

# **The Past and Future Growth of Southeast Michigan**

## **Population, Households, Jobs and Land Use**

### **1965 to 2025**

**October 1998**

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#### **Abstract**

SEMCOG's 2025 Regional Forecast Totals of population, households and jobs are presented with historical comparisons from 1965 to 1995. The report includes descriptions of changes in age structure, household size and composition and job industrial class. It also presents land urbanization that has and will result from household and job growth.

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## Table of Contents

Page	
v	Table of Data Displays
1	Executive Summary
3	Introduction
5	Population
9	Households
13	Jobs
17	Land Use
21	Appendices
A-1	Appendix A - Definitions
B-1	Appendix B - Regional Forecast Totals
C-1	Appendix C - Tables of Population and Age Groups, Households and Whether Children Present, Jobs by Industrial Class
D-1	Appendix D - Bibliography



## Table of Data Displays

### Page

#### Tables

B-1	Table 1	Regional Forecast Totals: Population, Population by Age Group and Persons per Household, Southeast Michigan, 1990-2025
B-2	Table 2	Regional Forecast Totals: Households by Income Quartile and whether Children Present in Household, Southeast Michigan, 1990-2025
B-3	Table 3	Regional Forecast Totals: Jobs by Industrial Class, Southeast Michigan, 1990-2025
C-1	Table 4	Population, Southeast Michigan, 1965-2025
C-2	Table 5	Population by Age Group, 1965, 1995 and 2025
C-2	Table 6	Households and whether Children Present, Southeast Michigan, 1965-2025
C-3	Table 7	Jobs, Southeast Michigan, 1965-2025
C-3	Table 8	Jobs by Industrial Class, 1965, 1995 and 2025

#### Figures

1	Figure 1	Summary of Population, Households and Jobs, 1965-2025
5	Figure 2	Population, Southeast Michigan, 1965-2025
6	Figure 3	Population Age Groups, 1965, 1995 and 2025
9	Figure 4	Persons per Household, 1965-2025
10	Figure 5	Households, Southeast Michigan, 1965-2025
13	Figure 6	Jobs, Southeast Michigan, 1965-2025
14	Figure 7	Jobs by Industrial Class, 1965, 1995 and 2025
17	Figure 8	Urbanization, Southeast Michigan, 1965, 1995 and 2020
19	Figure 9	Sources of Future Urban Land Consumption, Southeast Michigan, 1990-2020

## Executive Summary

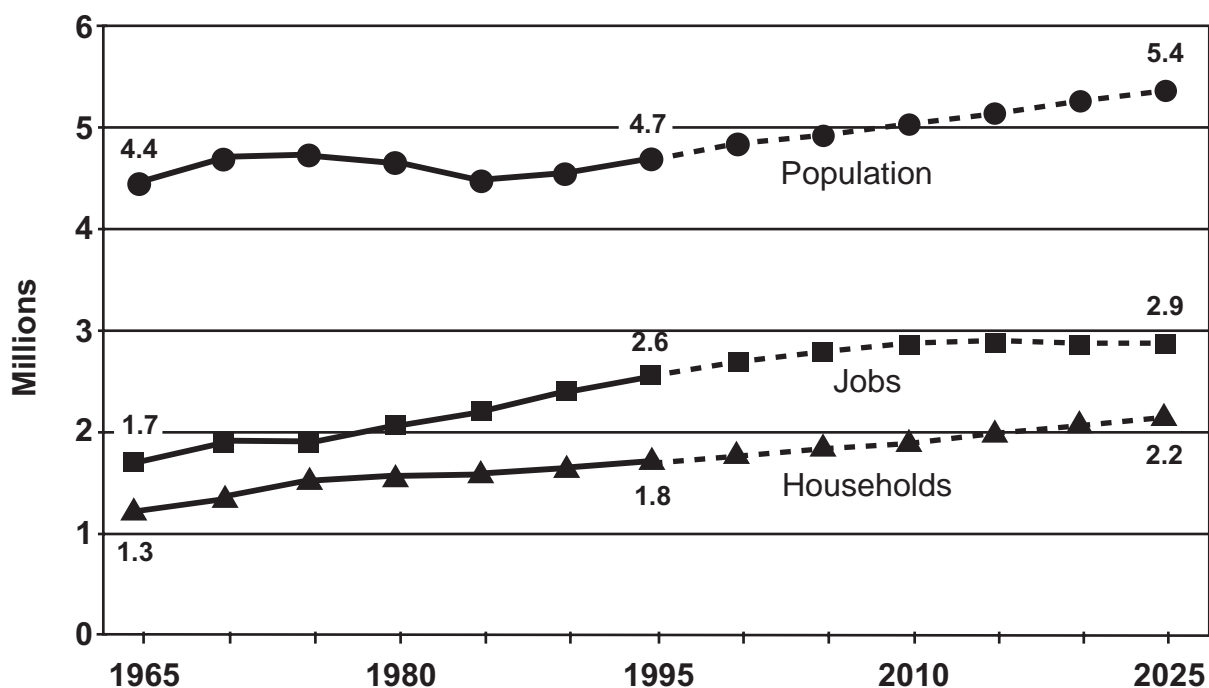
### Introduction

SEMCOG has produced a set of Regional Forecast Totals (RFTs) that provide numbers of population, households and jobs for the Southeast Michigan region at five-year intervals to the year 2025. At its October 29, 1998 meeting, the General Assembly adopted the RFTs as the first step in producing a forecast for small areas and the region's 233 local communities. These numbers will then be used to update future travel needs in SEMCOG's Regional Transportation Plan. This report presents the RFTs in a historic context by showing the region's growth and change since 1965.

### Results

Southeast Michigan is now growing moderately in population and households and more strongly in jobs. Figure 1 shows total population, households and jobs from 1965 through the forecast years to 2025.

Figure 1  
Summary of Population, Households and Jobs, 1965-2025



Sources: See Figures 2, 5 and 6; and SEMCOG DataCenter.

Population growth was stagnant in the '70s and '80s as the region's economy adjusted to oil shocks and manufacturing cutbacks. Since the late '80s, growth has been steady and will continue so through the forecast period. From 1995 to 2025, the region will add 721,000 people, growing to 5.4 million. Households will increase by 427,000 by 2025, growing at a faster rate than population as a result of continued decreases in average household size.

The biggest changes over the forecast period relate to the aging of the population, especially the baby boom generation — people born from 1946 through 1964. By 2025, that group will be between 60 and 79 years old. The aging of the baby boomers, plus increases in longevity, will result in an increased elderly population and smaller households. This also accounts for the lack of job growth forecast for the period after 2010.

Although the region is currently adding jobs at a rapid pace and the forecast predicts a full employment economy, job growth will halt after 2010. Because the number of prime working age adults (ages 18 to 54) will drop by 166,000 between 2010 and 2025, there will need to be major increases in labor force participation of older workers just to maintain a workforce at 2010 levels — about 2.9 million.

Rapid urbanization of land in the region is a result of continued growth in households and employment since 1965. The urbanization area was already spread out by 1965 and, when households grew by 40 percent between 1965 and 1995, the result was additional major increases in urbanized land. Based on SEMCOG's previous forecast, 33 percent more land will be urbanized between 1990 and 2020.

## **Methods**

The Regional Forecast Totals include numbers on population age groups; households by size, income group and whether children present; and jobs by type of industry. The process began with forecasts for counties produced by economists at the University of Michigan using the REMI model (Regional Economic Models, Inc.). SEMCOG then evaluated these against alternative national forecasts for Southeast Michigan. The final RFTs reflect staff and SEMCOG committee input and are presented in full in Appendix B of the report. The historical comparisons that start with 1965 were derived from the census and other sources and were modified to match RFT definitions.

## Introduction

SEMCOG has produced an updated forecast of Southeast Michigan's population, households and jobs that extends the projections to year 2025. These numbers are called Regional Forecast Totals (RFTs) and were adopted by SEMCOG's General Assembly on October 29, 1998. Adoption of the Forecast Totals is the first step in producing a detailed small area 2025 Regional Development Forecast (RDF) at five-year intervals that will be used to update the analysis of future travel in SEMCOG's Regional Transportation Plan. The 2025 RDF meets these SEMCOG planning objectives:

- provides a base for SEMCOG's long range regional plans,
- links future changes to past trends and the most current data on residential development and economic activity,
- provides SEMCOG's member local governments with an essential component of their comprehensive planning and
- satisfies planning requirements of the federal Transportation Equity Act for the 21st Century (TEA-21).

This report presents the 2025 Regional Forecast Totals by placing the numbers in the historic context of growth and change in Southeast Michigan since 1965. That is the year the Detroit Regional Transportation and Land Use Study (TALUS) began, which was a precursor to the establishment of SEMCOG in 1968.

The report graphics show the striking changes in growth rates, age structure and mix of jobs by industry from the past as a prologue to understanding continued change in the future.

### Definition of Regional Forecast Totals

Appendix A contains detailed definitions of Forecast Totals variables. All numbers are totals for the seven-county SEMCOG region. Included in the totals are:

- population and population by age groups: 0-4, 5-15, 16-17, 18-24, 25-34, 35-44, 45-54, 55-64, 65-74, and 75 and older,
- households, household size and households by four income groups combined with the presence or absence of children and
- jobs and jobs by nine industrial classes.

Graphics in this report show data at five-year intervals starting with 1965. Numbers from past years have been made to conform with 2025 RDF definitions. Numbers from 1970, 1980 and 1990 are derived from decennial censuses. The other years are based on estimates from TALUS, SEMCOG, the U.S. Census Bureau and the Bureau of Economic Analysis.



## Methods

SEMCOG's Regional Forecast Totals are developed through evaluation and analysis of several national forecasts for Southeast Michigan. The most important input comes from work done by economists at the University of Michigan's Institute of Labor and Industrial Relations. They used the REMI model (Regional Economic Models, Inc.) (Treyz, Rickman, 1992, pp. 221-253) to produce forecasts for each of Michigan's counties. SEMCOG staff worked with a committee of demographers, economists and county planners — the Regional Development Forecast Subcommittee of the DataCenter Advisory Council — to review REMI results.

In addition to REMI, input on the RFTs came from comparisons with government projections and private data company forecasts. Using a final run from the REMI model, SEMCOG added the county numbers to get regional totals. SEMCOG made several adjustments based on subcommittee consideration of key issues such as labor force participation of an aging workforce, immigration rates and birth rates. More detailed projections are listed in following sections, but the most basic assumptions underlying the 2025 RFTs are:

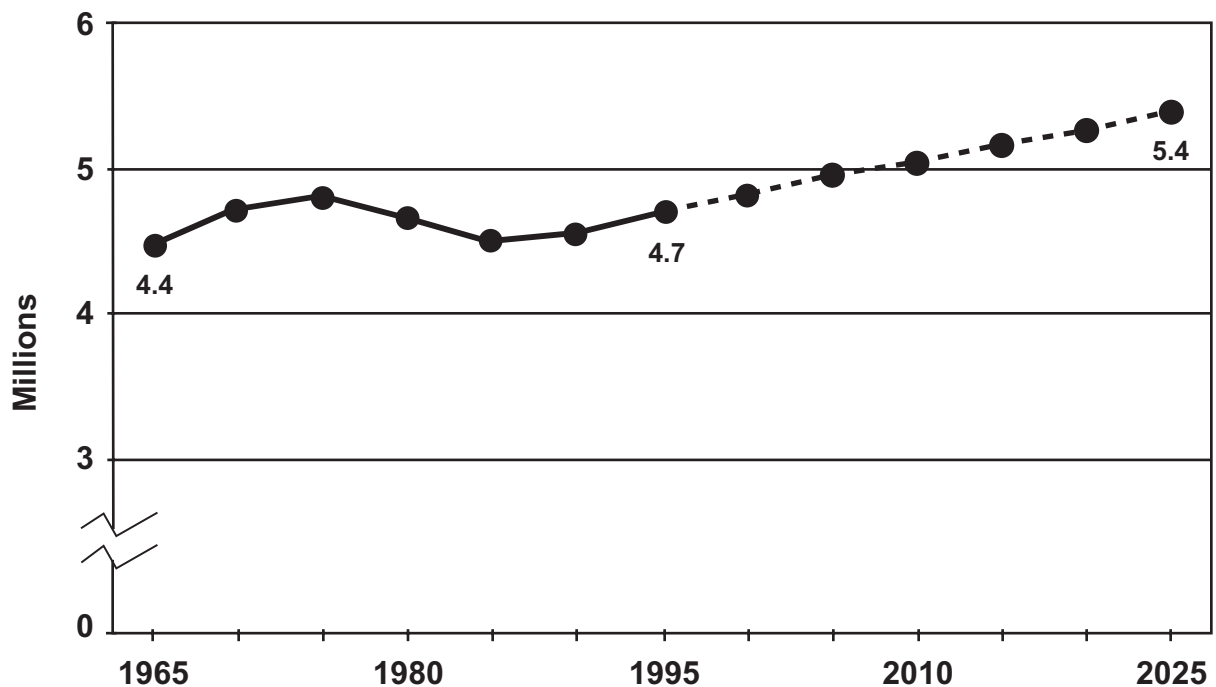
- a full employment economy throughout the forecast period,
- steady population growth, but not matching the stronger overall U.S. growth rate, led by the West and South and
- faster growth in households than population as average household size continues to shrink.

After their adoption, the Regional Forecast Totals will be used as “control totals” to guide the small area portion of the 2025 RDF. That is, the small area numbers for 1,442 traffic analysis zones and 233 local communities must add up to the Regional Totals. The small area portion of RDF is scheduled for completion in early 2000. SEMCOG's Regional Transportation Plan will use the small area numbers of jobs and households as the basis for its analysis of future travel demand in the region.

## Population

In 1965, Southeast Michigan was still growing at a strong pace. When birth rates dropped sharply in the mid-'60s, the 20-year post-war baby boom came to an end. The region's population stood at 4.4 million (Detroit Regional Transportation, "data base," 1965).

Figure 2  
Population, Southeast Michigan, 1965-2025



Sources: Detroit Regional Transportation, "data base," 1965; SEMCOG, *Population*, 1976 and 1986; U.S. Bureau of the Census, 1970, 1980 and 1990; and SEMCOG DataCenter.

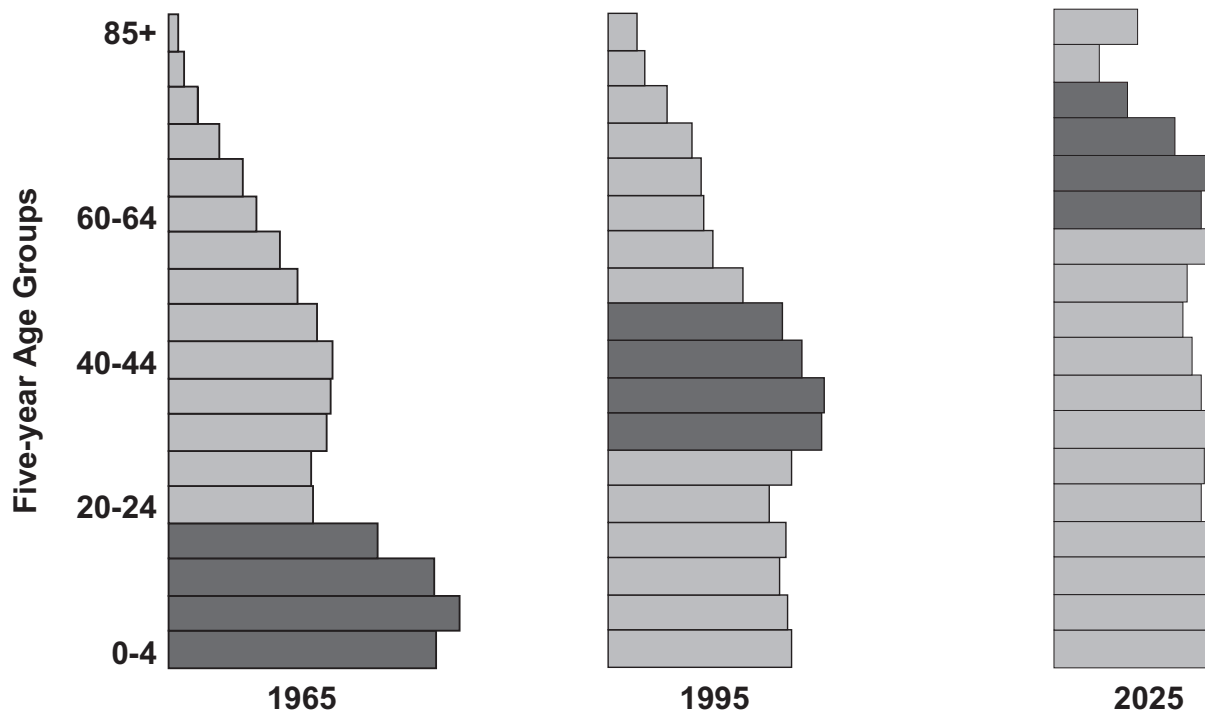
The '70s and '80s were rocky times for the auto industry and oil embargoes and plant closings reverberated through our population (SEMCOG, *Population*, 1976 and 1986; U.S. Bureau of the Census, 1970, 1980 and 1990). Many young adults left the region for better economic opportunities in the South and West. The result was that the region began the '90s three percent lower in total population than in 1970. With stabilization of the region's economy, Southeast Michigan is now growing at about one-half percent per year. That growth will continue throughout the forecast period, putting the region at 5.4 million people in 2025, a gain of 15 percent since 1995. This is in contrast to the six percent increase in the previous 30-year period, 1965-1995.

Underlying the steady growth in the future are some key assumptions and implications. By 2010, it is expected that the region will experience positive net migration for the first time since the '60s, a condition that will continue to the end of the forecast period. This means that more people will be moving into Southeast Michigan from other parts of the country than are leaving the region. Southeast Michigan will receive modest amounts of direct immigration from outside the U.S. Birth rates in the U.S. and the region will be close to current levels and there will be continued increases in longevity. Smaller households will result from the aging population, creating more "empty nest" households. There will be more elderly, healthy and able to live independently. There will also be more young adults who are able to afford to live on their own.

### Population Age Groups

Significant changes have occurred in the region's age structure since 1965. In Figure 3, in 1965, the baby boomers are the darker four bars, those 0-19 years of age (Detroit Regional Transportation, "data base," 1965). The older age groups are

Figure 3  
Population Age Groups, 1965, 1995 and 2025



Source: Detroit Regional Transportation, "data base," 1965; Grimes, "Michigan Forecast," 1998; Wang, "Population Projections," 1994; and SEMCOG DataCenter.

stacked on top, forming what demographers call a “population pyramid,” because through most of history there were many more young people and few older people. Figure 3 combines males and females so this graphic is in the shape of half a pyramid. In 1965, the top of the pyramid tapered sharply as there were only 16,000 people aged 85 and over.

Thirty years later, in 1995, the graphic has the shape of a potbellied man (Grimes, “Michigan Forecast,” 1998; and Wang, “Population Projections,” 1994). The reason is those large numbers of baby boomers who fill the 30-49 age groups. The bulge of those age groups would be even larger if the economic problems of the ‘70s and early ‘80s had not caused a major out-migration of about 400,000 baby boom adults. With increases in life span, the 85+ group has now grown to 57,000.

Fast forward to 2025, and the half pyramid is now more of a column. Baby boomers will be 60-79 years old and most of them will still be living (ibid). And note what has happened to the very old, those 85 and older. Since 1965, their numbers have swelled more than 10-fold to 186,000 in 2025.

The region’s steady growth and shifting age structure has major implications for Southeast Michigan communities. Growth in people and households will crowd schools in some places and smaller households will empty them in others. More land will be used for new housing. Redevelopment in Detroit will more and more balance out the city’s population losses. And retirement age baby boomers will need more condos, retirement centers and age-appropriate cultural and recreational opportunities.

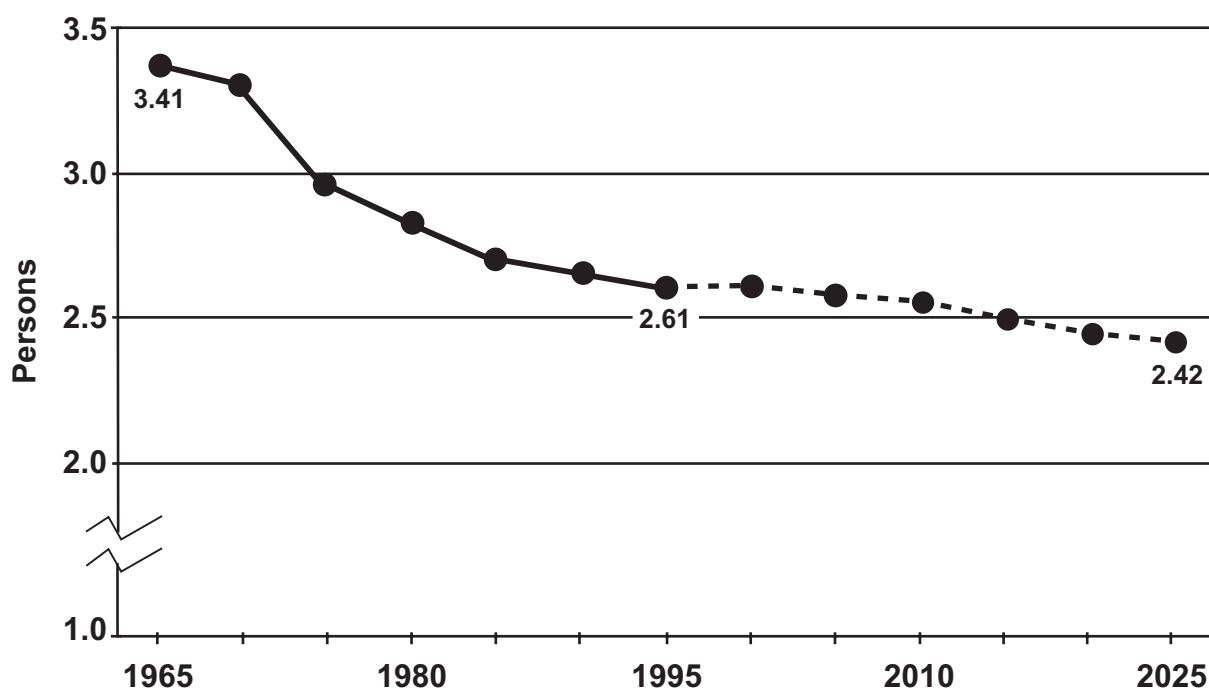


## Households

### Household Size

Changes in household size since 1965 reflect both the end of the baby boom and the increase in divorce and single parenting which accelerated through the '70s (Detroit Regional Transportation, "data base," 1965; SEMCOG, "Population," 1976 and 1986; U.S. Bureau of the Census, 1970, 1980 and 1990).

Figure 4  
Persons per Household, 1965-2025



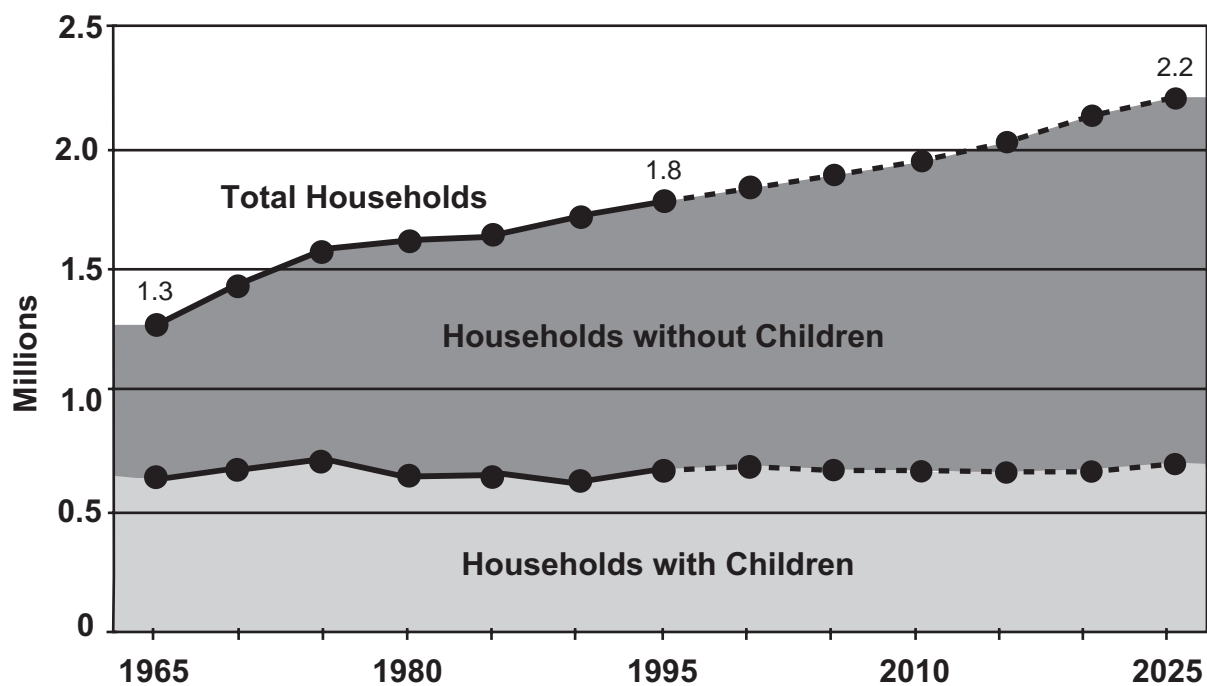
Sources: Detroit Regional Transportation, "data base," 1965; SEMCOG, *Population*, 1976 and 1986; U.S. Bureau of the Census, 1970, 1980 and 1990; and SEMCOG DataCenter.

The 2.61 average household size in 1995 was nearly one full person smaller than the 3.41 persons per household in 1965 (Detroit Regional Transportation, "data base," 1965). By 2015 or so, most of the baby boomers will no longer have children living at home. Other factors causing the continued drop in household size are more young adults delaying marriage and living alone and the improved health and longevity of older people. By 2025, average household size will fall even further to 2.42.

## Households

Households have grown at a faster rate than population during the last 30 years and will continue to do so through the forecast period. In 1965, there were 1.3 million households. (Detroit Regional Transportation, "data base," 1965). Unlike population, households continued to grow during the economic stagnation of the '70s and '80s (U.S. Bureau of the Census, 1970 and 1980; SEMCOG, "Small Area Forecast," 1980 and 1984).

Figure 5  
Households, Southeast Michigan, 1965-2025



Sources: Detroit Regional Transportation, "data base," 1965; SEMCOG, "Small Area Forecast," 1980 and 1984; U.S. Bureau of the Census, 1970, 1980 and 1990; and SEMCOG DataCenter.

By 1995, households totaled 1.8 million, a 39 percent increase over 1965. This trend is forecasted to continue, with households reaching 2.2 million in 2025, an increase of 24 percent over the next 30 years, compared to the 15 percent increase in population projected during the same time span.

How can households increase faster than population? This can be explained by the changing composition of households over time. There has been a significant increase in the number of households without children, though households with children have

remained relatively constant over time. As baby boomers grew up and left home, the number of households with children grew by just 47,000 between 1965 and 1995 (Detroit Regional Transportation, "data base," 1965). On the other hand, households without children increased by 449,000 during the same time period. This trend is forecasted to continue during the next 30 years, as baby boomers themselves become empty nesters and age beyond childbearing years, flattening the birth rate. Households with children remain virtually constant from 1995 to 2025; households without children will account for almost all of the overall growth in total households — 395,000 out of the projected 420,000 total increase in households.

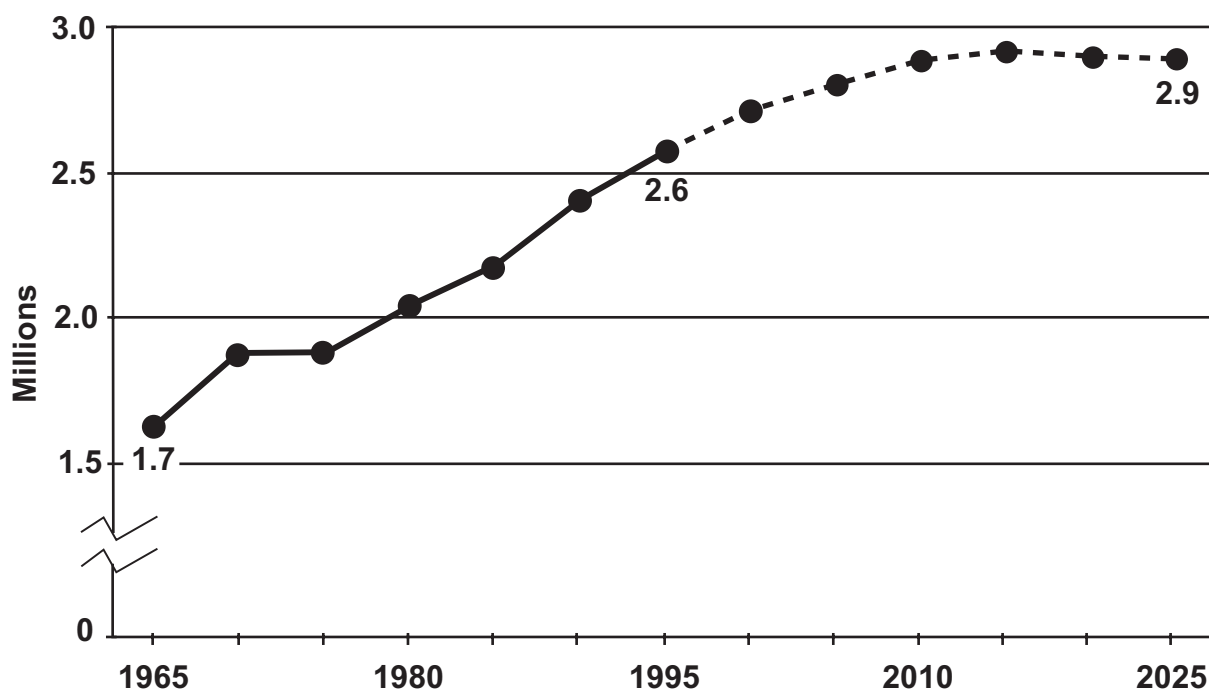




## Jobs

Southeast Michigan's economy produced moderate growth in jobs through the late '60s, the '70s and early '80s, as shown in Figure 6 (Detroit Regional Transportation, "data base," 1965; Bureau of Economic Analysis, 1994).

Figure 6  
Jobs, Southeast Michigan, 1965-2025



Sources: Detroit Regional Transportation, "data base," 1965; Bureau of Economic Analysis, 1994; and SEMCOG DataCenter.

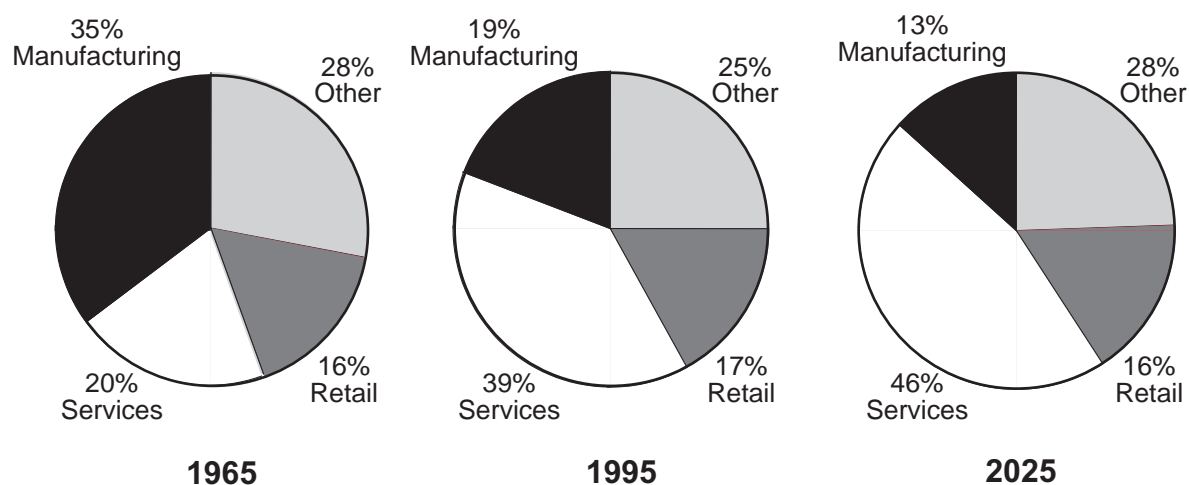
Not apparent in Figure 6 are several downturns in jobs, especially during the severe recession of 1979-1982. Because the graphic shows five-year time points, the dips in jobs between these years are not apparent.

Strong job growth characterizes the current decade. The Regional Forecast Totals forecast a gain of 289,000 jobs between 1990 and 2000. Growth will continue to 2010, but then stops. The main reason for the halt in job growth centers around aging baby boomers. The prime working age population (ages 18-54) will grow only 16,000 from 1995 to 2010. From 2010 to 2025, it will shrink by 166,000. SEMCOG's forecast implies that more older workers will stay in the labor force as a result of their improved health as well as economic demand. That will help keep the number of jobs stable between 2010 and 2025.

The economists who advised on the forecast believe the region will have a full employment economy through the forecast period. That is, jobs will be available for those who are capable and want to work. Manufacturing industries will need to continue productivity gains to stay globally competitive, so some jobs will be eliminated. Services will grow ever larger. Because of the aging population, the labor force cannot grow beyond year 2010. There will, however, be opportunities that will increase the labor force participation of workers over age 55.

The mix of jobs in Southeast Michigan's economy has changed markedly since 1965. Figure 7 shows the three largest groups of jobs — manufacturing, services, retail — plus other. In 1965, manufacturing accounted for 35 percent of all jobs.

**Figure 7**  
**Jobs by Industrial Class, 1965, 1995 and 2025**



Sources: Bureau of Economic Analysis, 1994; Detroit Regional Transportation, "data base," 1965; U.S. Bureau of the Census, "1970 Census," 1970; U.S. Bureau of the Census, "County Business Patterns," 1965 and 1970; and SEMCOG DataCenter.

By 1995, with automation, downsizing and productivity gains in manufacturing, that sector shrank to 19 percent of all jobs. Meanwhile, the diverse services group grew to be the largest group at 39 percent, with retail steady at about 16 percent of jobs.

SEMCOG's forecast indicates that the mix of jobs will continue this shift to 2025, with manufacturing jobs decreasing to 13 percent. Though the numbers of manufacturing jobs will decrease, the motor vehicle industry and its suppliers will continue to power

Southeast Michigan's economy. Some older factories may be upgraded or replaced, just as we have seen five plants close and five new plants open since 1980. The continuing growth in service sector jobs will demand construction of more office buildings.

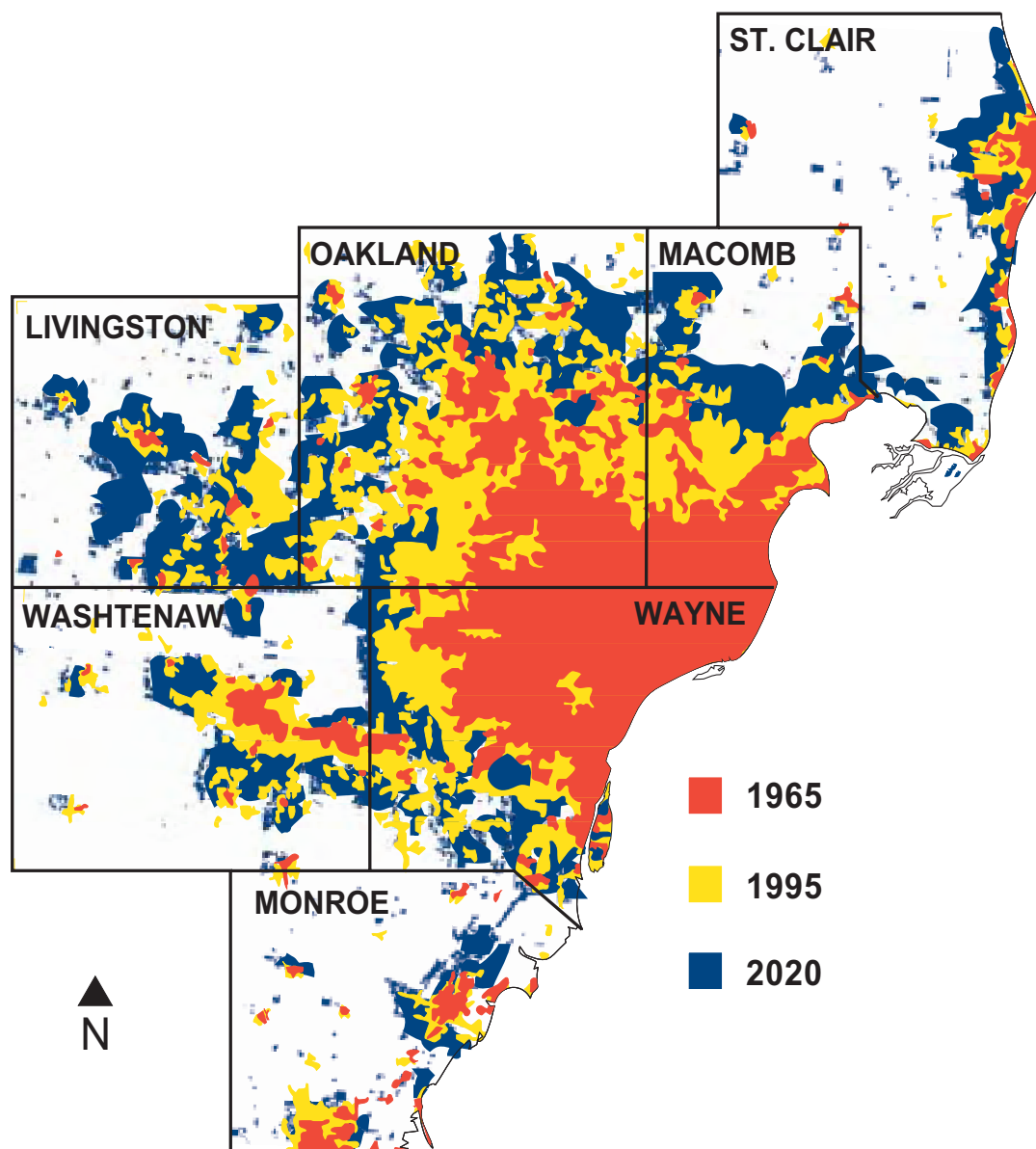
The full employment economy and an aging workforce together will create such a shortage of workers that many older workers will stay in the labor force. There will be a growing demand for better educated workers. The shortage will put strong upward pressure on wage rates, could cause an adjustment in U.S. immigration policy and could support raising ages for Social Security eligibility.



## Land Use

Urbanization of land in 1965 reflected the phenomenal growth in households and employment over the years since settlement of Southeast Michigan began (Detroit Regional Transportation, "Generalized Land Use," 1968).

Figure 8  
Urbanization, Southeast Michigan, 1965, 1995 and 2020



Sources: Detroit Regional Transportation, "Generalized Land Use," 1968; and SEMCOG DataCenter.

The region's development pattern in 1965 also reflected extensive suburbanization that occurred in the region before and after World War II. This was a time when the region's population was still growing and, as the City of Detroit filled up, urbanization spread outward. In the mid-'50s, the region's urban core began to lose population and jobs, fueling suburban growth. New subdivisions appeared, soon followed by shopping centers and industrial buildings along many of the major arterial roads in Macomb, Oakland and western Wayne counties. Smaller concentrations of development appeared adjacent to cities and towns in the outlying counties, with scattered development in rural areas just beyond the urban fringe.

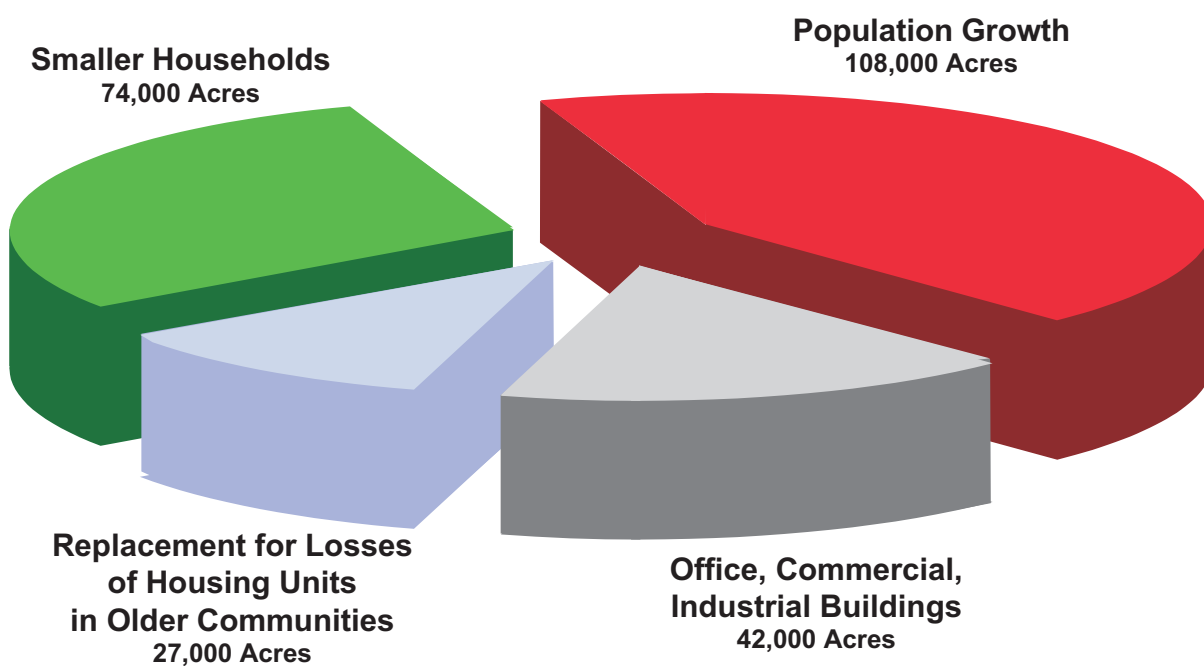
Over the 30-year period 1965-1995, suburbanization in Southeast Michigan continued unabated, propelled largely by the 40 percent increase in households that also occurred in this time span. Other factors in the increase in urbanized land included job growth and movement to suburban locations, increases in size of lots for housing and continued major losses of households and jobs from Detroit.

Two types of urban growth were prominent in the development pattern over the past 30 years. Denser urbanization featured residential subdivisions and apartment complexes, shopping centers, offices and industrial buildings located adjacent to previously developed areas. The second type of growth was the scattering of new homes and some businesses in more rural areas along county roads and in scattered subdivisions. Macomb, Oakland and western Wayne counties experienced most of the growth in the region, along with areas around the cities of Ann Arbor and Ypsilanti, southern Monroe County and the southeastern part of Livingston County. This development pattern continues in the '90s, boosted by gains in overall population growth — expanding the urbanized area farther out and scattering development across rural areas.

The expansion of the urbanized land area will likely continue in the future. SEMCOG's previous Regional Development Forecast which extended to year 2020, predicted the need for some 400,000 new and replacement housing units and nearly 423,000 new jobs (SEMCOG, *2020 Regional*, 1996, pp.7, 10). While some of these housing units and jobs will locate in existing urbanized areas as a result of redevelopment and infill, the vast majority will likely be in the development fringe and rural areas of the region.

The anticipated growth in the region, coupled with the trend toward scattered low density development, will result in 33 percent more land (an additional 251,000 acres) becoming urbanized, between 1990 and 2020. As shown in Figure 9, much of the region's future urbanization will need to accommodate the anticipated population growth. The other factors affecting future urbanization are smaller households, land needed for new non-residential development and, to a much lesser degree than in the past, people leaving older urban areas.

Figure 9  
Sources of Future Urban Land Consumption, Southeast Michigan, 1990-2020



Source: SEMCOG, *2020 Regional*, 1996; and SEMCOG DataCenter.





## Appendices

### Page

A-1	Appendix A – Definitions
B-1	Appendix B – Regional Forecast Totals
C-1	Appendix C – Tables of Population and Age Groups, Households and whether Children Present, Jobs by Industrial Class
D-1	Appendix D – Bibliography



## Appendix A - Definitions

### Population

Total population includes all residents of the community, whether they reside in housing units or group quarters (nursing homes, college dormitories, correctional facilities, etc.). Group quarters population estimates in nursing homes extends to 2025, while all other group quarters population is adjusted forward only to year 2000 and held constant from that point forward.

### Households

Total households equal the total number of occupied housing units. The households with children group is those households with one or more persons under 18 years of age. A household not containing any person under 18 is in the households without children group. Note that the 1990 total households figure is based on sample census data and may differ slightly from the 100 percent count total. Also note that neither population nor household numbers have been adjusted to reflect the 1990 Census undercount.

Household income quartiles consist of four income classes. Each class contains one-fourth of the region's total households. Households are arranged in order of income, lowest to highest. In terms of 1989 income, as reported in the 1990 Census, the quartile boundaries are:

- Quartile 1    Less than \$16,717
- Quartile 2    \$16,717 to \$34,302
- Quartile 3    \$34,303 to \$55,585
- Quartile 4    More than \$55,585

Because future dollar values of income quartiles cannot be projected accurately, forecast households are simply reported as number of households by quartile, with no dollar value specified.

### Persons per Household

Persons per household is an average, calculated by dividing household population by the total number of households. The household population is considered to be all persons occupying housing units — defined as houses, apartments, manufactured homes or other structures intended as separate living quarters where occupants live and eat separately from any other persons in the building.

### Employment

Total employment measures the number of jobs, both full-time and part-time in the region. This includes self-employed proprietors. These jobs may be held by residents of the region or by nonresidents who commute into the seven county area. Employment is broken down into nine types, called "industrial classes," which describe the

predominant purpose and major product or service of the business, agency or governmental department for which a person works. Note that although manufacturing jobs occur mainly in plants and factories, they can also be found in warehouses, research facilities and office buildings. Retail trade jobs occur mainly in stores, shops and eating and drinking establishments, but also occur in warehouses and office buildings. Services is a very diverse class, including hotels and motels, repair shops, barber and beauty shops, hospitals, schools at all levels, business service firms and offices for health practitioners, consultants, architects, engineers and lawyers. Other groups include agricultural services/mining, construction, transportation/communications/utilities, wholesale trade, finance/insurance/real estate and public administration. Note that the military is not included in RDF employment.

# Appendix B - Regional Forecast Totals

Table 1  
Regional Forecast Totals  
Population, Population by Age Group and Persons per Household  
Southeast Michigan, 1990-2025

Population	1990	1995	2000	2005	2010	2015	2020	2025	Numeric Change 1995-2025	Percent Change 1995-2025
<b>Total Population</b>	4,590,468	4,708,460	4,864,375	4,965,771	5,071,383	5,179,293	5,301,019	5,429,025	720,565	15.3%
Household Population	4,521,180	4,634,364	4,786,273	4,885,250	4,989,213	5,093,869	5,210,410	5,329,293	694,929	15.0%
Group Quarters Population	69,288	74,096	78,102	80,521	82,170	85,424	90,609	99,732	25,636	34.6%
<b>Population by Age Group</b>										
Age 0 to 4 years	347,129	345,709	328,184	315,986	324,143	338,254	349,964	357,149	11,440	3.3%
Age 5 to 15 years	704,564	734,798	773,152	761,919	721,466	713,524	738,674	773,053	38,255	5.2%
Age 16 to 17 years	131,538	142,319	136,857	149,786	152,937	143,435	139,709	144,949	2,630	1.8%
Age 18 to 24 years	485,781	428,554	449,530	464,280	500,749	497,635	472,396	467,977	39,423	9.2%
Age 25 to 34 years	807,887	749,787	679,648	608,633	618,948	655,924	693,391	685,331	-64,456	-8.6%
Age 35 to 44 years	710,489	775,484	787,026	740,098	662,631	594,199	604,714	646,038	-129,446	-16.7%
Age 45 to 54 years	474,827	583,900	689,520	762,151	771,373	726,704	652,743	588,522	4,622	0.8%
Age 55 to 64 years	394,960	379,715	433,940	549,136	648,145	720,004	731,694	693,350	313,635	82.6%
Age 65 to 74 years	323,062	333,355	317,967	317,788	366,650	468,407	554,102	621,309	287,954	86.4%
Age 75 and older	210,231	234,839	268,551	295,994	304,341	321,207	363,632	451,347	216,508	92.2%
<b>Persons per Household</b>	2.66	2.61	2.61	2.59	2.56	2.50	2.46	2.42	-0.19	-7.3%

Source: SEMCOG DataCenter

Table 2  
Regional Forecast Totals  
Households by Income Quartile\* and whether Children Present in Household  
Southeast Michigan, 1990-2025

Households	1990	1995	2000	2005	2010	2015	2020	2025	Numeric Change 1995-2025	Percent Change 1995-2025
<b>Total Households</b>	<b>1,698,819</b>	<b>1,775,478</b>	<b>1,832,327</b>	<b>1,885,210</b>	<b>1,950,211</b>	<b>2,033,871</b>	<b>2,117,064</b>	<b>2,202,781</b>	<b>427,303</b>	<b>24.1%</b>
Quartile 1 without Children	300,929	314,561	331,423	348,893	367,760	391,299	412,844	435,942	121,381	38.6%
Quartile 2 without Children	290,430	298,128	310,043	328,396	350,215	374,759	393,767	408,352	110,224	37.0%
Quartile 3 without Children	245,792	260,347	269,909	285,067	303,053	322,289	335,890	347,693	87,346	33.5%
Quartile 4 without Children	240,783	231,700	235,792	247,086	266,013	287,627	303,083	314,821	83,121	35.9%
<b>Total without Children</b>	<b>1,077,934</b>	<b>1,104,736</b>	<b>1,147,167</b>	<b>1,209,442</b>	<b>1,287,041</b>	<b>1,375,974</b>	<b>1,445,584</b>	<b>1,506,808</b>	<b>402,072</b>	<b>36.4%</b>
Quartile 1 with Children	123,755	129,309	126,659	122,409	119,793	117,169	116,422	114,753	-14,556	-11.3%
Quartile 2 with Children	134,292	145,741	148,038	142,906	137,337	133,708	135,499	142,343	-3,398	-2.3%
Quartile 3 with Children	178,935	183,522	188,173	186,236	184,500	186,179	193,376	203,003	19,481	10.6%
Quartile 4 with Children	183,903	212,170	222,290	224,217	221,540	220,841	226,183	235,874	23,704	11.2%
<b>Total with Children</b>	<b>620,885</b>	<b>670,742</b>	<b>685,160</b>	<b>675,768</b>	<b>663,170</b>	<b>657,897</b>	<b>671,480</b>	<b>695,973</b>	<b>25,231</b>	<b>3.8%</b>

\*Note: Quartiles consist of four income classes, each containing 1/4 of the region's total households, with households arranged in order of income, lowest to highest. Because further dollar values of quartiles cannot be projected accurately, forecast households are simply reported as households by quartile, with no values specified.

Source: SEMCOG DataCenter.

Table 3  
Regional Forecast Totals  
Jobs by Industrial Class  
Southeast Michigan, 1990-2025

Industrial Class	1990	1995	2000	2005	2010	2015	2020	2025	Numeric Change 1995-2025	Percent Change 1995-2025
Agricultural Services*, Mining & Farming	30,424	29,419	29,898	29,684	31,425	32,779	33,697	34,593	5,174	17.6%
Construction	93,654	106,427	119,414	119,748	122,904	124,941	125,753	127,334	20,907	19.6%
Manufacturing	486,644	501,455	486,963	458,552	453,141	431,279	406,500	383,106	-118,349	-23.6%
Transportation, Communication & Utilities	124,287	120,427	117,414	125,732	132,785	135,947	137,744	140,354	19,928	16.5%
Wholesale Trade	121,200	134,643	141,226	148,577	153,821	156,364	155,894	154,935	20,292	15.1%
Retail Trade	441,167	439,973	466,024	482,612	488,103	488,926	481,415	473,744	33,771	7.7%
Finance, Insurance, & Real Estate	173,122	182,830	185,203	185,274	184,276	181,207	176,532	172,646	-10,184	-5.5%
Services	904,892	1,011,583	1,121,954	1,201,442	1,268,837	1,299,046	1,316,220	1,341,163	329,580	32.6%
Public Administration	68,502	72,256	65,230	69,851	73,770	75,526	76,524	77,975	5,719	7.9%
<b>Total Employment</b>	<b>2,443,892</b>	<b>2,599,013</b>	<b>2,733,326</b>	<b>2,821,473</b>	<b>2,909,063</b>	<b>2,926,015</b>	<b>2,910,280</b>	<b>2,905,850</b>	<b>306,837</b>	<b>11.8%</b>

\*Note: Agricultural services include not only jobs in businesses that service farms, but also such businesses as lawn services, landscaping and veterinarians, and it is growth in these businesses that produces a net gain in the industrial class's total employment.

Source: SEMCOG DataCenter.





## Appendix C

### Tables of Population and Age Groups, Households and Whether Children Present, Jobs by Industrial Class

Table 4  
Population, Southeast Michigan, 1965-2025

<b>Year</b>	<b>Population</b>
1965	4,446,000
1970	4,738,000
1975	4,755,000
1980	4,682,000
1985	4,511,000
1990	4,590,000
1995	4,708,000
2000	4,864,000
2005	4,966,000
2010	5,071,000
2015	5,179,000
2020	5,301,000
2025	5,429,000

Sources: Detroit Regional Transportation, "data base," 1965; SEMCOG, *Population*, 1976 and 1986; U.S. Bureau of the Census, 1970, 1980 and 1990; and SEMCOG DataCenter.

Table 5  
Population by Age Group, 1965, 1995 and 2025

Age Group	1965	1995	2025
85+	16,000	57,000	186,000
80-84	28,000	66,000	100,000
75-79	55,000	112,000	165,000
70-74	95,000	157,000	277,000
65-69	132,000	176,000	347,000
60-64	161,000	183,000	333,000
55-59	199,000	196,000	360,000
50-54	230,000	254,000	300,000
45-49	265,000	330,000	288,000
40-44	300,000	367,000	313,000
35-39	291,000	409,000	333,000
30-34	286,000	403,000	348,000
25-29	260,000	347,000	337,000
20-24	261,000	306,000	334,000
15-19	376,000	334,000	354,000
10-14	482,000	325,000	343,000
5-9	525,000	340,000	354,000
0-4	484,000	346,000	357,000
<b>Total</b>	<b>4,446,000</b>	<b>4,708,000</b>	<b>5,429,000</b>

Sources: Detroit Regional Transportation, "data base," 1965; Grimes, "Michigan Forecast," 1998; Wang, "Population Projections," 1994; and SEMCOG DataCenter.

Table 6  
Households and whether Children Present, Southeast Michigan, 1965 - 2025

Year	Total Households	Households with Children Present	Households without Children Present
1965	1,279,000	624,000	655,000
1970	1,422,000	672,000	750,000
1975	1,569,000	717,000	852,000
1980	1,623,000	633,000	990,000
1985	1,636,000	653,000	983,000
1990	1,699,000	621,000	1,078,000
1995	1,775,000	671,000	1,105,000
2000	1,832,000	685,000	1,147,000
2005	1,885,000	676,000	1,209,000
2010	1,950,000	663,000	1,287,000
2015	2,034,000	658,000	1,376,000
2020	2,117,000	671,000	1,446,000
2025	2,203,000	696,000	1,507,000

Sources: Detroit Regional Transportation, "data base," 1965; SEMCOG, "Small Area Forecast," 1980 and 1984; U.S. Bureau of the Census, 1970, 1980 and 1990; and SEMCOG DataCenter.

Table 7  
Jobs, Southeast Michigan, 1965 - 2025

<b>Year</b>	<b>Jobs</b>
1965	1,745,000
1970	1,940,000
1975	1,950,000
1980	2,100,000
1985	2,230,000
1990	2,444,000
1995	2,599,000
2000	2,733,000
2005	2,821,000
2010	2,909,000
2015	2,926,000
2020	2,910,000
2025	2,906,000

Sources: Detroit Regional Transportation, "data base," 1965; Bureau of Economic Analysis, 1994; and SEMCOG DataCenter.

Table 8  
Jobs by Industrial Class, 1965, 1995 and 2025

<b>Industrial Class</b>	<b>1965</b>	<b>1995</b>	<b>2025</b>
Agricultural Services, Farming & Mining	21,000	29,000	35,000
Construction	92,000	106,000	127,000
Manufacturing	615,000	501,000	383,000
Transportation, Communication & Utilities	105,000	120,000	140,000
Wholesale Trade	113,000	135,000	155,000
Retail Trade	287,000	440,000	474,000
Finance, Insurance & Real Estate	97,000	183,000	173,000
Services	354,000	1,012,000	1,341,000
Public Administration	62,000	72,000	78,000
<b>Total Jobs</b>	<b>1,745,000</b>	<b>2,599,000</b>	<b>2,906,000</b>

Sources: Bureau of Economic Analysis, 1994; Detroit Regional Transportation, "data base," 1965; U.S. Bureau of the Census, "1970 Census," 1970; U.S. Bureau of the Census, "County Business Patterns," 1965 and 1970; and SEMCOG DataCenter.



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