

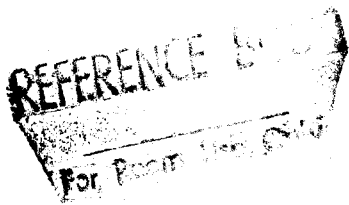
OVERALL ECONOMIC DEVELOPMENT PROGRAM

ADDENDUM

OAKLAND COUNTY
GOVERNMENTAL REFERENCE LIBRARY
1200 NORTH TELEGRAPH ROAD
PONTIAC MICHIGAN 48053

R-OCDOC
HC
107
.M52
O245
1978
Addendum

OAKLAND COUNTY, MICHIGAN
1978 REVISION



GOVERNMENTAL REFERENCE LIBRARY
1200 NORTH TELEGRAPH ROAD
PONTIAC MICHIGAN 48053

COUNTY OF OAKLAND, MICHIGAN
OVERALL ECONOMIC DEVELOPMENT PROGRAM
1978 REVISION ADDENDUM

Submitted To:

U.S. DEPARTMENT OF COMMERCE
ECONOMIC DEVELOPMENT ADMINISTRATION

Submitted By:

OAKLAND COUNTY OVERALL ECONOMIC
DEVELOPMENT PROGRAM COMMITTEE

Pontiac, Michigan February 1979

ADDENDUM TABLE OF CONTENTS

	<u>Page</u>
<u>INTRODUCTION</u>	1
OAKLAND COUNTY	
GOVERNMENTAL REFERENCE LIBRARY	
I. <u>O.E.D.P. COMMITTEE</u>	2
IV. <u>PHYSICAL RESOURCES</u>	2
A. Gas Distribution System	2
B. Electrical Distribution System	7
C. Solid Waste	8
D. Agriculture	10
E. Public Buildings	12
F. Cultural and Educational Assets	13
G. Medical Facilities	15
H. Public Accommodations	20
I. Recreation and Tourism	20
VI. <u>HUMAN RESOURCES</u>	23
A. Population Characteristics	23
B. Economic Base Analysis	32
1. Agricultural Services, Forestry, Fisheries	32
2. Mining	33
3. Contract Construction	34
4. Manufacturing	35
5. Transportation and Public Utilities	41
6. Wholesale Trade	42
7. Retail Trade	43
8. Finance, Insurance, Real Estate	46
9. Services	48
10. Public Sector Employment	50
C. Conclusion	50
<u>ERRATA</u>	52

ADDENDUM LIST OF TABLES

<u>TABLE</u>	<u>PAGE</u>
A O.E.D.P. Committee Membership	3
B Farms by SIC Type, Oakland County 1974	11
C Institutions of Higher Learning, Oakland County	14
D Libraries in Oakland County	16
E Hospital and Medical Facilities in Oakland County	18
F Comparative Historical Populations Projections - State, Region, and County 1950-1977	24
G Comparative Population Projections - State, Region and County 1980-2000	25
H Historic and Projected Age Cohorts, Oakland County	26
I Black Population, Oakland County, 1940-1977	28
J Oakland County Minor Civil Division Population Projections, 1975-1990	29
K Agricultural Employment and Payroll - Michigan and Oakland County, 1956-1976	32
L Mining Employment and Payroll - Michigan and Oakland County, 1956-1976	33
M Contract Construction Employment and Payroll - Michigan and Oakland County, 1956-1976	34
N Manufacturing Employment - Michigan, Detroit Region, Oakland County, 1956-1976	36
O Manufacturing Establishments by Size - Michigan, Detroit Region, Oakland County	37
P Manufacturing Payrolls - Michigan, and Oakland County, 1956-1976	37
Q Value Added by Manufacture - Detroit SMSA, 1958-1976	39
R Detailed Industry Groups - Establishments, Employment, and Payrolls - Oakland County 1976	40

ADDENDUM LIST OF TABLES....continued

<u>TABLE</u>	<u>PAGE</u>
S Transportation and Public Utilities Employment and Payroll - Michigan and Oakland County, 1956-1976	41
T Wholesale Trade Employment and Payroll - Michigan and Oakland County, 1956-1976	42
U Retail Trade Employment and Payroll - Michigan and Oakland County, 1956-1976	43
V Retail Sales - Detroit Region, and Oakland County, 1958-1976	44
W Total Effective Buying Income and Buying Power Index - Michigan, Detroit Region, and Oakland County, 1976	45
X Retail Sales by Type - Oakland County, 1972	46
Y Finance, Insurance, Real Estate Employment and Payroll - Michigan and Oakland County, 1956-1976	47
Z Services Employment and Payroll - Michigan, Detroit Region, Oakland County, 1956-1976	49

I. INTRODUCTION

This Addendum to the 1978 Revision of the Oakland County Michigan Overall Economic Development Program serves to provide additional information and analysis as requested by the EDA/MWRO in its review of the 1978 Revision.

The Addendum is considered an integral part of the 1978 OEDP Revision and thus is organized by chapters corresponding to those in the 1978 Revision.

Utilizing an addendum format to satisfy requirements of the EDA/MWRO review was authorized by the Economic Development Administration, and henceforth the 1978 Oakland County Michigan OEDP will consist of both the 1978 Revision and the Addendum.

I. O.E.D.P. COMMITTEE

Table A presents a listing of the current addresses and affiliations of the Oakland County O.E.D.P. Committee. Mr. James Stone serves as Chairperson, and Mr. Ed Revis serves as Vice-Chairperson. Members of the O.E.D.P. Executive Committee are indicated with an asterik (*).

IV. PHYSICAL RESOURCES

Gas Distribution System

Natural gas for residential, commercial, and industrial use is supplied by Consumers Power Co. Consumers provides gas service to 1,014,585 customers in a 12,900 square mile service area in 40 lower Michigan counties. All natural gas supplied in Oakland County is done so by Consumers Power. In 1977, 312 billion cubic feet of gas was sold by the utility. This was distributed 46.8% to residential space heating and 3.2% to residential non-heating; 48.4% to commercial/industrial users; and 1.6% to other users.

About 73 percent of the utility's gas supply in 1977 came from interstate pipeline suppliers; 15 percent came from Michigan production; and 12 percent was provided by the Marysville gas reforming plant which converts liquid hydrocarbon feedstocks from Canada into pipeline quality gas.

The ability of Consumers Power Co. to continue to supply existing gas customers as well as add new customers is of

TABLE A

OAKLAND COUNTY OVERALL ECONOMIC
DEVELOPMENT PROGRAM COMMITTEE
Membership and Affiliations

1. Local and State Government

Delmer G. Anderson, Development Executive
City of Pontiac
67-A North Saginaw
Pontiac, Michigan 48058 (857-7858)

* James Bates, Director of Community Development
City of Oak Park
13600 Oak Park Blvd.
Oak Park, Michigan 48237 (547-1331)

Ronald U. DeMaagd, City Manager
City of Oak Park
13600 Oak Park Blvd.
Oak Park, Michigan 48237 (547-1331)

2. County Government

Robert H. Gorsline, Commissioner (District 2)
Oakland County Board of Commissioners
1200 North Telegraph Road
Pontiac, Michigan 48053 (858-0102)

Patrick M. Nowak, Executive Officer-Administration
County of Oakland
1200 North Telegraph Road
Pontiac, Michigan 48053 (858-1209)

3. Business

Mahlon A. Benson, President
M. A. Benson Lumber Co.
556 North Saginaw
Pontiac, Michigan 48055 (334-2521)

John Zachem, Regional Personnel Manager, Data Processing Div.
IBM Corporation
20100 Telegraph Road, Suite 400
Birmingham, Michigan 48010 (644-8440)

* James Stone, President, (North Oakland Chamber of Commerce)
First Federal Savings & Loan Assoc. of Oakland
2101 S. Telegraph Road
Bloomfield Hills, Michigan 48013 (338-4056)

4. Industry

* J. L. Taunt

Pontiac Motor Division
2394 Silver Lake Road
Pontiac, Michigan 48055 (335-0982)

Brent T. Upson, Director of Economic Relations
General Motors Corporation
3044 West Grand Blvd.
Detroit, Michigan 48202 (556-3001)

Catherine Cartwright
Office of Economic Expansion,
Michigan Department of Commerce
Michigan Plaza, 11th Floor
1200 Sixth Street
Detroit, Michigan 48226 (256-3723)

5. Land Development

* Robert H. Carey, President

Thompson-Brown Co.
32823 Twelve Mile Road
Farmington, Michigan 48024 (553-8700)

6. Banking and Finance

Aleck Capsalis, Executive Vice President
Customer Service Division
Community National Bank of Pontiac
30 North Saginaw
Pontiac, Michigan 48058 (857-5500)

7. Utilities and Energy

* Ralph Hahn, Regional General Manager
Consumers Power Co.
1020 Featherstone Rd.
Pontiac, Michigan 48058 (858-2222)

J. Philip Lenihan, Manager
Oakland Division, Detroit Edison Co.
30400 Telegraph Road
Birmingham, Michigan 48010 (645-4200)

8. Education

Dr. Rex Wood
Oakland Schools
2100 Pontiac Lake Road
Pontiac, Michigan 48054 (858-2121)

9. Organized Labor

* Thomas Turner, President
Metropolitan Detroit AFL/CIO Council
2310 Cass Avenue
Detroit, Michigan 48202 (963-4233)

Kenneth Morris, Region 1B Director
United Auto Workers
711 West Thirteen Mile Road
Madison Heights, Michigan 48071 (566-1510)

10. Minority Groups

Larry Balber
Walled Lake Schools
8289 Commerce Road
Union Lake, Michigan 48085 (363-1600)

Pecola Burns, Nat'l. Assoc. of Negro Bus. & Prof.
Women Inc. (NANB & PW Inc.)
419 Baldwin
Clarkston, Michigan 48016 (628-1874)

11. Women and Youth

* Brenda Harris, New Community Development Group
10191 Pasadena
Ferndale, Michigan 48220 (198-0145)

Dawn Smith, Student
Oakland University
1131 Miller Road
Lake Orion, Michigan 48035 (693-1218)

12. Unemployed and Underemployed

Marie Hogan, Senior Aide Program
OLHSA
2303 Mapledale
Ferndale, Michigan 48220 (548-2239)

Lynn Kish, Secretary
Oakland County Head Start Policy Council
33925 Harlow
Farmington Hills, Michigan 48024 (478-7756)

13. Human Services

* Edward P. Revis, Executive Director
Oakland Livingston Human Service Agency
196 Oakland Avenue
Pontiac, Michigan 48058 (858-5150)

14. Environmental Concerns

Peggy Johnson, Director
Clinton River Watershed Council
8215 Hall Road
Utica, Michigan 48087 (729-1122)

15. Communications

John Riley
47 Illinois
Pontiac, Michigan 48053 (335-7943)

(*) indicates members of Executive Committee

course dependent on many variables including source supply, government regulation, and litigation proceedings. Once before, from June 1, 1975 to September 5, 1977, the utility followed an MPSC (Michigan Public Service Commission) gas allocation program whereby permits for use of gas were only allowed for new residential uses. Currently, permits are being issued for new commercial and industrial customers. The company is also involved in litigation on its Midland nuclear generating plant now under construction and proposed to go into operation in 1981. Despite the uncertainty of these variables, Consumers Power Co. expects to be able to provide gas service to existing customers, and add new customers for the foreseeable future.

Electrical Distribution System

The Detroit Edison Co. provides electrical service for all industrial, commercial, and residential customers in Oakland County. Detroit Edison's service area encompassed 7,600 square miles and 1,702,000 customers in 1977. Of the total 36.6 billion KWH (kilowatt hours) of electricity sold by the utility, 28.4% was used by residential customers; 48.9% by industrial customers 16.4% by commercial customers; and 6.3% by other users.

Fuels used in generating electricity by the utility include coal, oil, and gas with coal accounting for 82% of total fuels used; oil 14%; and gas 4%. A combination of fossil-fueled steam-electric plants; oil or gas-fired peaker units; and a pumped storage hydroelectric facility generate a total

course dependent on many variables including source supply, government regulation, and litigation proceedings. Once before, from June 1, 1975 to September 5, 1977, the utility followed an MPSC (Michigan Public Service Commission) gas allocation program whereby permits for use of gas were only allowed for new residential uses. Currently, permits are being issued for new commercial and industrial customers. The company is also involved in litigation on its Midland nuclear generating plant now under construction and proposed to go into operation in 1981. Despite the uncertainty of these variables, Consumers Power Co. expects to be able to provide gas service to existing customers, and add new customers for the foreseeable future.

Electrical Distribution System

The Detroit Edison Co. provides electrical service for all industrial, commercial, and residential customers in Oakland County. Detroit Edison's service area encompassed 7,600 square miles and 1,702,000 customers in 1977. Of the total 36.6 billion KWH (kilowatt hours) of electricity sold by the utility, 28.4% was used by residential customers; 48.9% by industrial customers 16.4% by commercial customers; and 6.3% by other users.

Fuels used in generating electricity by the utility include coal, oil, and gas with coal accounting for 82% of total fuels used; oil 14%; and gas 4%. A combination of fossil-fueled steam-electric plants; oil or gas-fired peaker units; and a pumped storage hydroelectric facility generate a total

capability of 8,868 MW (mega watts). (This includes purchase capability from Ontario Hydro, Toledo Edison and American Electric Power). The peak demand to date has been 7,381 MW. Total system generating capability is expected to be about 10,500 MW by 1982 assuming that the Greenwood No. 1 unit (oil) and Fermi No. 2 unit (nuclear) come on line in 1979 and 1980 respectively.

Again, given the volatile nature of the utility industry, Detroit Edison's 10 year forecast of demand predicts that the utility will be able to continue to service existing customers and add additional ones at least until 1987.

Solid Waste

Oakland County generates over 6,000 tons per day of solid waste. This figure includes residential, commercial, and industrial refuse; commercial and industrial solid special waste; and construction, demolition, bulky, and street sweeping waste. Residential, commercial, and industrial refuse excluding special wastes accounts for approximately 3,400 tons per day. By 1995 these figures are projected to run to 7,800 tons per day and 4,900 tons per day respectively.

Of the 61 communities in Oakland County, 43 are covered by the Oakland County Solid Waste Disposal System Master Plan; 14 by the SOCIA (Southeastern Oakland County Incinerator Authority) and 4 are serviced independently.

As recently as 1973 there were a total of 12 sanitary landfills licensed and operating in Oakland County. Today

due to environmental and licensure problems, as well as capacity reached, there are only 6. Four of these six are available to the communities in Oakland County SWDS; one is utilized by SOCIA; and one is owned and operated by the City of Pontiac. The Townships of Independence and Lyon, and the City of South Lyon, use landfills in Lapeer and Washtenaw Counties. In addition to its landfill (which handles only between 5 and 20% of generated capacity), SOCIA owns and operates a 600 TPD (ton per day) capacity refractory-lined incinerator.

Because of the recent closures of landfills, and the problems and controversy surrounding any possible new ones the County of Oakland under the direction of a Solid Waste Advisory Group (SWAG) appointed by the County Executive, has focused on a resource recovery/energy conversion program in addition to a sanitary landfill program to handle solid waste. A major conclusion of the SWAG report was that a water-walled incinerator of 600 - 1,200 TPD capacity be built on County Service Center properties. Such an incinerator would convert solid waste to steam for heating, and steam to electricity for sale to private utilities. Additional landfills are also being proposed to handle wastes which are inflammable.

These Oakland County SWDS and SOCIA programs are intended to handle solid waste generation in the county into the foreseeable future.

Agriculture

As is the case in urbanizing areas having land in the "fringe" area of metropolitan regions, Oakland County has experienced a steady decline in agricultural land uses and employment. Between 1969 and 1974 the number of active farms in the county declined from 863 to 609, and total farm acreage declined from 101,820 acres to 86,549 acres which is 15.6% of the land area of Oakland. The average size of an Oakland farm is 142 acres and its average value is \$199,123 - highest in the State. Of the 609 total farms 405 were fully owned by their operators, 142 were partially owned, and 62 were operated by tenants. The 62 tenancy farms comprise 10.2% of all farms in the county, which is double the statewide percentage. A high tenancy rate is characteristic of farming operations in large urban areas.

There were a total of 586 farm operators in Oakland in 1974, 250 of which had farming as their principal occupation, and 336 which had non-farming principal occupations. This again is a characteristic of farms in urban areas. The total value of all agricultural products sold in the County in 1974 was \$12,486,000.

60% of the farms in Oakland County in 1974 had farm sales in excess of \$2,500. Of these 367 farms, 307 were under individual or family ownership, 28 were controlled by partnerships, and 22 by corporations.

Following is a breakdown by SIC type of farm products for the 367 farms which had sales in excess of \$2,500 in 1974.

TABLE B

FARMS BY S.I.C. TYPE
OAKLAND COUNTY, 1974

<u>TYPE</u>	<u>NUMBER</u>	<u>% OF TOTAL</u>
Cash Grains	71	19.3%
Sugar crops, Potatoes, Hay, Peanuts	34	9.3
Vegetables, Melons	14	3.8
Fruits, Tree Nuts	11	3.0
Horticultural Specialities	65	17.7
General Farms (primarily crop)	13	3.5
Livestock (except dairy & Poultry)	62	16.9
Dairy	44	12.0
Poultry and Eggs	6	1.6
Animal Specialties	37	10.1
Farms not Classified	10	2.8
Total	367	100.0%

Source: 1974 Census of Agriculture - Michigan
U.S. Department of Commerce

Over 40% of Oakland farms are livestock oriented, and they represent the dominant type in the slowly declining agricultural sector.

Public Buildings

The stock of public facilities in Oakland County ranges from the delapidated to the historic to the conventional to the completely modern. Many of the rural townships have township halls which are extremely old or else are barely adequate for the expanding service needs of their respective communities. Until recently many townships had no central offices at all and Clerks and Treasurers kept township records and files in their homes. The need for centralized and ever higher levels of service forced these townships to acquire property and construct minimal facilities. Many of these facilities were marginally planned and are now in need of repair or expansion. This includes library, police, fire, and D.P.W. space needs as well.

The municipalities of Oakland, having had to provide higher levels of service years ago, usually have better physical plants than the rural townships. However, many of these are also in need of renovation, and in the case of rapidly growing communities, expansion space for all activities. A minority of communities have adequate and even superb office and facility space in which to serve their citizens.

In addition to raw space needs, or basic facility renovation, communities are also attempting to provide more specialized improvements such as senior citizen centers, library facilities, and municipal center beautification projects. Such projects are an attempt to upgrade the level of service outreach, and bring the citizenry into more positive contact with their government.

Cultural and Educational Assets

With its abundant natural amenities, educated white collar work force, and financial assets, Oakland is a major cultural focus of Southeast Michigan along with the Detroit New Center Area, and Ann Arbor.

Oakland County is the home of ten institutions of higher learning, on 15 separate campuses, matriculating nearly 40,000 students of all ages and ambitions, and supporting a multitude of academic related activities (see Table C). These institutions have a major influence throughout all of Southeast Michigan.

The Cranbrook Educational Community is an educational and cultural center comprised of the Cranbrook Academy of Art, Cranbrook Institute of Science, Cranbrook Schools (3 high-school level institutions) and Christ Church Cranbrook, all located on 300 acres in Bloomfield Hills. The museum, science center, and gardens attract visitors from all over the U.S. The Academy of Art has a worldwide reputation and has been the residence of such renowned persons as architects Eliel and Eero Saarinen, and sculptors Carl Milles and Marshall Fredericks.

The campus of Oakland University near Rochester is the location of the Meadowbrook Concert Series and Meadowbrook Theatre. The Detroit Symphony Orchestra performs a summer-long concert series at the open pavillion with a corresponding program of top classical, jazz, and pop artists. The Meadowbrook Theatre has a year long series of professional plays and musicals. Meadowbrook Hall, built in the 1920's, is the 100 room mansion of the late Alfred G. Wilson's, and is now open for public tours as well as special social and cultural events.

TABLE CINSTITUTIONS OF HIGHER LEARNING
IN OAKLAND COUNTY - 1978

INSTITUTION	LOCATION	OWNER- SHIP	TYPE OF PROGRAM	TOTAL FALL ENROLLMENT		
				1968	1973	1978
Colleges:						
Oakland University	Rochester	Public	4U & G	5,094	9,638	11 22
Oakland Community College						
Auburn Hills	Pontiac	Public	2U	2,042	4,827	6,19
Highland Lakes	Union Lake	Public	2U	1,782	2,416	3,11
Orchard Ridge	Farmington	Public	2U	4,149	5,960	6,90
Southeast	Royal Oak	Public	2U	0	2,197	3,78
Duns Scotus College	Southfield	Private	Seminary	75	68	3
Michigan Christian J.C.	Rochester	Private	2U	179	180	32
Midwestern Baptist College	Pontiac	Private	4U & Sem.	254	425	42
St. Marys College	Orchard Lake	Private	4U & Sem.	159	420	42
Technical Institutes:						
Cranbrook Academy of Art	Bloomfield Hills	Private	4U & G	115	148	14
Laurence Inst. of Technology	Southfield	Private	2U & 4U	4,556	4,022	4,86
Business Institutes:						
Pontiac Business Institute	Pontiac	Private	3B	311	260	1,10
Walsh College	Troy	Private	2B & G	0	543	1,39
				18,716	31,104	39.91

The Detroit Zoo, located in Huntington Woods, is one of the top ten zoos in the U.S. On its 130 acres are housed 1,541 mammals, birds, reptiles, and amphibians, representing 351 separate species. Annual attendance is always in excess of 1,500,000 persons. The zoo is considered one of the top three regional tourist attractions.

Complementing these larger cultural and educational institutions, is a plethora of smaller and localized educational/cultural activities. A small sampling would include: The Oakland County Cultural Council; Birmingham-Bloomfield Arts Association; Town Hall Lecture Series; numerous community theater and music groups; and over 70 art galleries, 100 antique shops, 80 book stores, and 60 public libraries (see Table D) located throughout Oakland County.

Medical Facilities

Because of its growing population and centralized location in the region, Oakland County has an excellent network of medical facilities, complimentary to the huge medical complexes at the Detroit Medical Center and at the University of Michigan in Ann Arbor. 3636 beds are available for acute care, 4228 beds for long term care, and 1134 beds for mental health care. The most sophisticated diagnostic and treatment equipment is available at the larger acute care hospitals, and specialty excellence has been attained in such areas as cancer treatment, coronary care, plastic surgery, and neonatology. Table E lists the licensed medical facilities in the county.

TABLE D

LIBRARIES IN OAKLAND COUNTY - 1978

NAME	LOCATION	TYPE	VOLUMES
Berkley Public	Berkley	P	46,790
Baldwin Public	Birmingham	P	126,230
Bloomfield Twp. Public	Bloomfield Hills	P	113,785
Independence Twp. Public	Clarkston	P	18,097
Blair Memorial	Clawson	P	37,075
Springfield Township	Davisburg	P	n.a.
Farmington Community	Farmington Hills	P	100,000
Ferndale Public	Ferndale	P	67,862
Royal Oak Township	Ferndale	P	n.a.
Franklin Public	Franklin	P	11,342
Hazel Park Memorial	Hazel Park	P	43,848
Highland Township	Highland	P	21,921
Holly Township	Holly	P	13,909
Huntington Woods Public	Huntington Woods	P	32,543
Orion Township Public	Lake Orion	P	43,571
Madison Heights Public	Madison Heights	P	50,150
Milford Township	Milford	P	22,000
Lyon Township	New Hudson	P	10,401
Novi Public	Novi	P	15,958
Oak Park Public	Oak Park	P	70,000
Brandon Township	Ortonville	P	11,549
Oxford Public	Oxford	P	34,725
Pontiac Public	Pontiac	P	121,573
Waterford Township	Pontiac	P	47,000
Avon Township	Rochester	P	85,400
Royal Oak Public	Royal Oak	P	121,622
South Lyon Public	South Lyon	P	20,146
Southfield Public	Southfield	P	115,630
Troy Public	Troy	P	110,231
Walled Lake City	Walled Lake	P	16,556
West Bloomfield Township	West Bloomfield	P	50,455
White Lake Township	White Lake	P	n.a.
Wixom Public	Wixom	P	8,200
O.C.C. - Auburn Hills	Auburn Heights	J	30,900
Cranbrook Academy of Art	Bloomfield Hills	C	19,000
Cranbrook Institute of Science	Bloomfield Hills	C	14,900
Botsford General Hospital Zieger Library	Farmington	M	1,368
Detroit Bible College	Farmington Hills	C	26,354
O.C.C. - Orchard Ridge			
Martin Luther King L.R.C.	Farmington Hills	J	70,000
St. Mary's College	Orchard Lake	C	44,699

TABLE D....continued

NAME	LOCATION	TYPE	VOLUMES
Mercy School of Nursing - Pontiac Unit	Pontiac	M	2,500
Midwestern Baptist College	Pontiac	C	15,000
Oakland County Law Library	Pontiac	L	39,000
Oakland County Governmental Reference Library	Pontiac	P	9,939
Pontiac General Hospital	Pontiac	M	n.a.
Pontiac Osteopathic Hospital	Pontiac	M	879
St. Joseph Mercy Hospital	Pontiac	M	2,950
U.Of M. McMath - Hulbert Observatory Library	Pontiac	C	2,000
Michigan Christian Jr. College	Rochester	J	20,000
Oakland University - Kresge	Rochester	C	227,720
William Beaumont Hospital	Royal Oak	M	3,000
O.C.C. - Southeast Campus	Royal Oak	J	12,500
Duns Scotus College	Southfield	C	37,000
Lawrence Institute of Technology	Southfield	C	36,583
Providence Hospital	Southfield	M	4,350
W.S.U. - Southfield Extension	Southfield	C	13,000
Walsh College	Troy	C	11,000
O.C.C. - Highland Lakes	Union Lake	J	26,000
			<hr/> 2,259,211

- P - Public Libraries
- M - Medical Libraries
- L - Law Libraries
- C - College & University Libraries
- J - Jr. College Libraries

Source: American Library Directory - 1978

TABLE E

SUMMARY OF HOSPITAL & MEDICAL FACILITIES
LOCATED IN OAKLAND COUNTY - 1978

<u>CATEGORY/FACILITY NAME</u>	<u>LOCATION</u>	<u>CONTROL</u>	<u>LICENSED CAPACITY</u>
<u>Acute Care</u>			
William Beaumont	Royal Oak	NP/O	915
William Beaumont - Troy	Troy	NP/O	200
Botsford Gen. Osteopathic	Farmington	NP/O	308
Crittenton	Rochester	NP/O	276
Madison Community	Madison Hts.	NP/O	37
Martin Place Osteo.-East	Madison Hts.	NP/O	264
Pontiac General	Pontiac	City	385
Pontiac Osteopathic	Pontiac	NP/O	314
Providence	Southfield	NP/O	406
Straith Memorial	Southfield	NP/O	45
St. Joseph Mercy	Pontiac	NP/City	486
			<hr/>
			3,636
<u>Long Term Care</u>			
Avondale Convalescent Home	Rochester	Prop.	124
Alexander Conval. Home	Royal Oak	Prop.	63
Bedford Villa Nursing Home	Southfield	Prop.	60
Beverly Manor Conval. Home	Pontiac	Prop.	235
Beverly Manor Conval. Center	Novi	Prop.	144
Bortz Green Lake Resthaven	West Bloomfield	Prop.	86
Brae Burn	Bloomfield Hills	Prop.	115
Bloomfield Hills Nurs. Center	Bloomfield Hills	Prop.	365
Cambridge Nur. Center - East	Madison Hts.	Prop.	160
Cambridge Nur. Center - North	Clawson	Prop.	120
Convalescent Center	Royal Oak	Prop.	13
Evergreen Conval. Home	Pontiac	Prop.	34
Farmington Nur. Home	Farmington	Prop.	179
Franklin Manor	Southfield	Prop.	107
Georgian Bloomfield	Bloomfield Twp.	Prop.	274
Glen Acres Nur. Home No. 2	Pontiac	Prop.	106
Grovecrest Conval. Center	Pontiac	Prop.	57
Heritage of Beverly Hills	Birmingham	Prop.	102
Hilton Conval. Home	Ferndale	Prop.	78
Holmes Conval. Home	Royal Oak	Prop.	80
Jewish Home (Prentis Manor)	Southfield	NP/O	98
Lahser Hills	Southfield	Prop.	161
Lakeview Nur. Home	Pontiac	Prop.	33
Lourdes	Pontiac	NP/City	108
Manor Haven Nur. Home	Royal Oak	Prop.	24
Medicenter	Southfield	Prop.	200
Mt. Vernon Nur. Home	Southfield	Prop.	228
Oak Hill Nur. Home	Farmington	Prop.	153
Orchard Lake Resthaven	Union Lake	Prop.	40
Ortonville Nur. Home	Ortonville	Prop.	51
Pine Knob	Clarkston	Prop.	27
Pontiac Lake Nur. Home	Pontiac	Prop.	18

TABLE E

SUMMARY OF HOSPITAL & MEDICAL FACILITIES
LOCATED IN OAKLAND COUNTY - 1978

<u>CATEGORY/FACILITY NAME</u>	<u>LOCATION</u>	<u>CONTROL</u>	<u>LICENSED CAPACITY</u>
<u>Acute Care</u>			
William Beaumont	Royal Oak	NP/O	915
William Beaumont - Troy	Troy	NP/O	200
Botsford Gen. Osteopathic	Farmington	NP/O	308
Crittenton	Rochester	NP/O	276
Madison Community	Madison Hts.	NP/O	37
Martin Place Osteo.-East	Madison Hts.	NP/O	264
Pontiac General	Pontiac	City	385
Pontiac Osteopathic	Pontiac	NP/O	314
Providence	Southfield	NP/O	406
Straith Memorial	Southfield	NP/O	45
St. Joseph Mercy	Pontiac	NP/City	486
			<hr/>
			3,636
<u>Long Term Care</u>			
Avondale Convalescent Home	Rochester	Prop.	124
Alexander Conval. Home	Royal Oak	Prop.	63
Bedford Villa Nursing Home	Southfield	Prop.	60
Beverly Manor Conval. Home	Pontiac	Prop.	235
Beverly Manor Conval. Center	Novi	Prop.	144
Bortz Green Lake Resthaven	West Bloomfield	Prop.	86
Brae Burn	Bloomfield Hills	Prop.	115
Bloomfield Hills Nurs. Center	Bloomfield Hills	Prop.	365
Cambridge Nur. Center - East	Madison Hts.	Prop.	160
Cambridge Nur. Center - North	Clawson	Prop.	120
Convalescent Center	Royal Oak	Prop.	13
Evergreen Conval. Home	Pontiac	Prop.	34
Farmington Nur. Home	Farmington	Prop.	179
Franklin Manor	Southfield	Prop.	107
Georgian Bloomfield	Bloomfield Twp.	Prop.	274
Glen Acres Nur. Home No. 2	Pontiac	Prop.	106
Grovecrest Conval. Center	Pontiac	Prop.	57
Heritage of Beverly Hills	Birmingham	Prop.	102
Hilton Conval. Home	Ferndale	Prop.	78
Holmes Conval. Home	Royal Oak	Prop.	80
Jewish Home (Prentis Manor)	Southfield	NP/O	98
Lahser Hills	Southfield	Prop.	161
Lakeview Nur. Home	Pontiac	Prop.	33
Lourdes	Pontiac	NP/City	108
Manor Haven Nur. Home	Royal Oak	Prop.	24
Medicenter	Southfield	Prop.	200
Mt. Vernon Nur. Home	Southfield	Prop.	228
Oak Hill Nur. Home	Farmington	Prop.	153
Orchard Lake Resthaven	Union Lake	Prop.	40
Ortonville Nur. Home	Ortonville	Prop.	51
Pine Knob	Clarkston	Prop.	27
Pontiac Lake Nur. Home	Pontiac	Prop.	18

TABLE E....continued

CATEGORY/FACILITY NAME	LOCATION	CONTROL	LICENSED CAPACITY
St. Annes Mead	Southfield	NP/O	20
Sherwood Hall Conval. Center	Royal Oak	Prop.	153
West Hickory Haven	Milford	Prop.	101
West Winds Nur. Home	Union Lake	Prop.	24
Whitehall Conval. Home	Farmington	Prop.	32
Whitehall Conval. Home	Novi	Prop.	87
Williamsburg Conval. Center	Farmington	Prop.	112
Woodside Medical	Pontiac	Prop.	56

4,228

Rehabilitation Facilities

William Beaumont	Royal Oak	Prop.	30
Oakland County Hospital	Pontiac	County	120
St. Josephy Mercy	Pontiac	NP/City	25
			<hr/> 175

Mental Facilities

William Beaumont	Royal Oak	Prop.	28
Clinton Valley Center	Pontiac	State	921
Kingswood	Ferndale	NP/O	100
Pontiac General	Pontiac	City	24
Providence	Southfield	NP/O	28
St. Joseph Mercy	Pontiac	NP/City	33
			<hr/> 1,134

1,134

NP - Non-Profit Assoc.
 Prop.- Proprietary
 O - Other

Source: Michigan Dept. of Public Health: Michigan State Plan for Hospital & Medical Facilities Construction 1976-77.

Public Accommodations

Oakland County has a total of 64 hotels and motels with 5,594 sleeping rooms available to tourists or convention - goers in the Detroit region. The majority of rooms are located in Royal Oak, Southfield, and Troy which have excellent Freeway access via I-75 and I-96. Tourist and especially convention traffic within Oakland has increased to the point where occupancy rates of over 90% are common during the work week, and Oakland's facilities are only able to handle a portion of the Detroit "spill-over" traffic.

Recreation and Tourism

Because of the uniqueness and diversity of its geology, topography, hydrology, vegetation, and animal life, as well as its centralized location and excellent transport access, Oakland County has been the recreational "playground" of the region since the turn of the century. Over 54,000 acres or 10% of its total land area is devoted to parkland or recreational use. Ten state (DNR), five regional (HCMA), seven county (OCPRC) and numerous local parks are located in Oakland County, along with a multitude of private recreational facilities.

The State Department of Natural Resources (DNR) owns approximately 25,500 acres of land generally in large land units in the western and northwestern areas of the county. The smallest of the DNR's ten parks is the 136 acre Dodge Park No. 4, and the largest is the 6,942 acre Holly Recreation Area. There are a total of 829 campsites, 45 trails, 2,687 picnic tables, and 5,014 parking spaces at D.N.R. Facilities in Oakland, which can accommodate approximately 30,000 people at one time.

The Huron Clinton Metropolitan Authority (HCMA) is the regional parks and recreation agency, and its five parks in Oakland comprise a total of 6,500 acres. The smallest HCMA facility is the 705 acre Sidney Walton Park in Commerce Township, and the largest is the 3,881 acre Kensington Metropark which straddles the Oakland/Livingston County line in Milford and Brighton (Livingston County) Townships. HCMA parks are oriented to active day-use in contrast to DNR parks which are mostly passive use over longer time periods.

The seven parks owned and operated by the Oakland County Parks and Recreation Commission (OCPRC) comprise 2,400 acres and are distributed throughout the county. OCPRC facilities compliment the regional and state facilities and as such provide virtually the entire range of recreational pursuits. In addition to "typical" park land and facilities, the OCPRC operates: 3 golf courses; a conference center; 2 pools (one a wave-action type); a youth center (with 2 arenas and stands); an activity center; and a mobile recreation program which includes a fashion-mobile, movie and nature mobile; swimmobile; 2 skate mobiles; 2 puppet mobiles; a show-mobile, and a sports-mobile. The mobiles can be obtained at a nominal charge by any local group or civic organization. A 0.25 mil county-wide tax levy and facility fees provide the OCRC with its financial base.

Most local municipalities and school districts have recreational land which is oriented to extremely-intensive, short term useage. There is also an enormous variety of quasi-public and private recreational facilities throughout Oakland. A partial

list includes:

- Michigan Nature Association properties (150A)
- Drayton Plains Nature Center (110A)
- Church and Religious Camps (1,400A)
- Youth Camps (Scouts, Campfire Girls, YMCA, YWCA, and 4-H) (2,000A)
- 38 public and 20 private golf courses
- hunting, shooting, archery, tennis, roadracing, flying, ATV, skiing, etc. clubs
- 3 major ski areas (Pine Knob, Mt. Holly, Alpine Valley)
- Hazel Park Raceway (horses)
- Pine Knob Amphitheater (concerts, shows)
- Waterford Race Course (cars)
- Pontiac Silverdome (80,000 seats - the world's largest air-supported covered stadium - and home of the Detroit Lions (pro-football); Detroit Pistons (pro-basketball); and Detroit Express (pro-soccer)

Together with these enormous park and recreation resources are 20 non-motel/hotel meeting facilities which can accommodate from 10 to 2,000 persons at one time for banquets, seminars, conferences, educational programs, private parties, social events, special events, exhibits, shows, or public gatherings. The Oakland County Tourist and Convention Bureau provides complete informational and staff services to any group or agency which wishes to utilize Oakland's tourist facilities.

VI. HUMAN RESOURCES

Population Characteristics

Although the Detroit Region (seven counties of Wayne, Oakland, Macomb, Washtenaw, Livingston, St. Clair, and Monroe) has held approximately the same percentage of Michigan's total population over the last thirty years, Oakland County has almost doubled its share of the total regional population. The increase in county population from 1960 to 1965 was due 42.4% to migration and 57.6% to natural increase. Population change from 1965 to 1970 was due 55.8% to migration and 44.2% to natural increase. From 1970 to 1977, the county's population increased by 76,300 persons or 8.4%. This increase was a little more than two-thirds due to natural increase, and somewhat less than one-third to migration. Thus, even though the birth-rate declined significantly between 1970 and 1977, it accounted for ever larger shares of Oakland's population change, and migration for ever less. It is apparent that intra-county migration as regards Oakland and Southeast Michigan.

Following in Table F is a comparison of Oakland's, the region's and the state's populations.

TABLE F

COMPARATIVE HISTORICAL POPULATIONS
STATE, REGION, and COUNTY 1950-1977

<u>/PERCENT OF AREA/NEXT LEVEL</u>	1950	1960	1970	1977
Michigan	6,371,766	7,823,194	8,875,083	9,129,000
7 County Region	3,344,793	4,181,354	4,731,655	4,685,000
Oakland	396,001	690,259	907,871	984,200
Region/Michigan	52.5%	53.4%	53.3%	51.3%
Oakland/Region	11.8%	16.5%	19.2%	21.0%
Oakland/Michigan	6.2%	8.8%	10.2%	10.8%

Source: 1950, 1960, 1970 Censuses of Population & Housing
Federal-State Cooperative Program for Population
Estimates, U.S. Dept. of Commerce, Bureau of the
Census

The population patterns that have characterized the Southeast Michigan region over the last twenty years are expected to continue over the next twenty years to the end of the century. However, they will not occur at the rate which was experienced from 1960-1977. This means that the region's portion of the State will be relatively stable (actually slightly declining) while Oakland gains a larger share of the region's total population. Oakland however is expected to grow at the same rate as the State. Table G documents the projected changes in county, regional, and state populations as developed by the Michigan Dept. of Management and Budget.

TABLE G

COMPARATIVE POPULATION PROJECTIONS
STATE, REGION, and COUNTY 1980-2000

<u>/PERCENT OF</u> <u>AREA/NEXT LEVEL</u>	<u>1980</u>	<u>1985</u>	<u>1990</u>	<u>1995</u>	<u>2000</u>
Michigan	9,358,000	9,703,000	10,046,000	10,325,000	10,505,000
7 County Region	4,796,000	4,901,000	5,002,000	5,077,000	5,103,000
Oakland	1,006,100	1,047,300	1,085,400	1,115,100	1,130,700
Region/Michigan	51.3%	50.5%	49.8%	49.2%	48.6%
Oakland/Region	21.0%	21.4%	21.7%	22.0%	22.2%
Oakland/Michigan	10.8%	10.8%	10.8%	10.8%	10.8%

Source: Population Projections for Michigan to the Year 2000
Michigan Dept. of Management and Budget - Information
Systems Division

The composition of Oakland's population has reflected that of many American suburbs after World War II. That is, a large increase in pre-school and school age populations until the early sixties and then a steady decline to the present. The transitional age population cohort (15-24) steadily decreased until the early sixties, and then has grown rapidly to the present, stocked with "war-babies". The large early labor force group has diminished continuously in percent of total population, while the late labor force group (45-64) has

increased very moderately. As is characteristic of a county whose median age has increased from 23.5 years in 1960 to almost 32 years currently, Oakland's senior citizen population has been constantly increasing since World War II. Table H shows the percentage of population cohorts in Oakland from 1940 to the present and projected to the year 2000. The county's median age in the year 2000 is projected to be 37.9, almost 3 years older than the statewide median age.

TABLE H
HISTORIC AND PROJECTED AGE COHORTS
PERCENT OF TOTAL COUNTY POPULATION

AGE COHORT/YEAR	1940	1950	1960	1970	1975	2000
Under 15	28.0	30.5	36.0	31.2	27.9	20.6
15-24	26.9	13.6	11.7	16.7	16.6	12.1
25-44	32.6	31.9	28.9	25.1	24.8	27.7
45-64	17.8	18.7	17.9	20.3	23.1	25.4
65 and over	4.7	5.3	5.5	6.7	7.6	14.2
Total	100.0	100.9	100.0	100.0	100.0	100.0

Source: 1940, 1950, 1960, 1970 Censuses of Population
Population Projections for Michigan to the Year 2000
Michigan Dept. of Management & Budget - Information
Systems Division

At the community level, local population change has varied widely over the past twenty years from slow decreases to explosive

increases. The County's constituent communities all had aggregate population increases until 1960. Between 1960 and 1970 however, southeast end communities such as Berkley, Ferndale, Hazel Park, Huntington Woods, and Royal Oak Township lost population. Between 1970 and 1977 more communities joined this declining group including Beverly Hills, Birmingham, Clawson, Franklin, Lake Orion, Madison Heights, Oak Park, Pleasant Ridge, Pontiac, Royal Oak and Sylvan Lake. A total of 19 communities, almost a third of all local units in the County, are estimated to have lost population between 1970-1977. Losses averaged 7.2% of local population, with absolute losses from individual communities of up to 8,000 persons (Royal Oak and Pontiac). Most of this local population decline was due to lower birthrates, smaller family sizes, and very low increases in aggregate housing stock. In only two cases (Hazel Park and Pleasant Ridge) have there been declines in actual housing stock between 1970 and 1977, and these were very small.

Historically, communities in the "Woodward Corridor" were populated first in Oakland County. These communities had access along Woodward Avenue and the inter-urban and rail lines that paralleled that major road. During the major growth period (1950-1970), eighteen communities increased their populations by over 10,000 persons. The five communities contributing most to this growth were Southfield (50,000 increase), Waterford Township (49,000 increase), Farmington Township (45,000), Royal Oak (39,000), and Bloomfield Township (39,000). Of the 18 largest growing communities between 1950 and 1970, half were in the corridor area, and half were in the "fringe area" rapidly developing because of

better east-west road access, the construction of Interstate 75, and the expansion of sewer and water systems. Between 1970 and the present, these "fringe" communities have become virtually entirely urbanized and the largest population gains have been registered by Troy (23,000 increase), Avon Township (10,000), West Bloomfield Township (9,000), and Novi (9,000). Table J presents population projections for Oakland's constituent local units from 1975 to 1990. Oakland's population has always been predominately white. Although there are a larger number of Black and Spanish speaking persons in Oakland today than ever before, the highest percentage of minority population was achieved in 1950 when 4.6% of the county's total population was non-white. In 1970, approximately one-quarter of the county's minority population was Spanish and three-quarters was Black. Table I details the absolute and percentage populations of the County's non-white population.

TABLE I
BLACK POPULATION - OAKLAND COUNTY
1940 - 1977

Year	Number	% of Total
1940	5,335	2.1
1950	18,388	4.6
1960	24,070	3.5
1970	28,439	3.1
*1977	31,978	3.3

*Estimate

Source: 1940-1970 Censuses General Social & Economic Characteristics, U.S. Dept. of Commerce

TABLE J

Oakland County Minor Civil Division Population Projections
to Year 1990

<u>Minor Civil Division</u>	<u>1970^a</u>	<u>1975^b</u>	<u>1980</u>	<u>1990</u>
Addison Township	2,431	3,235	3,734	5,216
Avon Township	24,513	30,564	36,228	50,438
Berkley	21,879	19,834	19,250	19,093
Beverly Hills	13,598	12,070	11,835	11,982
Bingham Farms	566	427	413	407
Birmingham	26,170	23,339	22,280	21,383
Bloomfield Hills	3,672	3,897	3,826	3,885
Bloomfield Township	42,788	40,363	39,719	40,502
Brandon Township	3,830	5,554	5,892	6,981
Clarkston	1,034	1,158	1,215	1,326
Clawson	17,617	16,526	16,257	15,794
Commerce Township	14,556	17,317	19,846	24,989
Farmington	10,329	11,101	10,980	10,743
Farmington Hills	48,694	54,124	56,476	59,699
Ferndale	30,850	27,941	27,503	25,878
Franklin	3,334	3,381	3,339	3,286
Groveland Township	2,570	3,142	3,661	4,664
Hazel Park	23,784	21,730	20,937	19,460
Highland Township	8,372	12,705	13,432	15,802
Holly	4,355	4,963	5,439	6,471
Holly Township	3,041	3,736	4,042	5,238
Huntington Woods	8,536	7,902	7,363	6,449
Independence Township	16,327	19,357	21,605	25,883
Keego Harbor	3,092	3,072	3,043	2,996

^aU.S. Bureau of the Census, 1970 Census of Population reflecting annexations since 1970 and corrections to 1970 Census counts.

^bU.S. Bureau of the Census, Current Population Reports, Series P25, No. 670, May 1977.

TABLE J....continued

<u>Minor Civil Division</u>	<u>1970^a</u>	<u>1975^b</u>	<u>1980</u>	<u>1990</u>
Lake Angelus	573	597	613	620
Lake Orion	2,921	3,342	3,661	4,722
Lathrup Village	4,676	5,060	4,949	4,985
Leonard	378	586	590	631
Lyon Township	4,500	6,479	7,039	10,172
Madison Heights	38,599	36,803	36,278	34,919
Milford	4,699	6,931	6,676	6,523
Milford Township	2,557	3,633	3,898	5,299
Northville	2,367	3,446	3,569	4,029
Novi (City and Township)	9,850	17,050	17,053	17,816
Oakland Township	4,793	6,158	7,483	10,419
Oak Park	36,762	33,860	31,595	28,104
Orchard Lake	1,487	1,681	1,687	1,710
Orion Township	14,189	16,326	18,126	20,818
Ortonville	983	1,417	1,439	1,537
Oxford	2,536	3,434	3,320	3,268
Oxford Township	5,953	8,096	8,697	11,214
Pleasant Ridge	3,989	3,636	3,499	3,257
Pontiac	85,279	76,027	74,421	75,097
Pontiac Township	13,219	15,101	16,238	19,384
Rochester	7,054	9,016	8,959	9,317
Rose Township	2,502	3,352	4,358	7,548
Royal Oak	86,238	79,191	78,114	74,760
Royal Oak Township	6,326	7,059	6,731	6,443
Southfield	69,298	75,978	77,661	78,701
South Lyon	2,675	4,080	4,326	5,119
Springfield Township	4,388	6,223	6,481	8,819
Sylvan Lake	2,219	1,908	1,750	1,200
Troy	39,419	55,169	63,771	91,709
Walled Lake	3,759	4,282	4,740	6,505
Waterford Township	59,123	59,888	58,848	57,850
West Bloomfield Township	28,563	35,431	41,172	51,106
White Lake Township	14,311	19,008	21,681	30,118
Wixom	2,010	4,107	4,697	6,466
Wolverine Lake	4,301	5,376	6,369	8,594
COUNTY TOTAL	907,871	966,625	998,751	1,097,345

Oakland County has the second largest black population in southeast Michigan. With a 27% Black population, Wayne County has by far the largest percentage in the region. Washtenaw has a 7.6% black population but its aggregate number (17,792) is considerably smaller than Oakland's. Michigan's percentage of black population is 11.2 which is approximately the national percentage.

The County's minority populace is concentrated in the City of Pontiac (32.5% minority group) and Royal Oak Township (67.0% minority group) and together these two communities contain 81% of the total county minority population. The Cities of Southfield, Oak Park, and Ferndale are experiencing an increase in minority populations as more middle-class Blacks are able to obtain the relatively better housing and educational amenities of Oakland County.

With regard to educational levels, Oakland has the highest median school years completed (12.4 yrs.) and largest percent of high school graduates (63.9%) in the 1970 three county SMSA. The three county area figures were 12.1 years and 52.1%. Pontiac has the poorest educational figures with 10.7 median years and 37.7% high school graduates, while Bloomfield Hills has the best with 15.1 median years and 91.3% high school graduates. The 1978 County Demographic Profile Survey showed that 74% of adult residents had graduated from high school, 23% had graduated from college, and another 12% had done post-graduate work. Only 17% of adult residents had not graduated from high school, and the other 9% had either gone to vocational or technical schools.

ECONOMIC BASE ANALYSIS

The analysis in this section is designed to compliment and add to the discussions in the Area and its Economy (pp. 23-42), and in the Human Resources (pp. 124-136) chapters that pertain specifically to employment analysis. This analysis will link the geographic and historical analyses into a comparative sectoral summary of the County's economic base.

Agricultural Services, Forestry, Fisheries

Agricultural services, forestry, and fisheries comprise the second smallest sector of Oakland's economy. Although agricultural employment has increased during the last twenty years, it has remained stable as a percent of total employment. The current percentage of agricultural employment in the county is approximately the same as the State's, but two and one-half times the regional percentage. Table K shows agricultural employment data for the State and County.

TABLE K

AGRICULTURAL EMPLOYMENT & PAYROLL
MICHIGAN and OAKLAND COUNTY 1956-1976

<u>EMPLOYMENT TOTALS</u>	<u>1956</u>	<u>1965</u>	<u>1970</u>	<u>1976</u>
Michigan	1,561	3,332	4,225	4,898
Oakland County	142	366	562	783
<u>EMPLOYMENT PERCENTAGES</u>				
Michigan	0.1%	0.2%	0.2%	0.2%
Oakland County	0.1%	0.2%	0.2%	0.2%
<u>1Q PAYROLL</u> <u>(x \$1,000)</u>				
Michigan	1,786	3,208	4,957	9,309
Oakland County	91	357	667	1,451

Source: County Business Patterns (Michigan 1956-1976)

As discussed in the section on "Agriculture", Oakland County lost 15,271 farm acres between 1969 and 1974 but the value of all agricultural products sold rose from \$8,852,000 to \$12,486,000. The best agricultural land in the County (in the southeast quadrant) was taken out of production years ago, and continued transformation of farmland to urban uses will result in declining farm employment although not necessarily in sales.

Mining

Although the County is a major producer of sand and gravel products, mining remains the smallest employment sector of Oakland with 348 employees in 1976, about 0.1% of total employment. The number of mining establishments has increased from 20 to 34 in the last twenty years, and quarterly payrolls have increased 287%, from \$316,000 to \$1,222,000.

TABLE L

MINING EMPLOYMENT & PAYROLL
MICHIGAN and OAKLAND COUNTY
1956-1976

<u>EMPLOYMENT TOTALS</u>	1956	1965	1970	1976
Michigan	16,031	12,813	10,512	12,624
Oakland County	274	249	381	348
<u>EMPLOYMENT PERCENTAGES</u>				
Michigan	0.8%	0.6%	0.4%	0.5%
Oakland County	0.2%	0.1%	0.2%	0.1%
<u>1Q PAYROLL</u> <u>(x \$1,000)</u>				
Michigan	20,537	20,703	21,540	45,732
Oakland County	316	373	739	1,222

Source: County Business Patterns, (Michigan 1956-1976)

Mining employment in the State as well as the County has been relatively stable since 1965, and this trend is projected to continue until at least 1985.

Contract Construction

The construction industry has grown at approximately the same rate as overall employment during the last twenty years. The increase in construction employment between 1965 and 1970 was 53.2%, and between 1970 and 1976 it was 34.5%. However, its share of total employment has fluctuated between 5.3% and 5.9%. This is a volatile industry with many seasonal as well as business cycle variations. Year to year changes in construction employment have been as high as 17%. It, along with manufacturing is considered a leading indicator of overall economic activity. A decline in residential construction presaged the 1974-75 recession, and since that time it has led the recovery. Construction employment is expected to reach 28,593 in 1990 which will be 6.2% of total county employment.

TABLE M

CONTRACT CONSTRUCTION EMPLOYMENT & PAYROLL
MICHIGAN and OAKLAND COUNTY 1956-1976

<u>EMPLOYMENT TOTALS</u>	1956	1965	1970	1976
Michigan	93,168	93,278	107,504	94,625
Oakland County	6,915	9,104	13,943	18,755
<u>EMPLOYMENT PERCENTAGES</u>				
Michigan	4.6%	4.3%	4.3%	3.6%
Oakland County	5.9%	5.3%	5.7%	5.9%
<u>1QPAYROLL (x \$1,000)</u>				
Michigan	116,855	151,172	261,036	316,467
Oakland County	8,549	14,929	37,742	69,815

Source: County Business Patterns. (Michigan 1956-1976)

Construction employment in the State in 1985 is expected to be 140,000, up 11.9% from 1974 figures. Thus the overall rate of increase in this sector is projected to be about 6% lower than the increase in total state employment of 17.8%

Manufacturing

Manufacturing is the primary export industry in Oakland, the Region, and Michigan. Currently, 28.6% of Oakland's, 39.4% of the Region's, and 40.0% of the State's employment is in the manufacturing sector. Although manufacturing employment has decreased both in absolute numbers as well as in percent of total employment over the last twenty years, it still is by far the most significant sector in terms of employment, earnings, payroll, location quotient, multiplier impact, and export of goods. However, as one examines increasingly smaller geographic units of analysis (i.e. State to Region to County), the aggregate significance of the manufacturing sector diminishes. This is even more so when the sector is examined over time.

From 1956 to 1976, Michigan lost 86,639 manufacturing jobs, but the southeast Michigan region lost 91,418 manufacturing jobs. The drop in manufacturing percentage of total jobs between 1956 and 1976 was the same for both the region and state - about 15%. The conclusion here is that manufacturing job losses in Michigan over the last twenty years have been concentrated in the Detroit area.

Although the region was declining in numbers of manufacturing jobs, Oakland was increasing by 28,259 from 1956 to 1976. However, this growth in absolute numbers actually resulted in a percentage

decline of manufacturing as compared to total jobs (from 53.5% to 28.6%). This clearly was due to overall rapid expansion of the County's economy during those years especially in the retail trade and services sectors whose combined increase of 111,549 accounted for well over half of all new jobs added. Nevertheless, the addition of 28,259 manufacturing sector jobs was the third highest absolute increase of Oakland's nine total sectors.

Table N documents the relationship of manufacturing jobs in a historical and geographic context.

TABLE N
 MANUFACTURING EMPLOYMENT
 MICHIGAN, DETROIT REGION, OAKLAND COUNTY
 1956-1976

<u>EMPLOYMENT TOTALS</u>	1956	1965	1970	1976
Michigan	1,124,200	1,085,941	1,103,816	1,037,561
Detroit Region	669,225	623,718	618,316	577,807
Oakland County	116,267	173,134	242,675	316,047
 <u>EMPLOYMENT PERCENTAGES</u>				
Michigan	54.9%	49.5%	44.2%	40.0%
Detroit Region	55.3%	49.0%	43.1%	39.4%
Oakland County	53.5%	47.4%	41.0%	28.6%

Source: County Business Patterns. (Michigan 1956-1976)

The number of manufacturing establishments both in the State and Region has increased only slightly over the last 20 years (about 12% for each). Oakland's manufacturing establishments increased by 88.8% during this same period. As is the case for all three geographic units, roughly two-thirds of all manufacturing establishments have less than 20 workers. Oakland has a smaller percentage (0.8%) of very large establishments (over 500 workers),

than does either the State (2.1%) or Region (2.0%) (see Table O).

TABLE O
MANUFACTURING ESTABLISHMENTS BY SIZE
MICHIGAN, DETROIT REGION, OAKLAND COUNTY

ESTABLISHMENTS	1956	1965	1970	1976
Michigan	12,355	13,605	13,587	13,837
Detroit Region	6,631	7,421	7,457	7,420
Oakland	1,003	1,327	1,571	1,894

SIZE GROUP	MICHIGAN (1976 Estabs.)	DETROIT REGION (1976 Estabs.)	OAKLAND CO. (1976 Estabs.)
0 - 19 employees	9,020	4,888	1,258
10 - 49	2,407	1,408	378
50 - 99	1,076	533	149
100 - 249	768	320	79
250 - 499	286	116	14
500 - 999	133	62	9
1,000 or more	147	93	7
	13,837	7,420	1,894

Source: County Business Patterns. (Michigan 1956-1976)

TABLE P
MANUFACTURING PAYROLLS
MICHIGAN, OAKLAND COUNTY
1956-1976

1Q PAYROLL (x \$1,000)	1956	1965	1970	1976
Michigan	1,474,264	1,984,713	2,622,370	3,963,881
Oakland County	87,531	156,612	238,352	356,200

Source: County Business Patterns, (Michigan 1956-1976)

In 1956, 63.1% of Michigan's total employment payroll was generated by manufacturing industries, this dropped to 52.4% in 1976. In 1956 in Oakland County, 62.8% of total non-public payroll was generated by manufacturing industries, and by 1976 this had dropped to 38.2%. The slow percentage increase in manufacturing jobs over the last twenty years is reflected by this decrease in payroll shares.

The cyclical nature of the Detroit Region's manufacturing sector can be seen by examining value added by manufacture data over time. Strikes, demand reductions, and overall economic climate have an impact on this sector. (see Table Q).

Oakland's manufacturing financial statistics show a steady growth, but evidence of cyclical nature is diminishing somewhat as the county's economy relies less heavily on manufacturing and more on secondary and tertiary sectors. In 1976 in Oakland: total manufacturing production wages were 887.9 million dollars; value added was 2.775 billion dollars; cost of materials was 4.630 billion dollars; value of shipments was 7.317 billion dollars; new capital expenditures were 293.4 million dollars; and year-end inventories were 153.7 million dollars.

TABLE Q

VALUE ADDED BY MANUFACTURE
DETROIT SMSA 1958-1976

YEAR	VALUE ADDED (millions of Dollars)	PERCENT CHANGE
1958	4,312.4	--
1960	5,663.6	31.3
1962	5,982.9	5.6
1964	7,429.3	24.2
1966	9,125.5	22.8
1968	9,630.0	5.5
1970	8,673.1	-9.9
1972	11,792.2	36.0
1974	13,217.8	12.1
1976	15,427.9	16.7

Source: 1972 Census of Manufacturers. U.S. Dept. of Commerce
Annual Survey of Manufacturers - 1976. U.S. Dept.
of Commerce

Methodological Note: Prior to 1972 the Detroit SMSA was defined as the 3 county area of Wayne, Oakland, and Macomb. After 1972, Livingston, Lapeer, and St. Clair counties were added to form the current 6 county SMSA. There is less than a 5% differential in values when either the old or new definitions are used after 1972.

Within the manufacturing sector in Oakland, the transportation equipment manufacturing group is by far the most significant with 37.3% of all manufacturing employment, and 42.7% of all manufacturing payroll. In contrast, there are only 79 transportation equipment

manufacturing establishments, 4.2% of total manufacturing establishments. Clearly this group contains the largest size establishments (4 out of the 7 manufacturing establishments employing over 1,000 persons). The auto-related machinery and fabricated metal groups add another 27,537 employees to comprise along with TEM over two-thirds of Oakland's manufacturing employment. (see Table R).

TABLE R

DETAILED INDUSTRY GROUPS, ESTABLISHMENTS,
EMPLOYMENT and PAYROLLS - OAKLAND COUNTY
1976

SIC CODE	MANUFACTURING INDUSTRY GROUP	ESTABLISHMENTS	EMPLOYEES	1Q PAYROLL (x \$1,000)
20	Food & Kindred	30	858	2,889
23	Apparel & Other Textile	15	188	344
24	Lumber and Wood	41	628	1,641
25	Furniture & Fixtures	20	246	657
26	Paper & Allied	13	754	2,266
27	Printing & Publishing	138	1,986	6,850
28	Chemicals & Allied	50	n.a.	n.a.
29	Petroleum & Coal	9	116	426
30	Rubber & Misc. Plastics	86	2,905	6,360
32	Stone, Clay, & Glass	75	1,335	3,704
33	Primary Metal Industries	51	2,121	6,984
34	Fabricated Metal	313	10,221	31,217
35	Machinery expt. Electrical	653	17,316	66,946
36	Electrical & Electronic Equipment	107	3,143	9,402

TABLE R...continued

SIC CODE	MANUFACTURING INDUSTRY GROUP	ESTABLISHMENTS	1Q PAYROLL	
			EMPLOYEES	(x \$1,000)
37	Transportation Equip.	79	33,771	152,186
38	Instruments & Related	43	958	2,959
39	Miscellaneous Manuf.	67	1,277	3,702
TOTAL:		1,894	90,485	356,200

Source: County Business Patterns. (Michigan 1976)

Transportation and Public Utilities

The transportation and public utilities (TPU) sector of Oakland's economy comprises the third smallest industry ahead of agricultural services and mining. Total jobs in the TPU industry have fluctuated over the last twenty years from a low of 4,263 in 1956, to a high of 10,396 in 1970. Because part of this industry is quasi-public, governmental regulations have a disproportionately larger impact on employment levels.

TABLE S

TRANSPORTATION AND PUBLIC UTILITIES EMPLOYMENT
AND PAYROLL - MICHIGAN and OAKLAND COUNTY 1956-1976

EMPLOYMENT TOTALS	1956	1965	1970	1976
Michigan	102,777	109,723	128,470	122,497
Oakland County	4,263	7,579	10,396	7,419
<u>EMPLOYMENT PERCENTAGES</u>				
Michigan	5.0%	5.0%	5.1%	4.7%
Oakland County	3.7%	4.4%	4.3%	2.3%
<u>1Q PAYROLL (x \$1,000)</u>				
Michigan	115,484	187,522	278,302	429,755
Oakland County	4,830	13,734	21,812	26,443

Source: County Business Patterns. (Michigan 1956-1976)

The TPU sector is expected to increase only 3.6% from present levels to 1985 for the State. This same percentage increase is expected for Oakland until 1990.

Wholesale Trade

The wholesale trade sector was the third fastest growing sector in Oakland's economy (as contrasted to the State) between 1956 and 1976 with a 570% increase in employment. This spectacular percentage growth was due in part to the fact that employment in this industry is small as a percentage of total employment (moving from a 3.1% to a 7.7% share). Nevertheless, this sector has added almost 21,000 jobs in twenty years and is expected to increase more moderately from now until 1990. Much of this growth will depend on Oakland retaining or slightly increasing its share of total regional employment - which is projected to occur.

TABLE T

WHOLESALE TRADE EMPLOYMENT & PAYROLL
MICHIGAN and OAKLAND COUNTY 1956-1976

<u>EMPLOYMENT TOTALS</u>	1956	1965	1970	1976
Michigan	116,996	127,208	149,939	147,114
Oakland County	3,647	7,535	12,997	24,437
<u>EMPLOYMENT PERCENTAGES</u>				
Michigan	5.7%	5.8%	6.0%	5.7%
Oakland County	3.1%	4.4%	5.4%	7.7%
<u>1Q PAYROLL (x \$1,000)</u>				
Michigan	146,840	210,923	343,201	509,415
Oakland County	4,706	13,304	32,644	98,118

Source: County Business Patterns. (Michigan 1956-1976)

Retail Trade

Retail Trade employment has had the second largest increase (behind Services) in Oakland County over the last 20 years. 47,310 jobs were added between 1956 and 1976 which is a 187% increase. Retail trade employment was the second largest sector in the County in 1956 and dropped to third in 1976 predominately because of the huge increases in the services sector. Nevertheless, retail trade employment is becoming nearly equal to manufacturing employment (23.0% share versus a 28.6% share in manufacturing).

Between 1956 and 1976, retail employment grew moderately for the Detroit Region as a whole, and even more slowly for the State. The region registered a 39% increase during these years and the State a 20% increase. Oakland's share of regional retail employment doubled, from 12.8% in 1956 to 26.4% in 1976.

TABLE U

RETAIL TRADE EMPLOYMENT & PAYROLL
MICHIGAN and OAKLAND COUNTY 1956-1976

EMPLOYMENT TOTALS

Michigan	343,962	366,559	462,305	507,697
Oakland County	25,248	37,076	54,696	72,558

EMPLOYMENT PERCENTAGES

Michigan	16.8%	16.7%	18.5%	19.6%
Oakland County	21.7%	21.4%	22.5%	23.0%

1Q PAYROLL
(x \$1,000)

Michigan	252,548	322,261	510,700	813,182
Oakland County	19,093	34,105	63,430	128,268

Source: County Business Patterns. (Michigan 1956-1976)

In line with the moderation in population growth, Oakland's retail employment is expected to grow by approximately 18% between now and 1990, one-tenth the rate of the 1956-1976 increase. This growth rate is almost precisely that projected for the State as a whole until 1985.

Oakland's retail sales have grown at an even faster rate than growth in establishments or employment. Between 1958 and 1972, retail sales in Oakland County jumped 239%, second fastest in the region behind Macomb County. Total retail sales in 1972 in Oakland were estimated to be \$2,696,655,000. Total retail sales in the region were estimated to be \$11,176,197,000. More recently, Sales and Marketing Management Magazine has estimated total regional retail sales in 1976 at \$15,169,541,000. Table V documents changes in retail sales in the Region and County between 1958 and 1976.

TABLE V

RETAIL SALES (x \$1,000)	1958	1963	1967	1972	1976
Detroit Region	4,893,477	5,933,616	7,805,628	11,176,197	15,169,541
Oakland County	795,168	1,104,645	1,554,263	2,696,655	3,719,645
Oakland % of Region	16.2%	18.6%	19.9%	24.1%	24.5%

Source: Census of Retail Trade, 1958-1972
U.S. Dept. of Commerce - Social & Economic Statistics Admin.
Annual Survey of Buying Power, 1977
Sales and Marketing Management Magazine

Sales and Marketing Management also estimates total disposable income available for all purchases. "Effective Buying Income (ERT) is their definition of after-tax income available for discretionary use (which would include retail purchases). Table W details total EBI for the County, Region, and State in 1976, along with a "Buying Power Index" (a weighted index using population, retail sales, and EBI, expressed as a percentage of total U.S. potential which is 100).

TABLE W

TOTAL EFFECTIVE BUYING INCOME
AND BUYING POWER INDEX - 1976
MICHIGAN, DETROIT REGION, OAKLAND COUNTY

AREA	TOTAL EBI (x \$1,000)	BUYING POWER INDEX
Michigan	53,518,559	4.4079
Detroit Region	31,148,079	2.2820
Oakland County	7,505,510	.5775

Source: Annual Survey of Buying Power, 1977
Sales and Marketing Management Magazine

Automotive dealers with extremely high sales per square foot, general merchandise stores with large selling areas, and food stores with very high volume, are the major types of retail trade within Oakland County. Together they comprised 58% of all retail sales in the County in 1972, but only about 19% of total establishments. (see Table X).

TABLE X
RETAIL SALES BY TYPE
OAKLAND COUNTY 1972

KIND OF BUSINESS	ESTABLISHMENTS	SALES (x \$1,000)	SALES AS % of TOTAL
Bldg. Materials, Hardware, Garden Supply	324	127,407	4.7
General Merchandise Group	114	452,050	16.8
Food Stores	837	510,403	18.9
Automotive Dealers	407	600,779	22.3
Gasoline Service Stations	769	158,252	5.9
Apparel and Accessory Stores	611	211,286	7.8
Furniture & Home Furnishings	525	129,915	4.8
Eating & Drinking Places	1,017	180,369	6.7
Drug & Proprietary Stores	198	116,820	4.3
Miscellaneous Retail Stores	2,455	209,374	7.8
Total:	7,257	2,696,655	100.0%

Source: Census of Retail Trade. Michigan, 1972

Finance Insurance and Real Estate

In terms of percentage increase, the Finance, Insurance and Real Estate (FIRE) Sector of Oakland's economy was the fastest grower between 1956 and 1976 with an 831% increase in employment. This dramatic growth translated to 23,746 new jobs. The FIRE sector now holds 8.5% of total county employment.

The kinds of businesses which are components of this sector (banks, savings and loan associations, various insurance carriers, brokerage houses, developers, real estate firms, etc.) find their growth and expansion directly based on population growth. They are also positively impacted by growth in the housing stock, especially in single family homes. And it was precisely the high rate of growth of these factors which expanded the FIRE sector so quickly.

Michigan also experienced rapid growth in this industry (127%) but clearly not at the rate of Oakland County. The FIRE sector is projected to grow by 23.4% between now and 1985 for the State as a whole. In Oakland County FIRE sector growth is projected to be 28.9%, much more in line with overall state growth than previously.

TABLE Y

FINANCE, INSURANCE, and REAL ESTATE
EMPLOYMENT AND PAYROLL 1956-1976
MICHIGAN AND OAKLAND COUNTY

<u>EMPLOYMENT TOTALS</u>	1956	1965	1970	1976
Michigan	73,061	92,906	119,198	165,712
Oakland County	2,858	5,158	10,790	26,604
<u>EMPLOYMENT PERCENTAGES</u>				
Michigan	3.6%	4.2%	4.8%	6.4%
Oakland County	2.5%	3.0%	4.5%	8.5%
<u>1Q PAYROLL (x \$1,000)</u>				
Michigan	72,532	119,407	210,219	416,351
Oakland County	2,799	6,557	19,416	69,295

Source: County Business Patterns. (Michigan 1956-1976)

Services

By far the largest increase in jobs in Oakland County during the last twenty years has been in the services sector. 64,239 service sector jobs were added between 1956 and 1976, accounting for almost a third of all job growth in the County. This 638% increase is indicative of the fact that Oakland has not only become a "dual economy" with the City of Detroit, but also that it is continually moving toward a post-industrial context, that is, increasingly involving secondary and tertiary economic activity. However, it is also clear that this growth in the secondary and tertiary sectors has been possible because of the employment and income generated by the manufacturing industries.

Oakland, as a recipient of much of the Region's population and income growth since the mid-fifties is a natural market for service type industries which locate near population centers. As such, Oakland captured over one-third of all new regional jobs in the services sector between 1956 and 1976. All counties in the Region however have experienced a great deal of growth in this sector as the Region's employment base is more evenly distributed. Even the slowest growing County, Wayne, experienced a 91% growth rate in the services sector between 1956 and 1976. Presently, this sector accounts for about 20% of all jobs in the Region and State, and 23% of total jobs in Oakland.

TABLE Z

SERVICES EMPLOYMENT AND PAYROLL
MICHIGAN, DETROIT REGION AND OAKLAND COUNTY
1956- 1976

<u>EMPLOYMENT TOTALS</u>	1956	1965	1970	1976
Michigan	161,548	294,430	393,866	498,337
Detroit Region	106,642	180,394	238,662	292,863
Oakland County	10,074	23,247	38,568	74,313
<u>EMPLOYMENT PERCENTAGES</u>				
Michigan	7.9%	13.4%	15.8%	29.2%
Detroit Region	8.8%	14.2%	16.6%	20.0%
Oakland County	8.7%	13.4%	15.9%	23.6%
<u>1Q PAYROLL</u> <u>(x \$1,000)</u>				
Michigan	127,101	278,930	535,394	1,056,717
Detroit Region	94,127	185,325	355,868	671,260
Oakland County	10,784	26,711	61,766	180,291

Source: County Business Patterns. (Michigan 1956-1976)

An interesting facet of the growth in service industries employment, is the even greater growth of service industry payrolls. For instance in Oakland, although service employment growth was 638% in twenty years, service payroll growth in the same period was 1572%. Twenty years ago there was a rough correlation between service employment and payroll (1 to 1). Today however this ratio has increased to 2.3 to 1 regionally and 2.4 to 1 in Oakland. Part of this is of course due to increases in wage levels, but a significant portion is due to the maturation effects (agglomeration, economies of scale, etc.) of the service industries.

Statewide, about 179,200 service sector jobs are projected to be added between now and 1985. This translates to a 35% growth rate, second highest next to projected growth in local government. For Oakland County, 20,811 service sector jobs are projected to be added in the next 11 years. This is 28% growth rate, lower than the State's and indicative of the fact that Oakland's population growth has slowed, especially relative to some of the exploding rural counties of Michigan. Growth in the services sector again being tied very closely with overall population increases.

Public Sector Employment

Up to this point the discussion has been focused entirely on employment analysis of the private sector. However, these jobs constitute only about 87% of total employment in Oakland, the other 13% being local, state, and Federal governmental jobs. Current public sector employment is estimated at 47,132 and this is expected to increase to 59,135 by 1990, growing at approximately the same rate as total employment (24%). It is felt that in spite of demands for higher levels of governmental services, that greater efficiencies will be demanded and obtained, thus holding down governmental growth rates.

Conclusion

Oakland's economy has undergone a major transformation over the last twenty years, incurring changes of a magnitude that will not take place again. Almost 200,000 new jobs were added, a third of which were in service industries, and a quarter of which were in retail trade. At the same time manufacturing jobs increased

at only a quarter of the rate of total employment increases, and was the second slowest growing sector next to mining. From a 53.5% share of total jobs in 1956, manufacturing now comprises 28.6% of all jobs within Oakland, only slightly more than retail trade or services.

Oakland has also captured an increasing share of the region's jobs, from 9.6% in 1956, to 21.5% in 1976. Thus, although the regional job base was growing, Oakland's was growing somewhat faster.

Basically what has transpired over roughly the last quarter century is that the County has seen its "boom" years of growth come and go. It is expected to continue to grow in terms of jobs and people, but only at a fraction of the past rate. More and more Oakland County residents now make their livelihood within the County. Two-thirds of the employed labor force of Oakland now work in Oakland. Although manufacturing continues to be the driving force of the Southeast Michigan economy, this maturing area is expanding its secondary and tertiary sectors to a much greater degree and becoming the archtypechal "post-industrial society." This however is taking place within the context of an older manufacturing based economic structure.

Thus the problems and needs confronting much of older, industrial America (including the aggregate Detroit Region) are now impacting Oakland. The County now represents a dichotomy with healthy growing residential and commercial areas, and declining areas of disinvestment as well. The changes in the economic base of Oakland reflect this duality and the problems that it generates.

1978 REVISION ERRATA

The following errors are found in the 1978 Revision of the Oakland County O.E.D.P. They should be corrected as indicated.

Page 23 The E.N.C. percentage of total U.S. Population should be 18.6% in 1985, and 17.6% in 2000.

Page 114 Oakland County's 1940 Population should be 254,068.

OAKLAND
COUNTY
PORTLAND, MICHIGAN 48341-0400

REFERENCE BOOK