts totaled \$564 million.

While the total value of production for single fruits and vegetables is not as large as the total value of production for other commodities, Michigan is a major producer of several types of fruit and vegetables. Of the nine fruit crops for which official estimates are available (apples, blueberries, strawberries, tart cherries, sweet cherries, peaches, grapes, pears, and prunes and plums), Michigan consistently ranks as one of nation's top five producers for more than half of them. In 1998, Michigan was the nation's leading producer of tart cherries (263 thousand pounds, or 76 percent of national production) and blueberries (49 thousand pounds, or 32 percent); the 3<sup>rd</sup> largest producer of apples (970 million pounds, or 9 percent), sweet cherries (35 thousand tons, or 17 percent) and all grapes (70 thousand tons, or 1.2 percent); and the 5<sup>th</sup> largest producer of plums (3.6 thousand tons, or 2.7 percent). The vegetables produced in Michigan are destined for both processing and fresh market. In 1998, Michigan ranked 1<sup>st</sup> in the production of cucumbers for pickles (143 thousand tons, or 23 percent); 2<sup>nd</sup> for fresh carrots (1,650 cwt., or 4.4 percent) and celery (968 cwt., or 5.3 percent); and 3<sup>rd</sup> for asparagus and snap beans (280 thousand cwt., or 14 percent, and 89 thousand tons, or 13 percent, respectively). Michigan also ranked high in the production of processing carrots, cauliflower, fresh cucumbers, tomatoes, peppers, and mushrooms.

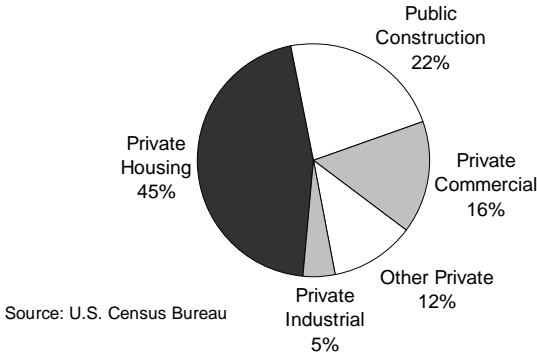
# Housing and Construction

## Introduction

The large amount of construction activity in Michigan and the U.S. in recent years reflects the robust national and state economies and property tax cuts which lowered the cost of owning property. Private residential construction accounted for almost half of all construction activity in 1999.

Michigan remains one of the most affordable housing markets in the U.S. even with strong growth in housing prices. The Michigan homeownership rate of 76.5 percent ranked 3<sup>rd</sup> in the nation in 1999. Michigan's 5.8 percent growth in homeownership from 1990 to 1999 exceeded the U.S. growth rate of 4.5 percent.

**Composition of U.S. Construction  
1999**



## National Trends

Construction activity is often measured by the "value of new construction put in place." In the U.S., new construction put in place in 1999 totaled \$764.2 billion, a 7.4 percent increase over 1998's total of \$711.8 billion. Overall construction activity has

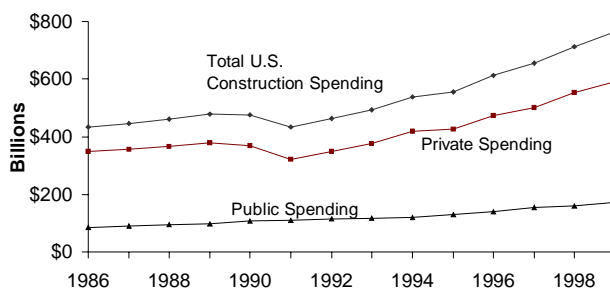


been strong since 1992, with \$4.8 trillion of new construction put in place since 1991, the end of the last economic downturn.

In 1999, the value of private construction put in place increased 7.1 percent to \$591.6 billion. Between 1992 and 1999, private construction put in place totaled \$3.7 trillion. Residential construction, a subset of private construction, has also been strong. In 1999, \$348.8 billion in private residential construction was put in place, a 10.9 percent increase over 1998.

The value of public construction put in place increased 8.2 percent in 1999 to \$172.3 billion. Between 1992 and 1999, \$1.1 trillion in new public construction was put in place.

### U.S. Value of New Construction Put in Place



.S. Census Bureau, *Current Construction Reports*, series C30

New housing starts are a closely watched construction indicator. New housing starts for 1999 totaled 1.67 million, 3.1 percent more than in 1998. More houses were started in 1999 than in any year since 1986. Single-unit housing starts increased by 60,000 units in 1999 to 1.33 million. Multi-unit housing starts declined by 14,000 in 1999 to 332,000.

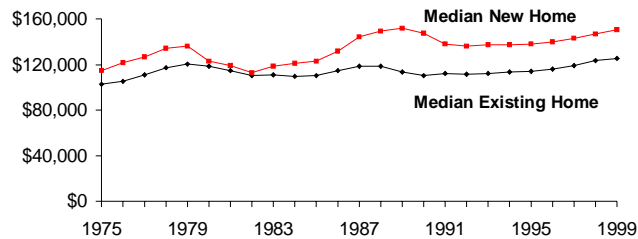
The number of housing permits issued is an indicator of future construction activity. The number of housing permits issued increased 3.2 percent in 1999 to 1.66 million. This represents the highest total since 1986 when almost 1.8 million permits were issued. Single-family dwellings accounted for 74.9 percent of the housing permits issued. The value of new housing permits issued in 1999 rose 9.7 percent to \$181.2 billion.

In 1999, more than 1.2 million single-family dwelling permits were issued, a 5.0 percent increase over 1998. The value of these permits increased 10.5 percent from \$142.2 billion to \$157.1 billion. Multi-family dwelling permits issued decreased 1.8 percent in 1999 to 417,000. The value of these permits increased, however, by \$1.1 billion (4.8 percent) to \$24.1 billion.

Sales of new houses in the United States reached their highest total ever in 1999, with 907,000 new houses sold. Sales increased by 2.4 percent over 1998, the previous high. Sales of existing homes increased 4.6 percent to 5.2 million, also a record high.

The average sales price of a new house in 1999 was \$195,800, a 7.6 percent increase over 1998. The median price of a new house increased 4.9 percent in 1999 to \$160,000, while the median price of an existing house increased 3.8 percent in 1999 to \$133,300. These increases compare with a 2.2 percent increase in the CPI for 1999. Since 1970, the average sales price of a new home has increased at an average annual rate of 7.1 percent. The median sales price of a new house has increased at an average rate of 6.9 percent, while the median sales price of existing houses has increased at a 6.2 percent annual rate. Since 1970, the CPI has increased at an annual rate of 5.2 percent.

### U.S. Housing Prices (Constant 1996 Dollars)



Sources: U.S. Census Bureau and National Association of Realtors

Inflation-adjusted home prices increased sharply in the late 1980s, with the average real sales price of a new house rising 28.1 percent between 1985 and 1989. The recession of 1990-91

caused real home prices to drop, with the average real price of a new house falling 14.8 percent between 1989 and 1993.

The average real sales price of new homes in the U.S. was 15.0 percent higher in 1999 than in 1993. Despite the recent increases, the average real price of new homes has not yet fully recovered the losses of the early 1990s, with the 1999 average still 2.1 percent below the 1989 peak.

### **Mortgage Rates**

Mortgage interest rates strongly influence the amount of activity in the housing market. The traditional 30-year fixed-rate mortgage averaged 7.44 percent in 1999, up from 6.94 percent in 1998. However, the 1999 average was more than 2.5 percentage points below the average for 1990 (10.13 percent) and was the fourth lowest annual average in 28 years.

Declining mortgage rates, along with strong economic growth, have made the 1990s a record decade for housing and construction. The 30-year fixed-rate mortgage has averaged 8.12 percent in the 1990s. In the 1980s, 30-year mortgages averaged over 10 percent in each calendar year and the average rate for the decade was 12.7 percent.

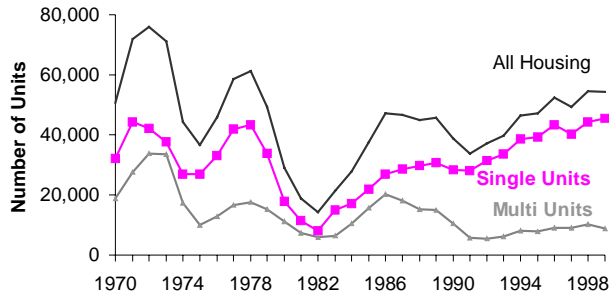
### **Michigan Trends**

Construction activity has been robust in Michigan throughout the 1990s. The Economic Census performed every five years by the U.S. Census Bureau estimates that the value of construction activity grew at an average annual rate of 13.1 percent in Michigan from 1992 to 1997. For the same period, the average annual growth rate for the entire U.S. was 9.4 percent.

In 1999, the number of new housing permits issued in Michigan remained strong at 54,257, nearly the same as the 1998 total of 54,474. The 1999 total represented the second highest total since 1978. For each year from 1996 through 1999, more new housing permits were issued in Michigan than in any year from 1979 to 1995. In 1999, the average value of new housing permits rose 6.0 percent to \$114,357.

In 1999, the number of single-family housing permits issued in Michigan increased 2.7 percent to 45,420. The number of single-family housing permits issued in each year from 1996 through 1999 was higher than any year since 1978. The average value of single-family housing permits issued in 1999 increased 4.5 percent to \$124,976, slightly below the U.S. average of \$126,035. As people shifted from renting to owning homes, there were 8,837 multi-family housing permits issued in 1999, a 13.6 percent decline, with the average value increasing 4.3 percent to \$59,777 per housing unit.

### Michigan Housing Permits

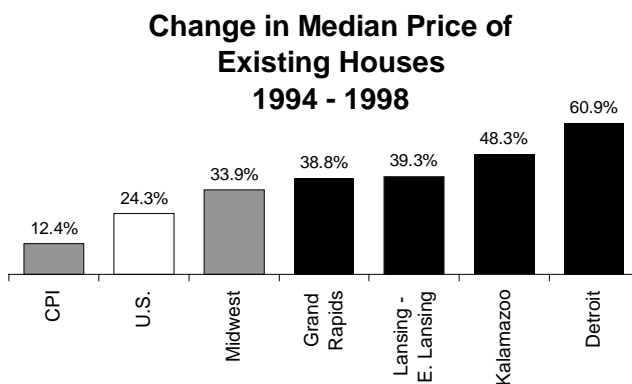


Source: U.S. Census Bureau

The average price of a house in Michigan has risen dramatically in recent years, exceeding the average increases in both the overall price level and U.S. house prices. The median price of existing houses in the U.S. rose 3.8 percent between 1998 and 1999 and 24.3 percent between 1994 and 1999. In 1999, the median sales price of existing houses sold in the Detroit metropolitan area was \$140,000, a 5.6 percent increase over 1998 and a 60.9 percent increase over 1994. The median sales price of existing homes in Grand Rapids increased 6.5 percent between 1998 and 1999 and 38.8 percent between 1994 and 1999. Median home prices in the Lansing/East Lansing area were up 5.0 percent between 1998 and 1999 and 39.3 percent between 1994 and 1999.

Housing price growth for the Midwest states more closely matches the Michigan experience, with the median price of

existing houses growing 4.6 percent between 1998 and 1999 and 33.9 percent between 1994 and 1999.



The purchase price of a house is only one factor in the overall cost of owning a house. Because most buyers use a mortgage to purchase a house, interest rates are an important factor in the overall cost. Low mortgage rates reduce interest costs while higher rates increase costs. Similarly, reductions in property taxes, such as occurred with the passage of Michigan's Proposal A, lower the cost of home ownership. Utility costs and home insurance rates are also important factors in the overall cost of home ownership. The steep reductions in property taxes, low mortgage rates, and reduced home heating costs have combined to lower home ownership costs for Michigan residents since 1994. This in turn makes it easier for renters to buy houses and for existing homeowners to buy larger houses. The effective increase in housing demand allows sellers to receive higher prices for houses, although these higher prices are more than offset by the reductions in ownership costs.

The table below presents an example of Michigan homeownership costs in the second half of the 1990s. The example uses the 1999 median sales price of an existing house in the Detroit area. That price is then adjusted for changes in housing prices to give an estimate of a similar house in 1994. Using the average rates for a 30-year fixed-rate mortgage and statewide average millage rates, the monthly costs of ownership are estimated. The decline in mortgage rates of nearly one

percentage point and the property tax reductions brought about by Proposal A result in an estimated reduction in ownership costs of about \$59 per month. Annual savings would total \$714.

### **Lower Taxes Reduce Housing Costs**

	<u>1994</u>	<u>1999</u>
Sales price	\$119,800	\$140,000
Mortgage payment with 20% down payment	728.79	778.52
Monthly property taxes	<u>282.73</u>	<u>183.52</u>
Monthly ownership costs	\$1,011.52	\$962.04

Sources: Federal Home Loan Mortgage Corporation, National Association of Realtors, and U.S. Census Bureau

Michigan housing remains affordable despite the strong increase in the price of houses. Each quarter, the National Association of Home Builders produces the Housing Opportunity Index. The Index is prepared for each U.S. metropolitan area and it estimates the percentage of houses sold in the area that a family earning the area's median income could afford to buy. In the fourth quarter of 1999, the metropolitan areas of Flint (67.6), Grand Rapids (74.1), Lansing (74.0), and Saginaw (78.6) all ranked significantly above the average U.S. value of 63.8.

Michigan has experienced rapid growth in nonresidential construction as well. According to the Economic Census, the level of commercial and industrial construction in Michigan grew by 96.2 percent between 1992 and 1997.<sup>7</sup> This represents an average annual increase of 14.4 percent, higher than both the national average (10.7 percent) and the average for the Midwest region (10.6 percent). Industrial construction in Michigan has grown even faster, with an average annual growth rate of 16.1

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<sup>7</sup> The Economic Census is completed every five years.

percent from 1992 to 1997. This growth is almost double the national average of 8.2 percent.

This growth in construction has made Michigan a leader in new business development. Michigan has led the nation in new facilities and expansions in 1997, 1998, and 1999.<sup>8</sup> Of the more than 36,200 new corporate facilities and expansions begun between 1997 and 1999 nationwide, 14.3 percent of them were located in Michigan. The end of the 1990s represents a stark turnaround from 1991, when only 46 new facilities located in Michigan.

Total new facilities and expansions in Michigan for 1998 and 1999 set new annual records, as measured by *Site Selection*. These record years represent total combined investments of more than \$33 billion.

The depth of the industrial expansion in Michigan is further supported by other comparisons completed by *Site Selection*. Michigan ranks 1<sup>st</sup> in the nation in new and expanded facilities per person, new and expanded facilities per 1,000 square miles, and capital investment per person from 1997 through 1999. Michigan ranks 5<sup>th</sup> in the nation in new jobs per person over that period as well. These measures control for the fact that Michigan is a large state by comparing new investments to population and land area. Michigan has consistently ranked in the top 5 in new facilities and capital investment per person as well as new facilities per square mile throughout the latter half of the 1990s.

Growth in construction employment in Michigan has been strong in recent years, outpacing the U.S. average. In 1999, average construction employment in Michigan increased to 190,000. The number of construction jobs in the U.S. increased to 6.4 million in 1999. Between 1992 and 1999, the number of construction jobs in Michigan increased 48.1 percent compared to a U.S. increase of 42.6 percent. Construction employment has been boosted by Michigan's strong economy and by a number of large construction projects occurring in the City of Detroit, including Comerica Baseball Park and three temporary casinos.

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<sup>8</sup> Source: *Site Selection*, February/March 1998, March 1999, and March 2000. To qualify, new facilities or expansions must involve new investment of \$1 million, create at least 50 new jobs, or add at least 20,000 sq. ft. of new floor area.

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## **The U.S. and Global Economies**

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# The U.S. Economy

## Overview

Gross domestic product (GDP) measures the final value of all goods and services produced in a given year. The U.S. economy is the world's largest, with GDP exceeding \$9.3 trillion in 1999. The U.S. GDP in 1999 was nearly twice the size of Japan's, the world's second largest economy, and approximately four times Germany's, the world's third largest.

Real U.S. GDP, measured in 1996 dollars, grew 4.2 percent in 1999 to \$8.9 trillion. Real gross investment helped spur 1999's strong growth, growing 6.6 percent and accounting for 1.2 percentage points of total real GDP growth.

Real consumption expenditures (comprising about 2/3 of GDP) grew 5.3 percent in 1999 with consumer confidence at a near record level. As a result, consumption contributed 3.5 percentage points to 1999 growth.

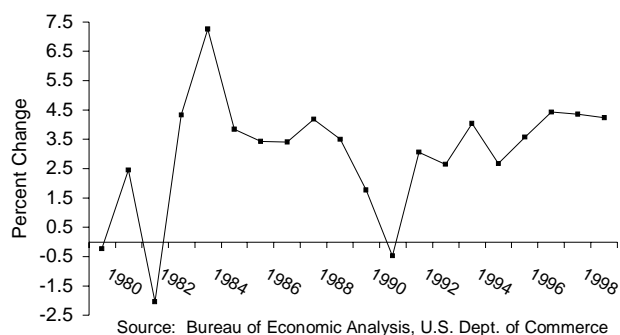
Increasing at its fastest rate since 1991, combined state, local, and federal real government spending increased 3.3 percent in 1999. Net exports (exports less imports) restrained U.S. growth last year. A stronger U.S. dollar, coupled with economic weakness abroad, helped push net exports sharply lower. Real net exports fell \$101.4 billion to a record low of -\$322.4 billion.

Typically, recessions occur when GDP falls in two consecutive quarters. Recoveries from recessions constitute expansions.

The U.S. economy last underwent a recession in 1990-91 when real GDP declined for three consecutive quarters. Between the end of that recession and the end of 1999, U.S. GDP grew every quarter and averaged 3.6 percent per year. Having begun in March 1991, the current recovery is now the longest on record.

The economic growth of the 1990s is significantly less variable than growth in the 1980s. Annual growth rates have only ranged between -0.5 percent and 4.4 percent in the 1990s, compared to the 1980s, when annual growth ranged between -2.0 percent to 7.3 percent.

### Real GDP Growth Less Volatile in the 1990s



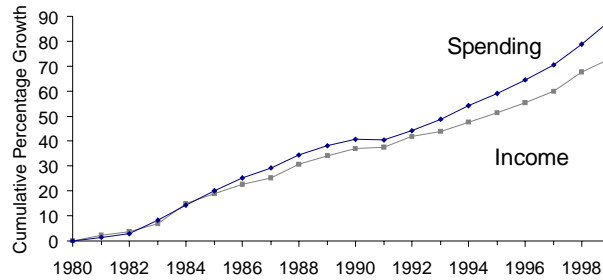
### Spending, Incomes, and Savings

Most of GDP returns to individuals as income. Disposable (after tax) personal income rose from \$4,293.6 billion in 1990 to \$6,639.7 billion in 1999, an average annual increase of 5.2 percent. Real disposable personal income grew an average of 2.6 percent per year between 1990 to 1999. Over that period, the U.S. population increased an average of 1.0 percent per year, resulting in a real disposable personal income per person average annual growth rate of 1.6 percent.

Compared to the 1980s, real disposable personal income growth has been both slower and less variable during the 1990s. While growing an average of 3.1 percent per year in the 1980s, real personal disposable income grew only 2.6 percent per year in the 1990s. At the same time, while annual real disposable personal income growth ranged between 0.8 percent to 7.7 percent in the 1980s, real disposable personal income growth ranged only between 0.4 percent and 4.8 percent in the 1990s.

The U.S. personal savings rate has declined sharply this decade. While Americans saved an average of 9.1 percent of disposable (after tax) personal income in the 1980s, they saved only 5.9 percent of disposable personal income in the 1990s. The U.S. savings rate has fallen dramatically from 8.7 percent (the decade's high) in 1992 to 2.2 percent in 1999.

### Spending Outpaces Income (Real Disposable Income and Personal Outlays)



Source: Bureau of Economic Analysis, U.S. Dept. of Commerce

In contrast to the personal savings rate, business savings has risen substantially over the decade. Between 1990 and 1999, undistributed corporate profits rose from \$95.3 billion (1.6 percent of GDP) to \$196.4 billion (2.1 percent of GDP).

As a percent of GDP, the gross savings rate, which also includes private and public consumption of fixed capital, was 18.5 percent in 1999, slightly lower than the 18.8 percent observed in 1998, the highest level since 1985. On average, the total gross savings rate as a percent of GDP for the 1990s was 17.1 percent, while the average for the 1980s was 18.3 percent.

### Consumer Debt

Consumption can grow faster than income if consumers spend their savings, borrow more, or spend from their wealth. In the 1990s, consumers have relied upon all of those means.

Consumer credit, excluding mortgage debt, grew 77.1 percent from 1990 to 1999, and mortgage debt increased 82.0 percent over the same period. On the other hand, housing prices increased only 32.8 percent over the same period.

With very low personal savings rates, and moderate growth in real disposable personal income and housing values, the main force driving the increase in consumer debt was the surge in wealth created by the stock market, which more than offset the increase in debt. In the last five years of the decade, the average

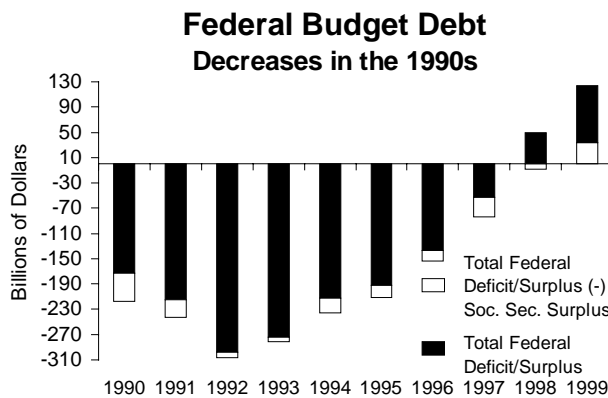
stock market return measured by the S&P 500 Index has exceeded 20 percent per year.

On average in the 1990s, total household outstanding debt as a percent of disposable personal income increased to 88.4 percent from 73.3 percent in the 1980s.

In 1999, consumer credit debt rose 7.1 percent, and home mortgage debt increased 10.1 percent, equaling 21.5 percent and 67.5 percent of disposable personal income, respectively.

### Federal Budget Deficits and Federal Debt

Helped by vigorous economic growth and a booming stock market, the overall federal government's surplus increased in 1999 for the second year in a row. Between calendar years 1998 and 1999, the overall federal surplus (including the social insurance surplus) increased from \$49.0 billion (0.6 percent of GDP) to \$124.4 billion (1.3 percent of GDP). Excluding last year's \$90.7 billion social insurance surplus, 1999's surplus totaled \$33.7 billion (1.0 percent of GDP), up from a deficit of \$7.9 billion in 1998 (0.6 percent of GDP). Last year's overall surplus sharply contrasts with 1992 when the overall federal deficit peaked in absolute terms (\$297.5 billion) and equaled 4.7 percent of GDP.



Source: Bureau of Economic Analysis, U.S. Dept. of Commerce

Before 1999, the last year the federal government ran both overall and excluding social security funds surpluses was in 1969.

In contrast to the federal government that has the authority to run budget deficits, state and local governments are commonly prohibited from running deficits and, taken as a whole, have commonly run a budget surplus. Between 1998 and 1999, the combined state and local surplus increased from \$41.7 billion to \$50.0 billion.

Thus, the combined federal, state, and local surplus increased again from \$90.7 billion in 1998 to \$174.4 billion in 1999. As a percent of GDP, the total government surplus increased from 1.1 percent in 1998 to 2.0 percent in 1999.

## Inflation and Unemployment

Tight labor markets and low unemployment are often associated with rising inflation. However, unlike the 1970s and 1980s, low unemployment and falling inflation have co-existed since 1992.

With solid economic growth since the 1990-91 recession, the U.S. unemployment rate fell to 4.2 percent in 1999, the lowest rate since 1969. At the same time, the inflation rate has remained at or under 3.0 percent since 1992.

**Inflation Plus Unemployment Rates  
Lower Than in Previous Decades**



Source: Bureau of Economic Analysis, U.S. Dept. of Commerce

Several factors have permitted low inflation, along with low unemployment, including the following:

1. Increased global competition.
2. Weak foreign economies have restrained goods inflation. In particular, weaker foreign economies have reduced world oil demand and lowered oil prices until late 1999. Lower oil prices have translated into lower gasoline prices and reduced the cost of producing goods and services that depend upon oil.
3. Inflationary expectations have fallen. Lowered expectations are, at least in part, the result of previously restrictive monetary policy.
4. Consumers have been increasingly reluctant to accept higher prices.
5. Higher worker productivity has helped hold down unit labor costs. Similarly, increased capacity has restrained inflationary pressures from increased industrial production.
6. A substantial slowdown in benefit costs has helped restrain overall labor compensation increases, even in the face of rising wages. In particular, health care cost increases have been substantially slower than in prior years.
7. Recently, a strong U.S. dollar has helped to contain inflation by reducing the dollar cost of imports.

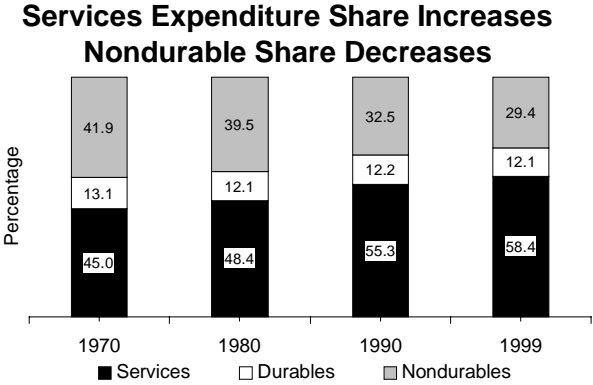
### **Consumption Expenditures**

Between 1990 and 1999, nominal consumption expenditures grew an average of 5.7 percent per year. Service expenditures continued to outpace spending on durable and nondurable consumption. While durable consumption and nondurable consumption grew an average of 5.1 percent and 4.7 percent per year, respectively, service expenditures grew 6.4 percent. A major component of consumption, U.S. retail sales grew on average 5.5 percent per year. In 1999, total retail sales increased 9.1 percent from 1998 totals, the highest annual increase of the decade.

Comparing the composition of total personal consumption expenditures in 1970 and 1999, the share of expenditures on services has increased from 45 percent to 58 percent over the

period. Expenditures on durable goods have remained relatively unchanged at 13 percent in 1970 and 12 percent in 1999, while spendings on nondurables have declined substantially, from 42 percent to 29 percent in 1999.

Adjusting for inflation, average overall consumption growth was 3.1 percent per year in the 1990s. With population growth averaging 1.0 percent per year, average annual real consumption per person growth was 2.1 percent over this time, slightly slower than in the previous decade. In the 1980s, real consumption grew on average 3.4 percent per year, and average real per person consumption grew 2.5 percent per year.



Source: Bureau of Economic Analysis, U.S. Dept. of Commerce

**Interest Rates**

Through its control over short-term interest rates, the Federal Reserve Open Market Committee helps regulate economic activity. Lower rates decrease the cost of investment and durable goods consumption and thus spur growth. In addition, higher investment increases an economy’s future productive capacity, which supports future economic growth. Conversely, higher rates curtail economic growth but help restrain inflation.

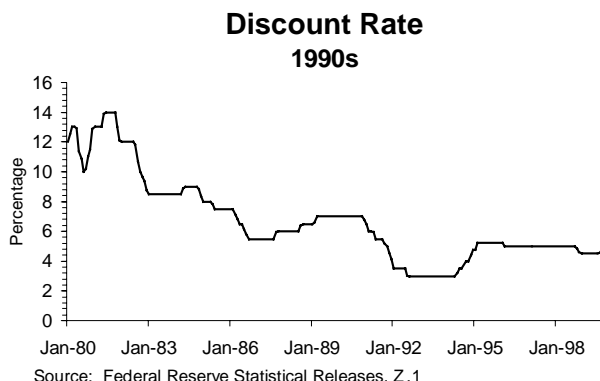
Because interest rate changes impact economic activity indirectly, the effects of an interest rate change lag over time. In addition, interest rates affect the economy through a very complex

economic structure. Thus, the effectiveness of the Federal Reserve Bank's (Fed) monetary policy depends crucially upon the accuracy of the Fed's projections of future economic activity.

The Fed has direct control over two key interest rates: the discount rate (the rate the Fed charges member banks for overnight loans) and the benchmark federal funds rate (the target the Fed sets for the rate that member banks charge each other for loans). Decreases (increases) in these rates reduce (increase) the interest rates that business and individuals pay.

With inflation slowing and economic activity slowing, the Fed cut the discount rate 4.0 percentage points from 7.0 percent to 3.0 percent between 1990 and 1992. The Fed lowered the federal funds rate benchmark even more sharply over this time and cut the target rate from 8.25 percent in mid-1990 to 3.0 percent by late-1992.

These Fed rate cuts helped push short-term interest rates lower over this period. Between 1990 and 1992, for example, the three-month Treasury bill rate fell from 5.4 percent to 3.0 percent. With inflation in 1992 also equaling 3.0 percent, the ex-post real interest rate (interest rate less inflation rate) fell to zero.



By the beginning of 1994, the Fed had become increasingly concerned about inflationary pressures fueled by strong economic growth and tight labor markets. As a result, the Fed increased the discount rate 2.25 percentage points to 5.25 percent by early 1995 and increased the federal funds rate target even more sharply (3.0 percentage points) to 6.0 percent.

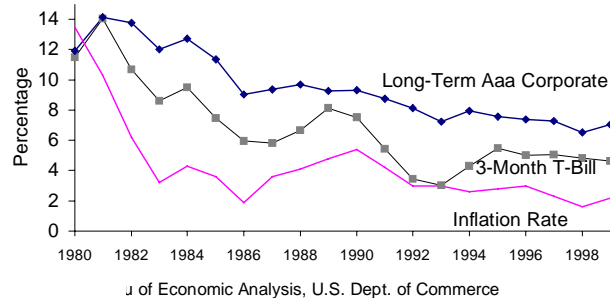


Responding to weak foreign economies and to the domestic financial market turmoil, the federal reserve cut the discount rate and the target federal funds rate in autumn of 1998. By the spring of 1999, the discount rate was 4.50 percent, while the federal funds rate had decreased to 4.75 percent.

As the conditions that led the Fed to decrease rates in the latter part of 1998 had dissipated, and as labor markets continued to tighten and the fear of inflation resumed, the Fed orchestrated three rate increases in the second half of 1999. The discount rate was increased a total of 50 basis points ending 1999 at 5.0 percent, while the target for federal funds rate was increased 75 basis points to 5.5 percent.

Increases in the discount rate and benchmark federal funds rate have pushed short-term rates up since 1993. The three-month Treasury bill rate rose from 3.02 percent to 4.66 percent between 1993 and 1999. With inflation hovering around 3.0 percent through 1996 and then falling to 2.2 percent in 1999, ex-post short-term rates rose even more sharply. Six-month and one-year Treasury bill rates paralleled three-month rates.

**Long-Term Rates and Short-Term Rates Converge**  
(Ex-Post Real Short-Term Rates Rise)



In addition to Federal Reserve policy, inflation and inflationary expectations play a key role in determining long-term interest rates. Lenders, seeking to assure themselves a given real (after inflation) return, adjust long-term rates in the light of inflationary expectations. As a result of low recent inflation and reduced inflationary expectations, long-term rates in 1999 were below 1993 rates, despite Fed rate increases. Long-term

high-grade corporate bonds averaged 0.18 percentage points lower in 1999 (7.04 percent) compared to 1993 (7.22 percent). The 30-year Treasury bond rate in 1999 (5.87) averaged 0.72 percentage points lower than in 1993 (6.59 percent). With long-term rates essentially the same as in 1993 and short-term rates considerably higher, the yield curve (the spread between long-term rates and short-term rates) has flattened considerably.

# The Global Economy

## Overview

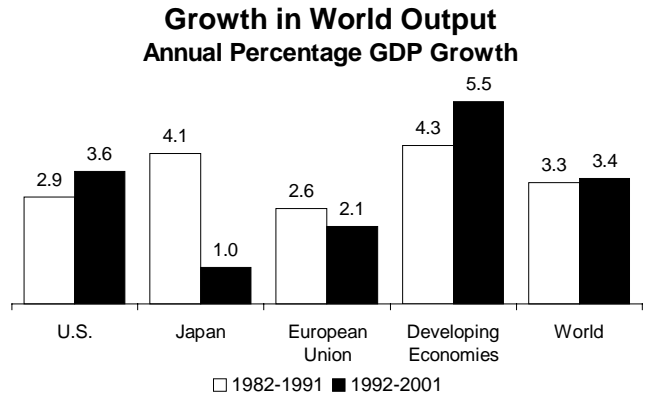
Overall the 1990s have been a period of significant growth in the world economy. Real output has grown 3.2 percent annually from 1992 through 1999, slightly less than the 3.3 percent annual average for 1982 through 1991. Growth has been especially strong throughout the decade among the developing nations of Asia. The growth in world output through the 1990s has been accompanied by growing trade among nations and reduced inflation. Increased trade has been facilitated by major tariff and trade barrier reductions, the end of the Cold War, and sound economic policies. The approval of the North American Free Trade Agreement (NAFTA) in 1993 and the completion of the Uruguay round of the General Agreement on Tariffs and Trade (GATT) in 1994 led the way for the 6.9 percent annual growth in international trade volume that has taken place between 1995 and 1999.

While worldwide economic growth has been the rule, some notable exceptions have occurred. Russia has spent much of the decade in steep recession. With the exception of the United States, the major industrial countries have experienced slower growth than the rest of the world throughout the 1990s. The economies of Japan and Western Europe have been particularly sluggish.

The latter part of the 1990s featured several currency crises, predominantly among the developing countries. The first began in Mexico in December 1994. This was followed by severe currency troubles in Asia beginning in July 1997. Thailand, Indonesia, Malaysia, the Philippines, Hong Kong, and South Korea all experienced steep currency devaluations, a sharp drop in equity prices, and severe economic recessions. Currency devaluations followed in Russia (1998) and Brazil (1999).

International trade comprises a significant share of U.S. economic activity. As a percent of GDP, exports of goods and services from the United States have averaged 10.5 percent of nominal GDP since 1990. Over the same time, imports' share at

at 11.7 percent averaged more than a full percentage point higher. For 1999, preliminary estimates indicate that exports equaled 10.6 percent of GDP, while imports totaled 13.4 percent.



Source: International Monetary Fund

On average, U.S. exports and imports both grew at a 7.0 percent rate between 1990 and 1995 in real (inflation-adjusted) terms. However, from 1995 through 1999, real export growth (7.5 percent) was outweighed by strong real import growth (11.4 percent).

In absolute terms, the U.S. both imports and exports more goods than any other nation in the world. For 1999, estimates reported by the World Trade Organization show that total U.S. merchandise exports equaled \$695.0 billion or 12.4 percent of the entire world's merchandise exports. Merchandise imports totaled \$1,059.9 billion, representing 18.0 percent of the world's imports. Germany, the world's second largest trader, exported \$540.5 billion in goods (9.6 percent of the total exports) and imported \$472.6 billion (8.0 percent of total imports).

However, international trade comprises a much smaller share of U.S. GDP than in most other industrialized nations. The World Bank estimates that in 1997 U.S. exports and imports of goods and services combined equaled 25.6 percent of U.S. GDP. Germany's exports of goods and services *alone* equaled 26.8 percent of Germany's GDP. Similarly, in 1997 Canada's

combined imports and exports totaled 79.7 percent of Canadian GDP.

Japan is a notable exception among the major industrialized nations. Exports and imports combined total 21.0 percent of Japan's GDP, compared with its 25.6 percent share in the U.S.



Source: U.S. Bureau of Economic Analysis

### The U.S. Trade Deficit

Many factors influence the volume and direction of international trade, including relative labor productivity, trade barriers, exchange rates, and domestic and foreign economic strength.

A country with productive workers can produce goods using fewer resources. These goods will cost less than competing goods produced in other countries and, thus, will make the productive country's goods attractive in the export market.

Trade barriers such as quotas and tariffs impede international trade, while open borders facilitate trade. A strong U.S. economy boosts imports to the U.S., while stronger economies abroad increase the demand for U.S. exports. Strong growth in the U.S. relative to its trading partners is likely the most important factor in the recent growth of the trade deficit.

A stronger dollar makes U.S. goods relatively more expensive and boosts imports relative to exports. Conversely, a

weaker dollar makes U.S. goods relatively more affordable and increases exports relative to imports.

The U.S. merchandise trade deficit equals the total value of goods imported into the United States less the value of goods exported from the United States. Since 1976, the U.S. has run a merchandise trade deficit. In 1991, with imports falling slightly and exports increasing significantly, the merchandise trade deficit fell to \$73.8 billion. However, despite a weakening dollar, the merchandise trade deficit rose sharply between 1992 and 1994. This was primarily due to recessions and sluggish growth among the other major industrialized nations. Over this period, the merchandise trade deficit more than doubled to \$166.2 billion. After slow increases between 1994 and 1997, the merchandise trade deficit rose very sharply again in 1998 and 1999. Weakness abroad sharply slowed U.S. exports to other nations. A rising dollar drove down import prices and, coupled with the strong U.S. economy, caused imports into the U.S. to rise sharply. Early estimates from the Bureau of Economic Analysis (BEA) indicate that the U.S. merchandise trade deficit in 1999 rose to \$349.4 billion, a new record.

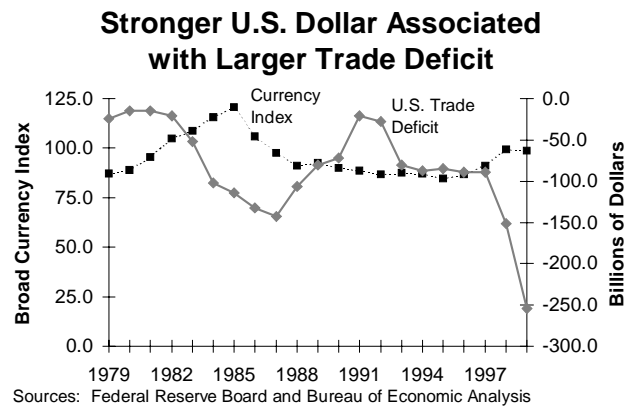
The U.S. also trades services with other countries. In contrast to goods trade, the value of services that the U.S. exports commonly outweighs the value of services imported. Since 1971, the U.S. has run a services trade surplus, and this surplus has grown substantially during the 1990s. However, each year between 1975 and 1997 the U.S. merchandise deficit has outweighed the U.S. services surplus.

Between 1990 and 1999 the U.S. services surplus increased from \$38.0 billion to \$95.4 billion. However, the record high merchandise trade deficit offset the record high services trade surplus, and the U.S. reported a record high goods and services trade deficit in 1999 at \$254.0 billion.

The United States also participates in the world economy through investments. Foreign companies and individuals invest in the U.S. and, conversely, U.S. companies and individuals make investments abroad. Typically, U.S. companies and individuals earn more from investments abroad than foreign companies earn from investments in the U.S. However, last year, with the U.S. economy strong and many foreign countries weak, foreign

investments in the U.S. earned slightly more investment income than American investors did abroad. While American investments abroad returned \$276.2 billion in 1999, foreign investments in the U.S. earned \$294.6 billion.

The value of the U.S. dollar has maintained greater stability in the 1990s than it exhibited in the previous decade, although the dollar is considerably below the highs reached in the middle of the 1980s. The lowest values were recorded in 1992 and 1995. Since 1995, the dollar's value has trended upward with the dollar gaining strength in 1998 and 1999. Strong increases in the flow of foreign capital into the U.S. have resulted in the strongest dollar of the decade.



### Composition of U.S. Trade

Merchandise trade comprises the largest share of U.S. trade. In 1999, total merchandise exports and imports accounted for 62.4 percent of combined merchandise, services and income trade, while services comprised 16.8 percent and income 20.8 percent.

In 1999, capital goods comprised the largest share of U.S. merchandise exports and imports: 56.6 percent of U.S. exports and 46.3 percent of U.S. imports. Automotive vehicles, engines and parts alone comprised 11.1 percent of U.S. exports and 17.4 percent of U.S. imports. Computers, peripherals, and parts

accounted for 6.8 percent of U.S. exports and 7.9 percent of U.S. imports.

Industrial supplies and materials accounted for 21.5 percent of U.S. exports and 21.6 percent of U.S. imports. Chemicals comprised the largest share of industrial supplies and materials exports (31.3 percent of these exports), while energy products accounted for the largest share of these imports (34.8 percent). Petroleum imports alone accounted for 30.2 percent of industrial supplies and materials imports and 6.6 percent of all U.S. imports.

Consumer products account for a significantly larger share of U.S. imports than exports. Last year, consumer products accounted for 23.3 percent of U.S. imports but only 11.8 percent of U.S. exports.

On the other hand, agricultural exports account for a significantly larger share of U.S. exports than U.S. imports. In 1999, agricultural exports of foods and beverages comprised 6.1 percent of U.S. exports but only 3.1 percent of U.S. imports. Total agricultural exports were 34.1 percent more than total imports. Overall agricultural exports accounted for 7.3 percent of U.S. exports.

### **Major U.S. Trading Partners**

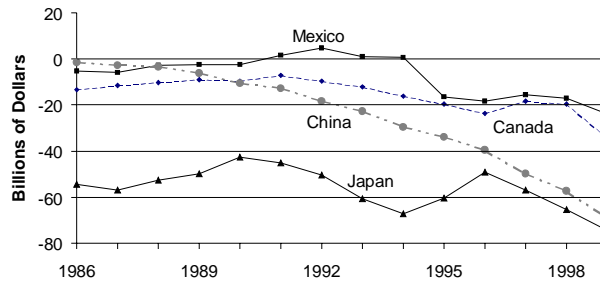
In 1999, U.S. exports to Canada, Mexico, the European Union, and Japan comprised 67.0 percent of all U.S. merchandise exports and 61.9 percent of all U.S. merchandise imports. During the 1990s, Canada, the largest U.S. trading partner, accounted for 22.4 percent of U.S. merchandise exports and 19.3 percent of U.S. merchandise imports. In 1999, Canadian trade comprised 24.3 percent of total U.S. goods exports and 19.5 percent of U.S. goods imports. Merchandise trade with Canada more than doubled in the 1990s, although U.S. imports from Canada have grown faster than exports. During the 1990s, the trade deficit with Canada averaged \$17.0 billion annually, and the deficit in 1999 was \$34.7 billion.

Japan has accounted for the second largest share of U.S. exports and imports among foreign nations. Between 1990 and 1999, Japanese imports comprised 10.1 percent of U.S. exports and 15.6 percent of U.S. imports. Last year, Japan accounted for



the second largest share of U.S. imports (12.7 percent). However, a severe economic slowdown in Japan depressed U.S. exports to Japan, and Japan's share of U.S. exports fell to third among U.S. trading partners behind Mexico. U.S. exports to Japan in 1999 were 14.6 percent below the 1996 level. After having fallen sharply in 1996 to \$49.2 billion, the U.S. trade merchandise trade deficit with Japan rose to \$74.5 billion in 1999. Every year this decade, the U.S. has run a merchandise trade deficit with Japan, averaging \$57.2 billion.

### U.S. Trade Balance With Major Trading Partners



Source: International Trade Administration, U.S. Dept. of Commerce

Mexico's importance to U.S. trade increased substantially during the 1990s. While only comprising 6.8 percent of U.S. exports and 5.7 percent of U.S. imports in 1989, trade with Mexico accounted for 12.7 percent of U.S. exports and 10.7 percent of U.S. imports in 1999. After having run a \$2.4 billion trade deficit with Mexico in 1990, the U.S. ran a trade surplus with Mexico from 1991 to 1994, averaging \$2.1 billion per year. In 1994, exports to Mexico nearly balanced with imports from Mexico. The implementation of NAFTA and the Mexican currency crisis, however, changed the trade relationship between the U.S. and Mexico for the remainder of the decade. In 1995, exports to Mexico fell \$4.5 billion while imports from Mexico rose \$12.7 billion, resulting in a \$16.6 billion trade deficit with Mexico. The trade deficit continued through 1999, when it reached \$24.0 billion.

U.S. trade with China has grown dramatically during the 1990s. U.S. imports from China increased from \$12.0 billion in 1989 to \$81.8 billion in 1999. In 1989, China was the 9<sup>th</sup> largest importer to the U.S. and comprised 2.5 percent of U.S. imports. However, by 1999, imports from China totaled 7.9 percent of U.S. imports, and China represented the 4<sup>th</sup> largest importer to the U.S.

In contrast, U.S. exports to China have grown only slightly faster than overall U.S. exports. China's share of U.S. exports increased from 1.6 percent to 1.9 percent during the 1990s, making China the 13<sup>th</sup> largest U.S. export nation and only the 5<sup>th</sup> largest export destination in Asia. In 1999, exports to China totaled less than one-fifth of U.S. imports from China, and the U.S. ran its second largest bilateral trade deficit with China (\$68.8 billion).

### **Michigan Exports and Foreign Direct Investment**

In 1998, based on data from the International Trade Administration, Michigan's exports increased 3.6 percent to \$39.3 billion with Michigan exports to 28 different nations exceeding \$100 million. Michigan is the fourth leading exporter among the 50 states. Canada, Michigan's largest international trading partner, accounted for 50.1 percent of Michigan's exports in 1998. Michigan is the largest exporter to Canada in the U.S.

Michigan's exports to Mexico, the state's second largest trading partner, totaled 20.1 percent of the state's exports in 1998. Exports to Mexico increased by 22.1 percent in 1998, from \$6.5 billion in 1997 to \$7.9 billion. Only Texas and California export more goods to Mexico than Michigan.

While comprising the third largest share of Michigan exports, exports to Japan accounted for only 3.6 percent of the state's exports last year. Michigan exports to Japan fell 3.5 percent in 1998 to \$1.4 billion.

Totaling \$22.8 billion last year, Michigan's transportation equipment exports accounted for over half of all Michigan exports (58.0 percent). Industrial machinery and computer equipment exports totaled \$4.8 billion and comprised 12.2 percent of Michigan's exports. Canada accounted for almost half of Michigan's exports of these goods: 48.4 percent of Michigan's

transportation equipment exports and 53.5 percent of the state's industrial machinery and computer equipment exports. Mexico comprised 21.4 percent of Michigan's transportation equipment exports and 14.9 percent of the state's exports of industrial machinery and computer equipment.

Michigan exports of fabricated metal products and non-computer electrical equipment both totaled \$2.0 billion and comprised 5.1 percent of Michigan exports.

Foreign direct investment continues to play a growing role in Michigan's economy. Between 1990 and 1997, foreign companies invested \$8.9 billion in additional property, plant, and equipment in Michigan. Employment in Michigan by U.S. affiliates of foreign companies grew by 31,800 jobs.

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## Appendix

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Table A-1

**U.S. AND MICHIGAN LABOR FORCE AND UNEMPLOYMENT**

(Numbers other than unemployment rates are in thousands)

Year	United States				Michigan			
	Civilian Labor Force	Number Employed	Number Unemployed	Unemployment Rate (%)	Civilian Labor Force	Number Employed	Number Unemployed	Unemployment Rate (%)
1975	93,775	85,846	7,929	8.5	3,892	3,406	486	12.5
1976	96,158	88,752	7,406	7.7	3,990	3,618	373	9.4
1977	99,009	92,017	6,991	7.1	4,114	3,777	337	8.2
1978	102,251	96,048	6,202	6.1	4,196	3,908	289	6.9
1979	104,962	98,824	6,137	5.8	4,314	3,979	335	7.8
1980	106,940	99,303	7,637	7.1	4,293	3,759	534	12.4
1981	108,670	100,397	8,273	7.6	4,306	3,777	529	12.3
1982	110,204	99,526	10,678	9.7	4,277	3,616	661	15.5
1983	111,550	100,834	10,717	9.6	4,286	3,678	608	14.2
1984	113,544	105,005	8,539	7.5	4,347	3,860	486	11.2
1985	115,461	107,150	8,312	7.2	4,352	3,920	433	9.9
1986	117,834	109,597	8,237	7.0	4,391	4,005	385	8.8
1987	119,865	112,440	7,425	6.2	4,524	4,155	369	8.2
1988	121,669	114,968	6,701	5.5	4,543	4,198	345	7.6
1989	123,869	117,342	6,528	5.3	4,592	4,267	326	7.1
1990	125,840	118,793	7,047	5.6	4,598	4,248	350	7.6
1991	126,346	117,718	8,628	6.8	4,592	4,165	427	9.3
1992	128,105	118,492	9,613	7.5	4,690	4,274	417	8.9
1993	129,200	120,259	8,940	6.9	4,753	4,418	335	7.1
1994	131,056	123,060	7,996	6.1	4,823	4,539	285	5.9
1995	132,304	124,900	7,404	5.6	4,814	4,556	258	5.3
1996	133,943	126,708	7,236	5.4	4,897	4,659	239	4.9
1997	136,297	129,558	6,739	4.9	4,961	4,752	209	4.2
1998	137,673	131,463	6,210	4.5	5,029	4,835	194	3.9
1999	139,368	133,488	5,880	4.2	5,136	4,942	194	3.8
2000p	140,863	135,208	5,655	4.0	5,137	4,961	176	3.4

Source: Bureau of Labor Statistics, U.S. Dept. of Labor

**Table A-2**  
**MICHIGAN MANUFACTURING AND DURABLE GOODS EMPLOYMENT**  
 (Numbers in thousands)

Year	Durable Goods Manufacturing											Other Durable Goods
	Total Manufacturing	Total Durable Goods	Lumber & Wood Products	Furniture & Fixtures	Stone, Clay, Glass, & Conc. Products	Primary Metal Products	Fabricated Metal Products	Industrial Machinery & Equipment	Electronic & Electrical Machinery	Transportation Equipment	Instruments & Rel. Products	
1974	1,114.0	897.2	15.5	21.9	22.7	93.9	141.6	158.1	45.4	377.6	10.7	9.9
1975	983.7	778.2	12.8	18.6	19.7	79.5	120.4	136.6	38.2	332.8	10.6	9.0
1976	1,061.7	845.4	14.1	19.6	20.2	86.2	137.3	138.0	39.5	370.5	10.8	9.2
1977	1,128.4	905.9	14.4	20.0	21.7	91.6	150.6	150.6	40.9	400.1	11.2	9.7
1978	1,179.6	952.8	14.4	21.5	21.9	91.6	155.6	159.8	42.7	423.7	12.1	9.4
1979	1,160.2	935.1	14.1	23.0	21.5	88.0	150.8	167.2	41.9	405.6	13.8	9.3
1980	998.9	795.0	11.6	23.0	19.2	67.3	118.0	158.4	34.9	340.2	13.8	8.6
1981	979.0	778.1	10.5	23.0	17.8	65.0	117.5	154.8	33.0	334.9	13.6	8.1
1982	876.9	684.5	9.7	21.6	15.1	51.1	101.7	132.1	30.4	302.7	13.1	7.0
1983	880.5	685.8	10.8	22.2	15.7	49.5	102.9	116.9	30.6	317.5	12.9	6.7
1984	962.8	755.3	12.2	24.8	17.3	53.6	118.6	129.4	34.1	343.7	14.0	7.5
1985	1,002.4	787.0	12.7	26.7	17.4	52.0	124.5	134.1	36.1	361.3	14.8	7.3
1986	1,000.4	783.3	13.2	28.2	17.5	49.9	122.8	132.6	37.7	359.7	14.6	7.2
1987	972.5	751.6	14.3	31.3	17.8	48.6	119.0	123.0	37.4	337.6	15.1	7.4
1988	955.4	726.5	15.7	33.8	16.8	(1)	119.5	121.7	33.8 (1)	314.4	16.8	7.4
1989	971.3	734.1	15.5	35.4	17.3	45.0	125.5	128.9	34.7	307.1	17.5	7.3
1990	943.6	709.6	15.1	35.6	17.3	41.5	120.7	126.9	31.8	295.0	17.9	7.7
1991	896.7	670.1	14.4	33.9	16.4	38.0	112.0	119.5	29.8	281.6	17.2	7.4
1992	900.6	671.0	14.7	33.9	16.5	36.5	113.7	115.0	29.9	286.0	17.3	7.4
1993	908.3	673.9	15.7	34.4	16.7	36.2	117.7	118.7	31.0	278.4	17.2	7.8
1994	951.5	709.3	17.4	36.9	17.6	37.2	125.6	127.2	32.7	289.0	17.4	8.2
1995	979.7	734.4	17.8	38.0	18.3	38.1	128.6	134.4	34.2	298.6	18.0	8.4
1996	971.7	727.4	17.4	37.9	18.6	36.9	127.5	133.7	33.6	294.9	18.5	8.3
1997	966.3	723.4	17.1	38.8	19.1	36.7	127.6	134.9	34.0	289.2	17.8	8.3
1998	969.7	729.6	17.7	41.7	20.7	37.3	128.1	135.1	35.4	287.8	17.7	8.3
1999	977.9	740.5	18.5	43.7	20.6	37.7	130.0	132.1	36.5	295.9	17.2	8.3

(1) Data not continuous  
 Source: Bureau of Labor and Statistics, U.S. Dept. of Labor  
 Source: Michigan Employment Security Commission

**Table A-3**  
**MICHIGAN MANUFACTURING AND NONDURABLE GOODS EMPLOYMENT**  
 (Numbers in thousands)

Year	Total Manufacturing	Total Nondurable Goods Manufacturing	Nondurable Goods Manufacturing							
			Food & Kindred Products	Textile Mill Products & Apparel	Paper & Allied Products	Printing Publishing & Allied	Petroleum & Related Chemicals	Other Nondurable Goods		
1974	1,114.0	216.8	51.8	24.7	26.3	35.5	41.8	36.7		
1975	983.7	205.5	51.5	22.2	23.5	34.5	43.8	30.0		
1976	1,061.7	216.3	51.3	25.9	24.6	33.7	45.5	35.3		
1977	1,128.4	222.5	51.9	27.3	24.3	32.3	47.2	39.5		
1978	1,179.6	226.8	52.4	27.7	23.7	33.6	45.9	43.5		
1979	1,160.2	225.0	52.1	25.9	23.8	34.1	45.0	44.1		
1980	998.9	203.9	48.8	19.3	21.6	33.2	47.5	33.5		
1981	979.0	200.9	46.9	19.4	21.7	33.2	46.6	33.1		
1982	876.9	192.4	46.1	17.3	20.4	32.7	44.9	31.0		
1983	880.5	194.7	45.4	18.8	20.4	34.0	42.8	33.3		
1984	962.8	207.6	45.8	20.8	21.1	36.7	43.0	40.2		
1985	1,002.4	215.4	45.8	22.6	21.3	37.9	43.5	44.3		
1986	1,000.4	217.1	45.5	22.9	21.1	38.5	42.3	46.8		
1987	972.5	220.9	45.2	22.6	21.1	40.0	43.0	49.0		
1988	955.4	228.9	45.2	22.4	20.7	42.7	44.9	53.0		
1989	971.3	237.2	45.4	22.7	21.3	44.4	46.3	57.1		
1990	943.6	234.0	44.7	21.0	20.9	45.1	46.7	55.6		
1991	896.7	226.6	44.0	17.5	20.8	44.7	46.8	52.8		
1992	900.6	229.7	43.9	18.6	20.8	44.6	46.6	55.2		
1993	908.3	234.4	44.4	18.8	21.0	44.9	46.6	58.7		
1994	951.5	242.3	43.4	20.9	21.5	44.9	45.9	65.7		
1995	979.7	245.3	43.4	21.1	21.6	43.9	45.3	70.0		
1996	971.7	244.3	42.8	19.6	21.4	43.8	45.1	71.6		
1997	966.3	242.9	41.3	19.3	21.8	43.7	44.8	72.0		
1998	969.7	240.1	40.1	19.4	20.7	43.7	45.4	70.8		
1999	977.9	237.3	39.1	19.5	20.4	42.6	44.6	71.1		

Source: Bureau of Labor and Statistics, U.S. Dept. of Labor

Table A-4  
**MICHIGAN NONMANUFACTURING AND PRIVATE SERVICE-PRODUCING EMPLOYMENT**  
 (Numbers in thousands)

Year	Total Nonmanufacturing Industries			Total Service-Producing Industries			Service-Producing Industries					
	Construction	Mining	Total Service-Producing	Transportation, Communications, & Utilities	Wholesale Trade	Retail Trade	Finance, Real Estate & Insurance	Services	Wholesale Trade	Retail Trade	Finance, Real Estate & Insurance	Services
1970	1,411.3	11.8	1,281.0	150.4	144.8	458.4	119.7	407.7	144.8	458.4	119.7	407.7
1971	1,426.4	11.1	1,294.8	148.1	144.8	460.7	121.0	420.2	144.8	460.7	121.0	420.2
1972	1,494.7	12.0	1,355.2	147.9	146.0	478.9	127.7	454.7	146.0	478.9	127.7	454.7
1973	1,571.2	12.9	1,426.9	153.6	150.6	503.3	130.3	489.1	150.6	503.3	130.3	489.1
1974	1,601.2	13.4	1,462.0	144.8	146.8	509.6	134.2	510.2	153.5	510.9	134.2	510.2
1975	1,569.7	13.8	1,449.6	144.8	146.8	509.6	134.0	514.4	146.8	509.6	134.0	514.4
1976	1,626.7	13.2	1,503.5	145.6	148.9	531.0	136.9	541.1	148.9	531.0	136.9	541.1
1977	1,717.2	12.1	1,582.3	150.8	151.8	557.1	142.2	580.4	151.8	557.1	142.2	580.4
1978	1,818.3	13.3	1,666.2	155.9	164.2	584.9	147.4	613.8	164.2	584.9	147.4	613.8
1979	1,855.8	13.2	1,703.1	160.6	170.4	590.9	154.5	626.7	170.4	590.9	154.5	626.7
1980	1,816.0	12.5	1,686.7	152.2	161.5	572.1	156.5	644.4	161.5	572.1	156.5	644.4
1981	1,786.9	12.9	1,667.2	147.9	157.9	556.8	155.0	649.6	157.9	556.8	155.0	649.6
1982	1,738.7	10.4	1,638.8	143.3	150.7	542.6	151.9	650.3	150.7	542.6	151.9	650.3
1983	1,772.8	9.0	1,677.3	139.4	154.6	556.9	151.4	675.0	154.6	556.9	151.4	675.0
1984	1,851.1	10.0	1,748.4	140.2	166.3	579.5	154.4	708.0	166.3	579.5	154.4	708.0
1985	1,978.4	9.9	1,860.7	145.9	174.6	617.4	163.3	759.5	174.6	617.4	163.3	759.5
1986	2,058.2	9.6	1,933.4	149.0	180.9	638.7	171.0	793.8	180.9	638.7	171.0	793.8
1987	2,151.7	9.9	2,018.5	152.3	186.2	674.4	179.6	826.0	186.2	674.4	179.6	826.0
1988	2,240.2	10.5	2,097.5	153.8	191.1	703.1	186.2	863.3	191.1	703.1	186.2	863.3
1989	2,327.7	10.3	2,177.5	155.3	196.0	726.6	187.4	912.2	196.0	726.6	187.4	912.2
1990	2,392.2	9.4	2,240.5	158.4	201.8	747.6	191.0	941.7	201.8	747.6	191.0	941.7
1991	2,358.4	9.1	2,220.2	154.1	199.0	732.0	189.6	945.5	199.0	732.0	189.6	945.5
1992	2,387.8	8.9	2,250.6	154.3	197.2	728.3	191.2	979.6	197.2	728.3	191.2	979.6
1993	2,458.1	8.8	2,316.6	156.7	200.3	742.6	194.6	1,022.4	200.3	742.6	194.6	1,022.4
1994	2,556.3	8.7	2,405.0	162.6	206.4	764.5	196.9	1,074.6	206.4	764.5	196.9	1,074.6
1995	2,653.3	8.4	2,482.2	167.0	214.2	789.6	196.3	1,125.1	214.2	789.6	196.3	1,125.1
1996	2,745.2	7.6	2,569.6	170.4	219.6	805.6	202.4	1,171.6	219.6	805.6	202.4	1,171.6
1997	2,834.5	7.6	2,647.1	173.5	228.6	817.4	205.7	1,221.9	228.6	817.4	205.7	1,221.9
1998	2,884.5	7.8	2,690.6	177.7	232.6	822.8	208.5	1,249.0	232.6	822.8	208.5	1,249.0
1999	2,917.3	6.9	2,719.9	176.6	232.4	840.4	208.8	1,261.7	232.4	840.4	208.8	1,261.7

Source: Bureau of Labor Statistics, U.S. Dept. of Labor, and Michigan Employment Security Agency



**Table A-5**

**PUBLIC SECTOR EMPLOYMENT IN MICHIGAN**  
(Numbers in thousands)

<u>Year</u>	<u>Total Government Employment</u>	<u>Federal Government</u>	<u>State Government (1)</u>	<u>Local Government</u>
1970	506.6	57.7	115.9	333.0
1971	509.4	54.8	117.8	336.8
1972	526.8	55.2	122.4	349.0
1973	534.4	55.0	123.9	355.4
1974	562.5	56.2	127.5	378.8
1975	583.1	56.1	132.6	394.4
1976	594.5	55.5	135.1	403.9
1977	596.7	54.7	136.8	405.2
1978	611.4	54.6	143.6	413.2
1979	621.0	56.7	147.7	416.6
1980	627.8	58.2	152.3	417.3
1981	598.4	55.9	147.8	394.7
1982	577.8	55.9	142.2	379.7
1983	569.8	55.9	140.5	373.4
1984	567.2	56.1	139.5	371.6
1985	580.7	57.9	143.6	379.2
1986	598.6	60.1	147.9	390.5
1987	611.6	60.2	154.3	397.1
1988	623.5	60.3	157.8	405.5
1989	623.2	60.1	161.7	401.4
1990	633.9	61.2	166.2	406.4
1991	635.8	58.3	165.7	411.8
1992	639.0	58.2	163.4	417.4
1993	639.4	56.9	163.8	418.7
1994	638.9	57.0	163.9	418.1
1995	640.9	57.2	165.4	418.3
1996	643.8	56.5	167.7	419.7
1997	647.4	56.2	165.3	425.9
1998	656.0	56.6	167.4	432.1
1999	667.1	57.3	169.8	440.0

(1) In addition to classified civil service employees, state government employment includes employees of state-supported colleges and universities, the legislature and the courts.

Source: Bureau of Labor and Statistics, U.S. Dept. of Labor

**Table A-6  
MICHIGAN MSA AND COUNTY EMPLOYMENT AND UNEMPLOYMENT RATES**

Area	1970		1980		1990		1999	
	Number Employed	Unemployment Rate (%)	Number Employed	Unemployment Rate (%)	Number Employed	Unemployment Rate (%)	Number Employed	Unemployment Rate (%)
Michigan	3,356,000	6.7	3,759,000	12.4	4,248,000	7.6	4,942,000	3.8
<b>MSA</b>								
Ann Arbor	153,125	5.7	206,050	9.6	248,555	5.5	301,375	2.2
Benton Harbor	66,300	5.7	63,800	13.0	75,120	7.2	81,315	4.0
Detroit	1,710,225	6.4	1,768,175	13.1	1,950,939	7.6	2,215,267	3.5
Flint	158,250	8.2	161,425	17.7	179,919	9.8	187,430	5.5
Grand Rapids	296,425	6.8	374,675	9.6	461,294	6.2	594,901	3.2
Jackson	54,800	6.0	59,700	11.4	65,889	7.3	75,412	3.4
Kalamazoo/Battle Creek	159,550	5.6	177,950	9.6	203,503	6.6	229,751	3.5
Lansing/East Lansing	150,600	6.2	188,875	9.7	218,030	6.3	240,588	2.6
Saginaw/Bay City/Midland	145,125	5.9	160,325	13.6	173,935	7.6	194,555	4.2
Upper Peninsula	97,600	9.2	121,050	12.2	126,159	9.2	147,280	6.3
<b>County</b>								
Alcona	2,075	8.8	2,825	18.1	3,394	13.4	4,710	7.9
Alger	2,700	11.5	3,350	14.1	3,437	9.5	4,217	5.9
Allegan	24,975	5.9	30,400	11.1	42,850	6.3	55,932	2.9
Alpena	9,900	12.0	13,600	13.7	12,767	10.5	15,409	6.5
Antrim	4,575	8.5	6,350	15.3	7,931	10.4	9,849	6.4
Arenac	4,200	5.6	5,300	14.2	5,579	9.3	6,601	7.3
Baraga	2,425	9.3	2,850	13.0	2,975	10.8	4,149	6.9
Barry	14,300	5.6	17,375	10.9	23,458	6.4	32,776	3.0
Bay	42,800	8.0	46,100	14.8	49,162	8.2	53,782	4.8
Benzie	3,050	12.2	3,725	15.8	5,321	12.0	7,383	5.7
Berrien	66,300	5.7	63,800	13.0	75,120	7.2	81,315	4.0
Branch	15,500	6.9	18,825	13.6	18,172	7.5	21,535	3.6
Calhoun	57,600	5.9	53,725	12.0	59,786	7.5	67,378	4.2
Cass	16,825	5.5	18,750	12.7	22,768	7.5	26,247	3.4
Charlevoix	6,025	10.1	8,150	14.2	10,272	8.6	13,788	5.2
Cheboygan	5,500	19.4	8,250	18.3	9,191	12.3	11,552	10.5
Chippewa	8,625	15.0	9,750	18.4	12,892	11.7	16,782	7.2
Clare	5,425	9.6	7,900	15.5	8,223	11.0	10,012	7.9
Clinton	17,875	5.2	25,150	9.6	29,208	6.6	33,864	2.3

Table A-6 (Continued)

Area	1970		1980		1990		1999	
	Number Employed	Unemployment Rate (%)	Number Employed	Unemployment Rate (%)	Number Employed	Unemployment Rate (%)	Number Employed	Unemployment Rate (%)
Crawford	2,375	10.4	3,275	15.5	4,978	6.9	5,436	6.5
Delta	12,325	8.5	15,200	11.5	15,279	9.6	18,190	6.4
Dickinson	8,325	6.5	11,650	8.4	11,467	7.8	13,636	5.3
Eaton	26,475	4.8	39,750	9.4	48,024	6.1	55,420	2.4
Emmet	6,875	10.7	12,000	11.6	12,727	9.7	16,932	7.1
Genesee	158,250	8.2	161,425	17.7	179,919	9.8	187,430	5.5
Gladwin	4,225	6.6	7,125	13.6	7,267	10.0	8,928	7.1
Gogebic	6,950	6.7	7,800	9.0	6,630	8.4	7,581	6.9
Grand Traverse	15,150	6.8	27,375	8.7	33,350	7.0	44,350	3.6
Graiot	14,525	12.0	14,275	13.4	16,734	9.1	18,906	4.5
Hillsdale	14,625	6.5	18,150	11.9	19,145	8.9	24,065	3.3
Houghton	10,125	11.0	13,100	11.0	13,418	7.6	17,005	4.6
Huron	11,825	12.6	11,875	16.2	14,192	10.6	17,532	4.9
Ingham	106,250	6.8	123,975	9.9	140,798	6.4	151,304	2.7
Ionia	15,500	8.6	23,325	11.2	24,202	10.2	26,893	4.3
Iosco	6,350	5.9	8,250	14.1	10,151	8.7	10,684	8.2
Iron	4,325	13.5	5,400	11.8	4,790	9.1	5,309	6.8
Isabella	16,025	5.6	24,550	8.0	24,188	6.3	32,126	3.1
Jackson	54,800	6.0	59,700	11.4	65,889	7.3	75,412	3.4
Kalamazoo	81,425	5.2	94,500	8.0	113,085	5.4	126,448	2.9
Kalkaska	1,525	16.4	5,450	10.3	5,500	10.1	7,337	6.2
Kent	163,875	6.7	210,250	8.9	253,084	5.8	320,736	3.1
Keweenaw	575	11.5	675	15.6	512	15.2	791	8.8
Lake	1,925	7.2	2,525	14.4	2,388	12.3	3,229	8.1
Lapeer	17,500	5.9	28,200	13.0	33,698	9.7	42,697	4.0
Leelanau	3,850	9.9	6,975	9.7	8,167	6.4	10,945	3.3
Lenawee	32,325	7.0	32,850	14.6	40,264	7.8	47,063	3.6
Livingston	21,600	5.3	40,400	11.7	58,259	5.4	79,599	2.2
Luce	2,225	11.0	2,650	13.1	2,183	9.4	2,448	8.2
Mackinac	3,800	16.5	5,825	15.3	5,305	14.6	6,841	9.7
Macomb	233,700	5.4	279,750	14.0	362,702	7.4	429,048	3.2
Manistee	7,200	11.1	8,625	12.4	8,335	11.0	10,432	6.0
Marquette	20,225	6.6	26,650	12.8	29,328	8.3	31,104	5.7

Table A-6 (Continued)

Area	1970		1980		1990		1999	
	Number Employed	Unemployment Rate (%)	Number Employed	Unemployment Rate (%)	Number Employed	Unemployment Rate (%)	Number Employed	Unemployment Rate (%)
Mason	8,700	6.2	11,150	12.9	11,102	8.6	13,598	6.2
Mecosta	9,750	7.6	13,525	8.6	15,031	8.3	17,732	4.1
Menominee	8,700	5.4	9,925	9.2	11,128	7.0	12,473	4.9
Midland	23,125	3.9	26,225	10.0	35,442	5.7	42,418	2.9
Missaukee	2,500	10.7	3,500	15.7	4,783	10.8	6,556	5.9
Monroe	43,350	5.0	55,250	11.6	62,109	7.8	71,820	3.2
Montcalm	14,625	6.5	17,450	14.0	20,209	14.8	24,338	5.9
Montmorency	1,575	8.7	2,150	25.2	2,732	15.5	3,157	11.7
Muskegon	57,775	8.3	59,675	13.2	66,757	8.7	81,590	4.7
Newaygo	9,750	7.6	11,425	14.9	15,510	9.9	19,932	6.9
Oakland	352,275	5.9	407,500	11.1	568,833	5.7	664,559	2.5
Oceana	6,000	10.1	8,325	13.5	9,991	11.3	13,336	7.4
Ogemaw	3,800	15.6	6,400	14.1	6,461	10.1	8,234	7.1
Ontonagon	3,600	6.5	2,975	12.5	3,640	5.7	2,794	9.0
Oscoda	5,650	10.3	7,200	13.0	7,746	11.6	10,450	5.6
Otsego	1,450	7.9	1,900	19.1	2,668	8.4	3,341	8.1
Otsego	3,775	8.5	8,425	8.2	8,722	6.4	13,145	4.6
Ottawa	49,800	6.1	74,350	7.7	98,603	5.4	136,644	2.7
Presque Isle	3,825	6.7	3,825	18.6	5,313	12.0	5,617	10.9
Roscommon	3,500	3.4	5,050	15.1	6,456	9.3	7,567	7.7
Saginaw	79,200	5.3	88,000	14.0	89,331	8.0	98,356	4.4
St. Clair	42,150	8.2	55,900	12.3	65,661	9.0	77,367	4.4
St. Joseph	19,325	4.9	22,750	10.7	26,956	8.9	32,111	3.2
Sanilac	12,925	9.0	13,200	18.6	16,850	11.1	20,009	6.4
Schoolcraft	2,675	11.6	3,250	13.9	3,175	16.6	3,960	9.4
Shiawassee	22,650	9.0	25,500	15.8	31,519	10.0	35,712	4.4
Tuscola	17,050	8.0	21,250	16.3	23,413	10.0	27,497	5.4
Van Buren	20,525	6.4	29,725	10.1	30,632	8.9	35,925	4.3
Washtenaw	99,200	5.3	132,800	7.6	150,032	5.0	174,713	1.8
Wayne	1,021,250	6.7	941,575	13.8	857,935	8.8	929,777	4.2
Wexford	7,300	8.5	8,800	15.2	10,819	12.7	14,428	6.7

Source: Bureau of Labor Statistics, U.S. Dept. of Labor

**Table A-7**  
**MICHIGAN LABOR FORCE STATISTICS**  
**BY AGE, RACE AND SEX - 1990 AND 1999**

Category	Unemployment Rate (%)			Labor Force Participation Rate (%)			Level of Employment (000s)		
	1990	1999	Change	1990	1999	Change	1990	1999	Change
<u>Age</u>									
16 - 24 years	14.5	9.1	-5.4 pts	68.8	71.9	3.1 pts	738	867	129
25 - 44 years	6.6	2.9	-3.7	82.4	85.0	2.6	2,300	2,445	145
45 - 64 years	4.5	1.9	-2.6	65.3	72.9	7.6	1,108	1,501	393
Over 65 years	6.0	2.3	-3.7	9.4	11.9	2.5	87	129	42
<u>Race</u>									
White	6.3	3.3	-3.0	67.1	68.9	1.8	3,733	4,235	502
Black	11.0	6.7	-4.3	55.2	65.7	10.5	438	583	145
Other	9.9	3.8	-6.1	60.7	71.4	10.7	62	124	62
<u>Sex</u>									
Male	8.1	3.6	-4.5	75.3	76.3	1.0	2,342	2,690	348
Female	6.8	3.9	-2.9	56.2	61.2	5.0	1,891	2,252	361
All Groups	7.5	3.8	-3.7	65.4	68.5	3.1	4,233	4,942	709

Source: Current Population Survey microdata files, Bureau of Census, U.S. Department of Commerce  
Compiled by Labor Market Analysis, Employment Service Agency, Michigan Department of Career Development

**Table A-8**  
**MICHIGAN LABOR FORCE STATISTICS**  
**BY EDUCATION LEVEL**

Educational Level	Unemployment Rate (%)		Labor Force Participation Rate (%)		Level of Employment (000s)				
	1996	1999	Change	1996	1999	Change			
Not a high school graduate	12.8	10.3	-2.5 pts	41.2	47.3	6.0 pts	501	568	67
High school graduate or GED	5.4	3.8	-1.6	65.6	67.2	1.6	1,539	1,673	134
Some college or Associate's	3.9	3.0	-0.9	76.0	76.9	8.0	1,501	1,548	47
Bachelor's degree or more	1.8	1.6	-0.2	80.0	80.0	0.0	1,051	1,169	118
All Groups	5.0	3.8	0.0	66.5	68.8	2.3	4,593	4,959	366

Source: Current Population Survey microdata files, Bureau of Census, U.S. Department of Commerce  
 Compiled by Don Grimes, University of Michigan

**Table A-9**  
**NEW INCORPORATIONS IN MICHIGAN**

<u>Year</u>	<u>Profit</u>	<u>Nonprofit</u>	<u>Foreign (Out-of-State)</u>	<u>Total</u>
1960	4,800	1,261	499	6,560
1961	4,788	1,312	497	6,597
1962	5,135	1,243	601	6,979
1963	5,102	1,241	528	6,871
1964	5,825	1,256	593	7,674
1965	6,152	1,286	627	8,065
1966	6,315	1,356	640	8,311
1967	6,341	1,361	715	8,417
1968	7,700	1,588	825	10,113
1969	9,586	1,767	1,064	12,417
1970	8,378	1,782	1,054	11,214
1971	8,270	1,993	1,082	11,345
1972	9,202	2,134	1,175	12,511
1973	9,709	1,878	1,093	12,680
1974	9,342	2,106	1,009	12,457
1975	9,996	2,138	926	13,060
1976	11,545	2,080	972	14,597
1977	13,273	2,082	956	16,311
1978	14,538	2,148	1,039	17,725
1979	18,654	2,217	1,062	21,933
1980	16,931	2,503	1,077	20,511
1981	17,139	2,288	1,277	20,704
1982	17,201	2,294	1,300	20,795
1983	18,463	2,613	1,540	22,616
1984	19,474	2,574	1,625	23,673
1985	21,864	2,490	1,719	26,073
1986	22,914	2,559	1,864	27,337
1987	23,869	2,467	1,998	28,334
1988	22,633	2,695	1,937	27,265
1989	22,248	2,881	1,828	26,957
1990	21,985	2,871	1,714	26,570
1991	21,840	2,863	1,626	26,329
1992	23,380	3,111	1,778	28,269
1993	24,488	3,102	1,881	29,471
1994	25,046	3,249	2,182	30,477
1995	25,752	3,241	2,351	31,344
1996	26,263	3,357	2,407	32,027
1997	25,560	3,400	2,653	31,613
1998	22,768	3,532	2,680	28,980
1999	22,304	3,625	2,644	28,573

Source: Michigan Department of Consumer and Industry Services,  
Corporation, Securities and Land Development Bureau

Table A-10

**U.S. AND MICHIGAN MANUFACTURING INDUSTRIES  
AVERAGE WEEKLY AND HOURLY EARNINGS**

Year	Michigan			United States		
	Average Weekly Earnings	Average Hourly Earnings	Real Weekly Earnings (1982-84 \$)	Average Weekly Earnings	Average Hourly Earnings	Real Weekly Earnings (1982-84 \$)
1956	\$94.98	\$2.33	\$336.81	\$78.78	\$1.95	\$289.63
1960	112.00	2.75	377.10	89.72	2.26	303.11
1965	143.79	3.22	460.87	107.53	2.61	341.37
1970	168.33	4.15	426.15	133.33	3.35	343.63
1971	188.19	4.59	460.12	142.44	3.57	351.70
1972	211.52	4.94	497.69	154.71	3.82	370.12
1973	228.63	5.27	505.82	166.46	4.09	374.91
1974	232.35	5.63	463.77	176.80	4.42	358.62
1975	250.76	6.15	465.23	190.79	4.83	354.63
1976	290.97	6.81	512.27	209.32	5.22	367.87
1977	326.27	7.54	537.51	228.90	5.68	377.72
1978	349.50	8.13	535.22	249.27	6.17	382.32
1979	359.72	8.73	488.75	269.34	6.70	370.99
1980	381.87	9.52	447.68	288.62	7.27	350.27
1981	426.27	10.53	457.37	318.00	7.99	349.83
1982	449.33	11.18	463.23	330.26	8.49	342.24
1983	494.02	11.62	495.01	354.08	8.83	355.50
1984	526.18	12.18	509.86	374.03	9.19	359.99
1985	544.78	12.64	510.09	386.37	9.54	359.08
1986	545.28	12.80	503.49	396.01	9.73	361.32
1987	547.33	12.97	490.00	406.31	9.91	357.67
1988	576.32	13.31	496.40	418.81	10.19	354.02
1989	579.58	13.51	473.90	429.68	10.48	346.52
1990	579.35	13.86	450.51	441.86	10.83	338.07
1991	602.58	14.52	452.73	455.03	11.18	334.09
1992	619.06	14.81	455.53	469.86	11.46	334.90
1993	662.02	15.36	474.23	486.04	11.74	336.36
1994	724.24	16.13	502.94	506.94	12.07	342.06
1995	722.53	16.31	486.22	514.59	12.37	337.66
1996	731.81	16.67	479.88	531.23	12.77	338.58
1997	757.64	17.18	484.73	553.14	13.17	344.64
1998	762.51	17.61	477.17	562.53	13.49	345.11
1999	808.35	18.33	493.20	580.05	13.91	348.17

Source: Employment Service Agency, Michigan Dept of Career Development and Bureau of Labor Statistics, U.S. Dept. of Labor



**Table A-11**  
**MICHIGAN PERSONAL INCOME, BY MAJOR SOURCE**  
 (Amounts in millions of dollars)

Source	1970	1980	1990	1995	1998	1999
Total Wage and Salary Disbursements	\$25,161.78	\$57,819.03	\$102,802.89	\$133,112.61	\$157,497.28	\$166,625.55
Farm, Ag. Serv., Forestry, Fishing and Other	124.24	299.63	703.15	934.23	1,218.38	1,276.44
Mining	110.40	289.08	300.87	326.26	335.69	316.40
Construction	1,393.13	2,442.53	4,275.51	5,203.99	7,423.12	8,336.89
Manufacturing	10,725.14	22,691.76	34,187.94	44,474.77	49,932.71	52,108.75
Nondurable Goods	8,792.05	18,791.98	27,180.63	35,689.18	39,948.75	42,029.45
Durable Goods	1,933.09	3,899.78	7,007.32	8,785.59	9,983.96	10,079.30
Transportation and Utilities	1,418.60	3,303.81	5,165.93	6,176.59	7,361.05	7,786.13
Wholesale Trade	1,417.02	3,243.55	6,574.06	8,688.32	10,699.68	11,232.21
Retail Trade	2,469.92	5,311.40	9,336.37	11,625.61	13,637.37	14,566.49
Finance, Insurance and Real Estate	911.21	2,368.28	5,080.91	6,705.65	8,609.03	8,858.03
Services	2,799.14	8,678.83	21,335.35	30,174.77	37,592.00	40,557.58
Government and Gov. Enterprise	3,792.99	9,190.18	15,842.80	18,802.42	20,688.25	21,586.64
Federal Civilian	553.13	1,129.16	1,841.90	2,186.85	2,371.38	2,450.91
Military	144.54	199.79	442.72	283.94	244.04	253.82
State and Local	3,095.32	7,861.23	13,558.18	16,331.63	18,072.84	18,881.92
Other Labor Income	2,348.89	9,221.91	14,474.32	23,967.16	17,654.74	18,148.75
Proprietors' Income	2,687.74	4,868.58	10,109.73	12,854.66	15,031.63	16,099.33
Farm	292.23	364.44	303.98	272.49	(32.21)	226.64
Nonfarm	2,395.52	4,504.15	9,805.74	12,582.17	15,063.84	15,872.69
Total Earnings by Place of Work	30,198.42	71,909.52	127,386.93	169,934.43	190,183.65	200,873.62
Less: Contributions for Social Insurance	1,019.63	3,182.70	7,497.82	10,226.22	11,764.52	12,479.33
Plus: Adjustment for Residence	111.08	352.84	457.97	702.11	904.34	943.68
Equals: Net Earnings by Place of Residence	29,289.87	69,079.66	120,347.08	160,410.32	179,323.48	189,337.97
Plus: Dividends, Interest and Rent	4,816.82	13,095.34	33,088.50	39,496.05	48,971.36	50,791.75
Plus: Transfer Payments	3,203.13	13,792.37	23,667.88	31,687.87	34,957.06	37,166.20
TOTAL PERSONAL INCOME	37,309.82	95,967.36	177,103.45	231,594.23	263,251.90	277,295.92
TOTAL REAL PERSONAL INCOME (in 1982-84 dollars)	94,455.24	112,505.70	137,716.52	155,850.76	164,738.36	169,186.04

Note: Some numbers may not add due to rounding.  
 Source: Bureau of Economic Analysis, U.S. Dept. of Commerce

Table A-12

## U. S. AND MICHIGAN PERSONAL AND PER-PERSON INCOME

Year	United States			Michigan			Michigan		
	Personal Income	Percent Change Annual Rate	Per Person Income	Personal Income	Percent Change Annual Rate	Per Person Income	Personal Income	Percent Change Annual Rate	Per Person Income
1970	\$834,455,000		\$4,095	\$37,309,818		\$4,194			102.4
1975	1,326,214,000	9.7	6,155	57,191,432	8.9	6,279	8.4		102.0
1980	2,313,921,000	11.8	10,183	95,967,358	10.9	10,369	10.6		101.8
1981	2,588,335,000	11.9	11,280	102,455,356	6.8	11,125	7.3		98.6
1982	2,756,954,000	6.5	11,901	104,477,364	2.0	11,462	3.0		96.3
1983	2,935,040,000	6.5	12,554	110,770,972	6.0	12,243	6.8		97.5
1984	3,260,064,000	11.1	13,824	122,857,126	10.9	13,576	10.9		98.2
1985	3,498,662,000	7.3	14,705	133,728,039	8.8	14,734	8.5		100.2
1986	3,697,359,000	5.7	15,397	142,146,336	6.3	15,573	5.7		101.1
1987	3,945,515,000	6.7	16,284	148,190,827	4.3	16,130	3.6		99.1
1988	4,255,000,000	7.8	17,403	158,529,131	7.0	17,198	6.6		98.8
1989	4,582,429,000	7.7	18,566	169,112,996	6.7	18,276	6.3		98.4
1990	4,885,525,000	6.6	19,584	177,103,451	4.7	19,022	4.1		97.1
1991	5,065,416,000	3.7	20,089	181,495,449	2.5	19,318	1.6		96.2
1992	5,376,622,000	6.1	21,082	192,037,533	5.8	20,278	5.0		96.2
1993	5,598,446,000	4.1	21,718	203,827,569	6.1	21,390	5.5		98.5
1994	5,878,362,000	5.0	22,581	219,120,750	7.5	22,862	6.9		101.2
1995	6,192,235,000	5.3	23,562	231,594,233	5.7	23,975	4.9		101.8
1996	6,538,103,000	5.6	24,651	238,094,677	2.8	24,447	2.0		99.2
1997	6,928,762,000	6.0	25,874	250,211,036	5.1	25,570	4.6		98.8
1998	7,383,687,000	6.6	27,322	263,251,897	5.2	26,807	4.8		98.1
1999	7,783,152,000	5.4	28,542	277,295,918	5.3	28,113	4.9		98.5

Source: Bureau of Economic Analysis, U.S. Dept. of Commerce

**Table A-13**  
**U. S. AND MICHIGAN REAL PERSONAL AND PER-PERSON INCOME**  
(in 1982-84 dollars)

Year	United States			Michigan			
	Real Personal Income	Percent Change Annual Rate	Real Per Person Income	Real Personal Income	Percent Change Annual Rate	Real Per Person Income	Percent Change Annual Rate
1970	\$2,150,657,216		\$10,554	\$94,455,235		\$10,618	
1975	2,465,081,784	2.8	11,441	106,106,553	1.6	11,649	1.9
1980	2,808,156,553	2.6	12,358	112,505,695	1.6	12,156	0.9
1981	2,847,453,245	1.4	12,409	109,930,639	0.4	11,937	-1.8
1982	2,856,947,150	0.3	12,333	107,708,623	-0.6	11,816	-1.0
1983	2,946,827,309	3.1	12,604	110,992,958	2.2	12,268	3.8
1984	3,137,693,936	6.5	13,305	119,047,603	5.6	13,155	7.2
1985	3,251,544,610	3.6	13,666	125,213,520	2.7	13,796	4.9
1986	3,373,502,737	3.8	14,048	131,252,388	2.8	14,380	4.2
1987	3,473,164,613	3.0	14,335	132,668,601	2.0	14,440	0.4
1988	3,596,787,828	3.6	14,711	136,545,332	2.6	14,813	2.6
1989	3,695,507,258	2.7	14,973	138,277,184	1.8	14,944	0.9
1990	3,737,968,630	1.1	14,984	137,716,525	0.1	14,792	-1.0
1991	3,719,101,322	-0.5	14,750	136,360,217	-1.6	14,514	-1.9
1992	3,832,232,359	3.0	15,026	141,307,971	1.9	14,921	2.8
1993	3,874,357,093	1.1	15,030	146,008,287	0.0	15,322	2.7
1994	3,966,506,073	2.4	15,237	152,167,188	1.4	15,876	3.6
1995	4,063,146,325	2.4	15,461	155,850,762	1.5	16,134	1.6
1996	4,167,050,988	2.6	15,711	156,127,657	1.6	16,031	-0.6
1997	4,316,985,670	3.6	16,121	160,083,836	2.6	16,360	2.1
1998	4,529,869,325	4.9	16,762	164,738,359	4.0	16,775	2.5
1999	4,671,759,904	3.1	17,132	169,186,039	2.2	17,153	2.2

Source: Bureau of Economic Analysis, U.S. Dept. of Commerce

Table A-14

**COUNTY AND METRO AREA  
PER-PERSON INCOME**

Area	1970	1975	1980	1985	1990	1998	Rank by 1998 Level	Percent Annual Growth Rate 1990 to 1998	Rank by Annual Growth Rate 1990 to 1998	Area as Percent of Michigan for 1998
United States	\$4,095	\$6,155	\$10,183	\$14,705	\$19,584	\$27,203		4.2		
Michigan	4,194	6,279	10,369	14,734	19,022	26,885	Among MSAs	4.4	Among MSAs	105
Michigan (Metropolitan Portion)	4,355	6,513	10,822	15,460	19,961	28,310	MSAs	4.5		118
Ann Arbor PMSA	4,416	6,588	11,258	16,484	21,493	31,616	1	4.9	2	
Benton Harbor MSA	4,056	5,886	8,995	12,481	16,450	24,235	6	5.0	1	90
Detroit PMSA	4,600	6,850	11,431	16,369	21,316	30,118	2	4.4	5	112
Flint PMSA	3,961	6,024	10,598	15,541	17,494	23,947	8	4.0	8	89
Grand Rapids-Muskegon-Holland MSA	3,899	5,844	9,640	13,847	18,274	26,694	3	4.9	3	99
Jackson MSA	4,087	6,101	9,599	12,678	16,255	22,576	9	4.2	6	84
Kalamazoo-Battle Creek MSA	3,998	6,046	9,590	13,462	17,804	24,726	5	4.2	7	92
Lansing-East Lansing MSA	3,931	6,035	9,864	14,173	17,815	24,226	7	3.9	9	90
Saginaw-Bay City-Midland MSA	3,831	5,960	10,000	13,771	17,698	25,010	4	4.4	4	93
Detroit-Ann Arbor-Flint CMSA	4,534	6,760	11,345	16,309	21,015	29,775	Among Counties		Among Counties	111
Alcona	2,910	4,337	7,243	10,423	13,748	18,593	62	3.8	62	69
Alger	2,628	4,279	6,297	9,026	12,365	16,996	74	4.1	51	63
Allegan	3,488	5,322	8,646	11,898	16,041	24,356	16	5.4	5	91
Alpena	3,274	5,128	8,362	11,301	15,248	22,125	33	4.8	21	82
Antrim	3,130	4,671	8,396	11,211	14,898	22,073	34	5.0	11	82
Arenac	3,246	4,769	7,851	10,961	13,972	18,452	63	3.5	72	69
Baraga	3,150	4,598	7,309	9,333	12,306	17,678	69	4.6	24	66
Barry	3,333	5,389	9,169	12,163	15,948	24,650	14	5.6	2	92
Bay	3,589	5,453	9,559	12,994	17,018	24,458	15	4.6	23	91
Benzie	3,387	4,992	7,815	11,669	14,671	20,812	43	4.5	31	77
Berrien	4,056	5,886	8,995	12,481	16,450	24,235	19	5.0	15	90
Branch	3,199	5,446	8,704	11,570	14,458	19,306	54	3.7	68	72
Calhoun	4,042	6,155	9,467	13,007	16,972	23,333	28	4.1	50	87
Cass	3,659	5,803	8,553	11,694	14,676	20,982	39	4.6	25	78

Table A-14 (Continued)

Area	1970	1975	1980	1985	1990	1998	Rank by 1998 Level	Percent Annual Growth Rate 1990 to 1998	Rank by Annual Growth Rate 1990 to 1998	Area as Percent of Michigan for 1998
	\$3,163	\$5,069	\$8,341	\$11,367	\$16,110	\$23,627				
Charlevoix	3,028	4,657	7,685	10,406	13,894	20,928	41	5.3	6	78
Cheboygan	3,056	4,848	7,103	9,782	11,944	17,008	73	4.5	26	63
Chippewa	2,899	4,284	6,943	9,824	12,570	16,549	80	3.5	74	62
Clare	3,564	4,904	9,052	13,627	16,504	24,310	17	5.0	16	90
Clinton	3,292	4,729	6,627	9,629	12,076	16,723	78	4.2	45	62
Crawford	3,219	4,975	8,021	11,158	14,738	21,878	35	5.1	10	81
Delta	3,546	5,822	9,665	12,338	17,552	23,187	29	3.5	70	86
Dickinson	3,737	5,644	9,741	14,316	17,905	23,978	21	3.7	66	89
Eaton	3,667	5,442	9,153	13,117	19,120	26,222	11	4.0	52	98
Emmet	3,961	6,024	10,598	15,541	17,494	23,947	23	4.0	54	89
Genesee	3,089	4,493	7,161	9,877	12,813	17,683	68	4.1	49	66
Gladwin	3,250	4,809	7,332	9,417	13,308	19,381	52	4.8	19	72
Gogebic	3,900	5,895	9,275	13,670	18,212	26,535	9	4.8	18	99
Grand Traverse	3,497	5,579	8,471	11,825	14,410	19,545	49	3.9	61	73
Gratiot	3,481	5,296	8,186	11,390	14,426	20,361	45	4.4	34	76
Hillsdale	2,803	4,224	7,028	9,838	13,183	18,732	59	4.5	28	70
Houghton	3,231	5,320	8,774	12,486	15,852	24,179	20	5.4	3	90
Huron	4,051	6,378	10,069	14,238	18,056	24,296	18	3.8	64	90
Ingham	3,114	4,962	7,949	11,183	13,270	16,832	77	3.0	79	63
Ionia	3,447	5,226	7,772	11,378	15,281	19,048	56	2.8	81	71
Iosco	2,877	4,913	8,242	10,523	13,832	19,141	55	4.1	46	71
Iron	2,915	4,807	7,706	10,763	14,204	19,696	48	4.2	43	73
Isabella	4,087	6,101	9,599	12,678	16,255	22,576	31	4.2	41	84
Jackson	4,094	6,252	10,147	14,407	19,393	27,364	7	4.4	35	102
Kalamazoo	3,365	5,707	6,790	9,197	12,491	17,122	71	4.0	53	64
Kalkaska	4,074	6,099	10,137	14,640	19,390	28,820	5	5.1	8	107
Kent	2,532	4,616	6,881	8,720	14,438	17,988	66	2.8	82	67
Keweenaw	2,912	3,968	6,180	8,844	11,199	15,518	82	4.2	44	58
Lake										

Table A-14 (Continued)

Area	1970	1975	1980	1985	1990	1998	Rank by 1998 Level	Percent Annual Growth Rate 1990 to 1998	Rank by Annual Growth Rate 1990 to 1998	Area as Percent of Michigan for 1998
	\$3,491	\$5,244	\$9,187	\$14,023	\$17,019	\$22,727				
Lapeer	3,681	5,586	9,073	12,941	17,878	26,448	10	5.0	12	98
Leelanau	3,890	5,779	9,535	13,229	17,123	23,400	27	4.0	56	87
Lenawee	4,112	5,860	10,543	16,287	20,778	30,666	3	5.0	14	114
Livingston	2,751	5,012	8,515	12,460	15,866	18,135	64	1.7	83	67
Luce	2,870	4,602	7,446	11,385	15,156	23,735	24	5.8	1	88
Mackinac	4,373	6,498	11,127	16,481	21,307	28,293	6	3.6	69	105
Macomb	3,220	4,820	8,122	11,228	14,487	18,697	60	3.2	76	70
Manistee	3,283	5,418	8,372	11,185	15,102	20,894	42	4.1	47	78
Marquette	3,336	4,931	7,937	10,899	14,718	20,551	44	4.3	39	76
Mason	2,534	3,737	6,395	8,931	11,831	17,181	70	4.8	20	64
Mecosta	2,943	4,676	7,765	11,032	14,855	20,980	40	4.4	33	78
Menominee	4,368	6,518	10,763	15,141	21,871	29,897	4	4.0	55	111
Midland	2,737	4,383	6,544	9,883	12,540	17,058	72	3.9	60	63
Missaukee	3,730	5,759	9,567	13,475	17,404	25,687	12	5.0	13	96
Monroe	3,388	5,004	8,456	11,073	12,960	16,583	79	3.1	78	62
Montcalm	2,636	4,079	7,073	9,623	11,883	16,868	76	4.5	30	63
Montmorency	3,684	5,565	8,923	12,294	15,143	21,016	38	4.2	42	78
Muskegon	3,252	4,791	7,579	10,629	13,555	17,856	67	3.5	73	66
Newaygo	5,468	8,208	14,159	20,897	27,865	42,378	1	5.4	4	158
Oakland	3,258	4,672	7,768	10,784	13,703	18,934	58	4.1	48	70
Oceana	2,826	4,199	6,564	9,467	11,667	15,938	81	4.0	58	59
Ogemaw	3,125	5,095	7,660	9,756	13,896	18,985	57	4.0	57	71
Ontonagon	2,967	4,341	6,587	9,650	12,207	18,133	65	5.1	9	67
Osceola	2,546	4,551	6,684	8,546	10,489	14,655	83	4.3	38	55
Oscoda	3,349	5,224	8,295	11,623	15,770	22,229	32	4.4	37	83
Otsego	3,815	5,668	9,471	14,071	19,018	26,812	8	4.4	36	100
Ottawa	2,729	4,429	7,812	10,575	13,574	16,951	75	2.8	80	63
Presque Isle	3,325	4,613	7,705	11,260	14,228	18,656	61	3.4	75	69
Roscommon	3,805	6,060	9,984	13,725	16,561	23,402	26	4.4	32	87
Saginaw										

Table A-14 (Continued)

Area	1970	1975	1980	1985	1990	1998	Rank by 1998 Level	Percent Annual Growth Rate 1990 to 1998	Rank by Annual Growth Rate 1990 to 1998	Area as Percent of Michigan for 1998
	\$3,885	\$5,684	\$9,497	\$13,774	\$17,592	\$23,976				
St. Clair	3,837	5,486	8,692	11,620	15,180	21,566	22	3.9	59	89
St. Joseph	3,602	5,207	8,551	11,489	14,818	21,084	36	4.5	29	80
Sanilac	2,980	4,740	7,570	10,526	14,014	19,473	37	4.5	27	78
Schoolcraft	3,684	5,660	9,325	13,088	15,561	20,056	51	4.2	40	72
Shiawassee	3,341	5,346	8,832	12,204	14,753	19,487	47	3.2	77	75
Tuscola	3,547	5,139	8,086	11,338	14,359	19,313	50	3.5	71	72
Van Buren	4,677	7,094	12,117	17,654	23,201	34,751	53	3.8	65	72
Washtenaw	4,452	6,579	10,628	14,620	18,605	25,065	2	5.2	7	129
Wayne	2,971	4,500	7,204	10,497	13,915	20,114	13	3.8	63	93
Wexford							46	4.7	22	75

Source: Bureau of Economic Analysis, U.S. Dept. of Commerce  
 Note: County and Metro Area data are from June 15, 2000 release, U.S. and Michigan data are from September 12, 2000 release.

Table A-15

## MICHIGAN GROSS STATE PRODUCT BY SECTOR - MILLIONS OF DOLLARS

Component	1980	1985	1990	1995	1996	1997	1998
Agriculture, forest., fish	\$1,631	\$1,914	\$2,147	\$2,322	\$2,411	\$2,506	\$2,470
Mining	1,181	1,295	1,129	994	1,091	1,259	1,136
Construction	3,967	4,822	7,633	9,374	10,639	11,722	12,752
Manufacturing	31,999	51,610	53,145	74,541	72,536	75,263	78,153
Durable goods	25,327	41,481	38,684	55,479	53,804	56,605	59,273
Motor vehicles	11,051	22,570	16,881	27,110	24,675	25,642	27,399
Fabricated metals	3,340	5,338	5,907	8,205	9,023	9,389	9,581
Industrial machinery	5,053	5,946	6,732	8,439	7,920	8,103	8,144
Nondurable goods	6,673	10,129	14,461	19,062	18,732	18,658	18,880
Transportation & utilities	7,785	11,485	14,073	17,081	18,136	19,260	19,873
Wholesale trade	6,534	9,088	12,524	17,941	19,291	20,712	22,072
Retail trade	9,412	13,256	16,660	22,375	25,124	26,682	28,318
F.I.R.E.	14,246	19,733	27,483	35,411	37,304	40,073	42,903
Services	13,498	21,692	33,396	45,991	49,488	52,838	56,618
Business services	1,937	4,590	6,637	10,347	11,294	12,735	14,368
Health services	5,114	7,362	11,152	15,665	16,709	17,108	17,539
Government	12,537	16,307	22,511	27,910	28,827	29,862	30,211
Federal	1,743	2,651	3,377	3,779	3,820	3,921	4,090
State and local	10,795	13,656	19,134	24,130	25,007	25,942	26,121
<b>Total Gross State Product</b>	<b>\$102,791</b>	<b>\$151,202</b>	<b>\$190,700</b>	<b>\$253,940</b>	<b>\$264,848</b>	<b>\$280,178</b>	<b>\$294,505</b>

## Percent of Total

Agriculture, forest., fish	1.6%	1.3%	1.1%	0.9%	0.9%	0.9%	0.8%
Mining	1.1%	0.9%	0.6%	0.4%	0.4%	0.4%	0.4%
Construction	3.9%	3.2%	4.0%	3.7%	4.0%	4.2%	4.3%
Manufacturing	31.1%	34.1%	27.9%	29.4%	27.4%	26.9%	26.5%
Transportation & utilities	7.6%	7.6%	7.4%	6.7%	6.8%	6.9%	6.7%
Wholesale trade	6.4%	6.0%	6.6%	7.1%	7.3%	7.4%	7.5%
Retail trade	9.2%	8.8%	8.7%	8.8%	9.5%	9.5%	9.6%
F.I.R.E.	13.9%	13.1%	14.4%	13.9%	14.1%	14.3%	14.6%
Services	13.1%	14.3%	17.5%	18.1%	18.7%	18.9%	19.2%
Government	12.2%	10.8%	11.8%	11.0%	10.9%	10.7%	10.3%
<b>Total Gross State Product</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Note: F.I.R.E. represents Finance, Insurance, and Real Estate.

Source: Bureau of Economic Analysis, U.S. Department of Commerce



**Table A-16**  
**U. S. AND DETROIT CONSUMERS PRICE INDICES**  
**AND INFLATION RATES**  
(1982-1984= 100)

Year	United States		Detroit	
	Index	Percent Change	Index	Percent Change
1956	27.2	1.5	28.2	1.9
1957	28.1	3.3	29.0	2.8
1958	28.9	2.8	29.4	1.5
1959	29.1	0.7	29.4	0.0
1960	29.6	1.7	29.7	1.0
1961	29.9	1.0	29.8	0.3
1962	30.2	1.0	29.9	0.3
1963	30.6	1.3	30.2	1.0
1964	31.0	1.3	30.4	0.7
1965	31.5	1.6	31.2	2.6
1966	32.4	2.9	32.5	4.2
1967	33.4	3.1	33.6	3.4
1968	34.8	4.2	35.1	4.5
1969	36.7	5.5	37.2	6.0
1970	38.8	5.7	39.5	6.2
1971	40.5	4.4	40.9	3.5
1972	41.8	3.2	42.5	3.9
1973	44.4	6.2	45.2	6.4
1974	49.3	11.0	50.1	10.8
1975	53.8	9.1	53.9	7.6
1976	56.9	5.8	56.8	5.4
1977	60.6	6.5	60.7	6.9
1978	65.2	7.6	65.3	7.6
1979	72.6	11.3	73.6	12.7
1980	82.4	13.5	85.3	15.9
1981	90.9	10.3	93.2	9.3
1982	96.5	6.2	97.0	4.1
1983	99.6	3.2	99.8	2.9
1984	103.9	4.3	103.2	3.4
1985	107.6	3.6	106.8	3.5
1986	109.6	1.9	108.3	1.4
1987	113.6	3.6	111.7	3.1
1988	118.3	4.1	116.1	3.9
1989	124.0	4.8	122.3	5.3
1990	130.7	5.4	128.6	5.2
1991	136.2	4.2	133.1	3.5
1992	140.3	3.0	135.9	2.1
1993	144.5	3.0	139.6	2.7
1994	148.2	2.6	144.0	3.2
1995	152.4	2.8	148.6	3.2
1996	156.9	3.0	152.5	2.6
1997	160.5	2.3	156.3	2.5
1998	163.0	1.6	159.8	2.2
1999	166.6	2.2	163.9	2.6

Source: Bureau of Labor Statistics, U.S. Dept. of Labor

Table A-17

**U.S. AND DETROIT CONSUMER PRICE INDICES DETAIL**  
(Annual Average)

Expenditure category	1970		1980		1990		1991		1992		1993	
	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit
All Items	38.8	39.5	82.4	85.3	130.7	128.6	136.2	133.1	140.3	135.9	144.5	139.6
Food and beverages	40.1	NA	86.7	88.9	132.1	126.5	136.8	131.1	138.7	133.4	141.6	135.2
Food	39.2	41.7	86.8	88.9	132.4	126.3	136.3	130.5	137.9	132.9	140.9	134.5
Food at home	39.9	41.5	88.4	88.4	132.3	126.8	135.8	131.4	136.8	133.5	140.1	135.2
Food away from home	37.5	40.8	83.4	89.8	133.4	126.5	137.9	129.9	140.7	132.5	143.2	134.6
Housing	36.4	NA	81.1	85.5	128.5	126.4	133.6	128.6	137.5	131.8	141.2	134.4
Shelter	35.5	38.1	81.0	88.6	140.0	140.1	146.3	143.8	151.2	147.5	155.7	151.9
Rent of primary residence	46.5	50.5	80.9	87.8	138.4	136.5	143.3	138.8	146.9	139.4	150.3	142.8
Owners' equivalent rent	NA	NA	NA	NA	144.8	144.2	150.4	148.0	155.5	151.8	160.5	157.0
Fuel and utilities	29.1	26.3	75.4	72.2	111.6	112.4	115.3	111.2	117.8	116.6	121.3	116.8
Household furnishings and operations	46.8	NA	86.3	87.3	113.3	104.3	116.0	105.9	118.0	105.1	119.3	104.1
Apparel	59.2	67.9	90.9	94.3	124.1	127.9	128.7	131.8	131.9	129.9	133.7	137.9
Transportation	37.5	36.9	83.1	82.8	120.5	124.0	123.8	129.3	126.5	129.9	130.4	132.5
Private	37.5	36.6	84.2	83.3	118.8	123.9	121.9	128.9	124.6	129.3	127.5	130.9
Gasoline	27.9	NA	97.5	96.6	101.0	102.0	99.2	98.3	99.0	93.6	97.7	92.0
Public	35.2	NA	69.0	NA	142.6	NA	148.9	NA	151.4	NA	167.0	NA
Medical care	34.0	33.5	74.9	80.1	162.8	159.8	177.0	171.0	190.1	181.6	201.4	190.9
Recreation	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	90.7	NA
Education and communication	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	85.5	NA
Other goods and services	40.9	NA	75.2	75.1	159.0	147.5	171.6	160.7	183.3	173.8	192.9	183.5

Table A-17 (Continued)

Expenditure category	1994		1995		1996		1997		1998		1999	
	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit
All items	148.2	144.0	152.4	148.6	156.9	152.5	160.5	156.3	163.0	159.8	166.6	163.9
Food and beverages	144.9	138.7	148.9	143.6	153.7	147.9	157.7	151.4	161.1	154.6	164.6	158.3
Food	144.3	137.8	148.4	142.8	153.3	147.3	157.3	150.8	160.7	153.7	164.1	157.6
Food at home	144.1	137.7	148.8	142.2	154.3	147.2	158.1	150.8	161.1	153.3	164.2	156.6
Food away from home	145.7	138.7	149.0	144.4	152.7	148.9	157.0	151.8	161.1	156.0	165.1	160.3
Housing	144.8	137.6	148.5	140.6	152.8	145.5	156.8	149.9	160.4	153.6	163.9	156.3
Shelter	160.5	156.2	165.7	160.5	171.0	165.7	176.3	171.2	182.1	176.6	187.3	179.7
Rent of primary residence	154.0	145.5	157.8	148.0	162.0	152.8	166.7	156.3	172.1	161.1	177.5	165.9
Owners' equivalent rent	165.8	161.8	171.3	165.6	176.8	170.4	181.9	176.1	187.8	181.8	192.9	184.9
Fuel and utilities	122.8	116.8	123.7	116.2	127.5	121.2	130.8	126.3	128.5	124.3	128.8	127.8
Household furnishings and operations	121.0	107.8	123.0	110.9	124.7	114.9	125.4	114.6	126.6	117.5	126.7	118.5
Apparel	133.4	136.1	132.0	136.9	131.7	131.7	132.9	135.2	133.0	133.7	131.3	133.4
Transportation	134.3	138.6	139.1	143.6	143.0	148.0	144.3	149.0	141.6	148.9	144.4	152.1
Private	131.4	136.9	136.3	141.9	140.0	146.1	141.0	147.0	137.9	146.9	140.5	149.5
Gasoline	98.2	93.6	99.8	96.4	105.9	105.9	105.8	105.2	91.6	93.5	100.1	101.3
Public	172.0		175.9		181.9		186.7		190.3		197.7	
Medical care	211.0	199.7	220.5	209.2	228.2	213.7	234.6	214.1	242.1	230.6	250.6	245.2
Recreation	92.7	NA	94.5	NA	97.4	NA	99.6	NA	101.1	100.1	102.0	104.5
Education and communication	88.8	NA	92.2	NA	95.3	NA	98.4	NA	100.3	102.6	101.2	106.7
Other goods and services	198.5	197.1	206.9	210.8	215.4	217.5	224.8	228.4	237.7	248.1	258.3	267.3

Source: Bureau of Labor Statistics, U.S. Dept. of Labor

**Table A-18**

**U. S. INTEREST RATES**  
(percent per year - average)

Year	U. S. Government Security Yields		High Grade	Corporate Aaa	30-year
	3-month Treasury Bills (1)	Constant Maturity 10- Year Issues	Municipal Bonds (Standard & Poor's)	Bonds (Moody's, Seasoned Issues)	Conventional Fixed Rate Mortgages
1960	2.9	4.1	3.7	4.4	NA
1965	4.0	4.3	3.3	4.5	NA
1970	6.4	7.4	6.5	8.0	NA
1971	4.4	6.2	5.7	7.4	NA
1972	4.1	6.2	5.3	7.2	7.4
1973	7.0	6.9	5.2	7.4	8.0
1974	7.9	7.6	6.1	8.6	9.2
1975	5.8	8.0	6.9	8.8	9.0
1976	5.0	7.6	6.5	8.4	8.9
1977	5.3	7.4	5.6	8.0	8.8
1978	7.2	8.4	5.9	8.7	9.6
1979	10.1	9.4	6.4	9.6	11.2
1980	11.5	11.4	8.5	11.9	13.8
1981	14.0	13.9	11.2	14.2	16.6
1982	10.7	13.0	11.6	13.8	16.1
1983	8.6	11.1	9.5	12.0	13.2
1984	9.5	12.5	10.2	12.7	13.9
1985	7.5	10.6	9.2	11.4	12.4
1986	6.0	7.7	7.4	9.0	10.2
1987	5.8	8.4	7.7	9.4	10.2
1988	6.7	8.9	7.8	9.7	10.3
1989	8.1	8.5	7.2	9.3	10.3
1990	7.5	8.6	7.3	9.3	10.1
1991	5.4	7.9	6.9	8.8	9.3
1992	3.5	7.0	6.4	8.1	8.4
1993	3.0	5.9	5.6	7.2	7.3
1994	4.3	7.1	6.2	8.0	8.4
1995	5.5	6.6	6.0	7.6	8.0
1996	5.0	6.4	5.8	7.4	7.8
1997	5.1	6.4	5.6	7.3	7.6
1998	4.8	5.3	5.1	6.5	6.9
1999	4.7	5.7	5.4	7.1	7.4

(1) New issues, bank discount basis

Source: Federal Reserve Statistical Releases, and Economic Indicators,  
Joint Economic Committee, U.S. Government Printing Office

Table A-19

## U.S. AND MICHIGAN RESIDENT POPULATION

Year	Michigan Population	Population Change		Natural Increase	Net Migration	U.S. Population	Michigan Percent of U.S.
		Number	Percent				
1970	8,881,800					203,302,000	4.4
1971	8,974,200	92,400	1.0	113,900	-21,800	207,660,700	4.3
1972	9,028,900	54,700	0.6	76,200	-21,200	209,896,000	4.3
1973	9,078,000	49,100	0.5	65,300	-16,300	211,908,800	4.3
1974	9,117,500	39,500	0.4	62,200	-22,200	213,853,900	4.3
1975	9,117,700	200	0.0	60,300	-60,300	215,973,200	4.2
1976	9,129,200	11,500	0.1	57,500	-46,500	218,035,200	4.2
1977	9,171,100	41,900	0.5	59,900	-17,900	220,239,400	4.2
1978	9,217,800	46,700	0.5	64,200	-17,200	222,584,500	4.1
1979	9,266,300	48,500	0.5	67,500	-19,500	225,055,500	4.1
1980	9,262,100	-4,200	0.0	53,100	-57,100	226,545,800	4.1
1981	9,209,300	-52,800	-0.6	84,200	-137,000	229,465,700	4.0
1982	9,115,200	-94,100	-1.0	64,300	-158,400	231,664,500	3.9
1983	9,047,800	-67,400	-0.7	60,100	-127,600	233,792,000	3.9
1984	9,049,500	1,700	0.0	56,100	-54,400	235,824,900	3.8
1985	9,076,300	26,800	0.3	59,700	-32,900	237,923,800	3.8
1986	9,127,800	51,500	0.6	58,800	-7,300	240,132,900	3.8
1987	9,187,500	59,700	0.7	59,300	400	242,288,900	3.8
1988	9,218,000	30,500	0.3	59,000	-28,500	244,499,000	3.8
1989	9,253,300	35,300	0.4	63,500	-28,200	246,819,200	3.7
1990	9,295,300	42,000	0.5	53,400	-11,500	248,709,900	3.7
1991	9,395,000	99,700	1.1	93,000	-17,400	252,153,100	3.7
1992	9,470,300	75,300	0.8	67,100	-17,300	255,029,700	3.7
1993	9,529,200	58,900	0.6	61,100	-27,600	257,782,600	3.7
1994	9,584,500	55,300	0.6	54,300	-24,500	260,327,000	3.7
1995	9,659,900	75,400	0.8	53,500	100	262,803,300	3.7
1996	9,739,200	79,300	0.8	49,600	5,600	265,228,600	3.7
1997	9,785,500	46,300	0.5	50,100	-3,300	267,783,600	3.7
1998	9,820,200	34,700	0.4	47,700	-12,000	270,248,000	3.6
1999	9,863,800	43,600	0.4	48,000	-3,400	272,690,800	3.6
2000	9,938,400	74,600	0.8	N/A	N/A	281,421,900	3.5

Note: Subnational population estimates result in an uncategorized residual so that the sum of natural increase and net migration does not equal the annual change in population. The residual and the movement of federal employees and their dependents are not shown in the table.

Sources: U.S. Census Bureau and Michigan Information Center

Table A-20

MICHIGAN POPULATION BY COUNTY

County/Region	Population	Population	Population Change, 1990-99		Deaths		Natural Increase, 1990-99		Net Migration, 1990-99	
	April 1, 1990	July 1, 1999	Number	Percent	Births	Deaths	Number	Percent	Number	Percent
United States	248,790,925	272,690,813	23,899,888	9.6	36,820,132	20,934,303	15,885,829	6.4	7,478,078	3.0
Michigan	9,295,287	9,863,775	568,488	6.1	1,287,572	763,166	524,406	5.6	-99,730	-1.1
Alcona	10,145	11,147	1,002	9.9	873	1,503	-630	-6.2	1,634	16.1
Alger	8,972	10,083	1,111	12.4	837	981	-144	-1.6	1,285	14.3
Allegan	90,509	103,406	12,897	14.2	13,003	6,987	6,016	6.6	7,093	7.8
Alpena	30,605	30,615	10	0.0	3,164	3,057	107	0.3	23	0.1
Antrim	18,185	21,953	3,768	20.7	2,286	2,046	240	1.3	3,560	19.6
Arenac	14,906	16,547	1,641	11.0	1,728	1,712	16	0.1	1,676	11.2
Baraga	7,954	8,672	718	9.0	909	1,052	-143	-1.8	893	11.2
Barry	50,057	54,648	4,591	9.2	6,518	3,750	2,768	5.5	1,972	3.9
Bay	111,723	109,514	-2,209	-2.0	13,422	9,387	4,035	3.6	-5,923	-5.3
Benzie	12,200	15,257	3,057	25.1	1,534	1,346	188	1.5	2,882	23.6
Berrien	161,378	159,709	-1,669	-1.0	21,271	14,324	6,947	4.3	-8,143	-5.0
Branch	41,502	43,825	2,323	5.6	5,034	3,669	1,365	3.3	1,091	2.6
Calhoun	135,982	141,380	5,398	4.0	18,010	12,961	5,049	3.7	706	0.5
Cass	49,477	50,129	652	1.3	4,960	4,140	820	1.7	11	0.0
Charlevoix	21,468	25,034	3,566	16.6	2,935	1,992	943	4.4	2,290	10.7
Cheboygan	21,398	24,153	2,755	12.9	2,546	2,458	88	0.4	2,725	12.7
Chippewa	34,604	37,904	3,300	9.5	3,885	2,651	1,234	3.6	2,147	6.2
Clare	24,952	29,955	5,003	20.1	3,407	3,176	231	0.9	4,823	19.3
Clinton	57,893	64,054	6,161	10.6	7,583	3,680	3,903	6.7	2,438	4.2
Crawford	12,260	14,265	2,005	16.4	1,543	1,200	343	2.8	1,694	13.8
Delta	37,780	38,848	1,068	2.8	3,918	3,562	356	0.9	842	2.2
Dickinson	26,831	26,944	113	0.4	2,943	2,922	21	0.1	192	0.7
Eaton	92,879	101,612	8,733	9.4	11,159	6,415	4,744	5.1	3,589	3.9
Emmet	25,040	28,995	3,955	15.8	3,389	2,335	1,054	4.2	2,982	11.9
Genesee	430,459	437,349	6,890	1.6	62,938	34,490	28,448	6.6	-20,398	-4.7

Table A-20 (continued)

County/Region	Population April 1, 1990		Population July 1, 1999		Population Change, 1990-99		Births		Deaths		Natural Increase, 1990-99		Net Migration, 1990-99	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Gladwin	21,896		25,697	17.4	3,801	17.4	2,577	2,543	34	0.2	3,819	17.4		
Gogebic	18,052		17,043	-5.6	-1,009	-5.6	1,540	2,431	-891	-4.9	-30	-0.2		
Grand Traverse	64,273		75,352	17.2	11,079	17.2	8,310	5,219	3,091	4.8	8,190	12.7		
Gratiot	38,982		40,027	2.7	1,045	2.7	4,886	3,784	1,102	2.8	77	0.2		
Hillsdale	43,431		47,042	8.3	3,611	8.3	5,374	3,733	1,641	3.8	2,095	4.8		
Houghton	35,446		35,448	0.0	2	0.0	3,742	3,861	-119	-0.3	227	0.6		
Huron	34,951		35,283	0.9	332	0.9	3,841	3,856	-15	0.0	479	1.4		
Ingham	281,912		285,123	1.1	3,211	1.1	38,176	17,027	21,149	7.5	-28,348	-10.1		
Ionia	57,024		67,126	17.7	10,102	17.7	7,603	3,971	3,632	6.4	6,571	11.5		
Iosco	30,209		25,928	-14.2	-4,281	-14.2	3,231	3,149	82	0.3	-4,618	-15.3		
Iron	13,175		12,817	-2.7	-358	-2.7	1,091	2,032	-941	-7.1	641	4.9		
Isabella	54,624		59,122	8.2	4,498	8.2	6,056	3,197	2,859	5.2	1,781	3.3		
Jackson	149,756		157,271	5.0	7,515	5.0	19,762	12,930	6,832	4.6	1,155	0.8		
Kalamazoo	223,411		229,867	2.9	6,456	2.9	29,751	15,956	13,795	6.2	-6,765	-3.0		
Kalkaska	13,497		15,808	17.1	2,311	17.1	1,875	1,185	690	5.1	1,655	12.3		
Kent	500,631		550,388	9.9	49,757	9.9	83,888	35,535	48,353	9.7	-3,325	-0.7		
Keweenaw	1,701		2,142	25.9	441	25.9	155	280	-125	-7.3	567	33.3		
Lake	8,583		10,627	23.8	2,044	23.8	1,030	1,352	-322	-3.8	2,373	27.6		
Lapeer	74,768		89,391	19.6	14,623	19.6	10,274	4,976	5,298	7.1	9,484	12.7		
Leelanau	16,527		19,370	17.2	2,843	17.2	1,951	1,541	410	2.5	2,764	16.7		
Lenawee	91,476		99,780	9.1	8,304	9.1	11,303	7,483	3,820	4.2	4,697	5.1		
Livingston	115,645		151,496	31.0	35,851	31.0	16,269	7,211	9,058	7.8	26,774	23.2		
Luce	5,763		6,754	17.2	991	17.2	655	650	5	0.1	981	17.0		
Mackinac	10,674		11,103	4.0	429	4.0	1,185	1,170	15	0.1	448	4.2		
Macomb	717,400		792,082	10.4	74,682	10.4	91,758	58,628	33,130	4.6	-1,146	-0.2		
Manistee	21,265		23,665	11.3	2,400	11.3	2,172	2,617	-445	-2.1	2,914	13.7		
Marquette	70,887		62,758	-11.5	-8,129	-11.5	7,445	5,285	2,160	3.0	-10,709	-15.1		
Mason	25,537		27,966	9.5	2,429	9.5	2,922	2,709	213	0.8	2,303	9.0		
Mecosta	37,308		40,704	9.1	3,396	9.1	4,076	2,834	1,242	3.3	2,236	6.0		

Table A-20 (continued)

County/Region	Population April 1, 1990		Population July 1, 1999		Population Change, 1990-99		Births	Deaths	Natural Increase, 1990-99		Net Migration, 1990-99	
	Number	Percent	Number	Percent	Number	Percent			Number	Percent	Number	Percent
Menominee	24,920		24,449	-1.9	-471	2,467	2,502	-35	-0.1	-347	-1.4	
Midland	75,651	8.4	81,994	10.093	6,343	4,823	4,823	5,270	7.0	1,316	1.7	
Missaukee	12,147	16.5	14,151	16.5	2,004	1,559	1,138	421	3.5	1,620	13.3	
Monroe	133,600	8.5	144,913	16.307	11,313	9,983	9,983	6,324	4.7	5,320	4.0	
Montcalm	53,059	15.7	61,406	15.7	8,347	7,619	4,614	3,005	5.7	5,459	10.3	
Montmorency	8,936	12.1	10,014	12.1	1,078	850	1,333	-483	-5.4	1,596	17.9	
Muskegon	158,983	5.7	168,037	22.635	9,054	13,874	13,874	8,761	5.5	852	0.5	
Newaygo	38,206	21.3	46,356	21.3	8,150	5,904	3,619	2,285	6.0	5,961	15.6	
Oakland	1,083,592	8.9	1,179,978	150.852	96,386	77,373	73,479	23,152	2.1	23,152	2.1	
Oceana	22,455	10.9	24,900	3.225	2,445	2,086	2,086	1,139	5.1	1,387	6.2	
Ogemaw	18,681	13.5	21,201	2.313	2,520	2,347	2,347	-34	-0.2	2,613	14.0	
Ontonagon	8,854	-13.4	7,668	742	-1,186	1,094	1,094	-352	-4.0	-819	-9.3	
Osceola	20,146	10.3	22,220	2,074	2,074	1,961	1,961	710	3.5	1,450	7.2	
Oscoda	7,842	8.899	8,899	9.26	1,057	992	992	-66	-0.8	1,146	14.6	
Osego	17,957	26.5	22,719	26.5	4,762	1,668	1,668	897	5.0	3,893	21.7	
Ottawa	187,768	230,261	22.6	30,451	42,493	11,821	18,630	18,630	9.9	24,269	12.9	
Presque Isle	13,743	6.2	14,596	1,248	853	1,248	1,618	-370	-2.7	1,298	9.4	
Roscommon	19,776	19.1	23,562	2,050	3,786	2,918	2,918	-868	-4.4	4,712	23.8	
Saginaw	211,946	-1.3	209,245	29,386	-2,701	29,386	17,622	11,764	5.6	-13,996	-6.6	
St. Clair	145,607	11.1	161,755	19,350	16,148	12,494	12,494	6,856	4.7	9,622	6.6	
St. Joseph	58,913	4.3	61,448	7,896	2,535	5,389	5,389	2,507	4.3	199	0.3	
Sanilac	39,928	8.8	43,451	5,041	3,523	5,041	4,256	785	2.0	2,858	7.2	
Schoolcraft	8,302	5.9	8,788	911	486	1,009	1,009	-98	-1.2	610	7.3	
Shiawassee	69,770	3.7	72,346	8,872	2,576	5,211	5,211	3,661	5.2	-891	-1.3	
Tuscola	55,498	4.9	58,195	6,750	2,697	4,539	4,539	2,211	4.0	647	1.2	
Van Buren	70,060	8.4	75,917	10,078	5,857	6,046	6,046	4,032	5.8	2,061	2.9	
Washtenaw	282,937	8.2	306,073	36,930	23,136	14,682	14,682	22,248	7.9	1,715	0.6	
Wayne	2,111,687	-0.2	2,106,495	321,598	-5,192	194,722	194,722	126,876	6.0	-228,987	-10.8	
Wexford	26,360	12.1	29,560	3,590	3,200	2,491	2,491	1,099	4.2	-2,180	8.3	

Source: U.S. Census Bureau

Notes: 1. The change in population includes the movement of federal employees and their dependents into and out of the United States. The difference between the change in population and the sum of natural increase and net migration for the U.S. is this movement of federal employees.

2. The estimated components of population change for subnational units produce a residual that is not displayed and the sum of natural increase and net migration differ from the estimated change by this residual and the movement of federal employees.



**Table A-21**  
**U.S. POPULATION, RANKED BY STATE**

	1990		2000		Percent	Rank
	1990 Census	Rank	2000 Census	Rank	Increase 1990-2000	
United States	248,709,873		281,421,906		13.2	
California	29,760,021	1	33,871,648	1	13.8	18
Texas	16,986,510	3	20,851,820	2	22.8	8
New York	17,990,455	2	18,976,457	3	5.5	42
Florida	12,937,926	4	15,982,378	4	23.5	7
Illinois	11,430,602	6	12,419,293	5	8.6	34
Pennsylvania	11,881,643	5	12,281,054	6	3.4	48
Ohio	10,847,115	7	11,353,140	7	4.7	44
Michigan	9,295,297	8	9,938,444	8	6.9	39
New Jersey	7,730,188	9	8,414,350	9	8.9	33
Georgia	6,478,216	11	8,186,453	10	26.4	6
North Carolina	6,628,637	10	8,049,313	11	21.4	9
Virginia	6,187,358	12	7,078,515	12	14.4	16
Massachusetts	6,016,425	13	6,349,097	13	5.5	41
Indiana	5,544,159	14	6,080,485	14	9.7	27
Washington	4,866,692	18	5,894,121	15	21.1	10
Tennessee	4,877,185	17	5,689,283	16	16.7	14
Missouri	5,117,073	15	5,595,211	17	9.3	30
Wisconsin	4,891,769	16	5,363,675	18	9.6	29
Maryland	4,781,468	19	5,296,486	19	10.8	23
Arizona	3,665,228	24	5,130,632	20	40.0	2
Minnesota	4,375,099	20	4,919,479	21	12.4	21
Louisiana	4,219,973	21	4,468,976	22	5.9	40
Alabama	4,040,587	22	4,447,100	23	10.1	25
Colorado	3,294,394	26	4,301,261	24	30.6	3
Kentucky	3,685,296	23	4,041,769	25	9.7	28
South Carolina	3,486,703	25	4,012,012	26	15.1	15
Oklahoma	3,145,585	28	3,450,654	27	9.7	26
Oregon	2,842,321	29	3,421,399	28	20.4	11
Connecticut	3,287,116	27	3,405,565	29	3.6	47
Iowa	2,776,755	30	2,926,324	30	5.4	43
Mississippi	2,573,216	31	2,844,658	31	10.5	24
Kansas	2,477,574	32	2,688,418	32	8.5	35
Arkansas	2,350,725	33	2,673,400	33	13.7	19
Utah	1,722,850	35	2,233,169	34	29.6	4
Nevada	1,201,833	39	1,998,257	35	66.3	1
New Mexico	1,515,069	37	1,819,046	36	20.1	12
West Virginia	1,793,477	34	1,808,344	37	0.8	49
Nebraska	1,578,385	36	1,711,263	38	8.4	37
Idaho	1,006,749	42	1,293,953	39	28.5	5
Maine	1,227,928	38	1,274,923	40	3.8	46
New Hampshire	1,109,252	40	1,235,786	41	11.4	22
Hawaii	1,108,229	41	1,211,537	42	9.3	31
Rhode Island	1,003,464	43	1,048,319	43	4.5	45
Montana	799,065	44	902,195	44	12.9	20
Delaware	666,168	46	783,600	45	17.6	13
South Dakota	696,004	45	754,844	46	8.5	36
North Dakota	638,800	47	642,200	47	0.5	50
Alaska	550,043	50	626,932	48	14.0	17
Vermont	562,758	49	608,827	49	8.2	38
District of Columl	606,900	48	572,059	50	-5.7	51
Wyoming	453,588	51	493,782	51	8.9	32

Source: Population Estimates Program, Population Division, U.S. Census Bureau

Table A-22

U.S. MOTOR VEHICLE STOCKS, AGE, AND MICHIGAN VEHICLE REGISTRATIONS

Year	New Car Registrations		New Truck Registrations		All New Registrations		U.S. Stock of Auto (thousands still in use)	Median Age of U.S. Autos (in years)	U.S. Stock of Trucks (thousands still in use)	Median Age of U.S. Trucks (in years)
	Michigan	Percent of U.S.	Michigan	Percent of U.S.	Michigan	Percent of U.S.				
1970	479,224	5.7	71,369	4.0	550,593	5.4	80,449	4.9	17,686	5.9
1971	633,963	6.5	92,725	4.7	726,688	6.2	83,138	5.1	18,465	6.1
1972	646,146	6.2	112,022	4.5	758,168	5.8	86,439	5.1	19,773	6.0
1973	664,505	5.9	130,182	4.3	794,687	5.5	89,805	5.1	21,412	5.8
1974	513,129	5.9	112,867	4.2	625,996	5.5	92,608	5.2	23,312	5.6
1975	496,476	6.0	111,956	4.7	608,432	5.7	95,241	5.4	24,813	5.8
1976	606,979	6.2	156,547	5.1	763,526	6.0	97,818	5.5	26,560	5.8
1977	664,122	6.1	173,874	5.0	837,996	5.8	99,904	5.6	28,222	5.7
1978	669,700	6.1	203,239	5.1	872,939	5.9	102,957	5.7	30,565	5.8
1979	611,443	5.9	145,253	4.2	756,696	5.5	104,677	5.9	32,583	5.9
1980	449,487	5.1	84,390	3.4	533,877	4.8	104,564	6.0	35,268	6.3
1981	445,758	5.3	72,429	3.3	518,187	4.9	105,839	6.0	36,069	6.5
1982	374,643	4.8	91,159	3.8	465,802	4.6	106,867	6.2	36,987	6.8
1983	485,062	5.4	127,078	4.3	612,140	5.1	108,961	6.5	38,143	7.2
1984	552,954	5.5	176,165	4.4	729,119	5.1	112,019	6.7	40,143	7.4
1985	555,623	5.1	204,283	4.4	759,906	4.9	114,662	6.9	42,387	7.6
1986	559,022	5.0	225,244	4.7	784,266	4.9	117,268	7.0	44,826	7.7
1987	453,743	4.5	215,062	4.3	668,805	4.4	119,849	6.9	47,344	7.8
1988	473,457	4.5	232,628	4.5	706,085	4.5	121,519	6.8	50,222	7.1
1989	460,463	4.7	232,227	4.6	692,690	4.6	122,758	6.5	53,202	6.7
1990	424,359	4.7	226,201	4.7	650,560	4.7	123,276	6.5	56,023	6.5
1991	381,245	4.6	205,883	4.7	587,128	4.7	123,327	6.7	58,179	6.8
1992	383,776	4.8	235,278	4.9	619,054	4.8	120,347	7.0	61,172	7.2
1993	388,510	4.6	255,930	4.6	644,440	4.6	121,055	7.3	65,260	7.5
1994	422,179	4.7	309,569	4.9	731,748	4.8	121,997	7.5	66,717	7.5
1995	399,310	4.6	327,512	5.0	726,822	4.8	123,242	7.7	70,199	7.6
1996	400,343	4.7	355,439	5.1	755,782	4.9	124,613	7.9	73,681	7.7
1997	386,682	4.7	397,807	5.5	784,489	5.1	124,673	8.1	76,397	7.8
1998	373,093	4.6	438,957	5.7	812,050	5.1	125,966	8.3	79,077	7.6
1999	378,368	4.5	499,635	5.9	878,003	5.2	126,869	8.3	82,640	7.2

Source: Automotive News Market Data Book & MVMA Motor Vehicle Facts and Figures

Table A-23

## U.S. AND MICHIGAN MOTOR VEHICLE PRODUCTION

Year	U.S. Car		U.S. Truck		Total U.S.		Total World		U.S. Percent of World		Michigan Auto		Michigan Truck		Total Michigan		Michigan Percent of U.S.	
	Production	Production	Production	Production	Production	Production	Production	Production	Production	Production	Production	Production	Production	Production	Production	Production	Production	Production
1970	6,550,077	1,716,641	8,266,718	29,707,707	27.8	2,099,000	454,000	2,553,000	30.9									
1971	8,557,878	2,097,697	10,655,575	33,728,068	31.6	2,836,000	587,000	3,423,000	32.1									
1972	8,827,706	2,471,530	11,299,236	35,845,958	31.5	2,902,000	734,000	3,636,000	32.2									
1973	9,667,118	3,007,495	12,674,613	39,236,122	32.3	3,268,000	1,012,000	4,280,000	33.8									
1974	7,309,763	2,742,502	10,052,265	35,108,355	28.6	2,403,000	897,000	3,300,000	32.8									
1975	6,740,584	2,250,507	8,991,091	33,322,385	27.0	2,249,000	757,000	3,006,000	33.4									
1976	8,537,759	2,946,410	11,484,169	38,619,510	29.7	2,914,000	1,030,000	3,944,000	34.3									
1977	9,293,674	3,433,569	12,727,243	41,240,509	30.9	2,852,000	1,077,000	3,929,000	30.9									
1978	9,153,299	3,676,747	12,830,046	42,611,388	30.1	2,707,560	1,288,000	3,995,560	31.1									
1979	8,418,369	2,973,498	11,391,867	41,978,835	27.1	2,581,919	995,781	3,577,700	31.4									
1980	6,416,885	1,593,489	8,010,374	38,837,519	20.6	1,731,501	443,125	2,174,626	27.1									
1981	6,280,045	1,701,122	7,981,167	37,380,354	21.4	2,040,238	459,673	2,499,911	31.3									
1982	4,973,870	1,902,164	6,876,034	36,433,276	18.9	1,817,456	577,142	2,394,598	34.8									
1983	7,112,352	2,400,429	9,512,781	40,022,104	23.8	2,077,412	696,546	2,773,958	29.2									
1984	7,777,721	3,146,356	10,924,077	42,159,635	25.9	2,138,844	873,452	3,012,296	27.6									
1985	8,186,040	3,485,435	11,671,475	44,690,081	26.1	2,406,822	897,914	3,304,736	28.3									
1986	7,829,697	3,543,168	11,372,865	45,156,013	25.2	2,626,299	782,155	3,408,454	30.0									
1987	7,094,992	3,880,342	10,975,334	46,384,697	23.7	2,559,963	842,132	3,402,095	31.0									
1988	7,129,420	4,132,729	11,262,149	47,670,728	23.6	2,389,431	822,213	3,211,644	28.5									
1989	6,829,976	4,294,969	11,124,945	48,080,447	23.1	2,124,044	925,383	3,049,427	27.4									
1990	6,079,192	3,808,844	9,888,036	50,375,116	19.6	1,945,632	751,129	2,696,761	27.3									
1991	5,439,379	3,444,390	8,883,769	47,441,562	18.3	1,566,716	593,320	2,160,036	24.3									
1992	5,655,781	4,119,195	9,784,976	49,442,510	19.8	1,688,034	756,354	2,444,388	25.0									
1993	5,988,534	4,901,548	10,890,082	48,793,692	22.3	1,797,880	1,012,858	2,810,738	25.8									
1994	6,609,523	5,707,176	12,316,699	51,745,907	23.8	2,145,905	1,264,398	3,410,303	27.7									
1995	6,326,700	5,577,515	11,904,215	53,337,499	22.3	1,848,797	1,235,701	3,084,498	25.9									
1996	6,055,939	5,658,812	11,714,751	53,270,933	22.0	1,845,163	1,053,919	2,899,082	24.7									
1997	5,922,205	6,143,227	12,065,432	56,521,200	21.3	1,875,490	1,120,936	2,996,426	24.8									
1998	5,559,124	6,487,853	12,046,977	53,841,408	22.4	1,717,388	1,065,940	2,783,328	23.1									
1999	5,640,030	7,423,375	13,063,405	56,285,888	23.2	1,777,843	1,329,955	3,107,798	23.8									

Source: Automotive News Market Data Book &amp; Office of Revenue and Tax Analysis

**Table A-24**  
**U.S. MOTOR VEHICLE SALES**

Year	Retail Auto Sales	Domestic Nameplate Auto Sales	Sales of Auto Imports	Import Share of Total Auto Sales (percent)	Retail Truck Sales	Domestic Nameplate Truck Sales	Import Share of Total Truck Sales (percent)
1974	8,851,956	7,448,921	1,403,035	15.8	2,687,924	2,511,771	6.6
1975	8,627,120	7,050,120	1,577,000	18.3	2,478,219	2,248,904	9.3
1976	10,099,573	8,606,573	1,493,000	14.8	3,181,254	2,943,872	7.5
1977	11,175,554	9,104,454	2,071,100	18.5	3,675,439	3,352,255	8.8
1978	11,308,498	9,307,998	2,000,500	17.7	4,109,079	3,773,166	8.2
1979	10,643,554	8,315,622	2,327,932	21.9	3,479,794	3,009,867	13.5
1980	8,975,209	6,578,275	2,396,934	26.7	2,487,239	2,000,669	19.6
1981	8,532,672	6,206,296	2,326,376	27.3	2,260,318	1,809,188	20.0
1982	7,978,177	5,756,660	2,221,517	27.8	2,559,881	2,145,947	16.2
1983	9,181,036	6,795,302	2,385,734	26.0	3,129,476	2,658,269	15.1
1984	10,332,669	7,951,517	2,441,713	23.6	3,883,555	3,475,416	10.5
1985	10,982,889	8,204,721	2,841,063	25.9	4,414,508	3,902,417	11.6
1986	11,408,910	8,214,662	3,248,579	28.5	4,617,506	3,921,408	15.1
1987	10,186,413	7,081,262	3,144,054	30.9	4,709,359	3,800,426	19.3
1988	10,544,154	7,501,095	3,068,738	29.1	4,878,312	4,168,256	14.6
1989	9,770,039	7,014,850	2,755,189	28.2	4,779,192	4,055,321	15.1
1990	9,295,741	6,842,733	2,453,008	26.4	4,591,077	3,836,052	16.4
1991	8,175,582	6,072,255	2,103,327	25.7	4,159,421	3,446,744	17.1
1992	8,210,627	6,216,488	1,994,139	24.3	4,674,589	4,001,927	14.4
1993	8,519,573	6,674,458	1,845,115	21.7	5,398,491	4,656,228	13.7
1994	8,991,347	7,181,975	1,809,372	20.1	6,097,787	5,702,913	6.5
1995	8,635,557	7,023,843	1,611,714	18.7	6,130,411	5,739,890	6.4
1996	8,529,124	7,139,884	1,389,240	16.3	6,611,099	6,169,877	6.7
1997	8,289,116	6,907,992	1,381,124	16.7	6,871,197	6,302,242	8.3
1998	8,183,412	6,756,804	1,426,608	17.4	7,413,134	6,806,478	8.2
1999	8,750,066	6,987,208	1,762,858	20.1	8,208,281	7,494,218	8.7

Source: Automotive News Market Data Book

**Table A-25**  
**U.S. AND MICHIGAN MOTOR VEHICLE INDUSTRY**

Year	Michigan				United States				Michigan Motor Vehicle Employment as a Percent of U.S.
	Number Employed (thousands)	Average Weekly Earnings	Average		Number Employed (thousands)	Average Weekly Earnings	Average		
			Hours	Hourly Earnings			Hours	Hourly Earnings	
1975	321.2	287.0	41.7	6.9	774.1	262.7	40.6	6.5	41.5
1976	357.6	338.8	44.7	7.6	850.6	305.3	43.0	7.1	42.0
1977	386.5	381.6	44.9	8.5	947.3	345.4	44.0	7.9	40.8
1978	409.6	397.5	44.4	9.0	1,004.9	368.1	43.3	8.5	40.8
1979	392.7	411.9	41.6	9.9	990.4	372.4	41.1	9.1	39.7
1980	326.3	438.2	39.8	11.0	788.8	394.0	40.0	9.9	41.4
1981	319.4	490.5	40.7	12.1	788.7	450.7	40.9	11.0	40.5
1982	286.5	526.4	40.7	12.9	699.3	470.6	40.5	11.6	41.0
1983	299.7	596.4	44.3	13.5	753.6	525.7	43.3	12.1	39.8
1984	324.7	644.9	45.0	14.3	861.5	557.6	43.8	12.7	37.7
1985	341.1	674.0	44.9	15.0	883.1	582.5	43.5	13.4	38.6
1986	338.5	657.9	43.2	15.2	871.8	573.0	42.6	13.5	38.8
1987	316.5	662.6	43.0	15.4	865.9	571.0	42.2	13.5	36.6
1988	294.7	722.2	44.5	16.2	856.4	609.0	43.5	14.0	34.4
1989	289.5	727.7	43.6	16.7	858.5	614.2	43.1	14.3	33.7
1990	278.7	725.2	41.7	17.4	812.1	617.3	42.4	14.6	34.3
1991	266.7	774.1	42.0	18.4	788.8	644.2	42.3	15.2	33.8
1992	272.4	775.0	41.8	18.5	812.5	655.1	42.4	15.5	33.5
1993	266.1	861.7	43.5	19.8	836.6	713.2	44.3	16.1	31.8
1994	278.3	1,002.5	47.4	21.2	909.3	782.9	46.0	17.0	30.6
1995	287.8	992.6	47.2	21.0	970.9	778.6	44.9	17.3	29.6
1996	284.2	996.6	46.7	21.3	966.8	796.5	44.9	17.7	29.4
1997	278.7	1,044.1	46.8	22.3	985.6	811.8	45.0	18.0	28.3
1998	276.4	1,062.8	44.9	23.7	995.3	776.0	43.5	17.8	27.8
1999	284.3	1,149.8	46.7	24.6	1,018.6	828.5	45.0	18.4	27.9

Source: Michigan Employment Security Agency and U.S. Department of Labor

Table A-26

## U.S. AND MICHIGAN FARM INCOME COMPONENTS

(All figures in thousands of dollars, except income per farm, number of farms, and land in farms)

Components	1970		1980		1990	
	U.S.	Michigan	U.S.	Michigan	U.S.	Michigan
Number of Farms	2,949,140	84,000	2,439,510	65,000	2,145,820	54,000
Land in Farms (1,000 acres)	1,102,371	12,700	1,038,885	11,400	986,850	10,800
Cash Receipts From						
Farm Marketings	\$50,508,794	\$909,579	\$139,736,457	\$2,727,667	\$169,526,257	\$3,170,901
Government Payments	3,717,371	65,698	1,285,672	10,666	9,298,030	168,831
Noncash Income	4,043,776	126,010	12,278,443	357,491	7,869,485	192,886
Farm-Related Income	542,271	10,138	2,273,104	101,701	8,096,672	128,021
Total Gross Farm Income	58,818,122	1,132,321	149,279,644	3,162,130	198,048,779	3,721,622
Expenses	44,452,234	855,006	133,138,267	2,678,819	153,301,789	3,153,367
Net Farm Income	14,365,888	277,315	16,141,377	483,311	44,746,990	568,254
Gross Income per Farm	19,944	13,480	61,192	48,648	92,295	68,919
Net Income per Farm	4,871	3,301	6,617	7,436	20,853	10,523
Components	1996		1997		1998	
	U.S.	Michigan	U.S.	Michigan	U.S.	Michigan
Number of Farms	2,190,500	54,000	2,190,510	53,000	2,191,510	52,000
Land in Farms (1,000 acres)	958,675	10,600	956,010	10,400	953,765	10,400
Cash Receipts From						
Farm Marketings	\$199,137,778	\$3,618,410	\$207,611,196	\$3,598,421	\$196,761,410	\$3,480,343
Government Payments	7,339,728	109,586	7,495,328	121,288	12,219,559	208,077
Noncash Income	10,334,809	288,657	10,622,975	307,377	11,312,612	322,035
Farm-Related Income	10,972,327	121,409	12,396,709	153,900	13,797,098	139,604
Total Gross Farm Income	235,740,726	3,990,845	238,668,743	4,235,468	233,059,056	4,110,191
Expenses	180,815,005	3,550,277	190,046,117	3,834,782	188,970,390	3,801,820
Net Farm Income	54,925,721	440,568	48,622,626	400,686	44,088,666	308,371
Gross Income per Farm	107,620	73,905	108,956	79,914	106,346	79,042
Net Income per Farm	25,075	8,159	22,197	7,560	20,118	5,930

Source: Economic Research Service, USDA

Table A-27

**MICHIGAN'S RANK IN THE NATION'S AGRICULTURE  
1998**

Commodity	Rank	Percent of U.S. Production	Leading State
Black Beans, dry	1	58.8	Michigan
Blueberries	1	32.0	Michigan
Cranberry Beans, dry	1	73.6	Michigan
Cucumbers for Pickles	1	23.2	Michigan
Flowering Bedding, flats	1	14.1	Michigan
Flowering Hanging Baskets, number	1	9.2	Michigan
Geraniums, potted	1	20.6	Michigan
Niagara Grapes	1	38.0	Michigan
Tart Cherries	1	75.8	Michigan
All Dry Beans	2	14.4	North Dakota
Carrots, fresh	2	4.4	California
Easter Lilies, potted	2	12.8	New York
Gladioli	2	26.3	Florida
Navy Beans	2	30.3	North Dakota
Small Red Dry Beans	2	30.3	Idaho
Apples	3	13.7	Washington
Asparagus	3	13.7	Washington
Concord Grapes	3	15.9	Washington
Dark Red Kidney Beans	3	10.5	Minnesota
Dry Light Red Kidney Beans	3	14.7	Nebraska
Snap Beans	3	12.6	Wisconsin
Sweet Cherries	3	16.7	Washington
Carrots, processing	4	5.5	Washington
Cucumbers, fresh market	4	12.4	Florida
Tomatoes, processing	4	0.9	California
Mushrooms	5	1.8	Pennsylvania
Poinsettias, pots	5	6.3	California
Sugarbeets	5	8.5	Minnesota
Maple Syrup	8	4.7	Vermont
Milk	8	3.4	Wisconsin
Potatoes, all	9	3.1	Idaho
Corn, for grain	11	2.3	Wisconsin
Soybeans	11	2.7	Iowa
Hogs, as of Dec.1	12	1.8	Iowa
Eggs	16	1.7	Ohio
Wheat, winter	16	1.6	Kansas
Hay, all	18	2.4	Georgia
Cash Receipts From Marketings	22	1.7	California

Source: Michigan Agriculture Statistics, 1998-99, Michigan Dept. of Agriculture

Table A-28  
NEW PRIVATE HOUSING UNITS AUTHORIZED IN MICHIGAN MSAS

Year	Battle Creek			Benton Harbor		Detroit PMSA		Ann Arbor PMSA		Grand Rapids		Jackson		Kalamazoo		Lansing		Muskegon		Saginaw		MSA Total		Non-Metro Total		Michigan Total	
	Year	Units	Starts	Units	Starts	Units	Starts	Units	Starts	Units	Starts	Units	Starts	Units	Starts	Units	Starts	Units	Starts	Units	Starts	Units	Starts	Units	Starts	Units	Starts
1974	505	N/A	19,231	1,878	1,949	3,560	679	1,298	2,452	723	1,997	34,272	9,919	44,191													
1975	654	N/A	14,004	633	1,485	3,427	890	1,655	1,865	639	1,366	26,618	10,151	36,769													
1976	961	N/A	18,214	1,105	1,861	3,811	916	1,972	2,509	1,163	1,863	34,375	11,520	45,895													
1977	845	N/A	24,672	1,670	3,282	4,563	1,177	2,640	3,800	847	1,870	45,366	13,318	58,684													
1978	781	N/A	26,409	2,390	3,277	5,832	663	1,674	3,455	1,173	1,751	47,405	13,669	61,074													
1979	831	N/A	20,050	1,302	2,281	4,123	771	1,838	3,986	674	1,596	37,452	11,757	49,209													
1980	692	N/A	9,692	921	1,244	2,627	273	1,648	2,206	803	701	20,807	8,169	28,976													
1981	219	447	5,460	271	631	1,909	181	1,414	1,671	362	325	12,890	5,877	18,767													
1982	176	221	4,603	214	353	1,546	355	432	772	323	323	9,318	4,858	14,176													
1983	290	312	8,162	345	734	2,659	178	912	1,212	292	319	15,415	6,008	21,423													
1984	180	198	11,651	738	901	3,999	225	653	1,452	315	721	21,033	6,716	27,749													
1985	80	235	20,109	1,478	1,291	4,318	166	727	1,697	375	658	31,134	6,458	37,592													
1986	227	387	24,452	1,634	1,510	5,805	334	1,696	2,536	368	839	39,788	7,442	47,230													
1987	383	446	22,450	2,418	928	6,184	484	1,702	2,236	485	1,086	38,802	7,791	46,593													
1988	398	565	20,671	2,475	1,078	5,708	463	1,614	2,057	584	869	36,482	8,425	44,907													
1989	535	478	20,447	1,892	1,362	5,718	680	1,546	2,215	675	1,153	36,701	8,986	45,687													
1990	229	554	16,162	1,809	1,281	4,876	584	728	1,634	691	1,034	29,582	9,289	38,871													
1991	239	472	14,108	1,125	837	3,104	454	691	1,839	555	1,214	24,638	9,878	34,516													
1992	395	496	15,530	1,104	1,135	4,136	585	810	1,580	541	1,183	27,495	9,531	37,026													
1993	N/A	539	14,719	3,330	1,223	5,351	584	1,897	1,853	N/A	1,469	30,965	8,790	39,755													
1994	N/A	604	17,572	4,091	1,719	6,606	621	1,973	1,926	N/A	1,461	36,573	9,902	46,475													
1995	N/A	547	18,024	4,078	1,912	7,102	634	2,128	1,935	N/A	1,200	37,560	9,666	47,226													
1996	N/A	698	19,709	4,881	2,120	7,940	716	2,089	2,184	N/A	1,339	41,676	10,679	52,355													
1997	N/A	547	18,164	4,765	1,954	7,151	695	2,221	1,985	N/A	1,357	38,839	10,398	49,237													
1998	N/A	669	21,056	5,637	1,946	7,720	718	2,183	1,707	N/A	1,518	43,154	11,320	54,474													
1999	N/A	658	19,370	5,361	2,806	7,228	1,007	2,072	2,040	N/A	1,360	41,902	12,355	54,257													

(1) Starting in 1993, the Muskegon housing starts are included in the Grand Rapids total.

(2) Starting in 1993 the totals for Battle Creek and Kalamazoo were reported together.

Source: U.S. Department of Commerce



Table A-29

**MEDIAN PRICE OF EXISTING HOME - MICHIGAN METROPOLITAN AREAS  
1988 - 1999**

Year	Grand Rapids		Kalamazoo	Lansing - E. Lansing		U.S.	Midwest	CPI
	Detroit	Rapids		E. Lansing	Lansing -			
1988	\$73,100	\$57,900	\$53,200	\$56,600	\$89,300	\$68,400	118.3	
1989	73,700	64,200	57,200	59,800	89,500	71,800	124.0	
1990	76,700	68,300	60,400	63,300	92,000	75,300	130.7	
1991	80,600	70,700	64,900	66,700	97,100	79,500	136.2	
1992	81,300	73,100	69,600	69,900	99,700	83,000	140.3	
1993	86,000	76,500	71,100	73,200	103,100	86,000	144.5	
1994	87,000	76,900	74,800	75,500	107,200	89,300	148.2	
1995	98,200	80,600	82,200	79,800	110,500	94,800	152.4	
1996	111,400	87,200	90,000	84,700	115,800	101,000	156.9	
1997	119,600	93,600	97,200	89,600	121,800	107,000	160.5	
1998	132,600	100,200	102,300	100,200	128,400	114,300	163.0	
1999	140,000	106,700	110,900	105,200	133,300	119,600	166.6	

**Cumulative Percentage Change**

1994 - 1999	60.9%	38.8%	48.3%	39.3%	24.3%	33.9%	12.4%
1988 - 1994	19.0%	32.8%	40.6%	33.4%	20.0%	30.6%	25.3%

**Average Annual Percentage Change**

1994 - 1999	10.0%	6.8%	8.2%	6.9%	4.5%	6.0%	2.4%
1988 - 1994	2.9%	4.8%	5.8%	4.9%	3.1%	4.5%	3.8%
1988 - 1999	6.1%	5.7%	6.9%	5.8%	3.7%	5.2%	3.2%

Sources: National Association of Realtors and Bureau of Labor Statistics, U.S. Department of Labor

Table A-30

10-YEAR STATE OF MICHIGAN REVENUE HISTORY  
(in Thousands)

	FY 1990	FY 1991	FY 1992	FY 1993	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999
<b>Taxes</b>										
Sales	\$2,671,268	\$2,671,853	\$2,738,147	\$2,905,665	\$3,775,260	\$4,884,198	\$5,171,598	\$5,389,802	\$5,617,331	\$5,901,733
Personal Income	3,907,701	3,810,264	3,927,931	4,204,772	4,461,416	5,013,472	5,438,788	5,930,404	6,316,125	6,907,933
Amt Reported as Expenditures	NA	856,800	964,700	975,200	1,067,700	459,600	429,618	470,000	477,000	486,100
Single Business	1,798,605	1,573,666	1,685,052	1,791,128	2,035,394	2,130,395	2,187,418	2,224,319	2,349,148	2,360,533
Use	473,919	474,278	479,979	529,532	725,091	942,885	1,034,886	1,092,216	1,159,258	1,283,017
State Education (Property)	NA	NA	NA	NA	446,863	1,155,601	1,272,288	1,348,832	1,256,874	1,273,459
Real Estate Transfer	NA	NA	NA	NA	NA	NA	NA	NA	227,852	261,696
Liquor, Beer, Wine, & Tobacco	369,873	375,478	360,461	358,887	510,312	734,645	698,007	662,287	689,451	739,972
Telephone and Telegraph	142,271	143,695	145,199	149,613	122,477	127,189	135,412	145,805	151,964	150,334
Insurance Company	78,647	175,973	178,304	188,196	194,442	213,638	205,996	182,389	142,565	199,463
Motor Vehicle and Fuel	1,148,361	1,152,595	1,185,774	1,244,816	1,287,765	1,338,692	1,334,349	1,424,963	1,695,068	1,784,970
Other	471,755	487,658	566,646	518,496	455,788	468,399	611,716	569,300	543,391	609,665
<b>Total Taxes</b>	<b>11,062,400</b>	<b>11,722,260</b>	<b>12,232,193</b>	<b>12,866,305</b>	<b>15,082,508</b>	<b>17,468,714</b>	<b>18,520,076</b>	<b>19,440,317</b>	<b>20,626,027</b>	<b>21,958,875</b>
<b>Federal Agencies</b>	<b>4,215,677</b>	<b>4,820,694</b>	<b>5,379,072</b>	<b>5,923,406</b>	<b>6,370,178</b>	<b>6,532,050</b>	<b>7,469,416</b>	<b>7,653,495</b>	<b>7,679,490</b>	<b>7,902,699</b>
<b>Local Agencies</b>	<b>161,574</b>	<b>154,282</b>	<b>178,660</b>	<b>148,956</b>	<b>156,267</b>	<b>183,282</b>	<b>197,972</b>	<b>168,247</b>	<b>165,443</b>	<b>183,822</b>
<b>Spec Medicaid Reimb</b>	<b>0</b>	<b>400,935</b>	<b>454,257</b>	<b>738,026</b>	<b>900,461</b>	<b>490,517</b>	<b>598,654</b>	<b>593,402</b>	<b>585,179</b>	<b>690,799</b>
<b>Services</b>	<b>102,551</b>	<b>115,280</b>	<b>107,939</b>	<b>110,543</b>	<b>113,757</b>	<b>122,532</b>	<b>120,415</b>	<b>114,354</b>	<b>107,623</b>	<b>113,415</b>
<b>Licenses and Permits</b>	<b>264,454</b>	<b>275,014</b>	<b>288,764</b>	<b>302,481</b>	<b>328,978</b>	<b>348,873</b>	<b>353,266</b>	<b>353,492</b>	<b>376,909</b>	<b>383,778</b>
<b>Miscellaneous</b>	<b>428,895</b>	<b>420,839</b>	<b>448,480</b>	<b>427,227</b>	<b>478,194</b>	<b>655,578</b>	<b>701,004</b>	<b>655,963</b>	<b>700,553</b>	<b>769,236</b>
<b>Total Revenue</b>	<b>\$16,235,551</b>	<b>\$17,909,303</b>	<b>\$19,089,364</b>	<b>\$20,516,944</b>	<b>\$23,430,346</b>	<b>\$25,801,546</b>	<b>\$27,960,804</b>	<b>\$28,979,270</b>	<b>\$30,241,222</b>	<b>\$32,002,624</b>

Source: 1999 State of Michigan Comprehensive Annual Financial Report

Notes:

1. Beginning in FY 1991, the State began reporting certain personal income tax credits as expenditures, rather than as revenue reductions.
2. Personal income tax totals are net of tax expenditures.
3. Revenue from special Medicaid reimbursements resulted from a program providing funding for Medicaid which did not exist prior to FY 1991. Prior year amounts have been reclassified to include contributions by local units of government which were previously reported on the "Local Agencies" line.
4. Beginning in FY 1997, the State began reporting the federal share of child support collections as federal revenue, rather than as miscellaneous revenue.
5. Beginning in FY 1998, the State began reporting real estate transfer tax separately from State Education Property Tax. Amounts of the real estate transfer tax before FY 1998 not available.

**Table A-31**  
**MICHIGAN ELEMENTARY, SECONDARY AND HIGHER EDUCATION ENROLLMENTS**

School Year	Elementary			Secondary			Total K-12			Percent Change		
	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1970-71	1,162,762	200,344	948,592	74,084	2,111,354	274,428	2,385,782	NA	NA	NA	NA	NA
1971-72	1,161,284	127,043	980,477	96,793	2,141,761	223,836	2,365,597	1.4	-18.4	-0.8	-0.8	-0.8
1972-73	1,133,209	126,431	990,288	94,811	2,123,497	221,242	2,344,739	-0.9	-1.2	-0.9	-0.9	-0.9
1973-74	1,098,753	121,584	989,948	93,718	2,088,701	215,302	2,304,003	-1.6	-2.7	-1.7	-1.7	-1.7
1974-75	1,070,095	117,023	986,354	93,324	2,056,449	210,347	2,266,796	-1.5	-2.3	-1.6	-1.6	-1.6
1975-76	1,044,767	117,713	981,441	91,805	2,026,208	209,518	2,235,726	-1.5	-0.4	-1.4	-1.4	-1.4
1976-77	1,019,534	160,445	969,665	54,653	1,989,199	215,098	2,204,297	-1.8	2.7	-1.4	-1.4	-1.4
1977-78	989,493	117,989	940,012	93,951	1,929,505	211,940	2,141,445	-3.0	-1.5	-2.9	-2.9	-2.9
1978-79	961,821	116,213	907,990	87,846	1,869,811	204,059	2,073,870	-3.1	-3.7	-3.2	-3.2	-3.2
1979-80	934,177	122,539	870,481	86,261	1,804,658	208,800	2,013,458	-3.5	2.3	-2.9	-2.9	-2.9
1980-81	904,829	116,291	838,848	85,247	1,743,677	201,538	1,945,215	-3.4	-3.5	-3.4	-3.4	-3.4
1981-82	862,549	117,721	805,781	84,424	1,668,330	202,145	1,870,475	-4.3	0.3	-3.8	-3.8	-3.8
1982-83	825,502	115,013	784,462	83,337	1,609,964	198,350	1,808,314	-3.5	-1.9	-3.3	-3.3	-3.3
1983-84	798,457	117,450	770,984	84,350	1,569,441	201,800	1,771,241	-2.5	1.7	-2.1	-2.1	-2.1
1984-85	790,132	117,665	752,125	81,213	1,542,257	198,878	1,741,135	-1.7	-1.4	-1.7	-1.7	-1.7
1985-86	796,256	116,201	733,370	76,647	1,529,626	192,848	1,722,474	-0.8	-3.0	-1.1	-1.1	-1.1
1986-87	808,053	117,422	714,877	73,994	1,522,930	191,416	1,714,346	-0.4	-0.7	-0.5	-0.5	-0.5
1987-88	822,857	117,176	696,885	70,792	1,519,742	187,968	1,707,710	-0.2	-1.8	-0.4	-0.4	-0.4
1988-89	836,775	116,727	668,333	67,543	1,505,108	184,270	1,689,378	-1.0	-2.0	-1.1	-1.1	-1.1
1989-90	848,833	114,312	647,143	64,060	1,495,976	178,372	1,674,348	-0.6	-3.2	-0.9	-0.9	-0.9
1990-91	861,452	105,713	641,125	57,341	1,502,577	163,054	1,665,631	0.4	-8.6	-0.5	-0.5	-0.5
1991-92	868,828	101,020	645,266	54,712	1,514,094	155,732	1,669,826	0.8	-4.5	0.3	0.3	0.3
1992-93	872,080	102,136	651,841	55,791	1,523,921	157,927	1,681,848	0.6	1.4	0.7	0.7	0.7
1993-94	871,986	107,286	659,686	61,987	1,531,672	169,273	1,700,945	0.5	7.2	1.1	1.1	1.1
1994-95	877,718	109,605	662,941	64,022	1,540,659	173,627	1,714,286	0.6	2.6	0.8	0.8	0.8
1995-96	892,259	112,796	668,853	64,721	1,561,112	177,517	1,738,629	1.3	2.2	1.4	1.4	1.4
1996-97	903,210	110,071	678,197	64,959	1,581,407	175,030	1,756,437	1.3	-1.4	1.0	1.0	1.0
1997-98	904,321	110,237	686,246	65,425	1,590,567	175,662	1,766,229	0.6	0.4	0.6	0.6	0.6
1998-99	906,979	106,087	696,661	63,883	1,603,640	169,970	1,773,610	0.8	-3.2	0.4	0.4	0.4

Table A-31 (Continued)

School Year	Public Higher Education			Private Higher Education		Total Higher Education	Percent Change
	Two-Year	Four-Year	Total	Total	Percent Change		
1970-71	125,533	217,802	343,335	6.1	52,348	395,683	5.7
1971-72	132,059	220,165	352,224	2.6	52,928	405,152	2.4
1972-73	136,611	218,724	355,335	0.9	50,593	405,928	0.2
1973-74	152,715	221,893	374,608	5.4	51,160	425,768	4.9
1974-75	173,643	229,627	403,270	7.7	55,273	458,543	7.7
1975-76	197,199	240,442	437,641	8.5	61,081	498,722	8.8
1976-77	187,622	236,831	424,453	-3.0	60,372	484,825	-2.8
1977-78	186,876	236,618	423,494	-0.2	61,906	485,400	0.1
1978-79	187,649	236,035	423,684	0.0	62,810	486,494	0.2
1979-80	231,915	240,600	472,515	11.5	64,333	536,848	10.4
1980-81	244,971	242,999	487,970	3.3	66,216	554,186	3.2
1981-82	211,871	235,027	446,898	-8.4	68,406	515,304	-7.0
1982-83	213,204	226,385	439,589	-1.6	69,807	509,396	-1.1
1983-84	217,230	226,999	444,229	1.1	71,433	515,662	1.2
1984-85	204,171	229,020	433,191	-2.5	73,661	506,852	-1.7
1985-86	209,656	236,648	446,304	3.0	76,716	523,020	3.2
1986-87	214,302	244,288	458,590	2.8	77,966	536,556	2.6
1987-88	217,036	249,484	466,520	1.7	79,366	545,886	1.7
1988-89	225,266	255,599	480,865	3.1	81,709	562,574	3.1
1989-90	223,578	259,922	483,500	0.5	83,545	567,045	0.8
1990-91	223,634	262,146	485,780	0.5	83,817	569,597	0.5
1991-92	225,922	260,366	486,288	0.1	86,270	572,558	0.5
1992-93	217,731	263,279	481,010	-1.1	85,492	566,502	-1.1
1993-94	206,689	258,107	464,796	-3.4	84,727	549,523	-3.0
1994-95	201,968	258,996	460,964	-0.8	86,238	547,202	-0.4
1995-96	199,220	259,414	458,634	-0.5	87,901	546,535	-0.1
1996-97	194,939	263,074	458,013	-0.1	86,495	544,508	-0.4
1997-98	195,075	267,154	462,229	0.9	84,847	547,076	0.5
1998-99	190,194	256,905	447,099	-3.3	84,974	532,073	-2.7

Notes: 1. The pupil counts displayed do not include special education or alternative education pupils, who are not counted by grade level and cannot, therefore, be categorized as elementary or secondary pupils.  
 2. Elementary includes grades K-6. Secondary includes 7-12. Counts are fall FTE state aid counts.  
 3. Higher Education figures are fall enrollment.

Source: Michigan Department of Education

Table A-32

INCREASE IN SCHOOL DISTRICTS' PER PUPIL FOUNDATION ALLOWANCES UNDER PROPOSAL A

SCHOOL CODE	SCHOOL DISTRICT NAME	PROPOSAL A FOUNDATION ALLOWANCE										FY94-FY00 Increase %
		BASE FY94	FY95	FY96	FY97	FY98	FY99	FY00(1)	FY00(1)	\$	%	
01010	ALCONA COMMUNITY SCHOOLS	5,027	5,245	5,398	5,553	5,707	5,707	5,707	5,945	5,945	\$918	18.3%
02010	AUTRAIN-ONOTA PUBLIC SCHOOLS	5,377	5,581	5,734	5,889	6,043	6,043	6,281	6,281	904	16.8%	
02020	BURT TOWNSHIP SCHOOL DISTRICT	8,428	8,588	8,741	8,896	9,050	9,050	9,288	9,288	860	10.2%	
02070	MUNISING PUBLIC SCHOOLS	3,875	4,200	4,506	4,816	5,124	5,170	5,700	1,825	1,825	47.1%	
02080	SUPERIOR CENTRAL SCHOOL DISTRICT	4,589	4,824	5,063	5,300	5,462	5,462	5,700	1,111	1,111	24.2%	
03010	PLAINWELL COMMUNITY SCHOOLS	4,558	4,794	5,036	5,277	5,462	5,462	5,700	1,142	1,142	25.1%	
03020	OTSEGO PUBLIC SCHOOLS	4,024	4,274	4,572	4,873	5,172	5,172	5,700	1,676	1,676	41.7%	
03030	ALLEGAN PUBLIC SCHOOLS	3,949	4,200	4,506	4,816	5,124	5,170	5,700	1,751	1,751	44.3%	
03040	WAYLAND UNION SCHOOLS	4,362	4,606	4,868	5,130	5,388	5,388	5,700	1,338	1,338	30.7%	
03050	FENNVILLE PUBLIC SCHOOLS	4,516	4,754	5,000	5,245	5,462	5,462	5,700	1,184	1,184	26.2%	
03060	MARTIN PUBLIC SCHOOLS	4,394	4,636	4,885	5,154	5,408	5,408	5,700	1,306	1,306	29.7%	
03070	HOPKINS PUBLIC SCHOOLS	4,102	4,352	4,642	4,934	5,223	5,223	5,700	1,598	1,598	39.0%	
03080	SAUGATUCK PUBLIC SCHOOLS	6,671	6,831	6,984	7,139	7,293	7,293	7,531	860	860	12.9%	
03100	HAMILTON COMMUNITY SCHOOLS	4,407	4,649	4,906	5,164	5,416	5,416	5,700	1,293	1,293	29.3%	
03440	GANGES SCHOOL DISTRICT #4	6,034	6,213	6,366	6,521	6,675	6,675	6,913	878	878	14.6%	
04010	ALPENA PUBLIC SCHOOLS	3,961	4,211	4,516	4,825	5,131	5,170	5,700	1,739	1,739	43.9%	
05010	ALBA PUBLIC SCHOOLS	5,215	5,425	5,578	5,733	5,887	5,887	6,125	910	910	17.5%	
05035	CENTRAL LAKE PUBLIC SCHOOLS	5,773	5,961	6,114	6,269	6,423	6,423	6,661	888	888	15.4%	
05040	BELLAIRE PUBLIC SCHOOLS	5,699	5,890	6,043	6,198	6,352	6,352	6,590	891	891	15.6%	
05060	ELK RAPIDS SCHOOLS	5,062	5,278	5,431	5,586	5,740	5,740	5,978	916	916	18.1%	
05065	ELLSWORTH COMMUNITY SCHOOLS	5,202	5,413	5,566	5,721	5,875	5,875	6,113	911	911	17.5%	
05070	MANCELONA PUBLIC SCHOOLS	4,768	4,986	5,153	5,308	5,462	5,462	5,700	932	932	19.5%	
06010	ARENAC EASTERN SCHOOL DISTRICT	3,918	4,200	4,506	4,816	5,124	5,170	5,700	1,782	1,782	45.5%	
06020	AU GRES SIMS SCHOOL DISTRICT	4,716	4,946	5,153	5,308	5,462	5,462	5,700	984	984	20.9%	
06050	STANDISH STERLING SCHOOL DISTRICT	3,738	4,200	4,506	4,816	5,124	5,170	5,700	1,962	1,962	52.5%	
07010	ARVON TOWNSHIP SCHOOL DISTRICT	6,266	6,435	6,588	6,743	6,897	6,897	7,135	869	869	13.9%	
07020	BARAGA TOWNSHIP SCHOOL DISTRICT	4,041	4,291	4,587	4,886	5,183	5,183	5,700	1,659	1,659	41.1%	
07040	L'ANSE AREA SCHOOLS	4,448	4,688	4,941	5,194	5,441	5,441	5,700	1,252	1,252	28.1%	
08010	DELTON-KELLOGG SCHOOL DISTRICT	4,501	4,740	4,988	5,235	5,462	5,462	5,700	1,199	1,199	26.6%	
08030	HASTINGS AREA SCHOOL DISTRICT	4,675	4,907	5,137	5,308	5,462	5,462	5,700	1,025	1,025	21.9%	
08050	THORNAPPLE-KELLOGG SCHOOL DISTRICT	4,598	4,832	5,070	5,306	5,462	5,462	5,700	1,102	1,102	24.0%	
09010	BAY CITY SCHOOL DISTRICT	4,184	4,434	4,715	4,997	5,276	5,276	5,700	1,516	1,516	36.2%	
09030	BANGOR TOWNSHIP SCHOOLS	4,339	4,584	4,849	5,114	5,374	5,374	5,700	1,361	1,361	31.4%	
09050	ESSEXVILLE HAMPTON SCHOOL DISTRICT	5,452	5,653	5,806	5,961	6,115	6,115	6,353	901	901	16.5%	
09090	PINCONNING AREA SCHOOLS	4,386	4,629	4,889	5,149	5,403	5,403	5,700	1,314	1,314	30.0%	
10015	BENZIE COUNTY CENTRAL SCHOOL	3,836	4,200	4,506	4,816	5,124	5,170	5,700	1,864	1,864	48.6%	

Table A-32 (continued)

SCHOOL CODE	SCHOOL DISTRICT NAME	PROPOSAL A FOUNDATION ALLOWANCE										FY94-FY00 Increase %
		BASE	FY95	FY96	FY97	FY98	FY99	FY00(1)	FY00(1)	\$	%	
10025	FRANKFORT-ELBERTA AREA SCHOOLS	5,993	6,173	6,326	6,481	6,635	6,635	6,873	880	14.7%		
11010	BENTON HARBOR AREA SCHOOLS	4,364	4,608	4,870	5,132	5,389	5,389	5,700	1,336	30.6%		
11020	ST. JOSEPH PUBLIC SCHOOLS	5,336	5,541	5,694	5,849	6,003	6,003	6,241	906	17.0%		
11030	LAKESHORE SCHOOL DISTRICT	4,187	4,437	4,717	4,999	5,278	5,278	5,700	1,513	36.1%		
11033	RIVER VALLEY SCHOOL DISTRICT	5,627	5,821	5,974	6,129	6,283	6,283	6,521	894	15.9%		
11160	GALIEN TOWNSHIP SCHOOL DISTRICT	4,557	4,793	5,035	5,275	5,462	5,462	5,700	1,143	25.1%		
11200	NEW BUFFALO AREA SCHOOL DISTRICT	8,367	8,527	8,680	8,835	8,989	8,989	9,227	860	10.3%		
11210	BRANDYWINE PUBLIC SCHOOL DISTRICT	4,206	4,456	4,734	5,014	5,290	5,290	5,700	1,494	35.5%		
11240	BERRIEN SPRINGS PUBLIC SCHOOL DISTRICT	4,344	4,588	4,852	5,117	5,377	5,377	5,700	1,356	31.2%		
11250	EAU CLAIRE PUBLIC SCHOOLS	4,160	4,410	5,153	5,308	5,462	5,462	5,700	1,540	37.0%		
11300	NILES COMMUNITY SCHOOL DISTRICT	4,560	4,796	5,038	5,279	5,462	5,462	5,700	1,140	25.0%		
11310	BUCHANAN COMMUNITY SCHOOL DISTRICT	4,267	4,514	4,786	5,060	5,328	5,328	5,700	1,433	33.6%		
11320	WATERLIET SCHOOL DISTRICT	4,552	4,788	5,030	5,271	5,462	5,462	5,700	1,148	25.2%		
11330	COLOMA COMMUNITY SCHOOLS	3,902	4,200	4,949	5,201	5,447	5,447	5,700	1,798	46.1%		
11340	BRIDGMAN PUBLIC SCHOOLS	6,694	6,854	7,007	7,162	7,316	7,316	7,554	860	12.8%		
11670	HAGAR TWP SCHOOL DISTRICT #6	3,628	4,200	4,506	4,816	5,124	5,170	5,700	2,072	57.1%		
11830	SODUS TWP SCHOOL DISTRICT #5	3,161	4,200	4,506	4,816	5,124	5,170	5,700	2,539	80.3%		
12010	COLDWATER COMM SCHOOLS	4,566	4,802	5,043	5,283	5,462	5,462	5,700	1,134	24.8%		
12020	BRONSON COMMUNITY SCHOOL DISTRICT	4,004	4,254	4,554	4,858	5,159	5,170	5,700	1,696	42.3%		
12040	QUINCY COMMUNITY SCHOOL DISTRICT	4,045	4,295	4,591	4,890	5,186	5,186	5,700	1,655	40.9%		
13010	ALBION PUBLIC SCHOOLS	5,009	5,227	5,380	5,535	5,689	5,689	5,927	918	18.3%		
13020	BATTLE CREEK PUBLIC SCHOOLS	5,213	5,423	5,576	5,731	5,885	5,885	6,123	910	17.5%		
13050	ATHENS AREA SCHOOLS	4,649	4,882	5,114	5,308	5,462	5,462	5,700	1,051	22.6%		
13070	HARPER CREEK COMM SCHOOLS	4,690	4,921	5,149	5,308	5,462	5,462	5,700	1,010	21.5%		
13080	HOMER COMMUNITY SCHOOLS	4,397	4,639	4,898	5,157	5,410	5,410	5,700	1,303	29.6%		
13090	LAKEVIEW SCHOOL DISTRICT	5,334	5,539	5,692	5,847	6,001	6,001	6,239	906	17.0%		
13095	MAR LEE SCHOOL DISTRICT	4,264	4,512	4,784	5,057	5,326	5,326	5,700	1,436	33.7%		
13110	MARSHALL PUBLIC SCHOOLS	4,664	4,895	5,126	5,308	5,462	5,462	5,700	1,036	22.2%		
13120	PENNFIELD SCHOOL DISTRICT	4,903	5,126	5,279	5,434	5,588	5,588	5,826	922	18.8%		
13130	TEKONSHA COMMUNITY SCHOOLS	5,098	5,313	5,466	5,621	5,775	5,775	6,013	915	17.9%		
13135	UNION CITY COMMUNITY SCHOOL DISTRICT	4,091	4,341	4,632	4,926	5,216	5,216	5,700	1,609	39.3%		
14010	CASSOPOLIS PUBLIC SCHOOLS	4,526	4,763	5,008	5,252	5,462	5,462	5,700	1,174	25.9%		
14020	DOWAGIAC UNION SCHOOLS	3,997	4,247	4,548	4,853	5,155	5,170	5,700	1,703	42.6%		
14030	EDWARDSBURG PUBLIC SCHOOLS	4,226	4,475	4,751	5,029	5,303	5,303	5,700	1,474	34.9%		
14050	MARCELLUS COMMUNITY SCHOOLS	4,188	4,438	4,718	5,001	5,279	5,279	5,700	1,512	36.1%		
15010	BEAVER ISLAND COMM SCHOOLS	8,627	8,787	8,940	9,095	9,249	9,249	9,487	860	10.0%		
15020	BOYNE CITY PUBLIC SCHOOL DISTRICT	5,320	5,526	5,679	5,834	5,988	5,988	6,226	906	17.0%		
15030	BOYNE FALLS PUBLIC SCHOOL DISTRICT	4,149	4,399	4,684	4,970	5,254	5,254	5,700	1,551	37.4%		

Table A-32 (continued)

SCHOOL CODE	SCHOOL DISTRICT NAME	PROPOSALA FOUNDATION ALLOWANCE										FY94-FY00 Increase %
		BASE	FY95	FY96	FY97	FY98	FY99	FY00(1)	\$	%		
15050	CHARLEVOIX PUBLIC SCHOOLS	6,216	6,387	6,540	6,695	6,849	6,849	7,087	871	14.0%		
15060	EAST JORDAN PUBLIC SCHOOL DISTRICT	4,881	5,104	5,257	5,412	5,566	5,566	5,804	923	18.9%		
16015	CHEBOYGAN AREA SCHOOLS	4,119	4,369	4,657	4,948	5,234	5,234	5,700	1,581	38.4%		
16050	INLAND LAKES SCHOOL DISTRICT	4,647	4,879	5,112	5,308	5,462	5,462	5,700	1,053	22.7%		
16070	MACKINAW CITY PUBLIC SCHOOLS	6,002	6,182	6,335	6,490	6,644	6,644	6,882	879	14.7%		
16100	WOLVERINE COMMUNITY SCHOOL DISTRICT	3,675	4,200	4,506	4,816	5,124	5,170	5,700	2,025	55.1%		
17010	SAULT STE MARIE AREA SCHOOLS	4,270	4,517	4,789	5,062	5,330	5,330	5,700	1,430	33.5%		
17050	DETOUR AREA SCHOOLS	7,379	7,539	7,692	7,847	8,001	8,001	8,239	860	11.7%		
17090	PICKFORD PUBLIC SCHOOLS	4,931	5,152	5,305	5,460	5,614	5,614	5,852	921	18.7%		
17110	RUDYARD AREA SCHOOLS	3,951	4,201	4,507	4,817	5,125	5,170	5,700	1,749	44.3%		
17140	BRIMLEY AREA SCHOOLS	4,264	4,511	4,783	5,057	5,326	5,326	5,700	1,436	33.7%		
17160	WHITEFISH SCHOOLS	9,270	9,430	9,583	9,738	9,892	9,892	10,130	860	9.3%		
18010	CLARE PUBLIC SCHOOLS	4,497	4,736	4,984	5,231	5,462	5,462	5,700	1,203	26.7%		
18020	FARWELL AREA SCHOOLS	3,890	4,200	4,506	4,816	5,124	5,170	5,700	1,810	46.5%		
18060	HARRISON COMMUNITY SCHOOLS	3,905	4,200	4,506	4,816	5,124	5,170	5,700	1,795	46.0%		
19010	DEWITT PUBLIC SCHOOLS	4,718	4,948	5,153	5,308	5,462	5,462	5,700	982	20.8%		
19070	FWLER PUBLIC SCHOOLS	5,098	5,313	5,466	5,621	5,775	5,775	6,013	915	17.9%		
19100	BATH COMMUNITY SCHOOLS	4,851	5,076	5,229	5,384	5,538	5,538	5,776	925	19.1%		
19120	OVID ELSIE AREA SCHOOLS	4,832	5,058	5,211	5,366	5,520	5,520	5,758	925	19.1%		
19125	PEWAMO WESTPHALIA COMM SCHS	5,186	5,398	5,551	5,706	5,860	5,860	6,098	911	17.6%		
19140	ST. JOHNS PUBLIC SCHOOLS	4,924	5,146	5,299	5,454	5,608	5,608	5,846	922	18.7%		
20015	CRAWFORD AUSABLE SCHOOLS	3,843	4,200	4,506	4,816	5,124	5,170	5,700	1,857	48.3%		
21010	ESCANABA AREA PUBLIC SCHOOLS	4,520	4,758	5,004	5,249	5,462	5,462	5,700	1,180	26.1%		
21025	GLADSTONE AREA SCHOOLS	4,439	4,680	4,934	5,188	5,436	5,436	5,700	1,261	28.4%		
21060	RAPID RIVER PUBLIC SCHOOLS	4,581	4,816	5,055	5,293	5,462	5,462	5,700	1,119	24.4%		
21065	BIG BAY DE NOC SCHOOL DISTRICT	5,062	5,278	5,431	5,586	5,740	5,740	5,978	916	18.1%		
21090	BARK RIVER HARRIS SCHOOL DISTRICT	4,246	4,494	4,768	5,044	5,315	5,315	5,700	1,454	34.2%		
21135	MID PENINSULA SCHOOL DISTRICT	4,114	4,364	4,652	4,943	5,230	5,230	5,700	1,586	38.6%		
22010	IRON MOUNTAIN CITY SCHOOL DISTRICT	4,289	4,535	4,805	5,076	5,342	5,342	5,700	1,411	32.9%		
22025	NORWAY VULCAN AREA SCHOOLS	4,012	4,262	4,561	4,863	5,164	5,170	5,700	1,688	42.1%		
22030	BREITUNG TWP SCHOOL DISTRICT	4,348	4,592	4,856	5,120	5,379	5,379	5,700	1,352	31.1%		
22045	NORTH DICKINSON COUNTY SCHOOL DISTRICT	4,505	4,743	4,990	5,237	5,462	5,462	5,700	1,195	26.5%		
23010	BELLEVUE COMMUNITY SCHOOL DISTRICT	4,435	4,676	4,931	5,186	5,434	5,434	5,700	1,265	28.5%		
23030	CHARLOTTE PUBLIC SCHOOLS	4,795	5,021	5,174	5,329	5,483	5,483	5,721	927	19.3%		
23050	EATON RAPIDS PUBLIC SCHOOLS	4,694	4,924	5,152	5,308	5,462	5,462	5,700	1,006	21.4%		
23060	GRAND LEDGE PUBLIC SCHOOLS	5,099	5,314	5,467	5,622	5,776	5,776	6,014	915	17.9%		
23065	MAPLE VALLEY SCHOOL DISTRICT	3,889	4,200	4,506	4,816	5,124	5,170	5,700	1,811	46.6%		
23080	OLIVET COMMUNITY SCHOOLS	4,466	4,705	4,956	5,207	5,452	5,452	5,700	1,234	27.6%		

Table A-32 (continued)

SCHOOL CODE	SCHOOL DISTRICT NAME	PROPOSAL A FOUNDATION ALLOWANCE										FY94-FY00 Increase %
		BASE FY94	FY95	FY96	FY97	FY98	FY99	FY00(1)	\$	%		
23090	POTTERVILLE PUBLIC SCHOOLS	4,996	5,215	5,368	5,523	5,677	5,677	5,915	919	18.4%		
23490	ONEIDA TWP SCHOOL DISTRICT #3	9,022	9,182	9,335	9,490	9,644	9,644	9,882	860	9.5%		
23590	ROXAND TWP SCHOOL DISTRICT #12	5,018	5,236	5,399	5,544	5,698	5,698	5,936	918	18.3%		
24020	HARBOR SPRINGS SCHOOL DISTRICT	6,817	6,977	7,130	7,285	7,439	7,439	7,677	860	12.6%		
24030	LITTLEFIELD PUBLIC SCHOOL DISTRICT	4,562	4,797	5,038	5,279	5,462	5,462	5,700	1,138	25.0%		
24040	PELLSTON PUBLIC SCHOOL DISTRICT	5,061	5,277	5,430	5,585	5,739	5,739	5,977	916	18.1%		
24070	PETOSKEY PUBLIC SCHOOLS	4,831	5,057	5,210	5,365	5,519	5,519	5,757	925	19.2%		
25010	FLINT CITY SCHOOL DISTRICT	5,555	5,752	5,905	6,060	6,214	6,214	6,452	897	16.1%		
25030	GRAND BLANC COMM SCHOOLS	5,480	5,679	5,832	5,987	6,141	6,141	6,379	900	16.4%		
25040	MT. MORRIS CONSOLIDATED SCHOOLS	4,689	4,920	5,148	5,308	5,462	5,462	5,700	1,011	21.6%		
25050	GOODRICH AREA SCHOOLS	4,449	4,690	4,943	5,196	5,442	5,442	5,700	1,251	28.1%		
25060	BENDLE PUBLIC SCHOOLS	4,727	4,957	5,153	5,308	5,462	5,462	5,700	973	20.6%		
25070	GENESEE SCHOOL DISTRICT	4,676	4,908	5,138	5,308	5,462	5,462	5,700	1,024	21.9%		
25080	CARMAN-AINSWORTH SCHOOLS	6,002	6,181	6,334	6,489	6,643	6,643	6,881	880	14.7%		
25100	FENTON AREA PUBLIC SCHOOLS	4,804	5,031	5,184	5,339	5,493	5,493	5,731	926	19.3%		
25110	KEARSLEY COMMUNITY SCHOOLS	5,008	5,227	5,390	5,535	5,689	5,689	5,927	918	18.3%		
25120	FLUSHING COMMUNITY SCHOOLS	4,549	4,785	5,028	5,270	5,462	5,462	5,700	1,151	25.3%		
25130	ATHERTON COMMUNITY SCHOOL DISTRICT	4,917	5,139	5,292	5,447	5,601	5,601	5,839	922	18.7%		
25140	DAVISON COMMUNITY SCHOOLS	4,519	4,757	5,003	5,248	5,462	5,462	5,700	1,181	26.1%		
25150	CLIO AREA SCHOOL DISTRICT	4,632	4,865	5,099	5,308	5,462	5,462	5,700	1,068	23.0%		
25180	SWARTZ CREEK COMMUNITY SCHS	4,868	5,092	5,245	5,400	5,554	5,554	5,792	924	19.0%		
25200	LAKE FENTON SCHOOLS	5,392	5,595	5,748	5,903	6,057	6,057	6,295	903	16.8%		
25210	WESTWOOD HEIGHTS SCHOOL DISTRICT	5,068	5,284	5,437	5,592	5,746	5,746	5,984	916	18.1%		
25230	BENTLEY COMMUNITY SCHOOL DISTRICT	5,299	5,506	5,659	5,814	5,968	5,968	6,206	907	17.1%		
25240	BEECHER COMMUNITY SCHOOL DISTRICT	5,625	5,819	5,972	6,127	6,281	6,281	6,519	894	15.9%		
25250	LINDEN COMMUNITY SCHOOL DISTRICT	4,400	4,642	4,900	5,159	5,412	5,412	5,700	1,300	29.5%		
25260	MONTROSE COMMUNITY SCHOOLS	5,432	5,634	5,787	5,942	6,096	6,096	6,334	902	16.6%		
25280	LAKEVILLE COMMUNITY SCHOOL DISTRICT	4,469	4,709	4,960	5,210	5,455	5,455	5,700	1,231	27.5%		
26010	BEAVERTON RURAL SCHOOLS	3,779	4,200	4,506	4,816	5,124	5,170	5,700	1,921	50.9%		
26040	GLADWIN COMMUNITY SCHOOLS	4,462	4,702	4,954	5,205	5,451	5,451	5,700	1,238	27.7%		
27010	BESSEMER CITY SCHOOL DISTRICT	4,337	4,582	4,847	5,112	5,372	5,372	5,700	1,363	31.4%		
27020	IRONWOOD AREA SCHOOLS	4,332	4,576	4,841	5,107	5,369	5,369	5,700	1,368	31.6%		
27060	MARENISCO SCHOOL DISTRICT	7,116	7,276	7,429	7,584	7,738	7,738	7,976	860	12.1%		
27070	WAKEFIELD TOWNSHIP SCHOOL DISTRICT	4,425	4,666	4,922	5,177	5,427	5,427	5,700	1,275	28.8%		
27080	WATERSMEET TOWNSHIP SCHOOL DISTRICT	6,502	6,662	6,815	6,970	7,124	7,124	7,362	860	13.2%		
28010	TRAVERSE CITY SCHOOL DISTRICT	4,588	4,823	5,062	5,299	5,462	5,462	5,700	1,112	24.2%		
28035	BUCKLEY COMMUNITY SCHOOL DISTRICT	4,612	4,846	5,082	5,308	5,462	5,462	5,700	1,088	23.6%		
28090	KINGSLEY AREA SCHOOL	3,834	4,200	4,506	4,816	5,124	5,170	5,700	1,866	48.7%		



Table A-32 (continued)

SCHOOL CODE	SCHOOL DISTRICT NAME	FY94-FY00 INCREASE									
		BASE	FY95	FY96	FY97	FY98	FY99	FY00(1)	FY00(1)	\$	%
29010	ALMA PUBLIC SCHOOLS	4,691	4,922	5,150	5,308	5,462	5,462	5,700	1,009		21.5%
29020	ASHLEY COMMUNITY SCHOOLS	4,743	4,972	5,153	5,308	5,462	5,462	5,700	957		20.2%
29040	BRECKENRIDGE COMMUNITY SCHOOLS	4,477	4,716	4,966	5,216	5,459	5,459	5,700	1,224		27.3%
29050	FULTON SCHOOLS	4,815	5,041	5,194	5,349	5,503	5,503	5,741	926		19.2%
29060	ITHACA PUBLIC SCHOOLS	4,562	4,798	5,039	5,279	5,462	5,462	5,700	1,138		25.0%
29100	ST. LOUIS PUBLIC SCHOOLS	4,646	4,879	5,112	5,308	5,462	5,462	5,700	1,054		22.7%
30010	CAMDEN FRONTIER SCHOOLS	4,283	4,529	4,799	5,071	5,338	5,338	5,700	1,417		33.1%
30020	HILLSDALE COMMUNITY PUBLIC SCHOOLS	4,174	4,424	4,713	4,996	5,275	5,275	5,700	1,526		36.6%
30030	JONESVILLE COMMUNITY SCHOOLS	4,384	4,627	4,887	5,147	5,402	5,402	5,700	1,316		30.0%
30040	LITCHFIELD COMMUNITY SCHOOLS	4,530	4,767	5,012	5,256	5,462	5,462	5,700	1,170		25.8%
30050	NORTH ADAMS-JEROME PUBLIC SCHOOLS	4,077	4,327	4,619	4,914	5,206	5,206	5,700	1,623		39.8%
30060	PITTSFORD AREA SCHOOLS	4,545	4,781	5,024	5,266	5,462	5,462	5,700	1,155		25.4%
30070	READING COMMUNITY SCHOOLS	4,135	4,385	4,671	4,960	5,245	5,245	5,700	1,565		37.8%
30080	WALDRON AREA SCHOOLS	4,719	4,949	5,153	5,308	5,462	5,462	5,700	981		20.8%
31010	HANCOCK PUBLIC SCHOOLS	4,096	4,346	4,636	4,929	5,218	5,218	5,700	1,605		39.2%
31020	ADAMS TOWNSHIP SCHOOL DISTRICT	4,321	4,566	4,832	5,099	5,362	5,362	5,700	1,379		31.9%
31030	CALUMET PUBLIC SCHOOLS	3,858	4,200	4,506	4,816	5,124	5,170	5,700	1,842		47.8%
31050	CHASSELL TOWNSHIP SCHOOL DISTRICT	4,092	4,342	4,633	4,927	5,217	5,217	5,700	1,608		39.3%
31070	ELM RIVER TOWNSHIP SCHOOL DISTRICT	6,275	6,444	6,597	6,752	6,906	6,906	7,144	869		13.8%
31100	DOLLAR BAY-TAMARACK CITY AREA SCHOOLS	4,413	4,654	4,911	5,168	5,420	5,420	5,700	1,287		29.2%
31110	HOUGHTON-PORTAGE TOWNSHIP SCHOOLS	4,248	4,496	4,770	5,046	5,317	5,317	5,700	1,452		34.2%
31130	LAKE LINDEN HUBBELL SCHOOL DISTRICT	4,033	4,283	4,580	4,880	5,178	5,178	5,700	1,667		41.3%
31140	STANTON TOWNSHIP SCHOOL DISTRICT	3,842	4,200	4,506	4,816	5,124	5,170	5,700	1,858		48.4%
32010	BAD AXE PUBLIC SCHOOLS	3,590	4,200	4,506	4,816	5,124	5,170	5,700	2,110		58.8%
32030	CASEVILLE PUBLIC SCHOOLS	5,554	5,751	5,904	6,059	6,213	6,213	6,451	897		16.2%
32040	CHURCH SCHOOL DISTRICT	2,826	4,200	4,506	4,816	5,124	5,170	5,700	2,874		101.7%
32050	ELKTON PIGEON BAYPORT SCHOOL DISTRICT	4,486	4,725	4,974	5,222	5,462	5,462	5,700	1,214		27.1%
32060	HARBOR BEACH COMMUNITY SCHOOLS	4,588	4,823	5,062	5,299	5,462	5,462	5,700	1,112		24.2%
32080	NORTH HURON SCHOOL DISTRICT	4,951	5,171	5,324	5,479	5,633	5,633	5,871	921		18.6%
32090	OWENDALE GAGETOWN AREA SCHOOL DISTRICT	5,192	5,403	5,556	5,711	5,865	5,865	6,103	911		17.5%
32130	PORT HOPE COMMUNITY SCHOOLS	7,350	7,510	7,663	7,818	7,972	7,972	8,210	860		11.7%
32140	BLOOMFIELD SCHOOL #1	4,744	4,973	5,153	5,308	5,462	5,462	5,700	956		20.1%
32170	UBLY COMMUNITY SCHOOLS	3,814	4,200	4,506	4,816	5,124	5,170	5,700	1,886		49.4%
32250	BLOOMFIELD TOWNSHIP SCHOOL DISTRICT 7F	4,272	4,519	4,790	5,063	5,331	5,331	5,700	1,428		33.4%
32260	COLFAX TOWNSHIP SCHOOL DISTRICT 1F	7,168	7,328	7,481	7,636	7,790	7,790	8,028	860		12.0%
32610	SIGEL TWP SCHOOL DIST #3 - ADAMS SCHOOL	2,762	4,200	4,506	4,816	5,124	5,170	5,700	2,938		106.4%
32620	SIGEL TWP SCHOOL DISTRICT #4	3,982	4,232	4,535	4,841	5,145	5,170	5,700	1,718		43.1%
32630	SIGEL TWP SCHOOL DISTRICT #6	5,669	5,861	6,014	6,169	6,323	6,323	6,561	893		15.7%

Table A-32 (continued)

SCHOOL CODE	SCHOOL DISTRICT NAME	PROPOSAL A FOUNDATION ALLOWANCE										FY94-FY00 Increase %
		BASE FY94	FY95	FY96	FY97	FY98	FY99	FY00(1)	FY00(1)	\$	%	
32650	VERONA TOWNSHIP SCHOOL DISTRICT 1F	3,286	4,200	4,506	4,816	5,124	5,170	5,700	2,414			73.4%
33010	EAST LANSING SCHOOL DISTRICT	6,470	6,631	6,785	6,940	7,094	7,332	863			13.3%	
33020	LANSING PUBLIC SCHOOL DISTRICT	5,401	5,604	5,757	5,912	6,066	6,304	903			16.7%	
33040	DANSVILLE AGRICULTURAL SCHOOL	5,107	5,321	5,474	5,629	5,783	5,783	6,021	915		17.9%	
33060	HASLETT PUBLIC SCHOOLS	5,145	5,358	5,511	5,666	5,820	5,820	6,058	913		17.7%	
33070	HOLT PUBLIC SCHOOLS	5,439	5,641	5,794	5,949	6,103	6,103	6,341	902		16.6%	
33100	LESLIE PUBLIC SCHOOLS	4,624	4,857	5,092	5,308	5,462	5,462	5,700	1,076		23.3%	
33130	MASON PUBLIC SCHOOLS	5,059	5,275	5,428	5,583	5,737	5,737	5,975	916		18.1%	
33170	OKEMOS PUBLIC SCHOOLS	6,298	6,466	6,619	6,774	6,928	6,928	7,166	868		13.8%	
33200	STOCKBRIDGE COMMUNITY SCHOOLS	4,563	4,799	5,040	5,280	5,462	5,462	5,700	1,137		24.9%	
33215	WAVERLY SCHOOLS	6,998	7,158	7,312	7,467	7,621	7,621	7,859	861		12.3%	
33220	WEBBERVILLE COMMUNITY SCHOOLS	4,834	5,059	5,212	5,367	5,521	5,521	5,759	925		19.1%	
33230	WILLIAMSTON COMMUNITY SCHOOLS	5,026	5,244	5,397	5,552	5,706	5,706	5,944	918		18.3%	
34010	IONIA PUBLIC SCHOOLS	4,229	4,478	4,754	5,032	5,305	5,305	5,700	1,471		34.8%	
34040	PALO COMMUNITY SCHOOL DISTRICT	4,437	4,678	4,932	5,186	5,434	5,434	5,700	1,263		28.5%	
34080	BELDING AREA SCHOOL DISTRICT	4,053	4,303	4,598	4,896	5,191	5,191	5,700	1,647		40.7%	
34090	LAKEWOOD PUBLIC SCHOOLS	4,323	4,568	4,834	5,101	5,364	5,364	5,700	1,377		31.8%	
34110	PORTLAND PUBLIC SCHOOL DISTRICT	4,443	4,683	4,937	5,191	5,439	5,439	5,700	1,257		28.3%	
34120	SARANAC COMMUNITY SCHOOLS	4,020	4,270	4,568	4,870	5,169	5,170	5,700	1,680		41.8%	
34140	BERLIN TWP SCHOOL DISTRICT #3	4,513	4,751	4,997	5,243	5,462	5,462	5,700	1,187		26.3%	
34340	EASTON TWP SCHOOL DISTRICT 6#	3,737	4,200	4,506	4,816	5,124	5,170	5,700	1,963		52.5%	
34360	IONIA TWP SCHOOL DISTRICT #2	3,926	4,200	4,506	4,816	5,124	5,170	5,700	1,774		45.2%	
35010	OSCODA AREA SCHOOLS	4,317	4,563	4,830	5,097	5,360	5,360	5,700	1,383		32.0%	
35020	HALE AREA SCHOOLS	4,848	5,073	5,226	5,381	5,535	5,535	5,773	925		19.1%	
35030	TAWAS AREA SCHOOLS	4,086	4,336	4,627	4,921	5,212	5,212	5,700	1,614		39.5%	
35040	WHITTEMORE PRESCOTT AREA SCHOOL DISTRICT	3,985	4,235	4,537	4,843	5,147	5,170	5,700	1,715		43.0%	
36015	FOREST PARK SCHOOL DISTRICT	4,850	5,075	5,228	5,383	5,537	5,537	5,775	925		19.1%	
36025	WEST IRON COUNTY SCHOOL DISTRICT	4,690	4,921	5,149	5,308	5,462	5,462	5,700	1,010		21.5%	
37010	MT. PLEASANT CITY SCHOOL DISTRICT	5,044	5,261	5,414	5,569	5,723	5,723	5,961	917		18.2%	
37040	BEAL CITY SCHOOL	4,707	4,937	5,163	5,308	5,462	5,462	5,700	993		21.1%	
37060	SHEPHERD PUBLIC SCHOOL DISTRICT	4,640	4,872	5,105	5,308	5,462	5,462	5,700	1,060		22.9%	
38010	WESTERN SCHOOL DISTRICT	4,761	4,989	5,163	5,308	5,462	5,462	5,700	939		19.7%	
38020	VANDERCOOK LAKE PUBLIC SCHOOLS	4,437	4,677	4,931	5,186	5,434	5,434	5,700	1,263		28.5%	
38040	COLUMBIA SCHOOL DISTRICT	4,456	4,696	4,948	5,200	5,447	5,447	5,700	1,244		27.9%	
38050	GRASS LAKE COMMUNITY SCHOOLS	4,773	5,000	5,153	5,308	5,462	5,462	5,700	928		19.4%	
38080	CONCORD COMMUNITY SCHOOLS	4,669	4,900	5,130	5,308	5,462	5,462	5,700	1,031		22.1%	
38090	EAST JACKSON PUBLIC SCHOOLS	4,850	5,075	5,228	5,383	5,537	5,537	5,775	925		19.1%	
38100	HANOVER HORTON SCHOOLS	4,237	4,486	4,761	5,037	5,310	5,310	5,700	1,463		34.5%	

Table A-32 (continued)

SCHOOL CODE	SCHOOL DISTRICT NAME	FY94-FY00 INCREASE									
		BASE	FY95	FY96	FY97	FY98	FY99	FY00(1)	FY00(1)	\$	%
38120	MICHIGAN CENTER SCHOOL DISTRICT	4,788	5,015	5,168	5,323	5,477	5,477	5,715	927	19.4%	
38130	NAPOLEON COMMUNITY SCHOOLS	4,503	4,741	4,989	5,236	5,462	5,462	5,700	1,197	26.6%	
38140	NORTHWEST SCHOOL DISTRICT	4,153	4,403	4,687	4,974	5,256	5,256	5,700	1,547	37.2%	
38150	SPRINGPORT PUBLIC SCHOOLS	4,379	4,622	4,882	5,143	5,398	5,398	5,700	1,321	30.2%	
38170	JACKSON PUBLIC SCHOOLS	5,034	5,252	5,405	5,560	5,714	5,714	5,952	917	18.2%	
39010	KALAMAZOO CITY SCHOOL DISTRICT	5,469	5,669	5,824	5,979	6,133	6,133	6,371	902	16.5%	
39020	CLIMAX SCOTT'S COMMUNITY SCHOOLS	4,944	5,165	5,318	5,473	5,627	5,627	5,865	921	18.6%	
39030	COMSTOCK PUBLIC SCHOOLS	4,858	5,082	5,235	5,390	5,544	5,544	5,782	924	19.0%	
39050	GALESBURG AUGUSTA COMMUNITY SCHOOLS	5,086	5,301	5,454	5,609	5,763	5,763	6,001	915	18.0%	
39065	GULL LAKE COMMUNITY SCHOOLS	4,722	4,952	5,153	5,308	5,462	5,462	5,700	978	20.7%	
39130	PARCHMENT SCHOOL DISTRICT	4,923	5,145	5,298	5,453	5,607	5,607	5,845	922	18.7%	
39140	PORTAGE PUBLIC SCHOOLS	4,738	4,967	5,153	5,308	5,462	5,462	5,700	962	20.3%	
39160	SCHOOLCRAFT COMMUNITY SCHOOLS	4,422	4,664	4,920	5,176	5,426	5,426	5,700	1,278	28.9%	
39170	VICKSBURG COMMUNITY SCHOOLS	4,410	4,652	4,909	5,166	5,418	5,418	5,700	1,290	29.3%	
40020	FOREST AREA COMMUNITY SCHOOL DISTRICT	3,919	4,200	4,506	4,816	5,124	5,170	5,700	1,781	45.5%	
40040	KALKASKA PUBLIC SCHOOLS	3,920	4,200	4,506	4,816	5,124	5,170	5,700	1,780	45.4%	
40060	EXCELSIOR DISTRICT #1	3,727	4,200	4,506	4,816	5,124	5,170	5,700	1,973	52.9%	
41010	GRAND RAPIDS CITY SCHOOL DISTRICT	5,066	5,282	5,435	5,590	5,744	5,744	5,982	916	18.1%	
41020	GODWIN HEIGHTS PUBLIC SCHOOLS	6,015	6,194	6,347	6,502	6,656	6,656	6,894	879	14.6%	
41025	NORTHVIEW PUBLIC SCHOOL DISTRICT	4,769	4,997	5,153	5,308	5,462	5,462	5,700	931	19.5%	
41026	WYOMING PUBLIC SCHOOLS	4,952	5,172	5,325	5,480	5,634	5,634	5,872	921	18.6%	
41040	BYRON CENTER PUBLIC SCHOOLS	5,624	5,819	5,974	6,129	6,283	6,283	6,521	897	15.9%	
41050	CALEDONIA COMMUNITY SCHOOLS	6,176	6,349	6,502	6,657	6,811	6,811	7,049	873	14.1%	
41070	CEDAR SPRINGS PUBLIC SCHOOLS	4,172	4,422	4,704	4,988	5,269	5,269	5,700	1,528	36.6%	
41080	COMSTOCK PARK PUBLIC SCHOOLS	4,995	5,214	5,367	5,522	5,676	5,676	5,914	919	18.4%	
41090	EAST GRAND RAPIDS PUBLIC SCHOOLS	5,601	5,796	5,953	6,108	6,262	6,262	6,500	900	16.1%	
41110	FOREST HILLS PUBLIC SCHOOLS	6,257	6,427	6,590	6,735	6,889	6,889	7,127	870	13.9%	
41120	GODFREY LEE PUBLIC SCHOOL DISTRICT	5,153	5,366	5,519	5,674	5,828	5,828	6,066	913	17.7%	
41130	GRANDVILLE PUBLIC SCHOOLS	4,468	4,708	4,959	5,209	5,454	5,454	5,700	1,232	27.6%	
41140	KELLOGGSVILLE PUBLIC SCHOOLS	4,559	4,795	5,037	5,277	5,462	5,462	5,700	1,141	25.0%	
41145	KENOWA HILLS PUBLIC SCHOOLS	5,338	5,544	5,697	5,852	6,006	6,006	6,244	905	17.0%	
41150	KENT CITY COMMUNITY SCHOOLS	4,380	4,623	4,883	5,144	5,399	5,399	5,700	1,320	30.1%	
41160	KENTWOOD PUBLIC SCHOOLS	5,268	5,477	5,630	5,785	5,939	5,939	6,177	908	17.2%	
41170	LOWELL AREA SCHOOL DISTRICT	4,577	4,813	5,053	5,291	5,462	5,462	5,700	1,123	24.5%	
41210	ROCKFORD PUBLIC SCHOOLS	4,402	4,644	4,902	5,160	5,413	5,413	5,700	1,298	29.5%	
41240	SPARTA AREA SCHOOLS	4,448	4,688	4,941	5,194	5,441	5,441	5,700	1,252	28.1%	
42030	GRANT TOWNSHIP SCHOOLS	10,681	10,841	10,994	11,149	11,303	11,303	11,541	860	8.1%	
43040	BALDWIN COMMUNITY SCHOOLS	5,098	5,313	5,466	5,621	5,775	5,775	6,013	915	17.9%	

Table A-32 (continued)

SCHOOL CODE	SCHOOL DISTRICT NAME	PROPOSALA FOUNDATION ALLOWANCE										FY94-FY00 Increase %
		BASE	FY95	FY96	FY97	FY98	FY99	FY00(1)	\$	%		
44010	LAPEER COMMUNITY SCHOOLS	4,496	4,735	4,983	5,230	5,462	5,462	5,700	1,204			26.8%
44020	ALMONT COMMUNITY SCHOOLS	4,152	4,402	4,686	4,972	5,255	5,255	5,700	1,548			37.3%
44050	DRYDEN COMMUNITY SCHOOLS	4,785	5,012	5,165	5,320	5,474	5,474	5,712	927			19.4%
44060	IMLAY CITY COMMUNITY SCHOOLS	4,102	4,352	4,642	4,935	5,223	5,223	5,700	1,598			38.9%
44090	NORTH BRANCH AREA SCHOOLS	4,198	4,448	4,727	5,008	5,285	5,285	5,700	1,502			35.8%
45010	GLEN LAKE COMMUNITY SCHOOL DISTRICT	5,146	5,359	5,512	5,687	5,821	5,821	6,059	913			17.7%
45020	LELAND PUBLIC SCHOOL DISTRICT	6,050	6,228	6,381	6,536	6,690	6,690	6,928	878			14.5%
45040	NORTHPORT PUBLIC SCHOOL DISTRICT	7,387	7,547	7,700	7,855	8,009	8,009	8,247	860			11.6%
45050	SUTTONS BAY PUBLIC SCHOOL DISTRICT	4,087	4,337	4,628	4,922	5,213	5,213	5,700	1,613			39.5%
46010	ADRIAN CITY SCHOOL DISTRICT	4,825	5,050	5,203	5,358	5,512	5,512	5,750	926			19.2%
46020	ADDITION COMMUNITY SCHOOLS	4,988	5,216	5,369	5,524	5,678	5,678	5,916	919			18.4%
46040	BLISSFIELD COMMUNITY SCHOOLS	4,483	4,722	4,972	5,221	5,462	5,462	5,700	1,217			27.2%
46050	BRITTON MACON AREA SCHOOL DISTRICT	5,154	5,366	5,519	5,674	5,828	5,828	6,066	913			17.7%
46060	CLINTON COMMUNITY SCHOOLS	4,225	4,474	4,750	5,028	5,302	5,302	5,700	1,475			34.9%
46070	DEERFIELD PUBLIC SCHOOLS	4,763	4,991	5,153	5,308	5,462	5,462	5,700	937			19.7%
46080	HUDSON AREA SCHOOLS	4,303	4,549	4,817	5,086	5,351	5,351	5,700	1,397			32.5%
46090	MADISON SCHOOL DISTRICT	6,099	6,274	6,427	6,582	6,736	6,736	6,974	876			14.4%
46100	MORENCI AREA SCHOOLS	4,525	4,762	5,007	5,251	5,462	5,462	5,700	1,175			26.0%
46110	ONSTED COMMUNITY SCHOOLS	4,484	4,723	4,972	5,221	5,462	5,462	5,700	1,216			27.1%
46130	SAND CREEK COMMUNITY SCHOOLS	5,110	5,325	5,478	5,633	5,787	5,787	6,025	914			17.9%
46140	TECUMSEH PUBLIC SCHOOLS	4,874	5,098	5,251	5,406	5,560	5,560	5,798	924			18.9%
47010	BRIGHTON AREA SCHOOLS	5,142	5,355	5,509	5,664	5,818	5,818	6,056	914			17.8%
47030	FOWLerville COMMUNITY SCHOOLS	4,534	4,771	5,015	5,258	5,462	5,462	5,700	1,166			25.7%
47060	HARTLAND CONSOLIDATED SCHOOLS	5,100	5,315	5,468	5,623	5,777	5,777	6,015	915			17.9%
47070	HOWELL PUBLIC SCHOOLS	4,803	5,030	5,183	5,338	5,492	5,492	5,730	927			19.3%
47080	PINCKNEY COMMUNITY SCHOOLS	4,403	4,645	4,903	5,161	5,413	5,413	5,700	1,297			29.5%
48040	TAHOUMENON AREA SCHOOLS	4,108	4,358	4,647	4,938	5,227	5,227	5,700	1,592			38.8%
49010	ST. IGNACE CITY SCHOOL DISTRICT	4,242	4,491	4,766	5,042	5,313	5,313	5,700	1,458			34.4%
49020	BOIS BLANC PINES SCHOOL DISTRICT	13,734	13,894	14,047	14,202	14,356	14,356	14,594	860			6.3%
49040	LES CHENEaux COMMUNITY SCHOOL DISTRICT	5,438	5,639	5,792	5,947	6,101	6,101	6,339	902			16.6%
49055	ENGADINE CONSOLIDATED SCHOOLS	5,677	5,869	6,022	6,177	6,331	6,331	6,569	892			15.7%
49070	MORAN TOWNSHIP SCHOOL DISTRICT	5,118	5,332	5,485	5,640	5,794	5,794	6,032	914			17.9%
49110	MACKINAC ISLAND PUB SCHOOLS	9,594	9,754	9,907	10,062	10,216	10,216	10,454	860			9.0%
50010	CENTERLINE PUBLIC SCHOOLS	7,885	8,045	8,198	8,353	8,507	8,507	8,745	860			10.9%
50020	EAST DETROIT PUBLIC SCHOOLS	5,708	5,899	6,052	6,207	6,361	6,361	6,599	891			15.6%
50030	ROSEVILLE COMMUNITY SCHOOLS	5,659	5,852	6,005	6,160	6,314	6,314	6,552	893			15.8%
50040	ANCHOR BAY SCHOOL DISTRICT	4,785	5,012	5,165	5,320	5,474	5,474	5,712	927			19.4%
50050	ARMADA AREA SCHOOLS	5,056	5,272	5,425	5,580	5,734	5,734	5,972	917			18.1%

Table A-32 (continued)

SCHOOL CODE	SCHOOL DISTRICT NAME	FY94 - PROPOSALA FOUNDATION ALLOWANCE										FY94-FY00 Increase %
		BASE	FY95	FY96	FY97	FY98	FY99	FY00(1)	\$	%		
50070	CLINTONDALE COMM SCHOOLS	5,487	5,687	5,840	5,995	6,149	6,149	6,387	900			16.4%
50080	CHIPPEWA VALLEY SCHOOLS	4,880	5,103	5,256	5,411	5,565	5,565	5,803	923			18.9%
50090	FITZGERALD PUBLIC SCHOOLS	6,317	6,484	6,637	6,792	6,946	6,946	7,184	867			13.7%
50100	FRASER PUBLIC SCHOOLS	6,253	6,423	6,576	6,731	6,885	6,885	7,123	870			13.9%
50120	LAKESHORE PUBLIC SCHOOLS	6,199	6,371	6,526	6,681	6,835	6,835	7,073	873			14.1%
50130	LAKEVIEW PUBLIC SCHOOLS	6,050	6,227	6,384	6,539	6,693	6,693	6,931	881			14.6%
50140	L'ANSE CREUSE PUBLIC SCHOOLS	5,607	5,802	5,955	6,110	6,264	6,264	6,502	895			16.0%
50160	MT. CLEMENS COMMUNITY SCHOOLS	5,713	5,904	6,057	6,212	6,366	6,366	6,604	891			15.6%
50170	NEW HAVEN COMMUNITY SCHOOLS	5,238	5,447	5,600	5,755	5,909	5,909	6,147	909			17.4%
50180	RICHMOND COMMUNITY SCHOOLS	4,758	4,987	5,153	5,308	5,462	5,462	5,700	942			19.8%
50190	ROMEO COMMUNITY SCHOOLS	5,584	5,780	5,933	6,088	6,242	6,242	6,480	896			16.0%
50200	SOUTH LAKE SCHOOLS	7,298	7,458	7,611	7,766	7,920	7,920	8,158	860			11.8%
50210	UTICA COMMUNITY SCHOOLS	5,540	5,738	5,892	6,047	6,201	6,201	6,439	899			16.2%
50220	VAN DYKE PUBLIC SCHOOLS	5,968	6,149	6,302	6,457	6,611	6,611	6,849	881			14.8%
50230	WARREN CONSOLIDATED SCHOOLS	7,421	7,581	7,735	7,890	8,044	8,044	8,282	861			11.6%
50240	WARREN WOODS PUBLIC SCHOOLS	7,069	7,229	7,392	7,547	7,701	7,701	7,939	870			12.3%
51020	BEAR LAKE SCHOOL DISTRICT	4,679	4,910	5,139	5,308	5,462	5,462	5,700	1,021			21.8%
51045	KALEVA NORMAN - DICKSON SCHOOLS	3,975	4,225	4,528	4,835	5,140	5,170	5,700	1,725			43.4%
51060	ONEKAMA CONSOLIDATED SCHOOLS	6,174	6,347	6,500	6,655	6,809	6,809	7,047	873			14.1%
51070	MANISTEE AREA PUBLIC SCHOOLS	3,923	4,200	4,506	4,816	5,124	5,170	5,700	1,778			45.3%
52015	N.I.C.E. COMMUNITY SCHOOLS	4,965	5,185	5,338	5,493	5,647	5,647	5,885	920			18.5%
52040	GWINN AREA COMMUNITY SCHOOLS	3,782	4,200	4,506	4,816	5,124	5,170	5,700	1,918			50.7%
52090	NEGAUNEE PUBLIC SCHOOLS	4,560	4,796	5,038	5,279	5,462	5,462	5,700	1,140			25.0%
52100	POWELL TOWNSHIP SCHOOL DISTRICT	6,261	6,430	6,583	6,738	6,892	6,892	7,130	869			13.9%
52110	REPUBLIC MICHIGAMME SCHOOLS	6,922	7,082	7,235	7,390	7,544	7,544	7,782	860			12.4%
52160	WELLS TOWNSHIP SCHOOL DISTRICT	7,267	7,427	7,580	7,735	7,889	7,889	8,127	860			11.8%
52170	MARQUETTE CITY SCHOOL DISTRICT	4,153	4,403	4,687	4,973	5,256	5,256	5,700	1,547			37.3%
52180	ISHPEMING PUBLIC SCHOOL DISTRICT	4,162	4,412	4,695	4,981	5,262	5,262	5,700	1,538			36.9%
53010	MASON COUNTY CENTRAL SCHOOL DISTRICT	4,358	4,602	4,865	5,128	5,396	5,396	5,700	1,342			30.8%
53020	MASON COUNTY EASTERN SCHOOL DISTRICT	4,418	4,659	4,915	5,172	5,423	5,423	5,700	1,282			29.0%
53030	FREESOIL COMMUNITY SCHOOL DISTRICT	4,355	4,599	4,862	5,125	5,384	5,384	5,700	1,345			30.9%
53040	LUDINGTON AREA SCHOOL DISTRICT	5,331	5,536	5,690	5,845	5,999	5,999	6,237	906			17.0%
54010	BIG RAPIDS PUBLIC SCHOOLS	4,406	4,648	4,891	5,133	5,308	5,462	5,700	1,294			29.4%
54025	CHIPPEWA HILLS SCHOOL DISTRICT	4,553	4,789	5,031	5,272	5,462	5,462	5,700	1,147			25.2%
54040	MORLEY STANWOOD COMM SCHOOLS	3,962	4,212	4,517	4,825	5,132	5,170	5,700	1,738			43.9%
55010	CARNEY NADEAU PUBLIC SCHOOLS	4,084	4,334	4,628	4,920	5,211	5,211	5,700	1,616			39.6%
55100	MENOMINEE AREA PUBLIC SCHOOLS	4,417	4,659	4,915	5,171	5,422	5,422	5,700	1,283			29.0%
55115	NORTH-CENTRAL AREA SCHOOLS	4,349	4,593	4,857	5,121	5,380	5,380	5,700	1,351			31.1%

Table A-32 (continued)

SCHOOL CODE	SCHOOL DISTRICT NAME	FY94-FY00 INCREASE									
		BASE	FY95	FY96	FY97	FY98	FY99	FY00(1)	FY94-FY00 Increase	\$	%
55120	STEPHENSON AREA PUBLIC SCHOOLS	3,992	4,242	4,543	4,848	5,151	5,170	5,700	1,708		42.8%
56010	MIDLAND PUBLIC SCHOOLS	6,752	6,912	7,068	7,223	7,377	7,377	7,615	864		12.8%
56020	BULLOCK CREEK SCHOOL DISTRICT	4,751	4,980	5,153	5,308	5,462	5,462	5,700	949		20.0%
56030	COLEMAN COMMUNITY SCHOOL DISTRICT	4,559	4,795	5,037	5,277	5,462	5,462	5,700	1,141		25.0%
56050	MERIDIAN PUBLIC SCHOOLS	4,572	4,807	5,047	5,286	5,462	5,462	5,700	1,128		24.7%
57020	LAKE CITY AREA SCHOOL DISTRICT	3,935	4,200	4,506	4,816	5,124	5,170	5,700	1,765		44.9%
57030	MCBAIN AGRICULTURAL SCHOOL DISTRICT	4,064	4,314	4,608	4,904	5,198	5,198	5,700	1,636		40.3%
58010	MONROE PUBLIC SCHOOLS	4,991	5,210	5,363	5,518	5,672	5,672	5,910	919		18.4%
58020	AIRPORT COMMUNITY SCHOOL DISTRICT	4,446	4,686	4,939	5,193	5,440	5,440	5,700	1,254		28.2%
58030	BEDFORD PUBLIC SCHOOL DISTRICT	4,378	4,621	4,882	5,143	5,398	5,398	5,700	1,322		30.2%
58050	DUNDEE COMMUNITY SCHOOLS	4,239	4,487	4,762	5,039	5,311	5,311	5,700	1,461		34.5%
58070	IDA PUBLIC SCHOOL DISTRICT	4,429	4,670	4,925	5,180	5,429	5,429	5,700	1,271		28.7%
58080	JEFFERSON SCHOOLS-MONROE CO.	9,500	9,660	9,813	9,968	10,122	10,122	10,360	860		9.1%
58090	MASON CONSOLIDATED SCHOOL DISTRICT	4,382	4,625	4,885	5,146	5,401	5,401	5,700	1,318		30.1%
58100	SUMMERFIELD SCHOOL DISTRICT	4,326	4,571	4,837	5,104	5,366	5,366	5,700	1,374		31.8%
58110	WHITEFORD AGRICULTURAL SCHOOL DISTRICT	5,009	5,227	5,380	5,535	5,689	5,689	5,927	918		18.3%
59020	CARSON CITY CRYSTAL AREA SCHOOL DISTRICT	4,761	4,989	5,153	5,308	5,462	5,462	5,700	939		19.7%
59045	MONTABELLA COMMUNITY SCHOOL DISTRICT	4,301	4,547	4,816	5,085	5,350	5,350	5,700	1,399		32.5%
59070	GREENVILLE PUBLIC SCHOOLS	4,244	4,492	4,766	5,042	5,314	5,314	5,700	1,456		34.3%
59080	TRI COUNTY AREA SCHOOLS	4,064	4,314	4,608	4,905	5,199	5,199	5,700	1,636		40.2%
59090	LAKEVIEW COMMUNITY SCHOOLS	4,037	4,287	4,584	4,883	5,181	5,181	5,700	1,663		41.2%
59125	CENTRAL MONTCALM PUBLIC SCHOOLS	4,612	4,845	5,081	5,308	5,462	5,462	5,700	1,088		23.6%
59150	VESTABURG COMMUNITY SCHOOLS	4,246	4,494	4,768	5,044	5,315	5,315	5,700	1,454		34.2%
60010	ATLANTA COMMUNITY SCHOOLS	4,510	4,748	4,985	5,241	5,462	5,462	5,700	1,190		26.4%
60020	HILLMAN COMMUNITY SCHOOLS	4,085	4,335	4,626	4,921	5,212	5,212	5,700	1,615		39.5%
61010	MUSKOGON CITY SCHOOL DISTRICT	5,249	5,458	5,611	5,766	5,920	5,920	6,158	909		17.3%
61020	MUSKOGON HEIGHTS SCHOOL DISTRICT	5,490	5,689	5,842	5,997	6,151	6,151	6,389	900		16.4%
61060	MONA SHORES SCHOOL DISTRICT	4,626	4,859	5,094	5,308	5,462	5,462	5,700	1,074		23.2%
61065	OAKRIDGE PUBLIC SCHOOLS	4,347	4,592	4,856	5,120	5,379	5,379	5,700	1,353		31.1%
61080	FRUITPORT COMMUNITY SCHOOLS	4,869	5,093	5,246	5,401	5,555	5,555	5,793	924		19.0%
61120	HOLTON PUBLIC SCHOOLS	4,009	4,259	4,559	4,862	5,163	5,170	5,700	1,691		42.2%
61180	MONTAGUE AREA PUBLIC SCHOOLS	4,363	4,607	4,869	5,131	5,388	5,388	5,700	1,337		30.6%
61190	ORCHARD VIEW SCHOOLS	5,125	5,339	5,492	5,647	5,801	5,801	6,039	914		17.8%
61210	RAVENNA PUBLIC SCHOOLS	4,775	5,002	5,155	5,310	5,464	5,464	5,702	928		19.4%
61220	REETHS PUFFER SCHOOLS	4,500	4,738	4,986	5,233	5,462	5,462	5,700	1,200		26.7%
61230	NORTH MUSKOGON PUBLIC SCHOOLS	5,110	5,324	5,477	5,632	5,786	5,786	6,024	914		17.9%
61240	WHITEHALL SCHOOL DISTRICT	4,660	4,892	5,123	5,308	5,462	5,462	5,700	1,040		22.3%
62040	FREMONT PUBLIC SCHOOL DISTRICT	4,507	4,745	4,992	5,238	5,462	5,462	5,700	1,193		26.5%

Table A-32 (continued)

SCHOOL CODE	SCHOOL DISTRICT NAME	FY94-FY00 INCREASE									
		BASE	FY95	FY96	FY97	FY98	FY99	FY00(1)	FY00(1)	\$	%
62050	GRANT PUBLIC SCHOOL DISTRICT	4,418	4,660	4,916	5,172	5,423	5,423	5,700	1,282		29.0%
62060	HESPERIA COMMUNITY SCHOOL DISTRICT	4,337	4,582	4,847	5,112	5,373	5,373	5,700	1,363		31.4%
62070	NEWAYGO PUBLIC SCHOOL DISTRICT	4,182	4,432	4,713	4,996	5,275	5,275	5,700	1,518		36.3%
62090	WHITE CLOUD PUBLIC SCHOOLS	4,482	4,721	4,971	5,220	5,462	5,462	5,700	1,218		27.2%
62470	BIG JACKSON SCHOOL DISTRICT	4,552	4,789	5,031	5,272	5,462	5,462	5,700	1,148		25.2%
63010	BIRMINGHAM CITY SCHOOL DISTRICT	10,217	10,377	10,530	10,685	10,839	10,839	11,077	860		8.4%
63020	FERNDALE PUBLIC SCHOOLS	5,926	6,109	6,262	6,417	6,571	6,571	6,809	882		14.9%
63030	PONTIAC CITY SCHOOL DISTRICT	5,172	5,384	5,537	5,692	5,846	5,846	6,084	912		17.6%
63040	ROYAL OAK SCHOOL DISTRICT	7,216	7,376	7,533	7,659	7,813	7,813	8,051	835		11.6%
63050	BERKLEY SCHOOL DISTRICT	5,966	6,147	6,302	6,457	6,611	6,611	6,849	883		14.8%
63060	SOUTHFIELD PUBLIC SCHOOL DISTRICT	9,299	9,459	9,612	9,767	9,921	9,921	10,159	860		9.2%
63070	AVONDALE SCHOOL DISTRICT	6,606	6,766	6,919	7,074	7,228	7,228	7,466	860		13.0%
63080	BLOOMFIELD HILLS SCHOOL DISTRICT	10,294	10,454	10,607	10,762	10,916	10,916	11,154	860		8.4%
63090	CLARENCEVILLE SCHOOL DISTRICT	6,411	6,575	6,728	6,883	7,037	7,037	7,275	863		13.5%
63100	NOVI COMMUNITY SCHOOLS	6,931	7,091	7,244	7,399	7,553	7,553	7,791	860		12.4%
63110	OXFORD AREA COMMUNITY SCHOOL DISTRICT	5,249	5,458	5,611	5,766	5,920	5,920	6,158	909		17.3%
63130	HAZEL PARK CITY SCHOOL DISTRICT	5,536	5,734	5,887	6,042	6,196	6,196	6,434	898		16.2%
63140	MADISON PUBLIC SCHOOLS	5,009	5,227	5,380	5,535	5,689	5,689	5,927	918		18.3%
63150	TROY PUBLIC SCHOOL DISTRICT	7,374	7,534	7,687	7,842	7,996	7,996	8,234	860		11.7%
63160	WEST BLOOMFIELD SCHOOL DISTRICT	7,225	7,385	7,539	7,694	7,848	7,848	8,086	861		11.9%
63180	BRANDON SCHOOL DISTRICT	4,719	4,949	5,153	5,308	5,462	5,462	5,700	981		20.8%
63190	CLARKSTON COMMUNITY SCHOOL DISTRICT	5,233	5,443	5,599	5,754	5,908	5,908	6,146	913		17.4%
63200	FARMINGTON PUBLIC SCHOOL DISTRICT	8,407	8,567	8,720	8,875	9,029	9,029	9,267	860		10.2%
63210	HOLLY AREA SCHOOL DISTRICT	4,844	5,069	5,222	5,377	5,531	5,531	5,769	925		19.1%
63220	HURON VALLEY SCHOOLS	5,090	5,305	5,458	5,613	5,767	5,767	6,005	915		18.0%
63230	LAKE ORION COMMUNITY SCHOOLS	6,081	6,258	6,412	6,567	6,721	6,721	6,959	877		14.4%
63240	SOUTH LYON COMMUNITY SCHOOLS	5,039	5,256	5,409	5,564	5,718	5,718	5,956	917		18.2%
63250	OAK PARK CITY SCHOOL DISTRICT	5,902	6,085	6,239	6,394	6,548	6,548	6,786	884		15.0%
63260	ROCHESTER COMMUNITY SCHOOL DISTRICT	6,132	6,306	6,459	6,614	6,768	6,768	7,006	874		14.3%
63270	CLAWSON CITY SCHOOL DISTRICT	6,145	6,319	6,472	6,627	6,781	6,781	7,019	874		14.2%
63280	LAMPHERE PUBLIC SCHOOLS	8,777	9,337	9,900	9,245	9,399	9,399	9,637	860		9.8%
63290	WALLED LAKE CONSOLIDATED SCHOOL DISTRICT	6,792	6,952	7,106	7,245	7,399	7,399	7,637	846		12.5%
63300	WATERFORD SCHOOL DISTRICT	5,353	5,558	5,720	5,875	6,029	6,029	6,267	914		17.1%
64040	HART PUBLIC SCHOOL DISTRICT	4,236	4,485	4,760	5,036	5,309	5,309	5,700	1,464		34.6%
64070	PENTWATER PUBLIC SCHOOL DISTRICT	5,991	6,171	6,324	6,479	6,633	6,633	6,871	880		14.7%
64080	SHELBY PUBLIC SCHOOLS	4,412	4,654	5,153	5,308	5,462	5,462	5,700	1,288		29.2%
64090	WALKERVILLE RURAL COMMUNITY SCHOOLS	4,331	4,576	4,841	5,107	5,368	5,368	5,700	1,369		31.6%
65045	WEST BRANCH-ROSE CITY AREA SCHOOLS	3,978	4,228	4,531	4,838	5,143	5,170	5,700	1,722		43.3%

Table A-32 (continued)

SCHOOL CODE	SCHOOL DISTRICT NAME	PROPOSAL A FOUNDATION ALLOWANCE										FY94-FY00 Increase %
		BASE	FY95	FY96	FY97	FY98	FY99	FY00(1)	\$	%		
66045	EWEN-TROUT CREEK CONSOLIDATED SCHOOLS	4,237	4,486	4,761	5,037	5,310	5,310	5,700	5,700	1,463	34.5%	
66050	ONTONAGON AREA SCHOOLS	4,237	4,485	4,760	5,037	5,309	5,309	5,700	5,700	1,463	34.5%	
66070	WHITE PINE SCHOOL DISTRICT	6,297	6,465	6,618	6,773	6,927	6,927	7,165	868	13.8%		
67020	EVART PUBLIC SCHOOLS	4,225	4,474	4,750	5,028	5,302	5,302	5,700	1,475	34.9%		
67050	MARION PUBLIC SCHOOLS	4,068	4,318	4,611	4,907	5,201	5,201	5,700	1,632	40.1%		
67055	PINE RIVER AREA SCHOOLS	4,584	4,819	5,068	5,296	5,462	5,462	5,700	1,116	24.3%		
67060	REED CITY AREA PUBLIC SCHOOLS	4,051	4,301	4,596	4,894	5,190	5,190	5,700	1,649	40.7%		
68010	MIO AU SABLE SCHOOLS	3,746	4,200	4,506	4,816	5,124	5,170	5,700	1,954	52.2%		
68030	FAIRVIEW AREA SCHOOL DISTRICT	4,315	4,561	4,828	5,096	5,359	5,359	5,700	1,385	32.1%		
69020	GAYLORD COMMUNITY SCHOOLS	4,419	4,661	4,917	5,173	5,423	5,423	5,700	1,281	29.0%		
69030	JOHANNESBURG-LEWISTON SCHOOLS	5,519	5,717	5,870	6,025	6,179	6,179	6,417	898	16.3%		
69040	VANDERBILT AREA SCHOOL	4,193	4,443	4,723	5,005	5,282	5,282	5,700	1,507	35.9%		
70010	GRAND HAVEN CITY SCHOOL DISTRICT	5,428	5,630	5,783	5,938	6,092	6,092	6,330	902	16.6%		
70020	HOLLAND CITY SCHOOL DISTRICT	5,119	5,333	5,491	5,646	5,800	5,800	6,038	918	17.9%		
70040	ALLENDALE PUBLIC SCHOOL DISTRICT	4,796	5,023	5,176	5,331	5,485	5,485	5,723	927	19.3%		
70070	WEST OTTAWA PUBLIC SCHOOL DISTRICT	4,888	5,111	5,265	5,420	5,574	5,574	5,812	924	18.9%		
70120	COOPERSVILLE PUBLIC SCHOOL DISTRICT	4,013	4,263	4,562	4,864	5,165	5,170	5,700	1,687	42.1%		
70175	JENISON PUBLIC SCHOOLS	4,451	4,692	4,945	5,197	5,444	5,444	5,700	1,249	28.0%		
70190	HUDSONVILLE PUBLIC SCHOOL DISTRICT	3,887	4,200	4,506	4,816	5,124	5,170	5,700	1,813	46.6%		
70300	SPRING LAKE PUBLIC SCHOOL DISTRICT	5,017	5,235	5,388	5,543	5,697	5,697	5,935	918	18.3%		
70350	ZEELAND PUBLIC SCHOOLS	4,653	4,885	5,117	5,308	5,462	5,462	5,700	1,047	22.5%		
71050	ONAWAY AREA COMMUNITY SCHOOL DISTRICT	3,398	4,200	4,506	4,816	5,124	5,170	5,700	2,302	67.8%		
71060	POSEN CONS SCHOOL DISTRICT	4,501	4,739	4,987	5,234	5,462	5,462	5,700	1,199	26.6%		
71080	ROGERS CITY AREA SCHOOLS	3,943	4,200	4,506	4,816	5,124	5,170	5,700	1,757	44.6%		
72010	GERRISH HIGGINS SCHOOL DISTRICT	4,129	4,379	4,666	4,955	5,240	5,240	5,700	1,571	38.1%		
72020	HOUGHTON LAKE COMM SCHOOLS	4,797	5,024	5,177	5,332	5,486	5,486	5,724	927	19.3%		
73010	SAGINAW CITY SCHOOL DISTRICT	5,275	5,483	5,636	5,791	5,945	5,945	6,183	908	17.2%		
73030	CARROLLTON SCHOOL DISTRICT	4,707	4,937	5,163	5,308	5,462	5,462	5,700	993	21.1%		
73040	SAGINAW TOWNSHIP COMMUNITY SCHOOLS	4,797	5,024	5,188	5,343	5,497	5,497	5,735	937	19.5%		
73080	BUENA VISTA SCHOOL DISTRICT	6,020	6,199	6,352	6,507	6,661	6,661	6,899	879	14.6%		
73110	CHESANING UNION SCHOOLS	4,779	5,006	5,159	5,314	5,468	5,468	5,706	927	19.4%		
73170	BIRCH RUN AREA SCHOOL DISTRICT	4,277	4,524	4,795	5,067	5,335	5,335	5,700	1,423	33.3%		
73180	BRIDGEPORT-SPAULDING COMMUNITY SCHOOLS	4,858	5,082	5,235	5,390	5,544	5,544	5,782	924	19.0%		
73190	FRANKENMUTH SCHOOL DISTRICT	5,690	5,881	6,034	6,189	6,343	6,343	6,581	892	15.7%		
73200	FREELAND COMMUNITY SCHOOL DISTRICT	4,249	4,497	4,771	5,047	5,317	5,317	5,700	1,451	34.1%		
73210	HEMLOCK PUBLIC SCHOOL DISTRICT	4,548	4,833	5,071	5,307	5,462	5,462	5,700	1,102	24.0%		
73230	MERRILL COMMUNITY SCHOOL DISTRICT	4,623	4,856	5,091	5,308	5,462	5,462	5,700	1,077	23.3%		
73240	ST. CHARLES COMMUNITY SCHOOLS	4,524	4,761	5,006	5,251	5,462	5,462	5,700	1,176	26.0%		



Table A-32 (continued)

SCHOOL CODE	SCHOOL DISTRICT NAME	PROPOSAL A FOUNDATION ALLOWANCE										FY94-FY00 Increase %
		BASE FY94	FY95	FY96	FY97	FY98	FY99	FY00(1)	FY00(1)	\$	%	
73255	SWAN VALLEY SCHOOL DISTRICT	4,504	4,742	4,989	5,235	5,462	5,462	5,700	5,700	1,196		26.6%
74010	PORT HURON AREA SCHOOL DISTRICT	4,554	4,790	5,032	5,274	5,462	5,462	5,700	5,700	1,146		25.2%
74030	ALGONAC COMMUNITY SCHOOL DISTRICT	4,914	5,136	5,289	5,444	5,598	5,598	5,836	5,836	922		18.8%
74040	CAPAC COMMUNITY SCHOOL DISTRICT	4,247	4,495	4,769	5,044	5,316	5,316	5,700	5,700	1,453		34.2%
74050	EAST CHINA SCHOOL DISTRICT	5,711	5,902	6,055	6,210	6,364	6,364	6,602	6,602	891		15.6%
74100	MARYSVILLE PUBLIC SCHOOL DISTRICT	4,684	4,916	5,145	5,308	5,462	5,462	5,700	5,700	1,016		21.7%
74120	MEMPHIS COMMUNITY SCHOOLS	4,833	5,059	5,212	5,367	5,521	5,521	5,759	5,759	925		19.1%
74130	YALE PUBLIC SCHOOLS	4,552	4,788	5,030	5,271	5,462	5,462	5,700	5,700	1,148		25.2%
75010	STURGIS PUBLIC SCHOOL DISTRICT	4,308	4,554	4,822	5,090	5,354	5,354	5,700	5,700	1,392		32.3%
75020	BURR OAK COMMUNITY SCHOOL DISTRICT	4,412	4,654	4,911	5,168	5,419	5,419	5,700	5,700	1,288		29.2%
75030	CENTREVILLE PUBLIC SCHOOLS	4,967	5,187	5,340	5,495	5,649	5,649	5,887	5,887	920		18.5%
75040	COLON COMMUNITY SCHOOL DISTRICT	4,178	4,428	4,709	4,983	5,272	5,272	5,700	5,700	1,522		36.4%
75050	CONSTANTINE PUBLIC SCHOOL DISTRICT	4,281	4,528	4,799	5,071	5,338	5,338	5,700	5,700	1,419		33.1%
75060	MENDON COMMUNITY SCHOOL DISTRICT	4,449	4,689	4,942	5,195	5,442	5,442	5,700	5,700	1,251		28.1%
75070	WHITE PIGEON COMMUNITY SCHOOL DISTRICT	3,975	4,225	4,528	4,835	5,140	5,170	5,700	5,700	1,725		43.4%
75080	THREE RIVERS COMMUNITY SCHOOLS	4,156	4,406	4,690	4,976	5,258	5,258	5,700	5,700	1,544		37.2%
75100	NOTTAWA COMMUNITY SCHOOL	3,776	4,200	4,506	4,816	5,124	5,170	5,700	5,700	1,924		51.0%
76060	BROWN CITY COMMUNITY SCHOOL DISTRICT	4,281	4,528	4,799	5,071	5,338	5,338	5,700	5,700	1,419		33.1%
76080	CARSONVILLE-PORT SANILAC SCHOOL DISTRICT	4,024	4,274	4,572	4,874	5,172	5,172	5,700	5,700	1,676		41.6%
76080	CROSWELL LEXINGTON COMMUNITY SCHOOLS	3,934	4,200	4,506	4,816	5,124	5,170	5,700	5,700	1,766		44.9%
76090	DEKERVILLE COMMUNITY SCHOOL DISTRICT	4,099	4,349	4,639	4,932	5,221	5,221	5,700	5,700	1,601		39.0%
76140	MARLETTE COMMUNITY SCHOOLS	4,428	4,669	4,924	5,179	5,429	5,429	5,700	5,700	1,272		28.7%
76180	PECK COMMUNITY SCHOOL DISTRICT	4,115	4,365	4,653	4,944	5,231	5,231	5,700	5,700	1,585		38.5%
76210	SANDUSKY COMMUNITY SCHOOL DISTRICT	4,206	4,456	4,734	5,014	5,290	5,290	5,700	5,700	1,494		35.5%
77010	MANISTIQUE AREA SCHOOLS	4,329	4,574	4,840	5,107	5,368	5,368	5,700	5,700	1,371		31.7%
78020	BYRON AREA SCHOOLS	4,504	4,742	4,989	5,236	5,462	5,462	5,700	5,700	1,196		26.6%
78030	DURAND AREA SCHOOLS	4,559	4,795	5,037	5,278	5,462	5,462	5,700	5,700	1,141		25.0%
78040	LAINGSBURG COMMUNITY SCHOOL DISTRICT	4,911	5,133	5,286	5,441	5,595	5,595	5,833	5,833	922		18.8%
78060	MORRICE AREA SCHOOLS	4,808	5,034	5,187	5,342	5,496	5,496	5,734	5,734	926		19.3%
78070	NEW LOTHROP AREA PUBLIC SCHOOL DISTRICT	4,730	4,960	5,153	5,308	5,462	5,462	5,700	5,700	970		20.5%
78080	PERRY PUBLIC SCHOOL DISTRICT	4,534	4,771	5,015	5,258	5,462	5,462	5,700	5,700	1,166		25.7%
78100	CORUNNA PUBLIC SCHOOL DISTRICT	4,827	5,053	5,206	5,361	5,515	5,515	5,753	5,753	925		19.2%
78110	OWOSSO PUBLIC SCHOOLS	4,226	4,475	4,751	5,029	5,302	5,302	5,700	5,700	1,474		34.9%
79010	AKRON FAIRGROVE SCHOOLS	4,485	4,724	4,973	5,222	5,462	5,462	5,700	5,700	1,215		27.1%
79020	CARO COMMUNITY SCHOOLS	4,350	4,594	4,857	5,121	5,380	5,380	5,700	5,700	1,350		31.0%
79030	CASS CITY PUBLIC SCHOOLS	4,048	4,298	4,593	4,892	5,188	5,188	5,700	5,700	1,652		40.8%
79080	KINGSTON COMMUNITY SCHOOL DISTRICT	4,193	4,443	4,723	5,005	5,282	5,282	5,700	5,700	1,507		35.9%
79090	MAYVILLE COMMUNITY SCHOOL DISTRICT	4,607	4,841	5,078	5,308	5,462	5,462	5,700	5,700	1,093		23.7%

Table A-32 (continued)

SCHOOL CODE	SCHOOL DISTRICT NAME	PROPOSAL A FOUNDATION ALLOWANCE										FY94-FY00 Increase %
		BASE FY94	FY95	FY96	FY97	FY98	FY99	FY00(1)	FY00(1)	\$	%	
79100	MILLINGTON COMMUNITY SCHOOLS	4,710	4,940	5,153	5,308	5,462	5,462	5,700	990			21.0%
79110	REESE PUBLIC SCHOOLS	4,250	4,498	4,772	5,047	5,318	5,318	5,700	1,450			34.1%
79145	UNIONVILLE SEBEWAING AREA SCHOOLS	4,664	4,896	5,127	5,308	5,462	5,462	5,700	1,036			22.2%
79150	VASSAR PUBLIC SCHOOLS	4,185	4,435	4,716	4,999	5,277	5,277	5,700	1,515			36.2%
80010	SOUTH HAVEN PUBLIC SCHOOLS	3,819	4,200	4,506	4,816	5,124	5,170	5,700	1,881			49.2%
80020	BANGOR PUBLIC SCHOOLS	3,954	4,204	4,510	4,819	5,127	5,170	5,700	1,746			44.2%
80040	COVERT PUBLIC SCHOOLS	7,727	7,887	8,040	8,195	8,349	8,349	8,587	860			11.1%
80050	DECATUR PUBLIC SCHOOLS	4,112	4,362	4,651	4,942	5,229	5,229	5,700	1,588			38.6%
80090	BLOOMINGDALE PUBLIC SCHOOL DISTRICT	4,087	4,337	4,628	4,922	5,213	5,213	5,700	1,613			39.5%
80110	GOBLES PUBLIC SCHOOL DISTRICT	4,588	4,823	5,062	5,299	5,462	5,462	5,700	1,112			24.2%
80120	HARTFORD PUBLIC SCHOOL DISTRICT	4,521	4,759	5,005	5,250	5,462	5,462	5,700	1,179			26.1%
80130	LAWRENCE PUBLIC SCHOOL DISTRICT	4,412	4,653	4,910	5,167	5,419	5,419	5,700	1,288			29.2%
80140	LAWTON COMMUNITY SCHOOL DISTRICT	4,443	4,684	4,938	5,191	5,439	5,439	5,700	1,257			28.3%
80150	MATTAWAN CONSOLIDATED SCHOOL DISTRICT	3,891	4,200	4,506	4,816	5,124	5,170	5,700	1,809			46.5%
80160	PAW PAW PUBLIC SCHOOL DISTRICT	3,825	4,200	4,506	4,816	5,124	5,170	5,700	1,875			49.0%
80240	BANGOR TWP SCHOOL DISTRICT #8	6,652	6,812	6,965	7,120	7,274	7,274	7,512	860			12.9%
81010	ANN ARBOR PUBLIC SCHOOLS	7,574	7,734	7,887	8,042	8,196	8,196	8,434	860			11.4%
81020	YPSILANTI SCHOOL DISTRICT	5,734	5,924	6,077	6,232	6,386	6,386	6,624	890			15.5%
81040	CHELSEA SCHOOL DISTRICT	5,367	5,571	5,726	5,881	6,035	6,035	6,273	906			16.9%
81050	DEXTER COMMUNITY SCHOOL DISTRICT	5,684	5,876	6,029	6,184	6,338	6,338	6,576	892			15.7%
81070	LINCOLN CONSOLIDATED SCHOOL DISTRICT	4,978	5,198	5,351	5,506	5,660	5,660	5,898	920			18.5%
81080	MANCHESTER COMMUNITY SCHOOL DISTRICT	5,195	5,406	5,559	5,714	5,868	5,868	6,106	911			17.5%
81100	MILAN AREA SCHOOLS	4,958	5,178	5,331	5,486	5,640	5,640	5,878	920			18.6%
81120	SALINE AREA SCHOOL DISTRICT	5,361	5,565	5,718	5,873	6,027	6,027	6,265	905			16.9%
81140	WHITMORE LAKE PUBLIC SCHOOL DISTRICT	4,438	4,679	4,933	5,187	5,435	5,435	5,700	1,262			28.4%
81150	WILLOW RUN COMMUNITY SCHOOLS	5,378	5,562	5,735	5,890	6,044	6,044	6,282	904			16.8%
82010	DETROIT CITY SCHOOL DISTRICT	5,380	5,584	5,737	5,892	6,046	6,046	6,284	904			16.8%
82020	ALLEN PARK PUBLIC SCHOOLS	5,364	5,568	5,721	5,876	6,030	6,030	6,268	904			16.9%
82030	DEARBORN CITY SCHOOL DISTRICT	6,933	7,093	7,247	7,402	7,556	7,556	7,794	860			12.4%
82040	DEARBORN HEIGHTS SCHOOL DISTRICT #7	4,771	4,999	5,153	5,308	5,462	5,462	5,700	929			19.5%
82045	MELVINDALE ALLEN PARK SCHOOLS	7,113	7,273	7,426	7,581	7,735	7,735	7,973	860			12.1%
82050	GARDEN CITY SCHOOL DISTRICT	5,483	5,683	5,836	5,991	6,145	6,145	6,383	900			16.4%
82055	GROSSE POINTE PUBLIC SCHOOLS	8,233	8,393	8,546	8,701	8,855	8,855	9,093	860			10.4%
82060	HAMTRAMCK PUBLIC SCHOOLS	4,526	4,763	5,008	5,253	5,462	5,462	5,700	1,174			25.9%
82070	HIGHLAND PARK CITY SCHOOLS	5,681	5,873	6,026	6,181	6,335	6,335	6,573	892			15.7%
82080	INKSTER CITY SCHOOL DISTRICT	5,799	5,987	6,140	6,295	6,449	6,449	6,687	887			15.3%
82090	LINCOLN PARK PUBLIC SCHOOLS	4,849	5,074	5,227	5,382	5,536	5,536	5,774	925			19.1%
82095	LIVONIA PUBLIC SCHOOLS	6,438	6,600	6,758	6,913	7,067	7,067	7,305	867			13.5%

Table A-32 (continued)

SCHOOL CODE	SCHOOL DISTRICT NAME	PROPOSALA FOUNDATION ALLOWANCE										FY94-FY00 Increase %
		BASE	FY95	FY96	FY97	FY98	FY99	FY00(1)	\$	%		
82100	PLYMOUTH CANTON COMMUNITY SCHOOLS	5,317	5,524	5,677	5,832	5,986	5,986	6,224	907			17.0%
82110	REDFORD UNION SCHOOL DISTRICT	4,996	5,215	5,368	5,523	5,677	5,677	5,915	919			18.4%
82120	RIVER ROUGE CITY SCHOOLS	6,955	7,115	7,268	7,423	7,577	7,577	7,815	860			12.4%
82130	ROMULUS COMMUNITY SCHOOLS	6,990	7,150	7,303	7,458	7,612	7,612	7,850	860			12.3%
82140	SOUTH REDFORD SCHOOL DISTRICT	5,944	6,126	6,279	6,434	6,588	6,588	6,826	882			14.8%
82150	TAYLOR SCHOOL DISTRICT	5,779	5,967	6,120	6,275	6,429	6,429	6,667	888			15.4%
82155	TRENTON PUBLIC SCHOOLS	6,874	7,034	7,195	7,350	7,504	7,504	7,742	868			12.6%
82160	WAYNE-WESTLAND COMMUNITY SCHOOL DISTRICT	5,211	5,421	5,574	5,729	5,883	5,883	6,121	910			17.5%
82170	WYANDOTTE CITY SCHOOL DISTRICT	4,810	5,036	5,189	5,344	5,498	5,498	5,736	926			19.3%
82180	FLAT ROCK COMMUNITY SCHOOLS	5,754	5,943	6,096	6,251	6,405	6,405	6,643	889			15.5%
82230	CRESTWOOD SCHOOL DISTRICT	5,548	5,745	5,898	6,053	6,207	6,207	6,445	897			16.2%
82240	WESTWOOD COMMUNITY SCHOOLS	5,719	5,909	6,062	6,217	6,371	6,371	6,609	891			15.6%
82250	ECORSE PUBLIC SCHOOL DISTRICT	5,624	5,818	5,971	6,126	6,280	6,280	6,518	894			15.9%
82290	GIBALTAR SCHOOL DISTRICT	5,037	5,254	5,471	5,626	5,780	5,780	6,018	981			19.5%
82300	GROSSE ILE TOWNSHIP SCHOOLS	6,926	7,086	7,239	7,394	7,548	7,548	7,786	860			12.4%
82320	HARPER WOODS SCHOOL DISTRICT	6,341	6,508	6,661	6,816	6,970	6,970	7,208	866			13.7%
82340	HURON SCHOOL DISTRICT	5,380	5,584	5,737	5,892	6,046	6,046	6,284	904			16.8%
82365	WOODHAVEN PUBLIC SCHOOLS	5,447	5,648	5,801	5,956	6,110	6,110	6,348	901			16.5%
82390	NORTHVILLE PUBLIC SCHOOLS	6,375	6,540	6,703	6,868	7,012	7,012	7,250	875			13.7%
82400	RIVERVIEW COMMUNITY SCHOOL DISTRICT	6,034	6,213	6,366	6,521	6,675	6,675	6,913	878			14.6%
82405	SOUTHGATE COMMUNITY SCHOOL DISTRICT	5,219	5,429	5,582	5,737	5,891	5,891	6,129	911			17.4%
82430	VAN BUREN PUBLIC SCHOOLS	5,519	5,718	5,871	6,026	6,180	6,180	6,418	898			16.3%
83010	CADILLAC AREA PUBLIC SCHOOLS	4,270	4,518	4,790	5,063	5,331	5,331	5,700	1,430			33.5%
83060	MANTON CONSOLIDATED SCHOOLS	4,265	4,512	4,784	5,058	5,327	5,327	5,700	1,435			33.7%
83070	MESICK CONSOLIDATED SCHOOL DISTRICT	3,805	4,200	4,506	4,816	5,124	5,124	5,700	1,895			49.8%

(1) Includes section 20j payment

Table A-33

## MICHIGAN REAL PROPERTY STATE EQUALIZED VALUE (SEV) BY CLASS

Year	Agriculture	Commercial	Industrial	Residential	Timber C-O	Total
1970	\$2,428,073,382	\$4,479,110,556	\$4,354,130,433	\$18,410,274,820	\$152,082,388	\$29,823,671,579
1971	2,631,643,039	4,920,726,264	4,732,051,343	20,121,981,797	166,389,114	32,572,791,557
1972	2,767,998,546	5,289,180,485	5,006,268,660	21,837,363,296	198,391,053	35,099,202,040
1973	2,966,596,460	6,095,838,694	5,257,318,114	23,132,331,200	230,441,780	37,682,526,248
1974	3,253,519,145	6,748,511,652	5,614,001,496	25,185,954,680	259,918,052	41,061,905,025
1975	3,680,674,772	7,251,964,454	5,824,753,617	27,679,961,125	289,724,453	44,727,078,421
1976	3,931,334,132	7,643,557,366	6,356,640,800	29,652,286,598	339,314,392	47,923,133,288
1977	4,410,266,132	8,077,760,508	6,585,112,846	32,150,563,868	381,970,088	51,605,673,442
1978	5,050,142,536	8,650,737,622	6,935,567,823	35,256,657,107	422,603,165	56,315,708,253
1979	5,766,430,668	9,581,045,520	7,502,276,607	39,954,252,345	466,549,835	63,270,554,975
1980	6,328,135,948	10,633,386,181	8,181,599,425	46,669,303,911	504,494,303	72,500,231,498
1981	6,851,013,534	11,556,372,899	9,124,359,043	53,018,207,770	529,173,435	81,492,349,275
1982	7,378,223,333	12,186,372,328	9,418,002,354	57,491,186,325	514,930,615	87,187,419,816
1983	7,429,329,879	12,465,415,642	9,452,673,269	56,977,602,048	499,165,062	87,040,838,141
1984	7,458,643,844	12,743,237,220	9,535,645,848	58,002,894,224	491,394,296	88,446,427,830
1985	7,403,969,514	13,515,504,501	9,867,244,730	59,069,664,700	465,134,767	90,525,492,733
1986	6,955,160,741	14,310,467,355	10,185,813,823	60,682,211,801	448,708,396	92,776,791,017
1987	6,215,406,320	15,738,555,140	10,529,154,262	63,653,297,519	423,411,315	96,753,501,584
1988	5,928,883,663	17,510,768,606	10,848,169,099	68,850,921,971	397,942,049	103,731,410,977
1989	5,904,588,144	19,315,639,740	11,417,842,888	75,467,133,491	378,793,765	112,708,813,945
1990	6,057,234,906	21,188,659,057	11,989,304,264	82,927,523,932	364,258,652	122,790,511,823
1991	6,213,137,932	22,554,363,038	12,301,807,180	90,600,239,418	347,001,089	132,309,607,394
1992	6,216,847,066	22,937,093,145	12,589,064,977	92,403,947,226	339,943,459	134,793,173,804
1993	6,582,382,596	23,876,588,014	12,854,175,802	103,938,971,556	342,888,132	147,891,456,507
1994	6,799,329,607	24,519,576,429	12,981,984,517	109,571,673,457	315,756,800	154,469,406,322
1995	7,025,495,741	25,507,399,601	13,460,660,268	117,188,134,392	293,966,672	163,822,538,245
1996	7,435,695,481	26,883,408,611	13,994,870,592	127,044,516,355	284,799,713	175,971,295,866
1997	8,086,317,160	28,796,350,519	14,619,079,321	138,923,304,960	284,376,970	191,049,507,847
1998	8,862,077,578	31,168,447,882	15,283,082,298	154,188,734,247	275,120,172	210,132,207,778
1999	9,746,360,963	34,175,427,581	16,480,050,259	170,817,572,682	294,576,698	231,911,500,955
2000	10,704,606,830	37,747,704,809	17,496,791,093	188,828,676,626	301,551,322	255,593,739,308

Source: Michigan State Tax Commission

**Table A-34**  
**MICHIGAN REAL PROPERTY TAXABLE VALUE (TV) BY CLASS**

Year	Agriculture	Commercial	Industrial	Residential	Timber C-O	Total
1995	\$6,772,340,174	\$25,090,256,525	\$13,369,455,314	\$114,130,278,690	\$279,752,975	\$159,963,292,389
1996	6,886,644,243	26,020,863,515	13,783,807,105	120,193,852,842	254,769,585	167,428,917,416
1997	7,049,764,809	27,350,534,023	14,319,968,643	127,861,808,955	241,477,448	177,105,866,648
1998	7,231,720,846	28,935,085,319	14,877,078,650	136,440,825,049	215,546,851	187,972,715,569
1999	7,334,070,027	30,616,828,483	15,680,530,909	144,918,791,677	207,013,883	199,046,230,459
2000	7,464,131,975	32,803,392,665	16,340,045,165	154,838,574,448	189,804,579	211,952,362,708

Source: Michigan State Tax Commission

Table A-35  
MICHIGAN PERSONAL PROPERTY STATE EQUALIZED VALUE (SEV) BY CLASS

Year	Agriculture	Commercial	Industrial	Residential	Utility	Total
1970	\$74,778	\$1,960,836,449	\$5,005,599,046	\$26,296,146	\$1,757,356,482	\$8,750,162,901
1971	94,686	2,060,693,881	5,128,931,506	27,807,650	1,847,296,876	9,064,824,599
1972	80,064	2,134,366,046	5,227,795,300	28,592,264	1,979,750,787	9,370,584,461
1973	128,156	2,328,516,373	5,417,026,545	32,384,384	2,143,642,638	9,921,698,096
1974	207,163	2,591,166,371	5,812,222,781	36,173,370	2,379,939,037	10,819,708,722
1975	204,494	2,844,516,638	6,551,065,713	39,285,910	2,652,494,463	12,087,557,218
1976	193,605	1,524,568,091	3,568,938,839	42,203,838	2,402,751,114	7,538,661,487
1977	261,790	1,621,573,625	3,702,836,647	44,002,603	2,528,988,905	7,897,663,570
1978	255,864	1,781,876,984	4,029,145,367	52,710,272	2,690,893,405	8,554,881,892
1979	279,328	1,971,939,226	4,304,285,432	54,087,484	2,926,809,276	9,257,400,746
1980	258,028	2,213,845,812	4,667,437,859	63,271,040	3,201,005,728	10,145,818,467
1981	490,114	2,458,616,916	4,753,688,798	61,383,795	3,292,605,897	10,566,785,520
1982	294,784	2,662,733,997	4,829,682,933	61,639,336	3,468,291,966	11,022,643,016
1983	655,831	2,814,352,083	4,754,502,733	59,061,371	3,674,349,279	11,302,921,297
1984	497,858	3,043,079,274	4,791,167,816	58,468,096	3,831,915,969	11,725,129,013
1985	500,785	3,481,144,373	5,104,870,618	57,335,215	3,626,411,968	12,270,262,959
1986	500,674	4,049,912,308	5,617,195,016	58,390,922	3,739,638,867	13,465,637,787
1987	477,606	4,529,439,608	6,037,600,585	59,371,314	3,874,328,298	14,501,217,411
1988	451,565	4,822,390,939	6,292,075,894	64,063,434	4,179,176,198	15,358,158,030
1989	384,496	5,215,475,694	6,576,500,524	65,574,814	4,246,472,974	16,104,408,501
1990	406,188	5,740,454,890	7,034,212,471	68,371,182	4,536,758,536	17,380,203,267
1991	426,726	6,016,387,985	7,357,311,190	69,102,132	5,107,407,964	18,550,635,997
1992	382,853	6,202,156,217	7,801,791,590	70,546,736	5,416,256,931	19,491,144,328
1993	429,993	6,166,779,871	8,030,127,096	82,215,346	5,706,113,789	19,985,666,094
1994	450,795	6,483,770,764	8,523,103,654	83,532,191	5,980,041,780	21,070,899,184
1995	477,348	6,955,501,140	9,201,211,359	87,585,098	6,327,571,639	22,572,346,584
1996	474,703	7,635,309,034	10,024,281,929	96,608,358	6,614,274,529	24,370,948,553
1997	470,474	8,352,340,457	10,520,476,765	125,506,099	6,697,034,543	25,695,828,338
1998	494,174	9,065,147,068	11,212,822,145	138,096,206	6,867,203,311	27,283,762,904
1999	556,817	10,165,416,542	11,690,259,928	159,036,255	7,075,388,966	29,090,658,508
2000	502,346	10,064,669,728	11,362,739,372	177,162,084	7,228,024,777	28,833,098,307

Source: Michigan State Tax Commission

Table A-36

MICHIGAN REAL AND PERSONAL PROPERTY VALUES, TAXES AND TAX RATES

Year	Assessed Valuation (Thousands)	County Equalized Valuation (Thousands)	State Equalized Valuation (Thousands)	Tax Levy		Average Millage Rate	
				Amount (Thousands)	Percent Change	Millage	Percent Change
1970	\$32,954,101	\$38,553,759	\$38,551,597	\$1,874,291	12.9	48.62	2.7
1971	36,593,349	41,562,933	41,648,959	2,063,280	10.1	49.54	1.9
1972	39,814,568	44,347,772	44,487,728	2,183,224	5.8	49.07	(0.9)
1973	42,648,458	47,492,752	47,612,674	2,420,403	10.9	50.84	3.6
1974	47,269,245	51,747,552	51,871,329	2,649,594	9.5	51.08	0.5
1975	51,148,731	55,802,269	56,800,875	2,903,906	9.6	51.12	0.1
1976	49,905,386	54,232,820	55,478,935	2,960,724	2.0	53.37	4.4
1977	53,867,947	59,305,512	59,512,999	3,207,096	8.3	53.89	1.0
1978	58,353,692	64,724,020	64,863,929	3,484,874	8.7	53.73	(0.3)
1979	64,169,105	72,449,827	72,512,251	3,889,378	11.6	53.64	(0.2)
1980	71,724,553	82,087,269	82,581,103	4,411,378	13.4	53.42	(0.4)
1981	80,255,988	91,930,069	91,799,179	4,898,386	11.0	53.36	(0.1)
1982	95,623,614	96,742,630	98,139,884	5,172,518	5.6	52.71	(1.2)
1983	97,967,489	98,327,004	98,302,925	5,187,279	0.3	52.77	0.1
1984	99,987,771	100,169,325	100,151,842	5,374,275	3.6	53.66	1.7
1985	102,736,459	102,685,055	102,685,055	5,592,861	4.1	54.47	1.5
1986	106,340,390	106,251,911	106,154,935	5,851,019	4.6	55.12	1.2
1987	111,387,223	111,256,788	111,037,636	6,214,634	6.2	55.97	1.5
1988	119,027,768	119,087,279	119,013,924	6,761,056	8.8	56.81	1.5
1989	128,648,757	128,813,222	128,754,498	7,391,136	9.3	57.40	1.0
1990	139,920,677	140,165,655	139,901,357	7,998,491	8.2	57.17	(0.4)
1991	150,686,640	150,858,393	150,665,065	8,638,678	8.0	57.34	0.3
1992	154,265,530	154,284,318	153,928,613	8,941,685	3.5	58.09	1.3
1993	167,651,137	167,877,123	167,731,374	9,500,582	6.3	56.64	(2.5)
1994	175,280,413	175,550,496	175,195,104	6,690,701	(29.6)	38.19	(32.6)
1995	186,261,943	186,388,437	186,394,885	7,081,111	5.8	38.88	1.8
1996	200,246,250	200,341,063	200,341,063	7,536,108	6.4	39.32	1.1
1997	216,681,926	216,745,336	216,745,336	7,952,659	5.5	39.25	(0.2)
1998	237,410,262	237,410,262	237,415,971	8,449,614	6.2	39.27	0.1
1999	260,964,265	261,002,159	261,002,159	8,933,372	5.7	39.16	(0.3)

Source: Michigan State Tax Commission and Office of Revenue and Tax Analysis

Table A-37

MICHIGAN STATE EQUALIZED VALUE (TAXABLE VALUE), BY LOCAL UNIT OF GOVERNMENT

(Dollar amounts in thousands)

Year	City		Township		Village		Total	
	SEV/TV	% of Total	SEV/TV	% of Total	SEV/TV	% of Total	SEV/TV	% of Total
1970	\$22,745,472	59.0	\$15,806,125	41.0	\$911,325	2.4	\$38,551,598	100.0
1971	26,678,784	64.1	14,970,175	35.9	973,540	2.3	41,648,959	100.0
1972	28,093,947	63.1	16,393,781	36.9	1,047,373	2.4	44,487,728	100.0
1973	29,663,371	62.3	17,949,303	37.7	1,109,677	2.3	47,612,674	100.0
1974	31,398,819	60.5	20,472,509	39.5	1,258,174	2.4	51,871,329	100.0
1975	33,771,052	59.5	23,029,823	40.5	1,403,173	2.5	56,800,875	100.0
1976	31,402,222	56.6	24,076,713	43.4	1,372,455	2.5	55,478,935	100.0
1977	32,799,055	55.1	26,713,945	44.9	1,500,704	2.5	59,512,999	100.0
1978	34,863,659	53.7	30,000,270	46.3	1,662,869	2.6	64,863,929	100.0
1979	38,204,235	52.7	34,308,015	47.3	1,865,961	2.6	72,512,251	100.0
1980	42,833,547	51.9	39,747,556	48.1	2,115,574	2.6	82,581,103	100.0
1981	47,164,585	51.4	44,634,595	48.6	2,359,223	2.6	91,799,179	100.0
1982	49,958,916	50.9	48,180,968	49.1	2,535,173	2.6	98,139,884	100.0
1983	49,772,178	50.6	48,530,747	49.4	2,537,973	2.6	98,302,925	100.0
1984	50,620,737	50.5	49,531,105	49.5	2,587,959	2.6	100,151,842	100.0
1985	52,458,583	51.1	50,226,472	48.9	2,609,131	2.5	102,685,055	100.0
1986	54,421,806	51.3	51,733,129	48.7	2,706,699	2.5	106,154,935	100.0
1987	57,569,279	51.8	53,468,357	48.2	2,835,748	2.6	111,037,636	100.0
1988	61,857,908	52.0	57,156,016	48.0	3,034,572	2.5	119,013,924	100.0
1989	66,836,823	51.9	61,917,675	48.1	3,244,865	2.5	128,754,498	100.0
1990	72,266,851	51.7	67,634,506	48.3	3,525,406	2.5	139,901,357	100.0
1991	76,914,931	51.1	73,750,133	48.9	3,807,036	2.5	150,665,065	100.0
1992	78,017,505	50.7	75,911,108	49.3	3,875,338	2.5	153,928,613	100.0
1993	83,356,067	49.7	84,375,307	50.3	4,246,082	2.5	167,731,374	100.0
1994	86,063,830	49.1	89,131,274	50.9	4,441,626	2.5	175,195,104	100.0
1995	88,477,159	48.6	93,647,994	51.4	4,600,487	2.5	182,125,153	100.0
1996	92,621,682	48.3	99,058,877	51.7	4,786,935	2.5	191,680,559	100.0
1997	97,013,121	47.9	105,602,411	52.1	5,028,854	2.5	202,615,532	100.0
1998	102,061,718	47.4	113,117,389	52.6	5,380,576	2.5	215,179,108	100.0
1999	107,322,531	47.1	120,773,866	52.9	5,718,876	2.5	228,096,397	100.0

Beginning in 1999, values are taxable values.

Source: Michigan State Tax Commission



**Table A-38**  
**MICHIGAN GENERAL PROPERTY TAXES, BY LOCAL UNIT OF GOVERNMENT**  
(Dollar amounts in thousands)

Year	School			City			County		
	Amount	% of Total	Millage	Amount	% of Total	Millage	Amount	% of Total	Millage
1970	\$1,167,313	62.3	30.28	\$417,563	22.3	18.36	\$240,247	12.8	6.23
1971	1,293,298	62.7	31.05	455,500	22.1	17.07	259,504	12.6	6.23
1972	1,367,523	62.6	30.74	478,665	21.9	17.04	276,349	12.7	6.21
1973	1,543,162	63.8	32.41	515,281	21.3	17.37	294,461	12.2	6.18
1974	1,725,399	65.1	33.26	525,884	19.8	16.75	319,717	12.1	6.16
1975	1,899,787	65.4	33.45	564,566	19.4	16.72	347,100	12.0	6.11
1976	1,951,536	65.9	35.18	571,118	19.3	18.19	341,810	11.5	6.16
1977	2,141,068	66.8	35.98	586,803	18.3	17.89	369,748	11.5	6.21
1978	2,342,119	67.2	36.11	620,979	17.8	17.81	400,217	11.5	6.17
1979	2,622,639	67.4	36.17	677,378	17.4	17.73	447,480	11.5	6.17
1980	3,009,469	68.2	36.44	736,985	16.7	17.21	504,460	11.4	6.11
1981	3,372,394	68.8	36.74	786,310	16.1	16.67	554,532	11.3	6.04
1982	3,588,710	69.4	36.57	811,269	15.7	16.24	581,142	11.2	5.92
1983	3,607,967	69.6	36.70	811,595	15.6	16.31	589,176	11.4	5.99
1984	3,761,002	70.0	37.55	829,252	15.4	16.38	602,935	11.2	6.02
1985	3,926,767	70.2	38.24	853,998	15.3	16.28	626,064	11.2	6.10
1986	4,102,395	70.1	38.65	899,262	15.4	16.52	651,462	11.1	6.14
1987	4,352,814	70.0	39.20	960,165	15.5	16.69	687,913	11.1	6.20
1988	4,761,210	70.4	40.01	1,013,834	15.0	16.40	756,858	11.2	6.36
1989	5,250,531	71.0	40.78	1,066,375	14.4	15.96	820,347	11.1	6.37
1990	5,704,489	71.3	40.78	1,125,805	14.1	15.59	893,985	11.2	6.39
1991	6,170,813	71.4	40.96	1,207,149	14.0	15.70	961,789	11.1	6.38
1992	6,411,139	71.7	41.65	1,231,699	13.8	15.79	988,422	11.1	6.42
1993	6,836,174	72.0	40.75	1,288,039	13.6	15.46	1,042,306	11.0	6.21
1994	3,865,697	57.8	22.07	1,355,455	20.3	15.75	1,098,218	16.4	6.27
1995	4,124,674	58.2	22.65	1,411,549	19.9	15.95	1,143,508	16.1	6.28
1996	4,398,167	58.4	22.95	1,487,390	19.7	16.06	1,219,794	16.2	6.36
1997	4,629,229	58.2	22.85	1,570,957	19.8	16.19	1,281,079	16.1	6.32
1998	4,918,068	58.2	22.86	1,655,572	19.6	16.22	1,356,051	16.0	6.30
1999	5,214,382	58.4	22.86	1,734,404	19.4	16.16	1,432,072	16.0	6.28

Source: Michigan State Tax Commission

Table A-38 (Continued)

Year	Township			Village			Total		
	Amount	% of Total	Millage	Amount	% of Total	Millage	Amount	% of Total	Millage
1970	\$38,954	2.1	2.46	\$10,214	0.5	11.21	\$1,874,292	100.0	48.62
1971	43,821	2.1	2.96	11,158	0.5	11.46	2,063,280	100.0	49.54
1972	47,967	2.2	2.93	12,719	0.6	12.14	2,183,224	100.0	49.07
1973	53,657	2.2	2.99	13,842	0.6	12.47	2,420,403	100.0	50.84
1974	62,530	2.4	3.05	16,064	0.6	12.77	2,649,594	100.0	51.08
1975	74,694	2.6	3.24	17,760	0.6	12.66	2,903,906	100.0	51.12
1976	78,555	2.7	3.26	17,705	0.6	12.90	2,960,724	100.0	53.37
1977	90,448	2.8	3.39	19,028	0.6	12.68	3,207,096	100.0	53.89
1978	100,893	2.9	3.36	20,666	0.6	12.43	3,484,874	100.0	53.73
1979	118,691	3.1	3.46	23,189	0.6	12.43	3,889,378	100.0	53.64
1980	134,302	3.0	3.38	26,163	0.6	12.37	4,411,378	100.0	53.42
1981	156,528	3.2	3.51	28,622	0.6	12.13	4,898,386	100.0	53.36
1982	161,779	3.1	3.36	29,618	0.6	11.68	5,172,518	100.0	52.71
1983	148,086	2.9	3.05	30,454	0.6	12.00	5,187,279	100.0	52.77
1984	149,591	2.8	3.02	31,400	0.6	12.17	5,374,180	100.0	53.66
1985	154,261	2.8	3.07	31,772	0.6	12.18	5,592,861	100.0	54.47
1986	164,583	2.8	3.18	33,317	0.6	12.31	5,851,019	100.0	55.12
1987	178,263	2.9	3.33	35,480	0.6	12.51	6,214,634	100.0	55.97
1988	191,005	2.8	3.34	38,149	0.6	12.57	6,761,056	100.0	56.81
1989	212,903	2.9	3.44	40,979	0.6	12.63	7,391,136	100.0	57.40
1990	230,587	2.9	3.41	43,625	0.5	12.37	7,998,491	100.0	57.17
1991	251,714	2.9	3.41	47,212	0.5	12.40	8,638,678	100.0	57.34
1992	262,086	2.9	3.45	48,338	0.5	12.47	8,941,685	100.0	58.09
1993	283,374	3.0	3.36	50,689	0.5	11.94	9,500,582	100.0	56.63
1994	317,464	4.7	3.56	53,867	0.8	12.13	6,690,701	100.0	38.19
1995	344,611	4.9	3.68	56,770	0.8	12.34	7,081,111	100.0	38.88
1996	370,704	4.9	3.74	60,054	0.8	12.55	7,536,108	100.0	39.32
1997	408,150	5.1	3.86	63,244	0.8	12.58	7,952,659	100.0	39.25
1998	454,170	5.4	4.02	65,753	0.8	12.22	8,449,614	100.0	39.27
1999	481,799	5.4	3.99	70,715	0.8	12.37	8,933,372	100.0	39.16

Source: Michigan State Tax Commission

**Table A-39**  
**MICHIGAN SCHOOL PROPERTY TAXES**  
(Dollar amounts in thousands)

Year	Operating Taxes			Debt, Building and Site Taxes			Total School Taxes		
	Amount	Percent of Total School Taxes	Millage Rate	Amount	Percent of Total School Taxes	Millage Rate	Amount	Total School Taxes as a Percent of Total Property Taxes	Total School Millage Rate
1970	\$989,878	84.8	25.7	\$177,436	15.2	4.6	\$1,167,313	62.3	30.3
1971	1,101,359	85.2	26.4	191,940	14.8	4.6	1,293,298	62.7	31.1
1972	1,171,356	85.7	26.3	196,167	14.3	4.4	1,367,523	62.6	30.7
1973	1,317,419	85.4	27.7	225,742	14.6	4.7	1,543,162	63.8	32.4
1974	1,494,394	86.6	28.8	231,005	13.4	4.5	1,725,399	65.1	33.3
1975	1,663,952	87.6	29.3	235,836	12.4	4.2	1,899,787	65.4	33.4
1976	1,702,286	87.2	30.7	249,250	12.8	4.5	1,951,536	65.9	35.2
1977	1,891,473	88.3	31.8	249,595	11.7	4.2	2,141,068	66.8	36.0
1978	2,073,000	88.5	32.0	269,119	11.5	4.2	2,342,119	67.2	36.1
1979	2,339,302	89.2	32.3	283,337	10.8	3.9	2,622,639	67.4	36.2
1980	2,710,253	90.1	32.8	299,216	9.9	3.6	3,009,469	68.2	36.4
1981	3,077,112	91.2	33.5	295,282	8.8	3.2	3,372,394	68.8	36.7
1982	3,293,604	91.8	33.6	295,106	8.2	3.0	3,588,710	69.4	36.6
1983	3,332,986	92.4	33.9	274,981	7.6	2.8	3,607,967	69.6	36.7
1984	3,483,596	92.6	34.8	277,406	7.4	2.8	3,761,002	70.0	37.6
1985	3,637,616	92.6	35.4	289,151	7.4	2.8	3,926,767	70.2	38.2
1986	3,806,997	92.8	35.9	295,399	7.2	2.8	4,102,395	70.1	38.6
1987	4,045,299	92.9	36.4	307,515	7.1	2.8	4,352,814	70.0	39.2
1988	4,439,589	93.2	37.3	321,621	6.8	2.7	4,761,210	70.4	40.0
1989	4,885,801	93.1	37.9	364,730	6.9	2.8	5,250,531	71.0	40.8
1990	5,340,031	93.6	38.2	364,459	6.4	2.6	5,704,489	71.3	40.8
1991	5,767,461	93.5	38.3	403,352	6.5	2.7	6,170,813	71.4	41.0
1992	5,976,316	93.2	38.8	434,823	6.8	2.8	6,411,139	71.70	41.7
1993	6,381,337	93.3	38.0	454,837	6.7	2.7	6,836,174	71.96	40.8
1994	3,411,942	88.3	19.5	453,755	11.7	2.6	3,865,697	57.78	22.1
1995	3,570,223	86.6	19.6	554,451	13.4	3.0	4,124,674	58.25	22.6
1996	3,759,071	85.5	19.6	639,096	14.5	3.3	4,398,167	58.36	22.9
1997	3,893,077	84.1	19.2	736,152	15.9	3.6	4,629,229	58.21	22.8
1998	4,113,183	83.6	19.1	804,886	16.4	3.7	4,918,068	58.20	22.9
1999	4,328,678	83.0	19.0	885,704	17.0	3.9	5,214,382	58.37	22.9

Source: Michigan State Tax Commission

**Table A-40**  
**HOMESTEAD PROPERTY TAX CREDIT**  
 (Number and amount in thousands)

Year	General	Senior Citizen	Veteran	Blind	Disabled	Farmland	Total
1978	Number 871.9	387.0	53.2	2.7	32.8	-	1,257.6
	Amount \$163,430.1	\$147,391.7	\$10,554.0	\$548.4	\$6,684.5	-	\$328,608.7
	Average \$209.0	\$380.9	\$198.4	\$203.1	\$203.8	-	\$261.3
1979	Number 862.7	385.8	52.5	3.1	32.4	5.4	1,341.9
	Amount \$200,376.9	\$161,663.8	\$10,519.5	\$654.5	\$7,304.0	\$15,577.2	\$396,095.9
	Average \$232.3	\$419.0	\$200.4	\$211.1	\$225.4	\$2,884.7	\$295.2
1980	Number 890.1	396.3	49.3	2.4	31.6	8.3	1,378.0
	Amount \$245,832.0	\$181,608.1	\$9,964.7	\$503.1	\$7,702.3	\$24,271.7	\$469,881.9
	Average \$276.2	\$458.3	\$202.1	\$209.6	\$243.7	\$2,924.3	\$341.0
1981	Number 975.4	402.9	44.8	2.5	30.9	12.0	1,468.5
	Amount \$315,030.1	\$205,905.2	\$8,806.7	\$521.8	\$8,329.6	\$37,950.3	\$576,543.7
	Average \$323.0	\$511.1	\$196.6	\$208.7	\$269.6	\$3,162.5	\$392.6
1982	Number 1,034.5	410.6	39.2	3.1	31.0	14.8	1,533.2
	Amount \$359,751.8	\$224,438.4	\$7,888.4	\$633.1	\$8,789.3	\$3,638.1	\$655,139.1
	Average \$347.8	\$546.6	\$201.2	\$204.2	\$283.5	\$3,624.2	\$426.8
1983	Number 986.0	418.8	37.6	2.5	26.7	15.1	1,486.7
	Amount \$337,111.2	\$228,140.4	\$7,637.1	\$530.1	\$7,491.4	\$62,981.3	\$643,891.5
	Average \$341.9	\$544.7	\$203.1	\$212.0	\$280.6	\$4,171.0	\$433.1
1984	Number 912.0	423.3	34.7	2.5	29.5	17.0	1,419.0
	Amount \$311,823.0	\$229,545.5	\$7,198.1	\$521.8	\$8,419.8	\$71,674.6	\$629,182.8
	Average \$341.9	\$542.3	\$207.4	\$208.7	\$285.4	\$4,216.2	\$433.4
1985	Number 846.9	439.4	32.1	2.0	22.8	18.2	1,361.4
	Amount \$280,927.6	\$240,933.7	\$6,690.9	\$426.8	\$6,515.2	\$77,568.3	\$613,062.5
	Average \$331.7	\$548.3	\$208.4	\$213.4	\$285.8	\$4,262.0	\$450.3
1986	Number 845.6	458.8	31.0	1.7	19.3	19.6	1,376.0
	Amount \$277,762.5	\$255,597.4	\$6,430.1	\$383.3	\$5,438.2	\$71,464.8	\$617,076.3
	Average \$328.5	\$557.1	\$207.4	\$225.5	\$281.8	\$3,646.2	\$448.5
1987	Number 854.6	467.9	25.2	2.0	23.4	17.3	1,390.4
	Amount \$287,296.5	\$274,740.8	\$5,286.2	\$424.0	\$6,731.0	\$8,215.7	\$632,694.2
	Average \$336.2	\$587.2	\$209.8	\$212.0	\$287.7	\$3,365.1	\$455.0
1988	Number 891.5	480.0	22.9	2.2	25.5	17.1	1,439.2
	Amount \$322,357.5	\$296,508.7	\$4,955.3	\$485.2	\$7,983.0	\$54,932.5	\$687,222.2
	Average \$361.6	\$617.7	\$216.4	\$220.6	\$313.3	\$3,212.4	\$477.5

Table A-40 (continued)

Year	General	Senior Citizen	Veteran	Blind	Disabled	Farm/land	Total
1989	Number 927.6	493.1	22.8	1.9	25.4	16.7	1,487.5
	Average \$363,208.1	\$325,536.7	\$4,986.1	\$431.7	\$8,346.4	\$54,294.9	\$756,803.9
1990	Number 982.8	500.2	17.3	2.3	33.1	15.4	1,551.1
	Average \$401,845.8	\$348,082.8	\$3,685.0	\$517.9	\$11,684.8	\$53,278.1	\$819,094.4
1991	Number 1,085.3	534.9	17.1	2.1	30.7	15.6	1,685.7
	Average \$476,258.7	\$385,417.8	\$3,852.7	\$493.1	\$11,117.9	\$62,443.1	\$939,583.3
1992	Number 1,081.2	551.4	16.1	1.6	32.6	15.3	1,698.2
	Average \$468,983.7	\$406,505.3	\$3,565.2	\$363.6	\$11,940.8	\$60,452.1	\$951,810.7
1993	Number 1,122.3	568.5	16.2	1.4	31.4	15.1	1,754.9
	Average \$517,887.7	\$442,577.1	\$3,527.6	\$305.0	\$12,052.5	\$64,689.3	\$1,041,039.2
1994	Number 662.3	416.0	16.7	1.6	23.9	13.7	1,134.2
	Average \$194,591.9	\$213,210.7	\$2,139.0	\$205.6	\$6,358.4	\$18,883.9	\$435,389.5
1995	Number 658.2	396.9	17.0	1.7	25.1	12.1	1,111.0
	Average \$191,569.7	\$210,408.8	\$2,163.9	\$210.1	\$6,981.5	\$17,594.4	\$428,928.4
1996	Number 689.6	392.2	15.6	1.5	26.0	11.4	1,136.3
	Average \$208,123.4	\$215,534.1	\$1,999.7	\$191.3	\$6,766.3	\$18,895.2	\$451,510.0
1997	Number 700.1	387.0	15.1	2.0	28.8	8.2	1,141.2
	Average \$217,637.4	\$216,687.5	\$1,894.9	\$243.4	\$8,505.7	\$17,733.9	\$462,702.8
1998	Number 701.7	374.9	13.7	1.6	29.1	7.7	1,128.7
	Average \$222,668.0	\$218,225.7	\$1,729.5	\$194.4	\$8,836.7	\$18,018.6	\$469,672.9
	Average \$317.31	\$582.16	\$126.38	\$123.53	\$303.44	\$2,331.90	\$416.12

Notes: The disabled category includes paraplegic, quadriplegic and totally disabled individuals.  
The farm/land category has been in effect since 1974 but was included in the other categories until 1979.  
Source: Office of Revenue and Tax Analysis, Michigan Dept. of Treasury

**Table A-41**  
**HISTORICAL DISTRIBUTIONS OF STATE REVENUE SHARING**  
 by Type of Local Unit of Government  
 (in millions)

	<u>1991-92</u>	<u>1992-93</u>	<u>1993-94</u>	<u>1994-95</u>	<u>1995-96</u>	<u>1996-97</u>	<u>1997-98</u>	<u>1998-99</u>	
	<u>Amount</u>	<u>Share</u>	<u>Amount</u>	<u>Share</u>	<u>Amount</u>	<u>Share</u>	<u>Amount</u>	<u>Share</u>	
Counties	\$121.6	13%	\$153.5	\$163.0	\$174.7	\$190.9	\$200.6	\$200.6	14%
Townships	212.2	23%	212.5	236.0	239.7	277.5	298.4	307.0	22%
Cities	572.1	62%	644.9	689.2	731.2	814.9	843.7	852.1	61%
Villages	20.4	2%	21.6	23.4	24.0	26.4	28.1	28.7	2%
<b>TOTAL</b>	<b>\$926.4</b>		<b>\$1,032.4</b>	<b>\$1,111.5</b>	<b>\$1,169.5</b>	<b>\$1,260.5</b>	<b>\$1,309.7</b>	<b>\$1,370.8</b>	<b>\$1,388.4</b>