

CHAPTER 2: ECONOMIC CHARACTERISTICS

Introduction

“Oakland County continues to be the economic engine for the State of Michigan. At a time when Michigan has lost more than 300,000 manufacturing jobs since 2001 and the state unemployment rate has been consistently higher than the national average, Oakland County has had the economic strength to buck the trend and continue to provide the spark that will ultimately lead the State of Michigan out of the recession. In fact, Manpower Employment Outlook Survey ranked Oakland County as one of the top ten growth markets in the entire nation.”¹

These words from County Executive L. Brooks Patterson speak to the important position that Oakland County holds in the State of Michigan’s economy. This chapter examines Oakland County’s economy from a variety of perspectives using data from various sources. These sources include the State of Michigan Labor Market Information Division (LMI), U.S. Census Bureau (Census and County Business Patterns), U.S. Department of Labor, the Bureau of Economic Analysis, and the Oakland County Economic Outlook produced by George A. Fulton and Donald R. Grimes. The data sources are differentiated by their coverage (i.e. all jobs vs. private sector jobs only), employment level (i.e. all businesses vs. businesses with paid employees only), and employment reference (i.e. jobs located in the county vs. jobs held by Oakland County residents). Regardless of source, the trends documented are similar.

Summary of Findings

The analysis shows that Oakland County continues to fuel the economy of the region and state. It saw tremendous growth during the boon years of the 1990s, lost jobs during the first part of this decade, but has moved back towards gains that are expected to continue at a moderate, but respectable pace through the decade. Although it is not immune from the overall economic trends of the state, it is better poised to adapt to economic change than much of the state. As a result, the county now accounts for a greater share of all jobs in the state than it did in 1990. The county’s jobs are increasingly high-paid and require high levels of education, which has significant implications for population trends, job accessibility, economic opportunity, and the housing market. Oakland County serves as the primary job center for its residents and much of the region, though a growing number of the commuters into the county are former Oakland County residents.

County Employment Trends, 1990 – 2004

The decade of the 1990’s was one of consistent economic growth for Oakland County. After a loss of 12,000 jobs in the last recession year of 1991, the county added almost 195,000 jobs through the end of the decade, for an average annual growth of 21,600 jobs from 1992 through 2000. The net job gain for the ten-year period (1991-2000) was 182,700 jobs (Fulton and Grimes, 2005).

¹ State of the County Speech delivered by L. Brooks Patterson, February 10, 2005.

Table 2.1 breaks out a portion of this growth (private sector jobs) from 1992-1999.² It shows that the major drivers of this growth were services. Manufacturing, retail trade, and construction also provided considerable job growth. While the data do not allow us to determine the specific industries within these sectors that accounted for most of this growth at the county level, we can take a look at statewide data for some insights. Table 2.2 identifies the major growth industries by service, manufacturing, and retail trade sectors for the state.³

Table 2.1. Oakland County Private Employment by Sector, 1992 – 1999

	1992	1993	1994	1995	1996	1997	1998	1999	1992-1999 Change		
									Total	Percent	Ann. Avg.
Total Private Sector Jobs	545,571	561,610	591,993	615,102	639,572	656,843	683,143	705,802	160,231	29.4%	22,890
Ag., Forestry & Fish.	3,949	4,034	4,333	4,475	4,894	4,744	5,140	5,109	1,160	29.4%	166
Mining	362	415	314	372	349	303	360	316	-46	-12.7%	-7
Construction	21,318	21,640	24,026	25,954	28,352	30,131	32,052	33,146	11,828	55.5%	1,690
Manufacturing	102,824	103,787	112,476	115,098	117,950	118,665	121,674	131,080	28,256	27.5%	4,037
Transp. & Pub. Utilities	15,055	15,060	16,838	18,825	19,027	20,265	20,672	19,768	4,713	31.3%	673
Wholesale Trade	44,776	45,700	46,933	49,213	49,570	51,248	54,180	54,234	9,458	21.1%	1,351
Retail Trade	115,833	117,192	119,699	120,322	124,660	124,916	125,636	128,146	12,313	10.6%	1,759
Finance, Ins. & Real Est.	47,878	49,089	50,744	50,245	52,025	52,414	55,779	56,337	8,459	17.7%	1,208
Services	193,576	204,693	216,631	230,598	242,746	254,161	267,654	277,671	84,095	43.4%	12,014

Source: State of Michigan, LMI, Covered Employment & Wage Statistics (ES-202)

The major growth within manufacturing clustered around automotive-related industries (e.g. fabricated metal, transportation, machinery, and rubber & plastics). The growing economy provided the impetus for growing motor vehicle sales and Michigan’s economy prospered accordingly. Business services accounted for the overwhelming majority of service-sector job growth in the state. Health, engineering & management, and recreation followed. In terms of retail trade, restaurants accounted for the most new jobs—more than twice the number of any other retail trade industry. Miscellaneous retail, general merchandise, auto dealers and service stations, and building materials and garden supplies rounded out the top-five job producing retail industries.

Employment patterns after 2000 changed noticeably from the 1990s trend. By 2001, the employment path in Oakland had started to turn downward, posting private job losses of almost 15,000 for the year (Table 2.3). This pattern corresponds with movements in the national labor market at that time, as the U.S. and Oakland economies responded to the national recession and the terrorist attack of September 11. The job loss continued in 2002 and 2003, with employment in Oakland declining by approximately 13,000 jobs each year. The national labor market turned around in the second half of 2003, but Oakland, similar to most local labor markets in Michigan, continued to lose jobs.

² The numbers in these tables report counts for all private-sector workers covered by Michigan Unemployment Insurance programs. We use 1999 as the last year, because of changes in the occupation/industry classification system that occurred in 2000. The Standard Occupation Classification system (SOC) was changed to the point that no valid comparisons can be made between the 1990 and 2000 Censuses.

³ We have excluded the construction sector from this table, because the industry break-out is insufficient for understanding the nature of growth in this sector in the county.

Table 2.2. Private Employment by Industry for Selected Sectors in Michigan, 1992 and 1999

	1992	1999	Change (92-99)
Total, Private Industries	3,268,469	3,879,454	610,985
Manufacturing			
Fabricated Metal Products	112,988	130,592	17,604
Transportation Equipment	283,903	300,813	16,910
Machinery, Except Electrical	116,150	133,054	16,904
Rubber & Misc. Plastics Products	51,765	62,040	10,275
Furniture & Fixtures	33,700	43,047	9,347
Electronic & Electronic Equipment	29,311	35,238	5,927
Stone, Clay, Glass & Concrete Products	16,431	21,398	4,967
Apparel & Other Textile Products	16,371	20,534	4,163
Lumber & Wood Products	14,683	17,910	3,227
Services			
Business Services	191,025	326,482	135,457
Health Services (Private)	320,663	358,074	37,411
Engineering & Management Services	82,050	118,073	36,023
Amusement & Recreation Services	36,533	56,890	20,357
Social Services	68,337	85,872	17,535
Educational Services (Private)	27,902	38,179	10,277
Auto Repair, Services & Parking	31,983	40,502	8,519
Retail Trade			
Eating & Drinking Places	256,001	290,655	34,654
Miscellaneous Retail Stores	85,400	101,662	16,262
General Merchandise Stores	117,081	131,962	14,881
Automotive Dealers and Service Stations	74,930	86,040	11,110
Building Materials & Garden Supplies	30,744	41,045	10,301
Furniture & Home Furnishing Stores	27,718	36,180	8,462
Food Stores	99,375	104,052	4,677
Apparel & Accessories Stores	38,164	35,837	(2,327)

Source: State of Michigan, LMI, Covered Employment & Wage Statistics (ES-202)

In spite of the fact that the Oakland economy reversed direction and returned to positive job growth in the second, third and fourth quarters of 2004, ending the year just 3,000 jobs below the 2003 average, the overall result for the year was a loss of just over 11,000 jobs due to substantial job loss in the opening quarter of 2004. Among the industry sectors, the two chief victims of the downturn between 2000 and 2004 were manufacturing, which alone contributed over half of the job loss, and professional and business services, especially the technology-based industries and business support activities.

The Bureau of Economic Analysis is a second source of private-sector employment data at the place-of-work level. While the data use a similar secondary source (ES-202), the employment totals run higher than the previously reported numbers, because they include all full- and part-time employment (i.e. not just those covered by Michigan unemployment insurance programs). In spite of this difference, the story that the numbers tell is the same (see Table 2.4) – the Oakland County economy experienced steady growth up until 2000 and then began its steady decline.

Table 2.3. Oakland County Full-Time Private Sector Employment by Sector, 2000 – 2004

	2000	2001	2002	2003	2004	2000 - 2004 Change		
						Total	Percent	Ann. Avg.
Total Private Sector Jobs	712,512	697,713	684,755	671,154	659,720	-52,792	-7.4%	-13,198
Ag., forestry, fishing and hunting	357	370	428	450	453	96	26.9%	24
Mining	330	311	280	267	253	-77	-23.3%	-19
Utilities	928	906	930	861	852	-76	-8.2%	-19
Construction	35,738	34,193	32,887	31,661	31,806	-3,932	-11.0%	-983
Manufacturing	107,410	100,818	94,134	87,320	80,409	-27,001	-25.1%	-6,750
Wholesale trade	43,565	42,098	40,547	39,549	37,644	-5,921	-13.6%	-1,480
Retail trade	84,197	82,893	79,950	77,300	79,500	-4,697	-5.6%	-1,174
Transportation and warehousing	7,988	7,773	7,504	7,220	7,216	-772	-9.7%	-193
Information	21,463	22,103	20,809	17,834	16,226	-5,237	-24.4%	-1,309
Finance and insurance	39,635	41,210	43,436	44,707	42,973	3,338	8.4%	835
Real estate and rental and leasing	15,899	15,867	15,652	15,367	15,664	-235	-1.5%	-59
Professional and technical services	99,736	97,830	96,092	91,928	88,878	-10,858	-10.9%	-2,715
Management of companies and enterprises	18,188	16,802	16,096	17,152	18,102	-86	-0.5%	-22
Administrative and waste services	75,566	73,784	66,667	68,922	66,857	-8,709	-11.5%	-2,177
Educational services	7,053	7,456	8,309	8,696	8,942	1,889	26.8%	472
Health care and social assistance	73,906	75,436	79,947	81,228	82,138	8,232	11.1%	2,058
Arts, entertainment, and recreation	10,624	10,507	10,588	10,658	10,748	124	1.2%	31
Accommodation and food services	49,406	46,565	49,005	49,724	50,471	1,065	2.2%	266
Other services, except pub admin	20,523	20,791	21,497	20,309	20,587	64	0.3%	16

Source: State of Michigan, LMI, Covered Employment & Wage Statistics (ES-202)

Table 2.4. Oakland County Employment As A Share of Michigan, 1990 – 2003

	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
Total full-time and part-time employ	737,852	826,733	859,088	881,334	910,202	938,205	960,731	946,069	931,207	920,699
Wage and salary jobs	636,997	711,629	739,975	763,601	794,622	820,735	837,520	818,143	799,021	784,204
Number of proprietors	100,855	115,104	119,113	117,733	115,580	117,470	123,211	127,926	132,186	136,495
Total full-time and part-time employ	15.3%	16.0%	16.3%	16.4%	16.8%	17.0%	17.1%	17.1%	17.0%	16.9%
Wage and salary jobs	15.4%	16.0%	16.4%	16.6%	17.1%	17.3%	17.4%	17.4%	17.3%	17.2%
Number of proprietors	14.9%	15.6%	15.6%	15.2%	15.0%	15.1%	15.3%	15.4%	15.4%	15.4%

Source: Bureau of Economic Analysis, REIS 1969-2003

The bottom half of the table displays the share of Michigan’s employment that is accounted for by Oakland County. The economic growth that Oakland County experienced during the 1990s is apparent in its steadily increasing share of the state’s wage and salary jobs. Oakland County’s share of total jobs increased from 15.3 percent in 1990 to 17.1 percent in 2000. It fell back slightly to 16.9 percent in 2003. In terms of wage and salary jobs, the county’s share grew from 15.4 percent in 1990 to 17.4 percent in 2000, with a drop back to 17.2 percent in 2003. The share of sole proprietorships on the other hand demonstrated much less variability,

increasing a half percentage point from 14.9 to 15.3 percent in 2000, and then holding at 15.4 percent from 2001-2003.

One additional source of data on employment by place-of-work is the Census Bureau's County Business Patterns series. It too utilizes administrative records and is produced on an annual basis.⁴ Since we have already looked at several sources in detail, Table 2.5 provides data only on total employment for the county as one more method of verifying the economic trends that visited the county over the 1990s and early part of this decade. Although the details are slightly different in terms of the overall business coverage and the fact that sole proprietorships are not included, the pattern holds constant. Oakland County employment grew during the 1990s and its share of employment statewide grew by 2 percentage points (17.4 to 19.4 percent vs. BEA's 15.4 to 17.4 percent). The loss of jobs post-2000 is also evident, although the share of the state's jobs actually increases slightly, indicating that the rate of job loss in the county was less than it was statewide.

Table 2.5. Oakland County Employment As A Share of Michigan, 1990 – 2003

	Michigan	Oakland	Oakland's Share
1990	3,411,784	592,646	17.4%
1995	3,704,315	665,004	18.0%
1996	3,758,060	699,090	18.6%
1997	3,844,460	718,438	18.7%
1998	3,919,567	746,998	19.1%
1999	3,996,300	768,482	19.2%
2000	4,072,786	791,090	19.4%
2001	4,008,572	779,062	19.4%
2002	3,889,825	765,163	19.7%
2003	3,885,221	758,855	19.5%

Source: U.S. Census Bureau: County Business Patterns

Employment by Community, 1999 – 2002

The sources we have used so far provide data at the county level and above, with no estimates of subcounty employment. Recent work by the Southeast Michigan Council of Governments (SEMCOG) attempts to fill that gap. It is SEMCOG's role, as the Detroit area's metropolitan planning organization, to produce population and employment forecasts for their transportation planning activities. Place-of-work employment for communities is needed as a basis for SEMCOG's Regional Development Forecast and Regional Transportation Plan. The estimates are based on geographic coding of locations of business-establishment employment as reported for wage and salary workers covered by state and federal unemployment insurance programs (the same ES-202 data used previously). We report the forecasts later in this chapter. Table 2.6 provides the results of their most recent estimates for past years. The data cover the

⁴ CBP data are extracted from the Business Register, the Census Bureau's file of all known single and multi-establishment companies. The Annual Company Organization Survey and quinquennial Economic Censuses provide individual establishment data for multi-location firms. Data for single-location firms are obtained from various programs conducted by the Census Bureau, such as the Economic Censuses, the Annual Survey of Manufactures, and Current Business Surveys, as well as from administrative records of the Internal Revenue Service (IRS), the Social Security Administration (SSA), and the Bureau of Labor Statistics (BLS).

time period of March 2000 to March 2002, a period which includes the last year of the 1990s employment boom and the first two years of the recent economic downturn.

A review of the table shows that Oakland County was estimated to have lost 3.2 percent, just over 24,000, of its full-time jobs over the two years. Forty-three communities experienced job loss, led by Addison Township's 38.2 percent loss. Addison Township's loss only amounted to 184 jobs, but other communities were hit harder. These included Troy (-3,972), Pontiac (-3,680) and Rochester Hills (-3,045). The big winner in both numerical and percent job growth was Milford Township, which saw its job total grow by 1,195 or 49.1 percent. Commerce Township followed with 493 jobs added and White Lake Township was third with 290 additional jobs.

Table 2.6. Full-Time Employment Estimates by Community, 2000 – 2002

Community	Jobs in 2000	Jobs in 2002	2000-2002 Change		Community	Jobs in 2000	Jobs in 2002	2000-2002 Change	
			Number	Percent				Number	Percent
Addison Twp	482	298	-184	-38.2%	Milford Twp	2,434	3,629	1,195	49.1%
Auburn Hills	45,862	43,997	-1,865	-4.1%	Milford Village	2,900	2,763	-137	-4.7%
Berkley	4,702	4,748	46	1.0%	Northville (Part)	638	692	54	8.5%
Beverly Hills Village	3,132	2,756	-376	-12.0%	Novi	28,421	28,528	107	0.4%
Bingham Farms Village	8,141	6,592	-1,549	-19.0%	Oakland Twp	2,602	2,822	220	8.5%
Birmingham	15,628	15,703	75	0.5%	Oak Park	10,559	9,695	-864	-8.2%
Bloomfield Hills	19,422	19,269	-153	-0.8%	Orchard Lake	945	984	39	4.1%
Bloomfield Twp	9,181	9,267	86	0.9%	Orion Twp	10,582	10,172	-410	-3.9%
Brandon Twp	900	952	52	5.8%	Ortonville	607	596	-11	-1.8%
Clarkston	802	633	-169	-21.1%	Oxford Twp	3,167	2,869	-298	-9.4%
Clawson	6,028	5,886	-142	-2.4%	Oxford Village	1,784	1,921	137	7.7%
Commerce Twp	11,355	11,848	493	4.3%	Pleasant Ridge	439	395	-44	-10.0%
Farmington	6,225	5,739	-486	-7.8%	Pontiac	53,010	49,330	-3,680	-6.9%
Farmington Hills	68,848	68,246	-602	-0.9%	Rochester	6,687	6,316	-371	-5.5%
Ferdale	9,778	8,783	-995	-10.2%	Rochester Hills	37,834	34,789	-3,045	-8.0%
Franklin Village	715	709	-6	-0.8%	Rose Twp	310	287	-23	-7.4%
Groveland Twp	1,176	1,008	-168	-14.3%	Royal Oak	33,237	32,825	-412	-1.2%
Hazel Park	4,118	3,637	-481	-11.7%	Royal Oak Twp	3,138	3,063	-75	-2.4%
Highland Twp	3,789	3,613	-176	-4.6%	South Lyon	2,448	2,411	-37	-1.5%
Holly Twp	611	573	-38	-6.2%	Southfield	114,616	114,216	-400	-0.3%
Holly Village	1,941	1,652	-289	-14.9%	Springfield Twp	2,059	1,952	-107	-5.2%
Huntington Woods	1,044	985	-59	-5.7%	Sylvan Lake	811	875	64	7.9%
Independence Twp	6,134	6,181	47	0.8%	Troy	106,543	102,571	-3,972	-3.7%
Keego Harbor	659	547	-112	-17.0%	Walled Lake	4,029	3,801	-228	-5.7%
Lake Angelus	11	12	1	9.1%	Waterford Twp	24,261	23,516	-745	-3.1%
Lake Orion Village	2,001	2,045	44	2.2%	West Bloomfield Twp	16,680	16,463	-217	-1.3%
Lathrup Village	3,606	3,283	-323	-9.0%	White Lake Twp	3,155	3,445	290	9.2%
Leonard Village	133	114	-19	-14.3%	Wixom	12,171	11,309	-862	-7.1%
Lyon Twp	3,525	3,028	-497	-14.1%	Wolverine Lake Village	403	367	-36	-8.9%
Madison Heights	26,571	24,176	-2,395	-9.0%	Oakland County	752,990	728,882	-24,108	-3.2%

Source: SEMCOG Analysis of ES-202 Data

Commuting to Work

In addition to asking respondents to identify their industry and occupation, the Census has been asking respondents to identify their place of work. Table 2.7 summarizes data on the work destinations of Oakland County residents over the last 40 years. It is readily apparent that the overwhelming majority of Oakland County residents work in Oakland County. In fact, the dominance of Oakland County as a location of jobs for its residents has grown over the years. In 1960, the ratio of Oakland County residents working in Oakland County to those working outside of Oakland County was 1.47. By 2000, the ratio had grown to 2.57. No other county came close to Oakland County in terms of the number of jobs added for Oakland County residents during the 1990s (51,370). Wayne County actually experienced a loss of Oakland County resident workers. As SEMCOG (2003) reports, Oakland County was the only county in southeast Michigan for which the percentage of residents who commute to work outside of the county did not increase in the 1990s. In other words, while other counties are increasingly seeing their residents commute to other counties for work, Oakland County is increasingly seeing its residents work within Oakland County.

Table 2.7. County of Work for Oakland County Residents, 1960 - 2000

	1960	1970	1980	1990	2000	1990-2000
Oakland	133,480	205,736	310,085	377,660	429,030	51,370
Wayne	75,007	79,292	102,762	109,080	106,405	-2,675
Macomb	13,574	20,910	30,616	40,662	41,935	1,273
Washtenaw	857	1,654	2,430	5,004	6,723	1,719
Genesee	1,216	2,081	3,177	4,701	6,307	1,606
Livingston	206	423	1,266	2,600	4,484	1,884
Lapeer	81	164	381	641	796	155
St. Clair	96	101	147	243	583	340

Source: U.S. Census Bureau: County Business Patterns

We can also look at the job and residency data from the opposite perspective—where people who work in Oakland County live, rather than where people who live in Oakland County work. According to SEMCOG (2003), Oakland County experienced the largest increase of any southeast Michigan county in the number of workers commuting into the county from outside its borders. Table 2.8 shows where the people who work in Oakland County live. It demonstrates the extent to which workers commute into the county from homes outside of the county. From 1990 to 2000, the number of people commuting into Oakland County increased for all counties in the region.

Table 2.8. County of Residence for Oakland County Workers, 1960 – 2000

	1960	1970	1980	1990	2000	1990-2000
Oakland	133,480	205,736	310,085	377,660	429,030	51,370
Wayne	19,165	55,174	76,127	110,794	124,137	13,343
Macomb	5,445	19,778	43,877	73,429	94,376	20,947
Washtenaw	371	1,079	2,200	4,017	6,864	2,847
Genesee	594	1,190	2,706	8,568	20,061	11,493
Livingston	836	1,959	6,129	10,306	17,064	6,758
Lapeer	1,129	2,175	4,382	7,542	9,897	2,355
St. Clair	280	857	1,338	2,493	4,038	1,545

Source: U.S. Census Bureau: County Business Patterns

Focusing on the 1990s, we see that almost 21,000 more Macomb County residents worked in Oakland County in 2000 than in 1990. This was the largest increase for any county other than Oakland. Although we cannot determine the exactly how many people fall into this category, some portion of this 21,000 results from former Oakland County residents moving into Macomb County (a trend documented in Chapter One of this report), but retaining their jobs in Oakland County. A similar dynamic is also part of the additional 11,493 Genesee County residents who now work in Oakland County.

These commuting trends truly support the words of Oakland County Executive L. Brooks Patterson when he states that “Oakland County continues to be the economic engine for the State of Michigan.” However, they also create negative consequences, such as increased demands on infrastructure. Demands on infrastructure are evident in many statistics. For example, according to SEMCOG (2003), in 2000 Oakland County had more miles of congested roads (301) than any other county in southeast Michigan—60 percent more miles of congestion than its nearest competitor. In fact, Oakland County accounted for an estimated 42 percent of the region’s congested roads in 2000. The Road Commission for Oakland County has estimated the cost of meeting road improvement needs for county roads from 2003 to 2013 to be \$1.9 billion (Road Commission for Oakland County, 2005). Capacity improvements costs alone are estimated to be \$1.2 billion. These needs far exceed resources presently available from federal and state funding sources.

Community trends have also resulted in longer commute times for people traveling within the county, though the extent to which this is true for Oakland County residents varies by community. Census data indicate that the overall impact was moderate.⁵ Average commute time for all Oakland County residents (working in or out of the county) increased 2.5 minutes to 26.5 minutes. This is similar to trends for the region, state, and country. However, commute times for residents of some communities increased more dramatically. Compared to 1990, at least five percent more of the population in 11 communities had a commute of 30 minutes or more. These communities included Clawson, Lake Angelus, Lathrup Village, Madison Heights, Novi, Orion Twp, Oxford Twp, Pontiac, South Lyon, Waterford, and White Lake Twp. Lathrup Village saw

⁵ The Census Bureau provides commute time data by location of residency, rather than location of employment. Thus, while we are able to analyze commute times for Oakland County residents we cannot isolate only those residents who work in Oakland County.

the largest increase, with 11 percent more of its residents commuting 30 minutes or more to work in 2000 than in 1990. In four communities—Brandon Twp, Holly Twp, Independence Twp, and Lake Angelus—at least five percent more of the population was commuting at least 60 minutes to work in 2000 compared to 1990. On the other hand, 11 communities saw their percentage of residents whose commute was at least 30 minutes drop from 1990 to 2000.

The variation in commute times is not surprising given the multitude of factors that contribute to changes in commuting times. First, there is no dominant pattern of commuting within the county. People commute to many different parts of the county from many different parts of the region. Thus, no overriding pattern of commute times would be expected. Second, while population has moved farther out into previously undeveloped parts of the county, so have jobs. Third, road capacity differs considerably across the county. Some roadways with high traffic volumes have seen expansions in their capacity in recent years; others have not. Fourth, several locations with high traffic volumes have sophisticated traffic management systems, like FAST-TRAC, which help mitigate the impact of increased traffic.

Where commuting times increase, the consequences can be considerable—from lost productivity to lost time with family. Housing can also become less attractive in communities where commute times are long. Increased frustration is often a result. Indeed, a 2002 survey by SEMCOG found that 64 percent of Oakland County residents were dissatisfied with traffic flow in the region (SEMCOG, 2003). This was one of the highest dissatisfaction percentages in the region, second only to Livingston County.

Occupation, Industry and Class of Worker

Much of this discussion has focused on the jobs located in Oakland County. While the next section will focus on the unemployment trends of Oakland County's residents, our analysis of the economy would not be complete without looking to the 2000 Census to understand the occupational and industrial mix of the county's residents. No attempt will be made to compare the 2000 results with previous censuses due to the major changes that took place in both the occupational and industrial classification systems.

Table 2.9 shows the occupational distribution of Oakland County resident workers compared to those of other local counties and the State of Michigan. The primary differences of note are Oakland County's high representation in Management and Professional occupations. Its 17.8 percent share of management, etc. workers is almost 50 percent higher than the state average and well above the comparison counties. Its 26.8 percent share of professional and related occupations workers is also significantly higher than the state average and only surpassed by Washtenaw County. Such an occupational structure provides ample reason for Oakland County's strong economy and high per capita income.

Table 2.9. Occupational Distribution of Workers in Oakland County, the State and Select Southeast Michigan Counties, 2000

	Oakland	Michigan	Genesee	Macomb	Washtnw	Wayne
Total Workers 16 and over	614,377	4,637,461	192,969	390,791	172,373	851,110
Management, business, & financial op. occ.	17.8%	12.0%	9.5%	12.3%	14.1%	10.5%
Professional and related occ.	26.8%	19.5%	17.4%	18.6%	34.2%	17.7%
Service occupations	10.7%	14.8%	16.5%	13.1%	13.4%	16.7%
Sales and office occupations	26.8%	25.6%	24.3%	28.3%	22.6%	26.8%
Farming, fishing, and forestry occ.	0.1%	0.5%	0.1%	0.1%	0.3%	0.1%
Construction, extraction, & maintenance occ.	6.9%	9.2%	10.6%	9.9%	5.6%	8.7%
Production, transp., & material mvg occ.	10.9%	18.5%	21.4%	17.7%	9.7%	19.6%

Source: U.S. Census Bureau

Table 2.10 shows the industrial distribution of Oakland County resident workers compared to those of other local counties and the State of Michigan. Rather than going into great detail across the various industrial sectors, this discussion highlights the industrial mix characteristics that contribute to Oakland County’s strong knowledge and income base. The most important difference is the county’s strong presence in professional, scientific and technical industries. This industry sector accounts for 10.3 percent of all county workers, double the rate of the state, and two percentage points higher than its nearest competitor, Washtenaw County. Oakland County also had strong showings against the other areas in the sectors of real estate, information, wholesale trade, and finance and insurance.

The last table in this series, Table 2.11, shows the class of worker distribution of Oakland County resident workers compared to those of other local counties and the State of Michigan. There is little to differentiate Oakland County from the others with the exception of its strong presence in the private, for profit, wage and salary occupations. This is complemented by a 5 percent rate of persons who are self-employed in their own incorporated business.

Labor Force and Unemployment

We now look at how the changing level of jobs affected the unemployment rate in the county. The next table will put Oakland County’s unemployment in the context of the state and surrounding counties. Table 2.12, though place-of-residence based, again shows the pattern of increasing labor force and employment from 1991 – 2000, followed by a rather rapid decline from 2000 – 2004. The unemployment rate has mirrored this trend, decreasing from a high of 7.6 percent in 1991 to a low of 2.5 percent in 2000. The number of unemployed has almost doubled since 2000 and the unemployment rate grew back to 5.6 percent in 2004 – the highest rate since 1993.

Table 2.10. Industrial Distribution of Workers in Oakland County, the State and Select Southeast Michigan Counties, 2000

	Oakland	Michigan	Genesee	Macomb	Washtnw	Wayne
Total Workers 16 and over	614,377	4,637,461	192,969	390,791	172,373	851,110
Agriculture, forestry, fishing and hunting	0.1%	0.9%	0.3%	0.2%	0.6%	0.1%
Mining	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
Construction	5.3%	6.0%	6.3%	6.7%	3.9%	4.6%
Manufacturing	21.8%	22.5%	24.1%	26.1%	15.5%	21.8%
Wholesale trade	3.9%	3.3%	2.9%	3.7%	1.9%	3.2%
Retail trade	11.9%	11.9%	12.8%	12.6%	10.0%	10.7%
Transportation and warehousing	2.2%	3.3%	3.0%	2.5%	2.8%	5.3%
Utilities	0.5%	0.8%	0.5%	0.6%	0.6%	1.1%
Information	2.7%	2.1%	2.1%	2.0%	3.1%	2.5%
Finance and insurance	5.0%	3.7%	3.2%	3.9%	2.8%	4.3%
Real estate and rental and leasing	2.2%	1.6%	1.5%	1.6%	1.7%	1.7%
Professional, scientific, and technical services	10.3%	5.1%	3.6%	6.8%	8.4%	5.0%
Management of companies and enterprises	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Admin and support and waste management serv	2.9%	2.9%	3.3%	3.0%	2.4%	4.1%
Educational services	7.7%	8.6%	8.6%	5.9%	19.2%	6.9%
Health care and social assistance	10.7%	11.3%	12.5%	9.7%	13.4%	11.7%
Arts, entertainment, and recreation	1.6%	1.5%	1.1%	1.4%	1.6%	1.7%
Accommodation and food services	4.6%	6.0%	6.5%	5.7%	6.1%	6.3%
Other services (except public administration)	4.1%	4.6%	5.1%	4.4%	3.4%	5.0%
Public administration	2.5%	3.6%	2.7%	3.0%	2.5%	4.0%

Source: U.S. Census Bureau

Table 2.11. Occupational Distribution of Workers in Oakland County, the State and Select Southeast Michigan Counties, 2000

	Oakland	Michigan	Genesee	Macomb	Washtnw	Wayne
Total Workers 16 and over	614,377	4,637,461	192,969	390,791	172,373	851,110
Private for-profit wage and salary workers:	78.8%	75.1%	77.4%	81.5%	64.6%	76.9%
Employee of private company	73.8%	71.9%	74.8%	78.4%	61.7%	74.6%
Self-employed in own incorporated business	5.0%	3.1%	2.6%	3.1%	2.9%	2.3%
Private not-for-profit wage and salary workers	7.3%	8.0%	7.6%	6.2%	12.1%	7.2%
Local government workers	5.6%	6.2%	6.1%	4.7%	5.7%	7.5%
State government workers	1.9%	3.7%	2.6%	1.5%	10.8%	2.5%
Federal government workers	1.2%	1.5%	1.0%	2.0%	1.5%	2.2%
Self-employed workers in own not incorp bus	4.9%	5.2%	5.0%	3.9%	5.1%	3.4%
Unpaid family workers	0.2%	0.3%	0.3%	0.2%	0.3%	0.2%

Source: U.S. Census Bureau

Table 2.12. Labor Force Estimates and Unemployment for Oakland County, 1990 - 2004

Year	Civilian Labor Force	Employed	Unemployed	Rate
1990	604,989	567,932	37,057	6.1
1991	605,510	559,528	45,982	7.6
1992	618,846	572,410	46,436	7.5
1993	624,043	586,296	37,747	6.0
1994	630,425	601,888	28,537	4.5
1995	638,514	614,507	24,007	3.8
1996	649,901	625,839	24,062	3.7
1997	660,552	639,564	20,988	3.2
1998	668,728	648,990	19,738	3.0
1999	680,455	660,795	19,660	2.9
2000	691,353	674,126	17,227	2.5
2001	680,869	653,311	27,558	4.0
2002	668,179	635,161	33,018	4.9
2003	661,496	627,576	33,920	5.1
2004	634,744	598,959	35,786	5.6

Source: State of Michigan, LMI, Local Area Unemployment Statistics (LAUS)

Our final look at unemployment compares the rates for Oakland County with those of the State and other southeast Michigan counties (table 2.13). Oakland County is seen to do consistently better than the state with a rate running 1 to 2 percentage points lower. A differential in the 1 point range also holds when the comparison is with Macomb County. The advantage is greater with Wayne County, averaging about 3 percentage points, and Genesee, where the differential has ranged between 2 and 5 percentage points. The unemployment rates for Livingston and Washtenaw counties, on the other hand, have been consistently lower than that of Oakland County – about 1 point for Livingston and 1.5 to 2 points for Washtenaw.

Table 2.13. Unemployment for Oakland County, the State, and Other Counties in Southeast Michigan, 1990 - 2004

	Oakland	Michigan	Macomb	Wayne	Washtenaw	Livingston	Genesee
1990	6.1	7.7	7.9	9.4	4.8	5.8	9.5
1991	7.6	9.3	9.7	11.2	5.7	7.3	12.0
1992	7.5	9.2	8.9	10.8	5.1	6.2	12.3
1993	6.0	7.4	6.8	8.3	4.2	4.4	10.4
1994	4.5	6.2	5.7	6.8	3.3	3.9	8.5
1995	3.8	5.3	4.8	6.1	2.7	3.6	6.7
1996	3.7	4.9	4.6	6.0	2.2	3.5	5.9
1997	3.2	4.3	4.0	5.4	2.0	3.0	5.2
1998	3.0	4.0	3.7	5.0	1.8	2.6	5.4
1999	2.9	3.8	3.7	4.8	1.6	2.5	5.0
2000	2.5	3.7	3.5	4.5	1.6	2.3	5.3
2001	4.0	5.2	5.2	6.3	2.1	3.2	6.9
2002	4.9	6.2	6.0	7.6	2.8	4.0	8.4
2003	5.1	7.1	6.6	9.0	3.1	4.2	9.3
2004	5.6	7.1	6.7	8.6	4.3	4.8	8.3
	Difference Between Comparison County's Rate and Oakland County's Rate						
1990		1.6	1.8	3.3	-1.3	-0.3	3.4
1991		1.7	2.1	3.6	-1.9	-0.3	4.4
1992		1.7	1.4	3.3	-2.4	-1.3	4.8
1993		1.4	0.8	2.3	-1.8	-1.6	4.4
1994		1.7	1.2	2.3	-1.2	-0.6	4.0
1995		1.5	1.0	2.3	-1.1	-0.2	2.9
1996		1.2	0.9	2.3	-1.5	-0.2	2.2
1997		1.1	0.8	2.2	-1.2	-0.2	2.0
1998		1.0	0.7	2.0	-1.2	-0.4	2.4
1999		0.9	0.8	1.9	-1.3	-0.4	2.1
2000		1.2	1.0	2.0	-0.9	-0.2	2.8
2001		1.2	1.2	2.3	-1.9	-0.8	2.9
2002		1.3	1.1	2.7	-2.1	-0.9	3.5
2003		2.0	1.5	3.9	-2.0	-0.9	4.2
2004		1.5	1.1	3.0	-1.3	-0.8	2.7

Source: State of Michigan, LMI, Local Area Unemployment Statistics (LAUS)

The Nature of Job Growth

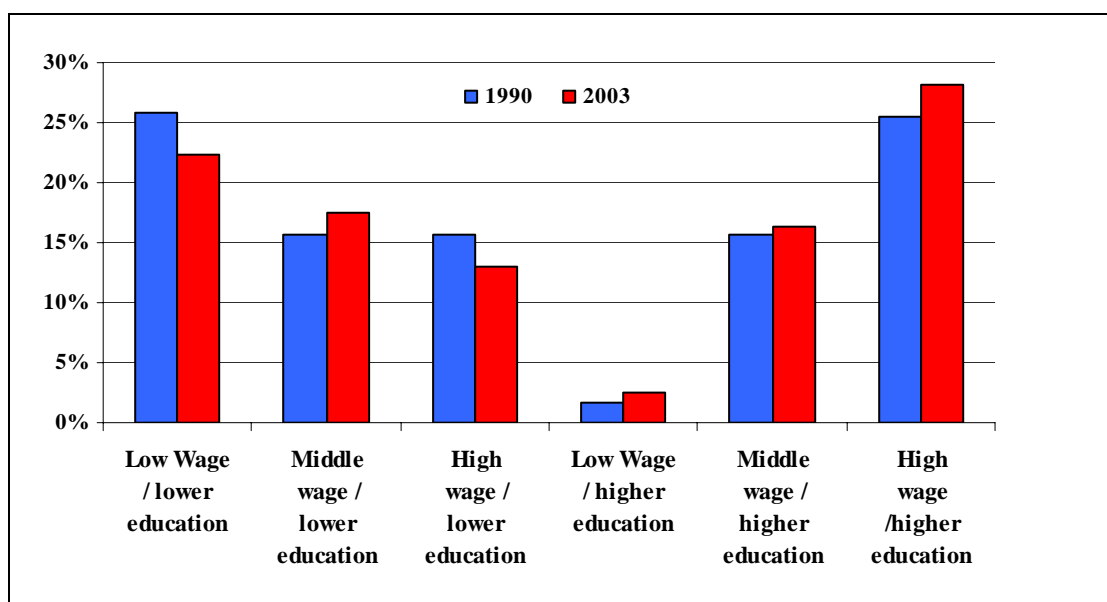
We finish up this chapter by incorporating the major findings that Grimes and Fulton reported in their 2005-07 Economic Outlook for Oakland County.⁶ The following analysis looks at the types of jobs that are being created in the local economy, including the educational levels normally associated with them. As Governor Granholm said in her 2005 State of the State address (as cited in Fulton and Grimes, 2005, p. 6), in the first four years of the twenty-first century, “we lost more than 170,000 manufacturing jobs in our state, the largest share of the 2

⁶ Oakland County Economic Outlook, 2005 – 2007, George A. Fulton and Donald R. Grimes, Institute of Labor and Industrial Relations, University of Michigan, April 2005.

million lost nationwide. While other states were ready to replace those jobs with high-skilled jobs in emerging, technology-based industries—Michigan was not.”

“Oakland County, on the other hand, is generally viewed as already being well down this road, attracting high-wage, high-skill jobs on an ongoing basis” (Fulton and Grimes, 2005, p. 6). In order to determine whether this conventional wisdom was supported by the data, Grimes and Fulton looked at the nature of the jobs that were created in Oakland County between 1990 and 2003. They divided industries into six categories based on average earnings and educational attainment and reported job change within each group from 1990 and 2003. Such an analysis provides a measure of the degree to which higher-paying jobs are being created, and whether or not those jobs are associated with higher education levels.⁷

Figure 2.1. Distribution of Total Non-farm Employment by Wage-Education Classification, 1990 – 2003



Source: 2005-07 Economic Outlook for Oakland County

Figure 2.1 presents the results of the Fulton and Grimes analysis for the six wage-education pairings. As Fulton & Grimes state:

“The most dramatic change over the period has been the increase in employment in industries that tend to require a more educated workforce [i.e. the three categories with “higher education]: 47.1 percent in 2003 compared with 42.8 percent in 1990. Also, it turns out ... that the biggest single portion of the Oakland economy [and the category with the largest increase since 1990] is the high-wage/higher-education category. Making up a relatively large 28.2 percent of jobs in 2003 (compared, for instance, with 16 percent in Washtenaw County, another affluent, technology-oriented county in the region) ...

⁷ Wage classifications were as follows: high—greater than \$50,000; middle—between \$30,000 and \$50,000; and low—less than \$30,000. Jobs requiring a higher education were those that had a significant concentration of workers with at least a bachelor’s degree. A full explanation of the methodology used to segment by wages and educational attainment is contained in Grimes’ and Fulton’s Economic Outlook report.

Four of the six categories are increasing over time in their employment share. Both of the segments that declined are in lower-education components, with the larger decline being in the category associated with low wages. On the other hand, high-wage jobs associated with lower levels of education are also becoming scarce.” (Fulton and Grimes, 2005, pp. 6-7)

Table 2.14 displays the results of Fulton’s and Grimes’s analysis of employment change among the six wage-education pairings in Oakland County. It shows the change in the number of jobs for each wage-education pairing, as well as the average annual wages for each wage-education pairing, as of 2003. For example, the first row of the table shows that the number of high wage jobs increased for both education levels, but the smallest increase, by far was in high wage jobs that require a lower-education level. It also shows that the average annual pay for high wage that require a high level education is considerably larger than the average annual pay for high wage jobs that require less education. Over the period, employment increased in all wage-education categories, with the largest increase (55,200 jobs) occurring in the high-wage/higher-education segment. Both middle-wage groupings experienced considerable increases in the number of jobs, though neither increase was as high as that of high-wage/higher-education jobs. The increases for both groupings of low-wage jobs were small relative to the other categories.

Table 2.14. Employment Change and Annual Wages in Oakland County by Wage-Education Classification, 1990 – 2003

	Higher Education Level		Lower Education Level		All Education Levels	
	Job Change	Average Annual Pay	Job Change	Average Annual Pay	Job Change	Average Annual Pay
	1990-03	2003	1990-03	2003	1990-03	2003
High wage	55,200	\$72,285	3,236	\$68,726	58,436	\$71,149
Middle wage	27,660	\$41,111	35,087	\$38,251	62,747	\$39,635
Low wage	8,091	\$24,394	11,799	\$18,296	19,890	\$18,913
All wages	90,951	\$58,855	50,122	\$37,320	141,073	\$47,450

Source: 2005-07 Economic Outlook for Oakland County

As Fulton and Grimes reported:

“The high-wage/higher-education industries, which account for 28 percent of total jobs in the county, contributed 39 percent of all job gains between 1990 and 2003 (55,200 out of 141,073). In contrast, the high-wage/lower-education industries make up 13 percent of county jobs, and account for only 2 percent of all job gains (3,236 out of 141,073). So, Oakland County clearly fits the governor’s vision of the ongoing transformation in successful economies: jobs in industrial sectors being replaced by high-wage/higher-education jobs in other sectors—although the replacement is not taking place with the same workers.” (Fulton and Grimes, 2005, p. 9)

Employment Forecast

We conclude our discussion of Oakland County's economy by reviewing forecasts of future employment growth. Our discussion relies upon two sources—Fulton's and Grimes's Oakland County Economic Outlook Summary Report 2006-2008 and SEMCOG's 2030 Regional Development Forecast.

The overall conclusion from the data is that Oakland County is expected to experience moderate annual growth in the number of jobs in the coming years. More specifically, Fulton and Grimes (2006) estimate that after a gain of 1,900 jobs countywide in 2005, Oakland County will gain an average of almost 4,700 jobs per year through 2008. These gains are significant, but less than half as high as Fulton's and Grime's estimates from just one year prior. Moreover, they are less than one-third of the annual gains experienced in the 1990s. The change reflects an economic recovery that is proceeding at slower than anticipated rates in Michigan and is negatively impacted by troubles with auto-related companies, such as Ford, General Motors, and Delphi.

All of the job gains over the next three years are expected to come from private service-producing, rather than goods-producing, industries. Administrative support and waste management jobs, along with private education and health services jobs are forecast to see the largest gains. Automotive and other manufacturing, natural resources and construction, and government jobs are all expected to decline over the next three years.

Table 2.15 provides forecasted employment by community from 2000 to 2010, based upon SEMCOG estimates. The estimated gain in employment countywide is considerably higher than we would expect given Fulton's and Grimes's estimates. This is due to a variety of factors too numerous to explain here. Given that the Fulton and Grimes estimates use more recent data and are based on models that have demonstrated their accuracy over the years, we caution readers against relying on the specific number of jobs estimated for each community. However, the estimates provide some insight into the general distribution of jobs among communities that we might expect in the coming years.

The location of expected job growth mirrors in many ways the location of projected population growth, in that the large percentage gainers are the more rural townships of today that are seeing the surge of housing development coming their way. Two patterns of growth are occurring. Housing growth is leading to a demand for services and retail development. On the other end of the development equation, communities are courting employers by offering green space and tax incentives. Once the job centers appear, housing demand is stimulated.

The communities forecast to have the largest percentage gains over the decade are Lyon, Oakland, Springfield, Groveland, Orion, Rose and Holly townships and the villages of Milford and Ortonville. The leaders in terms of number of jobs, are expected to be Auburn Hills; Pontiac; Novi; Milford; Farmington Hills; Troy; Southfield; and Lyon, Orion, and West Bloomfield Townships.

Table 2.15. Employment Forecast by Community, 2000 – 2010

Community	Jobs in 2000	Jobs in 2005	Jobs in 2010	2000-2010 Change		Community	Jobs in 2000	Jobs in 2005	Jobs in 2010	2000-2010 Change	
				Number	Percent					Number	Percent
Addison Twp	1,233	1,519	1,803	570	46.2%	Milford Twp	5,714	5,874	6,827	1,113	19.5%
Autum Hills	54,253	58,811	65,848	11,595	21.4%	Milford Village	4,884	9,699	11,257	6,373	130.5%
Berkley	7,014	7,120	7,273	259	3.7%	Northville (Part)	1,476	1,563	1,719	243	16.5%
Beverly Hills Village	2,949	3,032	3,230	281	9.5%	Novi	34,984	39,089	43,060	8,076	23.1%
Bingham Farms Village	6,994	7,192	7,506	512	7.3%	Oakland Twp	1,755	2,501	3,086	1,340	76.3%
Birmingham	22,802	22,349	22,572	-230	-1.0%	Oak Park	12,003	11,390	11,153	-850	-7.1%
Bloomfield Hills	24,943	26,076	28,486	3,543	14.2%	Orchard Lake	1,232	1,225	1,305	73	5.9%
Bloomfield Twp	15,687	17,612	19,212	3,525	22.5%	Orion Twp	9,057	11,822	13,285	4,228	46.7%
Brandon Twp	1,891	2,132	2,489	608	32.2%	Ortonville	654	820	916	262	40.1%
Clarkston	3,329	3,424	3,731	402	12.1%	Oxford Twp	1,650	1,728	1,899	239	14.5%
Cawson	6,404	6,584	6,756	352	5.5%	Oxford Village	3,571	4,405	5,060	1,489	41.7%
Commerce Twp	10,745	11,365	12,508	1,763	16.4%	Pleasant Ridge	953	1,003	1,063	110	11.5%
Farmington	8,127	7,804	7,863	-264	-3.2%	Pontiac	63,070	69,764	73,510	10,440	16.6%
Farmington Hills	78,835	80,781	84,279	5,444	6.9%	Rochester	17,448	17,662	18,541	1,093	6.3%
Ferdale	11,312	11,421	11,558	246	2.2%	Rochester Hills	29,439	30,575	33,022	3,583	12.2%
Franklin Village	2,911	2,812	2,903	-8	-0.3%	Rose Twp	386	461	563	167	42.2%
Groveland Twp	926	1,160	1,416	490	52.9%	Royal Oak	42,252	42,200	43,555	1,303	3.1%
Hazel Park	4,883	4,861	4,615	-268	-5.5%	Royal Oak Twp	3,937	4,096	4,106	169	4.3%
Highland Twp	6,407	7,253	8,145	1,738	27.1%	South Lyon	2,868	3,238	3,543	675	23.5%
Holly Twp	815	945	1,145	330	40.5%	Southfield	128,407	130,118	132,846	4,439	3.5%
Holly Village	3,264	3,341	3,648	384	11.8%	Springfield Twp	2,685	3,421	4,146	1,461	54.4%
Huntington Woods	1,954	2,045	2,204	250	12.8%	Sylvan Lake	1,144	1,144	1,193	49	4.3%
Independence Twp	7,725	9,165	9,964	2,239	29.0%	Troy	135,977	135,889	140,763	4,786	3.5%
Keego Harbor	1,426	1,438	1,521	95	6.7%	Walled Lake	7,770	7,655	7,725	-45	-0.6%
Lake Angelus	52	60	64	12	23.1%	Waterford Twp	32,366	32,757	34,715	2,349	7.3%
Lake Orion Village	1,715	1,872	1,916	201	11.7%	West Bloomfield Twp	21,706	23,662	26,084	4,378	20.2%
Lathrup Village	3,873	3,994	4,122	249	6.4%	White Lake Twp	4,985	6,042	6,698	1,712	34.3%
Leonard Village	121	132	141	20	16.5%	Whom	12,924	13,661	14,963	2,039	15.8%
Lyon Twp	3,104	5,866	7,230	4,126	132.9%	Wolverine Lake Village	512	524	553	41	8.0%
Madison Heights	28,848	28,882	28,641	-207	-0.7%	Oakland County	910,363	955,006	1,009,955	99,592	10.9%

Source: SEMCOG 2030 Regional Development Forecast

Conclusions

Oakland County’s strong economy has helped, and is likely to continue to help, it attract residents and investment. This growth has created both opportunities and challenges for the county. Opportunities include quality jobs, high incomes, and enhanced life opportunities for residents. They also include a strong tax base to support critical public services. The economic growth and its associated opportunities are something that most counties throughout the state and many parts of the country strive to emulate. The growth forecast for the next several years is likely to continue to provide many benefits to the county.

As pointed out in this chapter, one challenge resulting from the county’s economic growth is increasing demands on infrastructure and the associated economic and social costs that come with these demands. Increased demands for other public services also often arise with growth. Another challenge related to economic growth is rising housing costs, a trend documented in the Chapter Four of this report. It is likely that the continued growth of the

economy in the coming years will cause these challenges to continue, though on a smaller scale than experienced in the 1990s.

Two outcomes of these growth-related challenges are particularly important for housing and community development. The first is an increase in the number of people moving out of the county while retaining their jobs in the county. This reduces the county's ability to capture the benefits of job growth within its borders. It also increases the burden on infrastructure as the number of commuters in and out of the county increases. The second outcome of concern, which is less obvious from the data presented in this chapter, is the increased difficulty for both middle-income and lower-wage service sector employees to attain affordable housing close to their jobs. As demonstrated in the industry-level job growth data, service jobs, including lower-paying jobs in retail trade are accounting for a significant share of job growth in the county. The more difficult it is for middle-income and lower wage workers to access housing in the county, the more difficult it will be for employers to fill vacant positions. Affordability is explored in detail in Chapter Four.

In conclusion, it seems that much of what the county and its various stakeholders have done to make Oakland County's economy strong has had a positive impact on economic growth. It will be important for the county to maintain many of its practices to ensure the growth continues. This will be increasingly important as the state and the automotive industry, in particular, deal with the economic challenges that they face. County stakeholders must continue to be proactive in developing new strategies to attract economic investment. Moreover, it will be wise for county stakeholders to be aware of the impacts that economic growth has had on housing and infrastructure and adopt and/or advocate for policies that can ameliorate the negative effects. We detail some policy options in the final chapter of this report.