

Multnomah County, Oregon

RESOURCE ATLAS

- NATURAL
- HUMAN
- ECONOMIC
- PUBLIC

APRIL 1974

EXTENSION *Community Development* PROJECT

OREGON STATE UNIVERSITY

Multnomah County, Oregon

	NATURAL
RESOURCE	HUMAN
ATLAS	ECONOMIC
	PUBLIC

April 1974

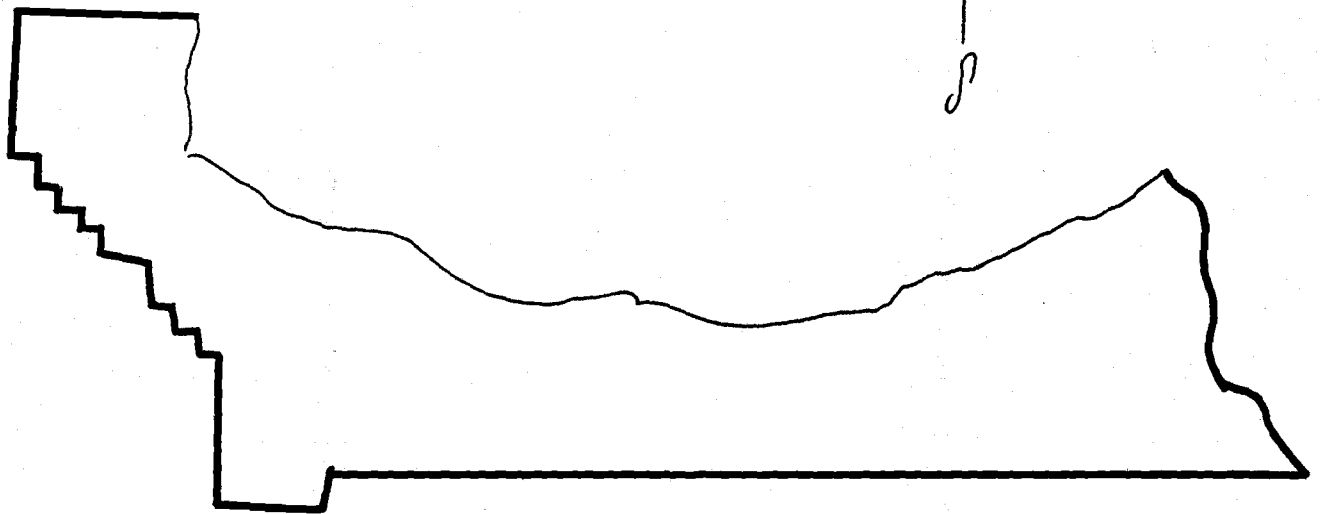
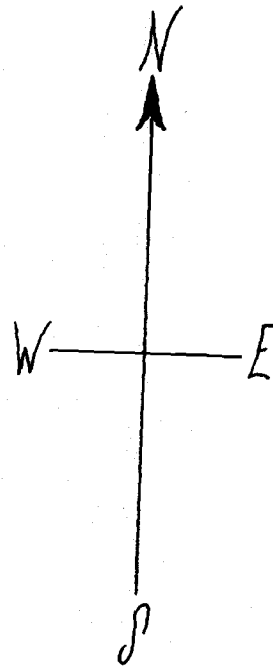
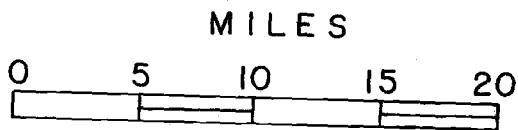
Oregon State University Extension Service

Prepared by Marilyn Ruttle, Research Assistant,
Under the supervision of: Robert O. Coppedge,
Extension Economist, and Russel C. Youmans,
Extension Resource Economist,
Department of Agricultural Economics

For sale by the Extension Business Office, Extension Hall, 118,
Oregon State University, Corvallis, Oregon 97331. \$2.50 per copy.

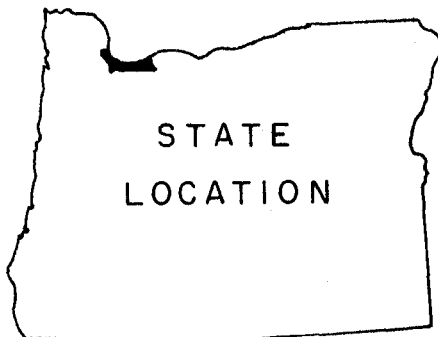
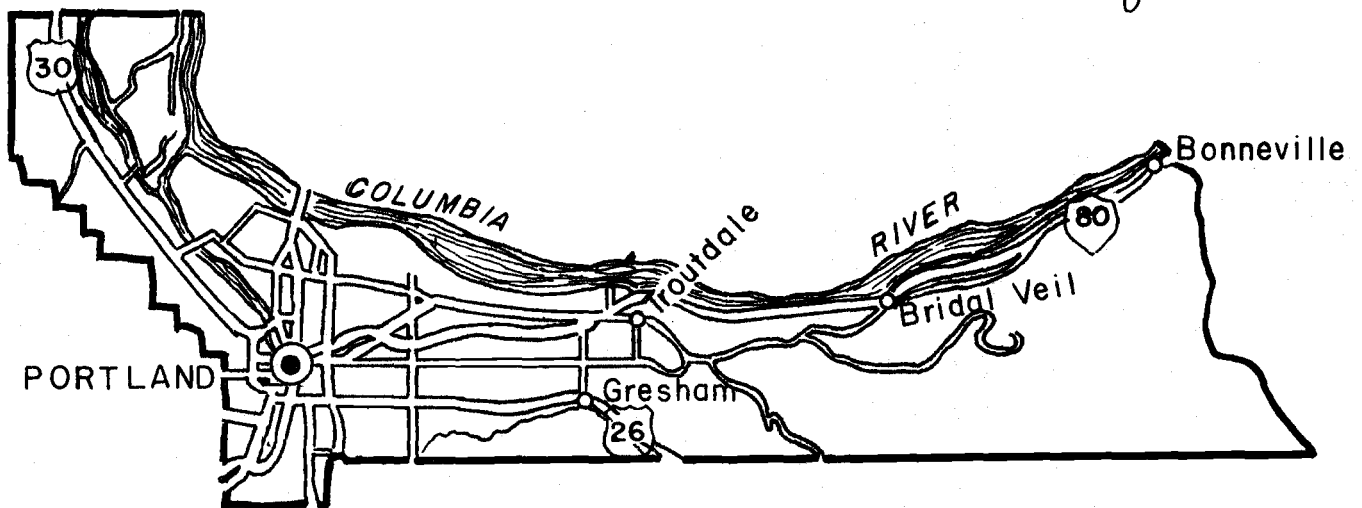
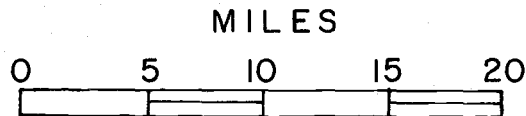
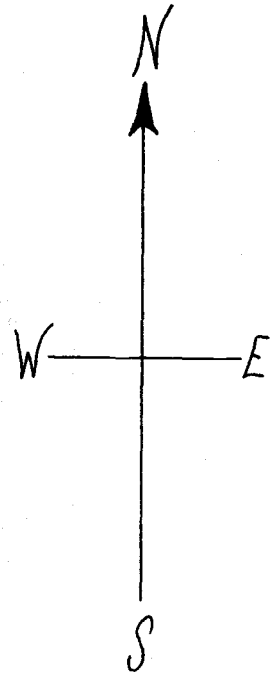
Contents

	<u>Page</u>
General Description	1
Physical Aspects.	2
Climate	3
Soils	5
Soil Characteristics and Land Capability.	9
Land Use and Ownership.	11
Agricultural Land	12
Forest Land	13
Water	16
Water-based Recreation.	19
Minerals.	19
Wildlife.	19
Human Resources	21
Population.	21
Employment.	24
Income.	31
Education	33
Health and Vital Statistics	37
Public Welfare.	43
Housing	45
The County's Economy.	47
Agriculture	47
Logging and Wood Products	52
Manufacturing	54
Mining.	55
Outdoor Recreation.	56
Business.	58
Public Services	63
Transportation.	63
Communication	64
Library Facilities.	67
Utilities	67
Public Finance.	70
Selected List of Agencies	75
Selected Bibliography	77



MULTNOMAH
COUNTY

MULTNOMAH COUNTY



LEGEND

- PRIMARY HIGHWAYS
- SECONDARY HIGHWAYS
- COUNTY ROADS
- INTERSTATE HIGHWAYS

GENERAL DESCRIPTION

Multnomah County was established by the Territorial Legislature on December 22, 1854, seven years before statehood. The land included part of Washington and Clackamas Counties. Its entire population numbered 1,500 to 3,000 at that time.

The county encompasses an area of 270,400 acres and ranks 36th among counties in area. The county is composed of three topographic-structural provinces which are from west to east, the Coast Range uplift, the Willamette trough, and the western and high Cascades, respectively. The Coast Range uplift area is caused by anticlinal folding of the underlying formations. It has a topography of irregular ridges and short steep slopes. The Willamette trough is relatively smooth, broken by low, rolling hills or buttes. The western and high Cascades are characterized by steep slopes, sharp ridgetops and deep canyons.

The county has a temperate maritime climate with dry, moderately warm summers and wet, mild winters. The average annual precipitation is as low as 36 inches in the Willamette Valley, and up to 100 inches in the higher elevations.

The average annual frost-free season varies from about 180 to 250 days in the Willamette trough, to less than 30 days at the higher elevations in the Cascades.

White settlement of the county began in 1835 by Hudson Bay Company employees. At first the economy was largely based on agriculture, but since then, logging manufacturing, and services have become important. The population has increased from 108,167 in 1900 to 560,000 in 1972.

Multnomah County is located in the northern portion of western Oregon. The county is bounded on the east by Hood River County, by Clackamas County on the south, and by Washington and Columbia Counties on the west. The northern boundary is formed by the Columbia River. The county lies entirely within the Lower Willamette River Basin.

Following is some general information on the county. 1/

Area: 457 square miles
270,400 acres

Population: 560,000
(July, 1972)

Elevation at Portland: 77 feet

True Cash Value: \$5,447,815,621
(1972)

Average Temperature:
Summer - 69.7°F
Winter - 40.2°F

Principal Industries:
Manufacturing, Lumbering,
Transportation

County Seat: Portland

1/ Oregon State Executive Department, Clay Myers, Secretary of State, Oregon Blue Book, 1973-74, January, 1973.

PHYSICAL ASPECTS

Multnomah County is divided into three geological and topographical provinces. They are from west to east, the Coast Range uplift, the Willamette trough, and the western and high Cascades, respectively. The Coast Range uplift is caused by anticlinal folding of the underlying formations. Its relief is irregular ridges and short steep slopes. The areas of sedimentary rock are dissected and have numerous slumps and slides. The areas of igneous rocks are less dissected because of its resistance to weathering and erosion. It contains drainage that is rugged, steep and convex.

The rocks of the Coast Range uplift are relatively young and are slightly altered either in structure or in mineral associations.

Following a period of extrusion, the area was warped upward to its present altitude accompanied by some minor folding such as the Portland Hills anticline. Following weathering and erosion of the Columbia basalt, a structureless light brown silt was formed known as the Portland Hills silt. It has a depth of 25 to 100 feet.

The Willamette trough includes the level area of Portland. The smooth surface is broken by low, rolling hills or buttes.

Downfoldings of rock formations created the Willamette syncline, a structural depression, with hills of moderate relief separating broad flats filled with alluvial sediments from the surrounding hills.

The rock formations under the alluvial sediments are presumed to be the same as the Coast Range and the Cascades. The Pliocene Age consists of beds of micaceous and quartzose sandstone and siltstone and tuffaceous siltstone, sandstone, and conglomerate. The late Pliocene flows remain as buttes near Gresham and exit as erosional remnants along the slope of the Portland Hills.

During the period of Pliocene time, there were three effects that affected the county's geology. They were uplift, glaciation, and deglaciation. Uplift coupled with erosion caused incision of the streams and alluviation of the valley. Glaciation caused lowered sea level and stream incision as ice accumulated on land. Deglaciation caused drowned streams, stream cut terraces, and alluviation.

The western high Cascades area begins at the east edge of the Willamette trough and extends to the summit of the Cascades. It is characterized by steep slopes, sharp ridgetops, and deep canyons. Elevations range from 200 feet near the Columbia River to 4,800 feet. The drainage formation is influenced by glacial action and displays the typical U-shaped canyons with hanging valley tributaries.

Some 7,500 feet of moderately deformed sequence of lava flows, pyroclastics and a small amount of marine sedimentary rocks are found in the western high Cascades.

The Eocene Goble volcanics series is the oldest formation. On the Goble volcanics is the Miocene Eagle Creek formation consisting of mud flows, volcanic debris, and fossil wood and leaves. This was eroded to a low relief followed by the pouring out of Columbia River basalt in the thickness of 200 to 2,000 feet.

A fault north-south between the western and high Cascades dropped the Cascades area. Plio-Pleistocene Cascan lavas built the high Cascades to its present height.

Climate

Multnomah County has a temperate maritime climate, moderately warm summers and wet, mild winters. The varying topography produces some variation in the climate depending primarily upon elevation.

Precipitation is as low as 26 inches in the Willamette Valley but increases rapidly with elevation to 100 inches in parts of the Coast Range and 140 inches in the Cascades. About 60 percent of this average annual precipitation is in November through February while only about 10 percent occurs from June through September.

At elevations below 2,000 feet, most of the precipitation occurs as rain at low intensities. With the rise in elevation, precipitation intensity also increases. Snow increases from about 2 percent of the annual precipitation on the floor of the Willamette Valley to 50 percent at 5,000 feet elevation and about 75 percent at 7,000 feet. Snow build-ups in the Cascade Mountains are an important source of summer stream-flows.

The prevailing winds are from the west and northwest during the summer months, and from the south and southwest during winter storm periods. Wind velocities are moderate, though strong winds sometimes accompany winter storms; and short periods of strong easterly or northerly winds may occur at any time of the year.

The seasonal temperature variations are small in the Willamette trough and Coast Range. A winter temperature below 10 degrees and a summer temperature above 100 degrees are rare in the county. The temperatures in the Cascades have a wide variation and are generally cooler than the rest of the county.

The frost-free season in most of the Valley area of the county is from March to November--a period of 180 to 250 days. At the higher elevation in the Cascades, the frost-free season is less than 30 days.

Table 1. Weather Stations, Elevation and Years of Record, Multnomah County

Station	Elevation	Years of Record
Bonneville Dam.....	85	1/
Portland WB AP.....	22	1/
Portland WB City.....	30	1/
Gresham 2 SE	450	3
Gresham.....	310	3
Gresham.....	376	1
Sauvies Island.....	40	1/

1/ Station established prior to 1951 and operated through 1960.

SOURCE: U.S. Department of Commerce, Weather Bureau, Decennial Census of U.S. Climate, Supplement for 1951 through 1960, Oregon No. 86-31, 1965.

Table 2. Temperature and Precipitation, Multnomah County, By Month, 1951-1960 Averages

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
Average Temperature	- - - - - degrees Fahrenheit - - - - -												
Bonneville Dam.....	36.5	40.1	43.1	50.6	56.6	61.2	67.3	66.3	63.2	54.5	44.3	39.6	51.9
Portland WB AP....	39.2	42.3	44.6	51.0	56.8	61.4	67.0	65.9	62.1	54.2	44.8	40.9	52.5
Portland WB City..	40.9	43.9	46.0	52.9	58.6	62.7	68.4	67.5	64.7	56.8	47.0	42.9	54.4
Total Precipitation	- - - - - inches - - - - -												
Bonneville Dam.....	14.0	8.2	9.2	5.3	3.9	3.0	.7	1.5	2.6	7.7	10.2	12.7	78.9
Portland WB AP....	6.8	4.1	3.9	2.2	2.1	1.8	.3	.8	1.5	3.7	4.9	5.5	37.6
Portland WB City..	8.3	4.7	4.9	2.6	2.1	1.9	.3	.9	1.7	3.9	5.6	6.7	43.5
Gresham....	9.9	4.7	5.2	2.7	2.6	2.3	.3	1.8	2.0	4.8	6.3	7.6	50.2
Sauvies Is.	8.4	5.0	4.6	2.4	1.9	1.6	.3	.7	1.5	3.6	6.0	6.9	42.9

SOURCE: U.S. Department of Commerce, Weather Bureau, Decennial Census of U.S. Climate, Supplement for 1951 through 1960, Oregon No. 86-31, 1965.

The following table indicates an average day-time high and low for each month over the years 1951-60. The minimum temperatures are generally considered to be night-time temperatures.

Table 3. Mean Daily Maximum and Minimum Temperatures, Multnomah County, By Month, 1951-1960 Averages

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
Mean Daily Maximum Temp.	- - - - - degrees Fahrenheit - - - - -												
Bonneville Dam...	41.2	46.0	50.4	59.5	66.0	70.3	78.2	76.9	73.4	62.3	50.2	44.5	59.9
Portland WB AP...	44.2	49.0	52.6	61.1	66.7	70.8	78.6	76.9	73.9	63.7	51.8	46.4	61.3
Portland WB City.	45.5	49.6	53.0	61.7	67.9	71.6	79.3	77.6	74.6	64.5	52.7	47.6	62.1
Mean Daily Minimum Temp.	- - - - - degrees Fahrenheit - - - - -												
Bonneville Dam...	31.7	34.1	35.8	41.7	47.1	52.1	56.5	55.7	53.0	46.7	38.3	34.5	43.9
Portland WB AP...	34.1	35.5	36.5	40.9	46.8	52.0	55.3	54.9	50.3	44.7	37.7	35.4	43.7
Portland WB City.	36.3	38.2	39.1	44.1	49.3	53.9	57.4	57.3	54.8	49.1	41.3	38.1	46.6

SOURCE: U.S. Department of Commerce, Weather Bureau, Decennial Census of U.S. Climate, Supplement for 1951 through 1960, Oregon, No. 86-31, 1965.

Table 4. Freeze Data for Multnomah County, By Month, 1951-1960 Averages

Station	Mean Number of Days with Temperature of 32 ⁰ F. or Below												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
Bonneville Dam...	15	11	8	1	1/	0	0	0	0	0	5	10	50
Portland WB AP...	11	9	8	1	1/	0	0	0	0	1/	7	9	45
Portland WB City.	7	4	3	0	0	0	0	0	0	0	3	4	21

1/ Less than .5 days.

SOURCE: U.S. Department of Commerce, Weather Bureau, Decennial Census of U.S. Climate, Supplement for 1951 through 1960, Oregon No. 86-31, 1965.

For more recent climatological data on Multnomah County see: U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Environmental Data Service, Climatological Data, Annual Summary, 1971, Vol. 77, Nov. 13, 1971.

Soils

The Multnomah County soil survey consists of 328 square miles or 209,920 acres. The topographic features consist of the alluvial lands along the Columbia River and tributaries, bench lands and hilly to mountainous districts. The soils are classified in 18 groups which shall be described on the following pages.

Olympic Loam has a depth of 10 to 14 inches and is brown to reddish-brown in color. It contains large quantities of very fine sand.

Olympic Loam is relatively unimportant and about 30 percent of this soil is under cultivation. Wheat, oats and vetch are the principal crops of this soil. Where the soil is sufficient in depth, prunes, cherries, and walnuts could be grown.

The largest area of Olympic Silt Loam is located east of the Sandy River and extends northeasterly to the county line. The topography of this soil ranges from smooth plateau-like to rough and hilly. All areas of Olympic Silt Loam are well-drained.

About 50 percent of this soil is under cultivation. The crops that are grown include wheat, oats, and vetch. The dairy industry has been well-established on this soil. When this soil was first cultivated, organic matter was abundant and crops were very productive. However, the neglected addition of organic matter has resulted in smaller yields in recent years.

About 20 percent of the Cascade Silt Loam series is under cultivation and produces crops of red clover, wheat, oats, and vetch and oat hay. Corn is also grown for silage. The major need of this soil is organic matter.

The topography of Willamette Loam is gently rolling with rather abrupt slopes to drainage ways. Because of this, drainage is good. The soil is generally located along rivers and streams at elevations from 15 to 30 feet above the high water mark. The largest area of this soil occurs around Gresham extending north to Troutdale.

Willamette Loam is best adapted to clover crops and would be greatly benefited if used more for this purpose. The addition of organic matter would also benefit this soil greatly.

Willamette Silt Loam has a color of light-brown to brown and a depth ranging from 12 to 24 inches. The topography of the soil is gently sloping to gently rolling with short steep slopes leading down to drainage ways. The soil is able to withstand comparatively long periods of droughts.

The principal area of this soil is located within the Portland city limits. Other small areas are located near Gresham and east of Mount Tabor.

Hillsboro Loam has a depth of 10 to 24 inches and brown to light-brown in color. The topography is characterized by well-rounded knolls and ridges running parallel to the course of the river. Because of this, erosion is prevented. Drainage is excellent.

The largest area is located along the banks of the Columbia River. This soil is one of the more important soils in the county. Ninety percent is under cultivation. The crops grown are red clover, alsike clover, wheat, oats, and vetch hay, and vegetables. The dairy industry is also very important here. Berries, fruit, corn, and potatoes are being produced for commercial and home use. With the addition of commercial fertilizers or barnyard manure, a high state of productiveness is maintained.

Powell Silt Loam is one of the most extensive in Multnomah County covering 12 percent of its area. It is extensively located in high plateau regions east and west of Gresham and bordering the Sandy River on the west. Drainage of this soil is excellent with only a few areas needing artificial drainage.

Sixty percent of the land is now utilized for agricultural practices of which dairy farming is the most important.

Salem fine sandy loam has a depth ranging from 12 to 16 inches and is brown in color. The topography is smooth but has sufficient slope to provide good drainage. The most important area of this soil is located west of Troutdale and southwest of Wilkes School.

About 90 percent of this soil is under cultivation. The principal crops grown in this soil are wheat, oats, vetch and clover. All kinds of berries and fruits do well in this soil.

The dark-colored phase of Amity Silt Loam consists of 12 inches of grayish-brown or dark-brown silt loam. The largest area of this type is located one-half mile north of Gresham with small areas located throughout the county. The soil is well above the present courses of streams which provide for poor drainage.

About 80 percent of the soil is under cultivation. The principal crops are oats, vetch, wheat and red clover. The principal need for the soil is drainage and addition of organic matter.

Columbia Fine Sand consists of a brownish-gray to grayish-brown sand. This soil is almost entirely confined to the banks of the Columbia River, and is slightly higher than soils of river bottoms.

Only 20 percent of this soil is under cultivation; the rest is used for pasture. The principal crops are wheat, oats, corn, alfalfa, clover and potatoes. Organic matter should be added for moisture retention.

A very small portion of this soil acreage has been cleared for agriculture use. This soil is one of the most important soils in the Columbia River bottom and is utilized for truck farming and dairying. The principle crops grown are alfalfa, clover, wheat, corn, and oats. In the areas devoted to trucking, all kinds of vegetables as well as strawberries are grown.

The cropping production is used mainly for feeding dairy cattle on the farms. The dairy industry in this area is very extensive with cream being the primary product.

Columbia Loam has an average depth of 8 inches and is light-brown to dark-brown in color. The soil contains a substantial amount of organic material. The topography of this soil is smooth and only occasionally interrupted by a channel scoured out by floods. Drainage is good, except areas with high water tables.

About 60 percent of the land is under cultivation producing crops of peas, beans, wheat, clover, corn, and oats. The more poorly drained areas furnish summer pasturage. When the land is well-drained the production of corn and vegetables are good.

Columbia Silt Loam has an average depth of 18 inches. This soil contains a relatively large proportion of organic matter and very fine sand.

The topography is smooth, with only slight irregularities. The drainage of Columbia Silt Loam is generally good. About 30 percent of the land is under cultivation and used for pasture. The primary crops are wheat, oats, corn, clover, beans and peas.

When the soil is diked it can be used in the production of many crops. When thoroughly drained, it is best adapted to corn and vegetables.

Wapato Silt Loam has an average depth of 12 inches and is dark-brown in color. The soil contains a small amount of clay. The soil is subject to periodic overflows which restricts drainage of the soil.

This soil is a productive soil, but owing to its small extent it is relatively unimportant in agricultural uses. About 60 percent of this soil is under cultivation producing crops of wheat, oats, corn and potatoes. The principal need for the land is drainage, which can be best accomplished by tilling.

Sauvie Silt Loam has a brownish or dull-gray color and an average depth of 8 inches. This soil contains a relatively high amount of organic matter. The surface is somewhat uneven and is subject to overflow. It is slightly higher than that of surrounding soils which gives good drainage for this soil.

The largest area not found in river bottoms is located in the City of Portland. Eighty percent of the land is under cultivation being used primarily for the production of vegetables. Areas that are free from overflow could be used for the production of wheat and forage crops.

The depth of Sauvie Silty Clay Loam is from 10 to 12 inches and has a brownish-gray to dull gray color. This type forms the greater part of the overflowed land of the Columbia River bottoms. The largest area is on Sauvie's Island and in the northwestern part of the county. Drainage of the greater part of this type is deficient on account of the high water table.

Toutle Sand consists of 36 inches or more of a brownish-gray to drab sand. This type of soil is confined almost entirely to the channel of the Sandy River where the less swift water deposits sediments of sand. The soil is subject to annual overflow and because of this, it is not used for agricultural purposes.

Bourlington Fine Sand has a depth of 36 inches or more and is dark-brown in color. Two of the largest areas of this soil occur on the west central part of Sauvie's Island. The topography varies from gently undulating to rolling to dune-like land. Drainage is very good to excessive in this type of soil.

Agricultural use is of little importance on this type of soil. Twenty percent of this land is cultivated producing primary crops of wheat, oats, corn, clover and potatoes. This soil could be made to produce very good crops through the addition of organic matter.

Soil Characteristics and Land Capability

An interpretive grouping of soils into "Land Capability Classification" has been developed by the Soil Conservation Service. This grouping shows, in general, how suitable soils are for most kinds of farming. Soil characteristics such as depth, texture, wetness, slope, erosion hazard, overflow hazard, permeability, structure, reaction, waterholding capacity, inherent fertility and climatic conditions as they influence the use and management of land are considered in grouping soils into eight land capability classes. These eight classes are designated by Roman numerals. The hazards and limitations of use of the groups increase as the class number increases. Class I land has few hazards or limitations, whereas Class VIII land is so limited that it is unfit for cultivation and grazing. This land can be used only for recreation, wildlife habitat or water supply.

Table 5. Use of Inventory Acreage by Capability Class and Limitations, Multnomah County, 1967

Capability Class and Limitations 1/	Use in Acres				
	Cropland	Pasture-Range	Forest	Other land	Total
I.....	3,387	0	1,597	153	5,137
II					
E.....	7,486	0	3,847	1,687	13,020
W.....	4,608	5,071	1,699	460	11,838
S.....	1,907	0	274	2,953	5,134
III					
E.....	4,089	0	9,237	977	14,303
W.....	5,386	0	5,374	153	10,913
IV					
E.....	882	3,941	9,065	364	14,252
VI					
E.....	311	3,376	19,591	824	24,102
VII					
E.....	0	561	5,617	0	6,178
VIII					
W.....	0	0	566	0	566
S.....	0	0	1,133	0	1,133
Total.....	28,056	12,949	58,000	7,571	106,576

1/ Limitations: E - main limitation is erosion;
W - water in soil interferes with plant growth;
S - Soil is shallow, droughty, or stony.

SOURCE: Oregon Conservation Needs Committee, Oregon Soil and Water Conservation Needs Inventory, U.S.D.A. Soil Conservation Service and Oregon State University Extension Service, 1971.

Table 6. Land Area and Use of Inventory Acreage, Multnomah County, 1967

Use	Acres
<u>Inventory Acreage</u>	
Cropland.....	28,056
Pasture.....	12,949
Range.....	0
Forest and woodland.....	58,000
Other land.....	7,571
Total inventory acres.....	106,576
Percent of total land area in inventory.....	40%
<u>Non-Inventory Acreage</u>	
Federal land.....	74,598
Urban and built-up areas.....	87,746
Water areas.....	1,800
Total non-inventory acres.....	164,144
Total land area.....	270,720

SOURCE: Oregon Conservation Needs Committee, Oregon Soil and Water Conservation Needs Inventory, U.S. Soil Conservation Service and OSU Extension Service, 1971.

Table 7. Conservation Treatment Needs, Multnomah County, 1967

Classification	Acreage
ALL CROPLAND.....	28,056
Cropland needing treatment.....	15,214
Type of treatment needed:	
Residue cover.....	2,093
Sod in rotation.....	1,429
Drainage.....	8,055
Management.....	2,371
Other.....	1,266
ALL PASTURE.....	12,949
Pasture needing treatment.....	9,949
Type of treatment needed:	
Brush control and improvement.....	4,390
Improvement of vegetation....	361
Protection only.....	5,198

SOURCE: Oregon Conservation Needs Committee, Oregon Soil and Water Conservation Needs Inventory, U.S. Soil Conservation Service and Oregon State University Extension Service, 1971.

Land Use and Ownership

In this report, land ownership in Multnomah County is classified as public lands; federal, state, and county; and private. About 61 percent of Multnomah County is privately owned. Most of the private land is in forests and farms. Approximately 27 percent of the county is in federal ownership, of which, 92 percent is in National Forests administered by the U.S. Forest Service. The majority of the remaining federal land is managed by the Bureau of Land Management.

Five percent of the county is owned by the State of Oregon. About 63 percent of the State-owned land is administered by the Highway Commission; 31 percent by the Game Commission; and the remaining divided between the Land Board, Higher Education, and Fish Commission.

Approximately 6 percent of the county is owned by the county and consists of county and city parks, municipalities, and road rights-of-way.

Land use in the county is primarily devoted to forests, agriculture, and urban development.

About 50 percent of the county is forest land. Agriculture land includes 20 percent of the county and intensified-type farming. Urban uses encompass 25 percent of the county due to the large population in the Portland area.

Conservation uses include approximately 3 percent of the county's land.

Table 8. Land Use and Ownership, Multnomah County, 1964

Item	Multnomah County		State
	Acres	Percent	Percent
Total land area.....	271,360	100.00	100.00
<u>Land Use</u>			
Urban.....	69,468	25.60	.49
Industrial.....	1,302	.48	.16
Military.....	-	-	.10
Intensive agriculture.....	55,655	20.51	6.52
Dryland farming.....	-	-	3.33
Forests.....	135,897	50.08	44.84
Parks.....	-	-	.32
Conservation.....	8,195	3.02	2.25
Grazing.....	-	-	41.50
Non-productive land.....	841	.31	.49
<u>Land Ownership</u>			
Total private land ownership	170,748	62.9	44.2
Total public land ownership.	100,612	37.1	55.8
Federal.....	74,856	27.6	51.8
State.....	12,977	4.8	2.9
Local.....	12,779	4.7	1.1

SOURCE: Oregon Department of Planning and Development, Resources for Development, 1964.

Table 9. Inventory of State-Owned Real Property, Multnomah County, 1970

Agency	Acres	Land Value	Improv. Value	Total Value	Annual Rental Income
Board of Education.	2.86	\$22,000	\$165,000	\$187,000	\$ -
Fish Commission....	24.00	23,550	175,620	199,170	420
Game Commission....	1,199.45	727,225	589,766	1,316,991	7,389
Dept. of General Services.....	1.84	1,625,000	7,248,025	8,873,025	205,850
Div. of Continuing Education.....	3.38	166,000	910,289	1,076,289	-
Portland State University.....	22.74	14,858,000	34,624,014	49,482,014	-
U. of O. Dental School.....	.80	40,000	4,718,447	4,758,447	-
U. of O. Medical School.....	99.68	2,812,000	36,109,521	38,921,521	-
Division of State Lands.....	200.00	8,000	-	8,000	-
Military Dept.....	19.94	150,250	1,115,620	1,265,870	-
Highway Division Parks.....	2,755.53	282,825	1,173,162	1,455,987	840
Offices.....	17.15	107,673	757,760	865,433	-
Totals.....	4,347.37	\$20,822,523	\$87,587,224	\$108,409,747	\$214,499

SOURCE: Legislative Fiscal Committee, Inventory of State-Owned Real Property, By County, Sec. 7, 115 State Capitol, Salem, Oregon, 1970.

Table 10. Land Area in Highways, Streets, and Roads, Multnomah County

Ownership	Multnomah County	
	Acres	Percent
State highways.....	5,480	30.46
County roads.....	5,980	33.24
City streets.....	6,525	36.28
Total.....	17,985	100.00

SOURCE: Oregon State Department of Revenue and Oregon State Highway Division, unpublished data.

Agricultural Land

The land base for agriculture in Multnomah County consists of 29,290 acres of cropland, 22,106 acres of woodland, including woodland pasture, and 19,396 acres of other land.

About 10 percent of the total county area is in cropland. Included in this figure are harvested cropland, cropland that is used for pasture, and other cropland. The cropland is used mainly for production of small grains, hay crops, grass seed, fruits, and vegetables. About 10 percent of the land in farms is irrigated.

Table 11. Land in Farms, Multnomah County, 1964 and 1969

Item	1964		1969	
	Acres	Percent	Acres	Percent
Total land area.....	270,725		270,400	
Proportion in farms....		24.6		26.2
Acres in farms.....	66,728	100.00	70,792	100.00
Cropland harvested.....	19,433	29.12	16,968	23.96
Cropland pasture.....	9,098	13.63	8,821	12.46
Other cropland.....	4,514	6.76	3,480	4.91
Woodland including woodland pasture.....	14,542	21.79	22,106	31.22
Other land.....	19,133	28.67	19,396	27.39
Irrigated land.....	5,157	7.72	7,130	10.07

SOURCE: U.S. Bureau of the Census, Census of Agriculture, 1964 and 1969, Vol. 1, Area Reports, Part 47, Oregon, U.S. Government Printing Office, Washington, D.C., 1967, 1972.

Forest Land

The forest land of Multnomah County may be divided into four distinct zones on the basis of ecology, climate, and pattern of land ownership as follows: the valley zone, the principal forest zone, the upper slope forest zone, and the subalpine forest zone.

The valley zone generally lies below 1,000 feet elevation and has the driest and warmest climate of any part of the county. This zone was only partially forested at the time of settlement, and much of it has since been cleared for agricultural, urban, residential, and other uses. Most of the remaining forest land is generally in blocks of less than 500 acres owned by farmers and ranchers intermingled with agricultural land. There are both hardwood and coniferous in this zone. The hardwood stands--cottonwoods, alder, bigleaf maple, and willows--occur on bottom lands subject to flooding and on dry sites. Coniferous stands occur on a variety of sites with Douglas-fir as the most common species mixed with Grand fir, Western hemlock, and Western red cedar.

The principal forest zone begins at 500 to 1,000 feet elevation and extends up to 3,000-4,000 feet. It contains the major share of the timber producing land in the county. Approximately 90 percent of the land is forested. Coniferous forests of Douglas-fir predominate with smaller stands of Western hemlock, Western red cedar, and True fir. Red alder stands occur at lower elevations of the Coast Range where fire or logging removed the original stand. Most of this land is owned by large timber companies or the public.

The upper slope forest zone begins at about 3,000 to 4,000 feet elevation and extends to 5,000 to 6,000 feet. About 80 percent of the land is forested; the remainder consists of rock outcrops, shallow, stony soils, meadows, and lakes. The true fir mountain-hemlock stands are predominant.

The subalpine forest zone begins at 5,500 to 6,000 feet elevation in the Cascades and extends to the upper limits of tree growth. The principal tree species--subalpine fir, mountain hemlock, whitebark pine, and Alaska yellow-cedar--occur in scattered stands intermingled with meadows and barren areas.

About 53 percent of the forest land in Multnomah County, or 68,000 acres, in 1963 was owned and managed by National Forests. National Forest lands are federal lands which have been designated by Executive order or statute as National Forests or purchase units, and other lands under the administration of the Forest Service.

About 44 percent of the forest land in Multnomah County, or 56,000 acres, is owned by farmer and miscellaneous private. Farmer-owned lands are lands owned by companies or individuals operating wood-using plants. Miscellaneous private lands are those lands privately owned - other than forest industry or farmer-owned lands.

Three percent of the forest land in Multnomah County is owned by other public. This is about 4,000 acres. Other public lands are federal lands other than National Forests, including lands administered by the U.S. Bureau of Land Management, U.S. Bureau of Indian Affairs, and miscellaneous federal agencies, and land owned by states, counties, and local public agencies, or land leased by these governmental units for more than 50 years.

The major uses of forest land in Multnomah County are for production of crops of commercial timber, for outdoor recreation, and for watershed protection. Other uses such as wildlife habitat and grazing are also important.

The "Multiple Use-Sustained Yield" concept is used in the National Forest system. This means management of forest and related areas in a manner that will conserve the basic land resource itself while at the same time producing a high-level sustained yields of water, timber, recreation, wildlife, and forage in the combination that will best meet the needs of the American people.

On many private holdings, the only management is that related to the harvesting of mature timber while on other private holdings considerable attention is given to measures that will maximize the continuous production of timber.

In 1963, there were 128,000 acres of commercial forest land in Multnomah County. Commercial forest land is that land which is producing or capable of producing industrial wood and not withdrawn from timber utilization.

There were an estimated 4,000 acres of noncommercial forest land in Multnomah County in 1963. Noncommercial forest land that is unproductive forest land incapable of yielding crops of industrial wood because of adverse site conditions, and productive public forest land withdrawn from commercial timber use through statute or administrative regulation.

Table 12. Forest Acreage, Ownership and Use, Multnomah County, 1963

Item	Acres	Percent
LAND		
Total land.....	271,000	100.00
Forest land.....	132,000	48.70
Commercial.....	128,000	47.23
Unproductive.....	3,000	1.10
Productive-reserved....	1,000	.36
Nonforest.....	139,000	51.29
OWNERSHIP		
All ownerships.....	128,000	100.00
National forest.....	68,000	53.12
Other public.....	4,000	3.12
Forest industry.....	-	-
Farmer and misc. private.	56,000	43.75

SOURCE: U.S. Forest Service, Forest Statistics for Northwest Oregon, Resource Bulletin PNW-7, Pacific Northwest Forest and Range Experiment Station, 1964.

Table 13. Volume of All Growing Stock and Sawtimber by Ownership, Multnomah County, 1963

Ownership	Total Commercial Growing Stock		Total Commercial Sawtimber	
	million cubic ft.	percent	million board ft. ^{1/}	percent
National forest.....	448	69.89	2,872	75.06
Other public.....	31	4.83	211	5.51
Forest industry.....	-	-	-	-
Farmer and misc. private.....	162	25.27	743	19.41
Total.....	641	100.00	3,826	100.00

^{1/} International 1/4 inch rule; not reported in Scribern Log Rule.

SOURCE: U.S. Forest Service, Forest Statistics for Northwest Oregon, Resource Bulletin, PNW-7, Pacific Northwest Forest and Range Experiment Station, 1964.

Table 14. Volume of All Growing Stock and Sawtimber on Commercial Forest Land by Species, Multnomah County

Species	Total Commercial Growing Stock		Total Commercial Sawtimber	
	million cubic ft.	percent	million board ft. 1/	percent
Softwoods.....	552	86.11	2,877	90.64
Douglas-fir.....	289	45.08	1,605	50.56
Pines.....	1	.15	7	.22
True firs.....	80	12.48	313	14.39
Sitka spruce.....	-	-	-	-
Western hemlock..	156	24.33	819	25.80
Western redcedar.	25	3.90	132	4.15
Other.....	1	.15	1	.03
Hardwoods.....	89	13.88	297	9.35
Red alder.....	64	9.98	209	6.58
Bigleaf maple.....	25	3.90	88	2.77
All species.....	641	100.00	3,174	100.00

1/ Scribner log rule.

SOURCE: U.S. Forest Service, Forest Statistics for Northwest Oregon, Resource Bulletin, PNW-7, Pacific Northwest Forest and Range Experiment Station, 1964.

Water

Surface drainage for Multnomah County is carried on by the Columbia and the Sandy Sub-basins. The Columbia Sub-basin consists of the Scappoose Creek Watershed, the Portland Watershed, Fairview Watershed, and the Johnson Creek Watershed. The Scappoose Watershed contains 52,400 acres, with only a small portion of this in Multnomah County. The Portland Watershed contains 155,200 acres which is divided between Columbia, Multnomah, and Clackamas Counties. The Fairview Watershed is contained entirely in Multnomah County and occupies 15,600 acres. The Johnson Creek Watershed has 28,800 acres that are divided between Multnomah and Clackamas Counties. The Sandy Sub-basin has several watersheds within its boundaries. The Bonneville watershed is located in northeast Multnomah County and contains 49,970 acres. Bull Run River Watershed contains 89,400 acres and is located in Multnomah and Clackamas Counties and contains 237,030 acres. It is located in eastern Multnomah County.

The Bull Run Watershed is the primary source of water for the Portland area. It provides 70,000,000 gallons of water per day for Portland and surrounding areas.

The average monthly flows are high from November to April and are low during the late summer months--July, August, September and October. This follows seasonal precipitation patterns except for some modifications on those streams originating in the Cascades.

Water shortages are most critical in the month of August whereas December is the month in which water supplies are at their peak. The major stream regulation occurs in the Willamette Basin before reaching Multnomah County.

Table 15. Annual Yield of Representative Streams, Multnomah County

Stream and Gaging Point	Drainage Area sq. miles	Years of Record	Mean Annual Yield ^{1/}	
			acre-feet ^{2/}	acre-feet/ sq. mile
Bull Run River near Multnomah Falls.....	47.9	2	NA	NA
North Fork Bull Run R. near Multnomah Falls.	8.32	3	NA	NA

NA - not available.

^{1/} Annual yield of surface water is the net yield, or quantity of water, leaving a drainage area during the hydrologic or water year which extends from Oct. 1 of one year to September 30 of the following year. Net yield is the precipitation on the area minus evaporation, transpiration, and net underground percolation. Average or mean annual yield actually reflects a composite of constantly changing conditions due to withdrawals from stream flow and changes in watershed characteristics.

^{2/} Acre-feet equals the quantity of water (43,650 cu. ft.) that covers one acre to a depth of one foot.

SOURCE: U.S. Department of the Interior Geological Survey, Water Resources Division, Water Resources Data for Oregon, Part 1, Surface Water Records, 1968.

Table 16. Extremes of Discharge at Selected Stations, Multnomah County

Stream and Location	Maximum Discharge		Minimum Discharge	
	Year	Flow (cfs) ^{1/}	Year	Flow (cfs)
Bull Run River near Multnomah Falls.....	1968	6,540	1967	33
North Fork Bull Run River near Multnomah Falls.....	1968	988	1967	9.8

^{1/} cfs - cubic feet per second.

SOURCE: U.S. Department of Interior Geological Survey, Water Resources Division, Water Resources Data for Oregon, Part 1, Surface Water Records, 1968.

The occurrence of ground water in Multnomah County is governed principally by topography, precipitation, and rock permeability. Ground slope determines, in part, the time surface runoff has to enter the ground, whereas permeability is the capacity of the rocks to transmit water.

The Willamette Valley Division is generally deficient in ground water--except for the flood plain areas which provide most abundant supplies.

Agriculture in Multnomah County already uses considerable ground water. Much of the irrigated land uses wells as a main source of water. It is the chief source of water in the Sandy Sub-Basin.

Ground water is still a good source for future development in certain areas in Multnomah County. The quality and quantity of water are usually adequate for domestic, agricultural, and industrial needs. However, a few local ground water shortages have occurred because of improper spacing of wells rather than a real lack of water.

Irrigation development has been accomplished primarily on an individual farm basis. Most irrigation is on land near the major streams where water is readily available from streams or wells.

Major industrial water users in the county fall mainly within two categories: lumber and woods products manufacturing, and food and kindred products processing.

Water requirements for use in food and kindred products processing include water for washing and cleaning of food products, brining, packaging, and canning of food stuffs. Water use is very seasonal with approximately 80 percent being required during the summer processing season from June through October.

Much of the water diverted for industrial uses is returned for further use downstream, but waste products from some manufacturing processes lower the quality of water and contribute to its pollution.

Pollution of streams has long been a matter of state and local concern. The table below lists the sewage treatment plants which have been constructed in the county by cities and other developed areas.

Table 17. Sewage Treatment Plants, Multnomah County, 1973

Location	Year Built	Type 1/	Design Population	Population Served	Receiving Stream
AP Industrial Park..	1969	AD(L)	75	25	Columbia Slough
Columbia Way Court..	1971	AD	175	145	Ditch to Col. Slough
Gresham.....	1955-1972	AS	30,000	17,500	Columbia River
Jubitz Truck Station	1964	AD	50	25	Columbia Slough
Mountain States Airport Park.....	1969	AD-EF	500	510	Columbia Slough
Portland Columbia Blvd.....	1951-1971	P	1,100,000	411,200	Columbia River
Tryon Creek.....	1965	AS	31,000	31,000	Willamette R.
Portland Mobile Home Court.....	1963-1972	TF	620	650	Columbia Slough
Portland Airport....	1941	P	3,000	3,000	Columbia River
Propco.....	1963	AD	150		Columbia Slough
Reynolds Aluminum...	1942	P	1,000	300	Salmon River
Troutdale.....	1970	AS	5,000	1,310	Sandy River
Wood Village.....	1943-1964	TF	1,500	1,275	Creek to Col. R.

1/ P - primary, AD - aerobic digestion, AD(L) - aerobic digestion, lagoon,

AS - activated sludge, EF - effluent filtration, TF - trickling filter.

SOURCE: Oregon State Department of Environmental Quality, Water Quality Control in Oregon, Oregon Sanitary Authority, 1970.

Water-based Recreation

The population density of Multnomah County results in heavy recreational use of the area's water bodies despite the generally low bacterial quality of the Willamette River. Boating, fishing, and stream or lake-oriented picnic and camping activities are expanding greatly.

The Sandy River is a recreation site that is popular with Portland residents because of its proximity to the urban area. The main reservoir in Multnomah County is located on the Bull Run River. This is used for recreation besides being a major water supply for Portland.

Multnomah County's two state parks--Dabney and Lewis and Clark--are the most-attended parks in the entire Willamette Basin.

Water needs for wildlife vary according to species and are met in most areas from streams, lakes, and marsh areas.

Multnomah County has an extensive fishlife population. One of the outstanding uses for the Willamette River and its tributaries is the production of anadromous fish for the sport and commercial fisheries of the Willamette and Columbia Rivers and the Pacific Ocean. Salmonoids include spring chinook, fall chinook, coho, steelhead trout, and resident species of trout.

The Willamette River serves as through-way for spring chinook, silver salmon, and steelhead trout.

Minerals

Income producing mineral deposits are primarily sand, gravel, and stone. In 1965, \$5,198,000 of sand and gravel were produced in Multnomah County. This was 13 percent lower than 1964's figure. The reason lies in the reduced yield of sand and gravel. The minerals that are produced in Multnomah County are sand and gravel, lime, stone, and clay; however, many other minerals commodities are consumed.

Many companies located in Portland use imported minerals for refining and producing by-products. Chemical, metalurgical, and processing plants furnish calcium carbide, ferrosilicone, ferromanganese, silicomanganese, caustic soda, chlorine, cast-steel products, and an inert carrier for insecticides.

The Union Carbide Corporation is a big producer of alloy metals and calcium carbide. They purchased 178.3 million kilowatt-hours of electrical energy for the production of these.

Wildlife

The most numerous big game animal in Multnomah County is the Columbia black-tailed deer. Hunting pressure is variable depending upon accessibility.

There are also several species of small game birds in Multnomah County. They include ring-necked pheasants, valley quail, bobwhite quail, mourning

doves, and band-tailed pigeons.

In forested areas, band-tailed pigeons, blue grouse, ruffed grouse, and mountain quail are most common.

Migratory waterfowl are abundant during the migration period. The State Game Commission purchased 13,000 acres on Sauvies, Government, Lemon and McGuire Islands to develop and preserve wintering grounds. About one-half of this area is used for public hunting.

There are many species of furbearers in Multnomah County such as beaver, racoon, gray fox, red fox, marten, mink, muskrat, otter, skunk, and weasel. Pollution of some streams has created unfavorable habitat conditions, which have forced furbearers into smaller streams and ditches, where considerable damage is caused.

Table 18. Big Game Animal Population Trends, Multnomah County

Game Management Unit <u>1/</u>	Miles Traveled	Animals Observed, 1971	Animals per Mile		
			1971	1970	5 yr. ave.*
Black-tailed deer Santiam.....	260	503	1.9	1.8	2.2

1/ Santiam Game Management Unit does not cover the entire county area, nor is it completely contained within the county.

SOURCE: Oregon State Game Commission, 1971 Annual Report, Oregon State Game Commission.

* - 5-year average, 1966-1970.

All the major stream and most of the minor streams maintain runs of anadromous fish. Coho, or silver, salmon, spring chinook, and cutthroat trout migrate annually to spawn in the county. However, low summer flows accompanied by high water temperatures and stream turbidity are detrimental to migration and spawning.

Nearly all of the game fish found in Oregon are in the streams, lakes, and reservoirs located in Multnomah County. The lowland streams and reservoirs contain warm water fish such as large-mouth bass, small-mouth bass, white crappie, bullhead catfish, and bluegill. Native fish population has been hard to maintain because of pollution and physical barriers to fish movement.

HUMAN RESOURCES

Population

Although the county was explored prior to 1800, the most significant exploration was the Lewis and Clark expedition of 1805. Trappers and employees of British and American fur companies traveled through the area as early as 1812. The first settlers in the Lower Willamette River Basin were retired Hudson Bay Company employees who settled in the east Portland area of the county. Settlers began arriving about 1835 and increased rapidly after 1840. The Donation Land Claim Law provided free land to immigrants arriving in Oregon by 1850 and encouraged rapid and widespread homesteading. Most of the Willamette Valley was taken up in donation land claims by 1855. As in most metropolitan areas, the greatest growth during the past 20 years has occurred in the fringe areas of the City of Portland. By 1972, the population totaled 650,000 for the entire county.

The following tables give more detailed information on the population growth, composition, and movement within the county.

Table 19. Number of Persons by Racial Group, Multnomah County, 1970

Racial Group	Number of Persons
Total.....	556,667
Caucasian.....	515,166
Spanish language.....	8,356
Black.....	22,155
American Indian.....	2,673
Other.....	8,317

SOURCE: Valde, Gary R., and Robert O. Coppedge, Income and Poverty Data for Racial Groups: A Compilation for Oregon Census County Divisions, Special Report 367, Oregon State University Extension Service, Corvallis, Oregon, 1972.

Table 20. Multnomah and Bordering Counties, Population and Rank Order in Oregon, 1960 and 1972

County	1960		1972	
	Rank	Population	Rank	Population
MULTNOMAH.....	1	522,812	1	560,000
Clackamas.....	4	113,038	4	178,400
Columbia.....	20	22,739	17	30,070
Washington.....	5	92,237	3	178,300

SOURCE: U.S. Bureau of the Census, Census of Population: 1960 General Social and Economic Characteristics, Final Report PC(1)-C39, Oregon, U.S. Government Printing Office, 1962; and Center for Population Research and Census, Population Estimates of Counties and Cities of Oregon, Portland State University, July, 1972.

Table 21. Land Area and Population Density, Multnomah County,
1950, 1960, 1970

County and State	Land Area	Population Density		
		1950	1960	1970
	square miles - - persons per sq. mile - -			
State of Oregon.....	96,248	15.8	18.4	21.7
MULTNOMAH.....	424	1,112.1	1,233.0	1,308.2
Clackamas.....	1,887	45.9	59.9	88.0
Columbia.....	646	35.6	34.6	44.6
Washington.....	716	85.6	128.8	220.5

SOURCE: U.S. Bureau of the Census, Census of Population: 1950, 1960, and 1970 General Population Characteristics, Final Report PC(1)-B39, U.S. Government Printing Office, Washington, D.C., 1951, 1961, and 1971 editions.

Table 22. Population Growth

Year	Population	Percent Increase or Decrease	
		Period	Percent
1910.....	226,261		
1920.....	275,898	1910-1920	21.9
1930.....	338,241	1920-1930	22.6
1940.....	335,099	1930-1940	4.9
1950.....	471,537	1940-1950	32.8
1960.....	522,813	1950-1960	10.9
1965.....	555,000	1960-1965	6.2
1970.....	554,668	1965-1970	(.8)
1972.....	560,000	1971-1972	1.0

SOURCE: Center for Population Research and Census, Population Estimates of Counties and Incorporated Cities of Oregon, Portland State University, 1972.

Table 23. Components of Change in Multnomah County's Population, 1940-1970

Year	Net Change	Natural Increase	Net Migration
1940-1950.....	116,438	42,002	74,436
1950-1960.....	51,276	53,122	-1,846
1960-1970.....	33,854	33,400	454

SOURCES: U.S. Bureau of the Census, Census of Population, General Demographic Trends for Metropolitan Areas, 1960 to 1970, Final Report PHC (2)-39, U.S. Government Printing Office, Washington, D.C., 1971. Oregon State Board of Census, Components of Population Growth, Population Bulletin P-3, 1961.

Table 24. Urban and Rural Population, Multnomah County

Year	Urban		Rural	
	Population	Percent Change	Population	Percent Change
1950.....	425,968	-	45,569	-
1960.....	503,766	18.3	19,047	-58.2
1970.....	540,080	6.8	14,588	-23.5

SOURCE: U.S. Bureau of the Census, Census of Population: 1960 and 1970
General Population Characteristics, Final Report PC(1)-B39,
 Oregon, U.S. Government Printing Office, Washington, D.C., 1961, 1971.

Table 25. Population Estimates of Incorporated Cities, Multnomah County,
Selected Years, 1960-1972

City and County	1960	1965	1971	1972
Maywood Park.....	-	-	1,200	1,220
Fairview.....	578	759	1,115	1,255
Gresham.....	3,944	5,400	12,150 <u>2/</u>	13,850
Portland <u>1/</u>	372,298	381,600	382,356 <u>2/</u>	383,356
Troutdale.....	522	600	1,410	1,680
Wood Village.....	822	900	1,925	1,960
Incorporated Area.....	378,164	389,259	400,308	403,441
Unincorporated Area.....	144,699	165,741	159,392	156,559
Total	522,813	555,000	559,700	560,000

1/ This figure represents the part of Portland that is located in Multnomah County. A very small part of Portland (about .01) is located in Clackamas County.

2/ Includes population annexed during the period from April 1, 1970 to June 30, 1971.

SOURCE: Center for Population Research and Census, Population Estimates of Counties and Incorporated Cities of Oregon, Portland State University, July, 1972.

Table 26. Population by Age and Sex, Multnomah County, 1960 and 1970

Age Group	Male		Female		Total		Percent	
	1960	1970	1960	1970	1960	1970	1960	1970
Total population.	251,719	264,538	271,094	292,129	522,813	556,667	100.0	100.0
Under 5....	26,053	21,449	25,308	20,369	51,361	41,818	9.8	7.5
5-9....	26,138	23,319	24,902	22,710	51,040	46,029	9.8	8.3
10-14....	22,817	24,902	22,915	24,576	45,732	49,478	8.8	8.9
15-19....	15,795	24,368	18,063	26,454	33,858	50,822	6.5	9.1
20-24....	12,265	21,181	15,146	26,965	27,411	48,146	5.2	8.6
25-34....	28,175	33,697	30,327	33,329	58,502	67,026	11.2	12.0
35-44....	34,052	27,267	37,202	29,015	71,254	56,282	13.6	10.1
45-54....	32,682	32,227	33,847	35,554	66,529	67,781	12.7	12.2
55-64....	25,193	27,798	27,522	30,972	52,715	58,770	10.1	10.6
65 and over....	28,549	28,330	35,862	42,185	64,411	70,515	12.3	12.7
Median age.....	33.2	29.4	34.7	32.0	34.0	30.6		

SOURCE: U.S. Bureau of the Census, Census of Population: 1960 and 1970 General Population Characteristics, Final Report PC(1)-B39, Oregon, U.S. Government Printing Office, Washington, D.C., 1961, 1971.

Table 27. Population of Selected Cities by Age and Sex, Multnomah County, 1960 and 1970

Age Group	Gresham		Portland	
	1960	1970	1960	1970
Under 5.....	315	850	32,422	26,779
5-14.....	718	2,189	63,727	59,594
15-24.....	485	1,558	43,975	69,926
25-34.....	331	1,381	38,385	43,668
35-44.....	536	1,173	49,193	35,363
45-54.....	465	1,070	50,311	46,333
55-64.....	383	727	41,739	44,274
65 and over.....	710	927	52,920	56,682
Total population.....	3,944	9,875	372,676	382,619
Male.....	1,836	4,843	172,092	179,163
Female.....	2,108	5,032	195,584	203,456

SOURCE: U.S. Bureau of the Census, Census of Population: 1960 and 1970
General Population Characteristics, Final Report PC(1)-B39, Oregon,
U.S. Government Printing Office, Washington, D.C., 1961, 1971.

Employment

The U.S. Census of Population, Department of Commerce reported in 1970 the total civilian labor force for Multnomah County was 240,895. At the time, the unemployment rate was 5.6 percent of the total labor force or 15,383 persons unemployed. For number of persons unemployed, Multnomah County ranked first in the State; however, ranking by percent the County ranked twenty-third for unemployment.

The Census of Population shows that only 3,157 persons were employed in agriculture. However, this does not include the large number of seasonal workers employed in growing and harvesting crops during June, July, and August.

Employed in nonagricultural industries were 225,508 employees and employers.

Table 28. Employment Status, Multnomah County and Portland, 1969 and 1970

Subject	Multnomah County		Portland	
	1960	1970 ^{1/}	1960	1970 ^{1/}
Total males, 14 years and over.....	180,055	189,664	130,896	131,902
Total labor force.....	137,844	143,827	98,307	97,608
Armed forces.....	1,314	592	586	362
Civilian labor force.....	136,570	143,235	97,721	97,246
Employed.....	128,786	133,316	91,942	90,006
Unemployed.....	7,784	9,919	5,779	7,240
Not in labor force.....	42,171	45,837	32,589	34,294
Inmate of institution.....	48	2,549	932	1,008
Enrolled in school.....	13,306	11,499	9,615	8,311
Other.....	26,797	31,789	22,042	24,975
Total females, 14 years and over...	201,797	218,972	150,682	156,869
Total labor force.....	77,663	97,660	60,628	70,041
Employed.....	74,201	92,192	58,000	66,293
Unemployed.....	3,437	5,464	2,603	3,748
Not in labor force.....	124,316	121,312	90,054	86,828
Inmate of institution.....	2,477	3,137	1,320	1,781
Enrolled in school.....	14,022	12,764	9,971	9,121
Other.....	107,817	105,411	78,763	75,926
Married (husbands present), in labor force.....	27,159	50,502	16,462	33,276

^{1/} 16 years and over.

SOURCE: U.S. Bureau of the Census, Census of Population: 1960 and 1970 General Social and Economic Characteristics, Final PC(1)-C39, Oregon, U.S. Government Printing Office, Washington, D.C., 1962, 1972.

Table 29. Percent of Age Group in Labor Force, Multnomah County and Portland, 1970

Age Group	Multnomah County		Portland	
	Male	Female	Male	Female
Years				
14-15.....	17.6	8.8	NA	NA
16-17.....	43.4	30.3	43.3	29.6
18-19.....	64.8	56.7	64.3	56.8
20-21.....	75.1	64.3	73.7	64.8
22-24.....	86.5	62.7	85.3	65.5
25-34.....	93.1	50.3	92.0	53.6
35-44.....	95.0	53.8	94.6	54.0
45-64.....	87.8	51.9	87.2	52.9
65 and over.....	22.4	10.7	22.9	10.8

SOURCE: U.S. Bureau of the Census, Census of Population: 1970 General Social and Economic Characteristics, Final Report PC(1)-C39, Oregon, U.S. Government Printing Office, Washington, D.C., 1972.

NA - not available.

Table 30. Industry Group of Employed, Multnomah County, 1960 and 1970

Industry	Number Employed	
	1960	1970
Agriculture.....	2,710	3,157
Forestry and fisheries.....	472	
Mining.....	76	257
Construction.....	12,018	11,783
Manufacturing.....	39,888	40,685
Lumber and wood products.....	5,667	4,242
Food and kindred products.....	6,298	3,528
Other.....	27,923	32,915
Transportation.....	14,238	12,663
Communications.....	3,635	4,016
Wholesale trade.....	13,374	16,774
Retail trade.....	34,517	39,236
Business services.....	15,420	25,159
Personal services.....	15,548	12,624
Hospitals and health services.....	6,728	15,898
Educational services.....	10,184	17,400
Professional and related services.....	7,243	11,350
Public administration.....	10,657	10,161
Utilities and sanitary services...	NA	4,345

NA - not available.

SOURCE: U.S. Bureau of the Census, Census of Population: 1960 and 1970 General Social and Economic Characteristics, Final Report PC(1)-C39, Oregon, U.S. Government Printing Office, Washington, D.C., 1962 and 1972.

Table 31. Number of Hired Seasonal Workers in Agriculture by Type of Worker, Portland Area, 1965 and 1971, Midmonth Figures

Month	Portland Area					
	Local		Intrastate Migratory		Interstate Migratory	
	1965	1971	1965	1971	1965	1971
May.....	270	245	-	-	-	-
June.....	3,420	2,505	-	-	-	5
July.....	3,825	6,835	25	-	80	15
August.....	5,140	2,345	-	35	125	-
September...	895	530	-	-	-	-
October.....	290	515	-	-	-	-

SOURCE: Oregon State Department of Employment, 1965 Oregon Farm Labor Report, 1966.

Oregon State Department of Human Resources, Employment Division, 1971 Annual Rural Manpower Report, 1972.

Table 32. Multnomah County Occupations, 1970

Occupation	Number Employed		
	Male	Female	Total
Total employed, 16 years and over..	133,316	92,192	225,508
Professional, technical and kindred workers.....	18,964	13,907	32,871
Engineers.....	2,624	-	2,624
Physicians and related practioners.....	1,917	-	1,917
Other health workers.....	467	4,075	4,542
Teachers.....	1,999	4,375	6,375
Technicians, except health.....	1,864	286	2,150
Other professional workers.....	10,093	5,171	15,264
Managers and administrators.....	17,126	3,855	20,981
Sales workers.....	12,029	7,153	19,182
Clerical and kindred workers.....	11,699	37,261	48,960
Craftsmen and kindred workers.....	26,665	1,620	28,285
Operative except transport.....	14,281	7,261	21,542
Transport.....	8,949	321	9,270
Laborers except farm.....	9,487	877	10,364
Farmers and farm managers.....	384	126	510
Farm laborers.....	841	212	1,053
Service workers.....	12,806	17,337	30,143
Cleaning service.....	4,239	2,371	6,610
Food service.....	3,691	7,092	10,783
Health service.....	368	3,805	4,173
Personal service.....	1,293	2,283	3,576
Protective service.....	2,031	137	2,168
Private household.....	85	2,262	2,347

SOURCE: U.S. Bureau of the Census, Census of Population: 1970 General Social and Economic Characteristics, Final Report PC(1)-C39, Oregon, U.S. Government Printing Office, Washington, D.C., 1972.

Table 33. Median Earnings of Selected Occupation Groups, Multnomah County, 1959 and 1969

Occupation Group	1959	1969
Male, total with earnings.....	\$5,285	\$7,968
Professional, managerial, and kindred workers.....	6,874	10,449
Farmers and farm managers.....	2,651	5,036
Craftsmen, foremen, and kindred workers	5,628	8,578
Operatives and kindred workers.....	4,938	7,443
Farm laborers.....	847	1,968
Laborers, excluding farm and mine.....	3,980	5,414
Female, total with earnings.....	\$2,546	\$3,853
Clerical and kindred workers.....	3,158	4,331
Operatives and kindred workers.....	2,608	3,660

SOURCE: U.S. Bureau of the Census, Census of Population: 1960 and 1970 General Social and Economic Characteristics, Final Report PC(1)-C39, Oregon, U.S. Government Printing Office, Washington, D.C., 1962, 1972.

Table 34. Annual Average Labor Force in Portland Area 1/, 1968-1971

Industry	Thousands of Persons			
	1968	1969	1970	1971
Civilian labor force.....	435.8	458.4	465.5	473.2
Workers in labor management disputes	.5	.4	.5	1.0
Unemployment.....	15.5	16.2	26.1	28.8
Percent of labor force.....	3.6	3.5	5.6	6.1
Employment.....	419.8	441.8	438.9	443.4
Agricultural.....	12.0	12.7	11.8	10.5
Nonagricultural.....	407.8	429.1	427.1	432.9
Self-employed, unpaid family and domestics.....	46.2	47.5	46.5	47.8
Wage and salary workers.....	361.6	381.6	380.6	385.1
Manufacturing.....	86.8	91.3	85.7	83.8
Durable goods.....	55.9	59.9	54.8	53.6
Lumber and wood.....	9.7	9.5	8.7	8.7
Primary metal.....	6.6	7.0	6.5	6.2
Other durables.....	39.6	43.4	39.5	38.7
Nondurable goods.....	30.9	31.4	30.9	30.2
Food products.....	10.2	10.5	10.3	10.4
Paper.....	7.9	7.7	7.6	7.1
Other.....	12.8	13.2	13.3	12.7
Nonmanufacturing.....	274.8	290.3	294.9	301.3
Contract construction.....	18.0	19.5	17.3	17.8
Transportation, communication, utilities.....	29.7	30.4	30.2	29.6
Wholesale and retail trade.....	88.1	92.5	92.6	93.8
Finance, insurance and real estate.....	22.8	24.2	24.7	25.0
Service and miscellaneous.....	59.3	64.6	67.7	70.4
Government.....	56.9	59.1	62.4	64.7

1/ Includes Multnomah, Clackamas, and Washington Counties in Oregon and Clark County in Washington.

SOURCE: Oregon State Department of Human Resources, Employment Division, Labor Force and Employment in Oregon by County 1968 through 1971 publications, Research and Statistics Section, 1969, 1972.

Table 35. Number and Percent of Persons Unemployed in Multnomah and Bordering Counties, 1968 and 1971

County	Number of People		Percent of Labor Force	
	1968	1971	1968	1971
MULTNOMAH 1/.....	15,500	28,800	3.6	6.1
Columbia.....	440	720	5.4	7.9
Hood River.....	440	550	7.3	8.4

1/ Figures include Multnomah, Clackamas, and Washington Counties in Oregon and Clark County, Washington.

SOURCE: Oregon State Department of Human Resources, Employment Division, Labor Force and Employment in Oregon by County 1968 through 1971 publications, Research and Statistics Section, 1969, 1972.

Table 36. Covered Payrolls and Employment by Industry, Multnomah County
1970 and 1971

Industry	Average Employment		Annual Payroll
	1970	1971	1971
Agriculture, forestry, and fisheries..	423	509	\$3,079,617
Mining.....	87	86	933,664
Contract construction.....	11,642	11,654	124,142,907
Lumber and wood products manufacturing	4,337	4,285	41,878,620
Food and kindred products manufacturing.....	7,332	7,250	67,232,489
Other manufacturing.....	38,474	37,052	335,215,589
Transportation, communication, elec- tric, gas, and sanitary services....	21,718	21,289	219,113,764
Wholesale and retail trade.....	71,555	71,054	509,742,909
Finance, insurance and real estate....	20,458	20,322	153,179,086
Services and miscellaneous.....	35,486	36,512	213,433,929
Government.....	17,648	22,535	215,388,151
Yearly total.....	229,163	232,554	\$1,883,379,170

SOURCE: Oregon State Department of Human Resources, Employment Division,
Oregon Covered Employment and Payrolls, 1970 and 1971, Summary Data,
Research and Statistics Section, 1971, 1972.

Table 37. Major Occupation Group of Unemployed, Multnomah County, 1960 and 1970

Occupation Group	Number of Persons	
	1960	1970
Professional, technical, and kindred workers.	321	1,164
Farmers and farm managers.....	60	<u>1/</u>
Managers, officials and proprietors, excluding farm.....	372	<u>1/</u>
Clerical and kindred workers.....	1,335	2,112
Sales workers.....	703	885
Craftsmen, foremen, and kindred workers.....	1,681	2,616
Operatives and kindred workers.....	2,243	3,196
Service workers, including private household.	1,667	2,624
Farm laborers.....	312	353
Laborers, excluding farm and mine.....	1,329	1,483

1/ Included in Professional, technical, and kindred workers.

SOURCE: U.S. Bureau of the Census, Census of Population: 1960 and 1970
General Social and Economic Characteristics, Final Report PC(1)-
C39, Oregon, U.S. Government Printing Office, Washington, D.C.,
1962, 1972.

Table 38. Local Government Employees and Payroll, Multnomah County,
October, 1967

Item	Employees and Earnings
Employees.....	17,446
Full-time only.....	13,986
Full-time equivalent employment....	14,848
Education.....	7,993
Teachers only.....	5,805
Functions other than education...	6,855
Highways.....	720
Public welfare.....	153
Hospitals.....	517
Health.....	305
Police protection.....	1,160
Fire protection.....	845
Sewerage.....	153
Sanitation other than sewerage.	130
Parks and recreation.....	711
Natural resources.....	15
Housing and urban renewal.....	54
Correction.....	71
Libraries.....	-
Financial administration.....	390
General control.....	603
Water supply.....	524
Other local utilities.....	-
Other and unallocable.....	504
October payroll.....	\$9,156,000
Education.....	5,067,000
Teachers only.....	3,993,000
Functions other than education...	4,089,000
Average monthly earnings, full-time employment	
Teachers.....	\$687
Others.....	\$577

SOURCE: U.S. Bureau of the Census, Census of Governments, 1967, Vol. 3, No. 2, Compendium of Public Employment, U.S. Government Printing Office, Washington, D.C., 1969.

Income

Table 39. Net Effective Buying Income Estimates, Multnomah County,
1967 and 1969

Area	Net Dollars		Per Household	
	1967	1969	1967	1969
	- thousand dollars -		- - dollars - -	
State of Oregon.....	\$5,224,888	\$6,650,690	\$8,113	\$9,440
Multnomah County.....	1,666,808	2,042,097	8,508	10,060
Portland.....	1,195,926	1,435,416	8,236	9,751

SOURCE: Bureau of Business and Economic Research, Oregon Economic Statistics
1972, University of Oregon, 1972.

Table 40. Bank Debits and Deposits, Multnomah County, 1965-1971

Year	Bank Debits <u>1/</u>	Bank Deposits
	- - - - - thousand dollars - - - - -	
1965.....	\$20,034,014	\$1,414,817
1966.....	21,394,758	1,457,987
1967.....	23,178,484	1,593,763
1968.....	27,429,188	1,786,592
1969.....	34,698,383	1,631,439
1970.....	37,442,435	1,788,209
1971.....	41,280,740	NA

NA - not available.

1/ Bank debits represent the dollar value of checks drawn against deposit accounts of individuals and businesses. Included are debits to demand deposit accounts of individuals, business firms, and state and other political subdivisions, and payments from escrow or trust accounts. Excluded are debits to U.S. Government, interbank, time and savings accounts, and several other categories of accounts.

SOURCE: Bureau of Business and Economic Research, Oregon Economic Statistics,
1969 and 1972, University of Oregon, 1972.

Table 41. Income and Poverty Data for Racial Groups, Multnomah County, 1970

Item	Number	Percent
<u>Mean Income</u>		
Families:		
All races.....	\$11,582	<u>1/</u>
Caucasian.....	11,747	
Spanish language.....	10,435	
Black.....	8,131	
Other.....	10,352	
Unrelated individuals:		
All races.....	\$4,042	
Caucasian.....	4,106	
Spanish language.....	3,900	
Black.....	3,043	
Other.....	2,999	
<u>Families by Family Income Class</u>		
All races:		
under \$3,999.....	17,807	12.46
\$4,000 to \$5,999.....	13,785	9.65
\$6,000 to \$11,999.....	58,854	41.18
\$12,000 +.....	52,464	36.71
total.....	142,910	100.00
Caucasian:		
under \$3,999.....	15,895	11.88
\$4,000 to \$5,999.....	12,524	9.36
\$6,000 to \$11,999.....	55,178	41.22
\$12,000 +.....	50,253	37.54
total.....	133,850	100.00
Spanish Language:		
under \$3,999.....	236	12.55
\$4,000 to \$5,999.....	204	10.85
\$6,000 to \$11,999.....	900	47.87
\$12,000 +.....	540	28.73
total.....	1,880	100.00
Black:		
under \$3,999.....	1,288	26.07
\$4,000 to \$5,999.....	824	16.68
\$6,000 to \$11,999.....	1,866	37.76
\$12,000+.....	963	19.49
total.....	4,941	100.00
Other:		
under \$3,999.....	388	17.38
\$4,000 to \$5,999.....	233	10.43
\$6,000 to \$11,999.....	910	40.48
\$12,000+.....	708	31.71
total.....	2,237	100.00

Table 41, cont. Income and Poverty Data for Racial Groups,
Multnomah County, 1970

Item	Number	Percent
<u>Income below poverty level (bpl)</u>		
Families bpl		
All races.....	10,773	100.00
Caucasian.....	9,153	84.96
Spanish language.....	233	2.16
Black.....	1,099	10.21
Other.....	288	2.67
Persons in families bpl.....	37,136	
Unrelated individuals bpl		
Under 65.....	13,214	
65 and over.....	11,208	
Male family head, 14-64 years, bpl		
Employed.....	2,608	
Unemployed.....	448	
Not in labor force.....	1,293	
Female family heads bpl in labor force with children below 6 years.	822	
Income source of families and unrelated individuals bpl		
Earnings.....	14,765	
Social security or railroad retirement.....	14,496	
Public assistance or welfare.....	5,773	

1/ Blank spaces indicate a zero, suppressed data, or not applicable.

SOURCE: Valde, Gary R. and Robert O. Coppedge, Income and Poverty Data for Racial Groups: A Compilation for Oregon Census County Divisions, Special Report 367, Oregon State University, Corvallis, Oregon, 1972.

Education

In addition to the public grade schools and high schools listed in the table below, there are a number of private colleges and schools of higher education, one state university and two community colleges located within the county as well as one publically financed medical school.

Table 42. Formal Education Facilities, Multnomah County, 1969-70 and 1971

School District, Type School and Number of Each Type	Enrollment ^{1/}		High School Graduates, 1971
	1969-70	1971	
Bonneville School District #46			
Elementary - 1.....	50	44	
Corbett School District #39			
Elementary - 2.....	363	395	
High School - 1.....	185	185	40
David Douglas School District #40			
Elementary - 13.....	6,591	6,213	
High School - 1.....	3,093	3,092	672
Gresham School District #4			
Elementary - 5.....	1,927	2,781	
Gresham Union High #2J			
High School - 3.....	3,997	4,495	929
Lynch School District #28			
Elementary - 7.....	3,830	3,787	
Orient School District #6J			
Elementary - 2.....	673	711	
Parkrose School District #3			
Elementary - 7.....	2,763	2,630	
Junior high - 2.....	1,462	1,483	
High School - 1.....	1,369	1,439	417
Portland School District #1J			
Elementary - 102.....	50,789	48,676	
High School - 15.....	23,919	23,442	5,275
Reynolds School District #7			
Elementary - 5.....	1,744	1,830	
Junior high - 1.....	586	580	
High School - 2.....	1,038	1,203	280
Riverdale School District #51J			
Elementary - 2.....	317	274	
Rockwood School District #27			
Elementary - 5.....	2,114	2,146	
Sauvies Island School District #19			
Elementary - 1.....	98	91	
County totals			
Elementary - 174.....	71,629	69,578	
Junior high - 3.....	2,048	2,063	
High School - 24.....	33,601	33,856	7,613

^{1/} Average daily membership.

SOURCE: Oregon Board of Higher Education, 1971-72 Oregon School-Community College Directory, and 1971 Oregon Public High School Graduates, and Summary of Pupil Personnel for Fiscal Year ending June 30, 1969, School Finance and Statistical Service.

Table 43. Racial and Ethnic Distribution of Public School Enrollment
by School District, Multnomah County, 1972

District	White	Black	American Indian	Spanish Surname	Other <u>1/</u>	Total
- - - - - number of students - - - - -						
Bonneville.....	42	-	-	-	-	42
Corbett.....	551	1	4	4	6	566
David Douglas.....	8,580	46	43	51	135	8,855
Gresham.....	3,051	11	4	19	47	3,132
Gresham (UHS) <u>2/</u>	4,538	8	12	12	52	4,622
Lynch.....	3,599	14	19	19	50	3,701
Orient.....	703	1	3	4	10	721
Parkrose.....	5,137	53	14	31	73	5,308
Pleasant Valley.....	386	4	-	-	1	391
Portland District #1	62,471	7,056	426	724	1,066	71,743
Reynolds.....	3,635	13	5	29	56	3,738
Riverdale.....	257	1	-	-	8	266
Rockwood.....	2,063	1	16	35	21	2,136
Sauvies Island.....	101	-	-	-	-	101
Total.....	95,114	7,209	546	928	1,525	105,322

1/ Includes Japanese, Chinese, Filipino, and others.

2/ Incomplete.

SOURCE: Compiled from Oregon Board of Education reports by Oregon State Extension Service.

Table 44. Years of School Completed by Population 25 Years and Over,
Multnomah County, 1970

Education	Number Males	Number Females	Total	Percent
Total, 25 years and over.....	149,503	171,127	320,630	100.00
No school years completed...	1,240	1,455	2,695	.84
Elementary: 1-4 years.....	2,856	2,274	5,130	1.59
5-7 years.....	9,867	8,607	18,474	5.76
8 years.....	19,672	20,182	39,854	12.42
High School: 1-3 years.....	26,750	32,229	58,979	18.39
4 years.....	44,227	67,020	111,247	34.69
College: 1-3 years.....	22,181	23,695	45,876	14.30
4 yrs. or more	22,710	15,665	38,375	11.96
Median school years completed.	12.3	12.3	12.3	

SOURCE: U.S. Bureau of the Census, Census of Population: 1970 General Social and Economic Characteristics, Final Report PC(1)-C39, Oregon, U.S. Government Printing Office, Washington, D.C., 1972.

Table 45. Multnomah County Residents Enrolled in Higher Education Institutions, Fall 1971

Institution	Number Enrolled
Total enrolled.....	17,457
Eastern Oregon College.....	59
Oregon College of Education.....	332
Oregon State University.....	2,373
Portland State University.....	9,112
Southern Oregon College.....	283
University of Oregon.....	2,387
Oregon Technical Institute.....	99
University of Oregon Dental School..	131
University of Oregon Medical School.	365
Total in private and independent institutions.....	2,316

SOURCE: Oregon Educational Coordinating Council, Post Secondary Enrollment in Oregon, An Analysis of the Statewide Student Enrollment Data Survey, 1972.

Table 46. Youth Organizations, Multnomah County

Organization	Membership
Boy Scouts.....	15,603
Camp Fire Girls.....	7,285
4-H.....	2,278
Future Farmers.....	96
Girl Scouts.....	3,087
Junior Achievement.....	785 1/
YMCA.....	15,566 2/
EFNEP.....	1,270

1/ Includes members 8 - 18 years of age.

2/ Multnomah and Clackamas Counties combined.

SOURCE: 1973 Boy Scout figure from Columbia-Pacific Council Office, unpublished data; 1973 Camp Fire Girls figure from Portland Office, Camp Fire Girls, unpublished data; 1973 Girl Scout figure from Columbia River Girl Scout Council, unpublished data; 1972 4-H, Future Farmers and EFNEP figures from Oregon State University Extension Service, 4-H Division, unpublished data; 1972 YMCA figures from Portland Office, YMCA, taken from YMCA National Yearbook.

Although Multnomah County operates no correction institutions of its own, it is served by four state correctional institutions in Marion County. These include training schools for socially maladjusted boys between 12 and 18 years of age and girls between the ages of 12 and 21.

Table 47. Felonies and Juvenile Delinquency, Multnomah County, 1968

Subject	Number
Commitments to felony and correctional institutions, 1967-68	
Total committments.....	456
Oregon State Penitentiary.....	172
Oregon State Correctional Institution...	152
MacLaren (boys' training school) 1/.....	97
Hillcrest (girls' training school) 1/...	35
Juvenile court cases, 1968	
All cases.....	13,971
Delinquency.....	5,778
Traffic.....	6,612
Other.....	1,581

1/ Oregon State Department of Human Resources, Children Services Division, Adolescent Population and Commitment Data by County, by Calendar Year, 1967-1970.

SOURCE: Oregon State Executive Department, Program Planning Division, District Facts, 1970.

Health and Vital Statistics

Multnomah County has more health facilities and medical personnel per person than any other county in Oregon. There are 16 hospitals in the county, all but one located in the major population center of the state, Portland.

The following tables give additional information on health problems in the county, medical personnel available, and facilities available in the county.

Table 48. Existing Medical Facilities, Number of Existing Beds, and Number of Beds Needed, Multnomah County, 1971 ^{1/}

Category and Community	Number of Facilities		Number of Beds	
	Existing	Needed	Existing	Needed
General Hospital				
Gresham.....	1	1	58	58
Portland.....	15	15	3,149	3,095
Long-term Care Facilities				
Gresham.....	1	1	64	64
Portland.....	4	4	370	370
Troutdale.....	1	1	21	21
Gresham.....	5	5	331	361
Portland.....	34	34	2,495	2,595
Troutdale.....	2	2	377	377
Diagnostic and treatment centers				
Gresham.....	1	1		
Portland.....	15	15		

^{1/} Mental Facilities: the state plan of the Mental Health Division is made a part of this plan by reference.

Tuberculosis Hospitals: 1 existing, one needed.

Rehabilitation Facilities: 6 existing and 6 needed.

SOURCE: Oregon State Board of Health, Health Facility Planning and Construction Section, Oregon State Plan for Construction and Modernization of Hospitals, Public Health Centers and Medical Facilities, 1971 Annual Revision, 1971.

Table 49. Number of Licensed Medical Personnel and Ratio of Population Per Professional, Multnomah County, 1969

Profession	Multnomah County		State
	Number	Ratio ^{1/}	Ratio ^{1/}
Medical doctors and doctors of osteopathy.....	1,343	417	770
Dentists.....	575	973	1,470
Registered nurses.....	3,367	166	276
Licensed practical nurses.....	921	607	1,002
Pharmacists.....	419	1,335	1,375

^{1/} Ratio figure equals population per professional in particular category.

SOURCE: Oregon State Executive Department, Program Planning Division, District Facts, 1970.

Table 50. Diagnostic or Treatment Center Facilities, Multnomah County, 1970

Name and Location	Outpatient Visits During Year	Services <u>1/</u>
Gresham General Hospital, Gresham..	10,823	A,H,I
Bess Kaiser Hospital, Portland.....	44,280	A,B,E,H,I
City of Roses Hospital, Portland...	1,825	A,H,I
Emanuel Hospital, Portland.....	74,179	A,B,E,G,L,M,O,P,T
Good Samaritan Hospital, Portland..	29,795	A,H,I,J,K,M,N,P,R, S,T
Holladay Park Hospital, Portland....	10,113	A,D,H,I
Multnomah Hospital, Portland.....	27,775	
Physicians and Surgeons Hospital, Portland.....	11,778	H,I
Portland Adventist Hospital, Portland.....	20,646	A,B,H,I
Portland Osteopathic Hospital, Portland.....	10,192	A,B,H,I
Providence Hospital, Portland.....	38,255	A,H,I,L,M,P,U
Shriners Hospital, Portland.....	3,220	E,H
U. of O. Dental School, Portland...	50,000	C,H,I
U. of O. Medical School, Portland..	117,164	A,B,D,E,F,Q,J-W
U. of O. Tuberculosis Hospital, Portland.....	2,823	
Woodland Park Hospital, Portland...	28,377	

1/ Service Code, 1964 data.

A. General	M. Electroencephalogram
B. Cancer	N. Ophthalmology
C. Dental	O. Gynecology
D. Mental Hygiene	P. Radioisotopes
E. Orthopedic	Q. Medical
F. Tuberculosis	R. Muscular Dystrophy
G. Physiotherapy	S. Neurological
H. X-Ray	T. Obstetric
I. Clinical Laboratory	U. Well baby clinic
J. Cardiovascular	V. Pediatrics
K. Arteriovascular	W. Urology
L. Electrocardiogram	

SOURCE: Oregon State Board of Health, Health Facility Planning and Construction Section, Oregon State Plan for Construction and Modernization of Hospitals, Public Health Centers and Medical Facilities, 1971 Annual Revision, 1971.

Table 51. Percent of Occupancy of Existing Medical Facilities, 1969

Name of Facility	Location	Total Capacity	Percent of Occupancy
General Hospital			
Gresham General.....	Gresham	58 <u>1/</u>	70
Bess Kaiser Memorial.....	Portland	239	68
City of Roses.....	Portland	21 <u>1/</u>	82
Emanuel.....	Portland	436	89
Good Samaritan.....	Portland	492 <u>2/</u>	82
Holladay Park.....	Portland	135	80
Medical Center.....	Portland	53	66
Multnomah.....	Portland	300	82
Physicians and Surgeons.....	Portland	160	77
Portland Adventist.....	Portland	276	74
Portland Osteopathic.....	Portland	103	69
Providence.....	Portland	400 <u>1/</u> <u>3/</u>	93
St. Vincents.....	Portland	420 <u>4/</u>	66
Shriners.....	Portland	80	78
U. of O. Medical School.....	Portland	241	72
Wemme Memorial Hospital.....	Portland	13	34
Woodland Park.....	Portland	130	30
Long-term Care Facilities			
The Village Convalescent			
Hospital.....	Gresham	64	84
Belmont Convalescent Hospital	Portland	58	88
Colonial Manor Sanatorium....	Portland	100	97
Crestview Convalescent Center	Portland	100	75
Park Royal Health.....	Portland	112	62
Edgefield Manor.....	Troutdale	21	91
City of Roses Hospital.....	Portland	41 <u>5/</u>	64
Emanuel Hospital.....	Portland	<u>6/</u>	<u>6/</u>
Providence Hospital.....	Portland	60 <u>5/</u>	31
Gresham General Hospital.....	Gresham	48	151
Nursing Homes			
Colbert Nursing Home.....	Gresham	78	95
Echo Nursing Home.....	Gresham	46	100
Hood View Convalescent Center	Gresham	53	87
Ideal.....	Gresham	89	94
Mountain View Manor <u>7/</u>	Gresham	22	97
Rest Harbor Sanatorium <u>7/</u>	Gresham	65	98
Baptist Manor.....	Portland	94	50
Bell Rose Sanatorium.....	Portland	60	105 <u>8/</u>
Care Convalescent Home.....	Portland	51	96
Carolina Nursing Home.....	Portland	32	129 <u>8/</u>
Columbia Manor.....	Portland	96	94
Del's Convalescent Home.....	Portland	40	94
Durano-Gonzales.....	Portland	33	10
Easport Nursing Home.....	Portland	91	103
Fairlawn Nursing Home.....	Portland	89	97
Flanders St.Con. <u>7/</u>	Portland	27	87
Gard Conv. <u>7/</u>	Portland	25	39
Gateway Care Center.....	Portland	97	73
Glenaire Convalescent Center.	Portland	95	88

Table 51, cont. Percent of Occupancy of Existing Medical Facilities, 1969

Name of Facility	Location	Total Capacity	Percent of Occupancy
Nursing Homes, cont.			
Graystone Nursing Home.....	Portland	37	95
Hazelwood Nursing Home.....	Portland	122	98
Hillhaven Nursing Home.....	Portland	86	91
Hill View Manor 7/.....	Portland	26	108
Jallo's Nursing Home.....	Portland	62	101
Kearney Care Center.....	Portland	192	92
Lombard Nursing Home.....	Portland	31	76
McCarthy Nursing Home.....	Portland	75	94
Midway Nursing Home.....	Portland	40	102 8/
Mt. St. Joseph's.....	Portland	139	136 8/
Mt. Tabor Care Center.....	Portland	113	91
Odd Fellows Home 7/.....	Portland	20	58
Park View Nursing Home.....	Portland	120	68
Parkrose Nursing Home 7/.....	Portland	23	104 8/
Porthaven Nursing Home.....	Portland	76	100
Portland East Conv. Home.....	Portland	86	74
Portland Medical Sanatorium..	Portland	32	100
Powellhurst Nursing Home.....	Portland	75	93
Reedwood Convalescent.....	Portland	60	100
Regina Coeli 7/.....	Portland	6	77
Robison Jewish Home 7/.....	Portland	18	96
Rose City Nursing Home.....	Portland	34	99
Roselawn Nursing Home.....	Portland	63	81
Satterlund's Nursing Home 7/..	Portland	9	96
Selby Nursing Home.....	Portland	61	95
Sunshine Haven Nursing Home 7/..	Portland	14	97
Treadwell Nursing Home.....	Portland	87	100
Victoria Nursing Home.....	Portland	44	99
Wallway Nursing Home.....	Portland	37	96
Willamette Blvd. Sanatorium..	Portland	45	99
Womans Convalescent Home 7/..	Portland	20	67
Edgefield Manor Nursing Home.	Troutdale	281	93
Green Acres Nursing Home.....	Troutdale	96	92

1/ Excludes long term care beds.

2/ Phase III construction was completed in March, 1969, making total 492.

3/ Includes potential of 24 beds in solariums.

4/ Replacement for St.Vincent's is in Washington County. Percent occupancy is based on old facility.

5/ Excludes acute care beds.

6/ Eighty beds under construction under Hill-Burton project.

7/ These facilities do not have the skilled nursing care required by the State Plan in order to be classified as a long term care facility. Therefore, totals for areas do not include these beds.

8/ Licensed capacity exceeds evaluation capacity resulting in a high percentage of occupancy.

SOURCE: Oregon State Board of Health, Health Facility Planning and Construction Section, Oregon State Plan for Construction and Modernization of Hospitals, Public Health Centers and Medical Facilities, 1971 Annual Revision, 1971.

Table 52. Health Statistics, Multnomah County, 1970

Item	Multnomah County		State
	Number	Rate <u>1/</u>	Rate <u>1/</u>
Morbidity			
Tuberculosis.....	126	22.5	11.6
Syphilis.....	59	10.5	5.3
Gonorrhea.....	4,931	881.0	422.0
Influenza.....	3,704	661.8	1,171.7
Hepatitis.....	190 <u>2/</u>	34.2 <u>2/</u>	45.1 <u>2/</u>
Measles (Rubella).....	114	20.4	18.1
Deaths from all causes.....	6,199	11.1 <u>3/</u>	9.4 <u>3/</u>
Malignant neoplasms (cancer)....	1,078	192.6	168.4
Diabetes mellitus.....	75	13.4	13.3
Heart diseases.....	2,351	420.0	349.6
Cerebrovascular diseases.....	778	139.0	110.9
Arteriosclerosis.....	126	22.5	21.2
Other cardiovascular diseases...	117	20.9	17.3
Influenza and pneumonia.....	175	31.3	26.4
Bronchitis, emphysema, asthma...	168	30.0	26.9
Peptic ulcer.....	24	4.3	4.3
Cirrhosis of liver.....	186	33.2	15.8
Congenital anomalies.....	55	9.8	8.2
Certain infancy mortality causes	90	16.1	14.7
All other diseases.....	530	94.7	76.9
Accidents.....	277	49.5	61.3
Suicides.....	105	18.8	14.9
Homicides.....	19	3.4	3.8

1/ Rate per 100,000 population.

2/ 1966-68 average, taken from Office of the Governor Planning Section, Health Facts, 1969.

3/ Rate per 1,000 population.

SOURCE: Oregon State Department of Human Resources, State Health Division, Vital Statistics Section, Vital Statistics Annual Report, 1970.

Table 53. Number of Admissions to State Psychiatric Hospitals and Mental Health Clinics and Ratio per 100,000 Population, Multnomah County, 1968-69

Facility	Multnomah County		State
	Number	Ratio	Ratio
Psychiatric hospitals.....	1,084	194	134
Mental health clinics.....	2,414	431	460

SOURCE: Oregon State Executive Department, Program Planning Division, District Facts, 1970

Table 54. Births and Deaths by Major Category, Multnomah County and State of Oregon, 1967 and 1971

Category	Multnomah County				State
	Number		Rate		Rate
	1967	1971	1967	1971	1971
All births <u>1/</u>	8,895	8,352	16.0	14.9	15.6
All deaths <u>1/</u>	6,285	6,199	11.3	6.5	9.4
Illegitimate births <u>2/</u>	1,255	997	141.1	119.4	78.1
Premature births <u>2/</u>	652	548	73.3	65.6	57.4
Infant deaths <u>2/</u>	191	180	21.5	21.6	18.4
Accidental deaths <u>3/</u>	226	277	40.7	49.5	61.3

1/ Rates per 1,000 population.

2/ Rates per 1,000 live births

3/ Rate per 100,000 population.

SOURCE: Oregon State Department of Human Resources, State Health Division, Vital Statistics Section, Vital Statistics Annual Report, 1971; 1968 Statistical Report.

Public Welfare

Table 55. Average Monthly Public Welfare Payments by Type of Service, Multnomah County, Fiscal Years 1968-69 and 1971-72

Type of Service	Average Payment Per Case	
	1968-69	1971-72
Old Age Assistance.....	\$ 60.32	\$ 62.62
Aid to the Disabled.....	85.01	94.73
Aid to the Blind.....	96.43	118.54
General Assistance.....	68.74	74.17
Aid to Dependent Children <u>1/</u>		
UN <u>2/</u>	38.96	50.73
Basic <u>2/</u>	43.91	52.05

1/ Payment per person, not case.

2/ The UN figure represents payments to families where the male parent is in the home but unemployed. The basic figure represents all others.

SOURCE: Unpublished data received from Sondra Lipman, Oregon Public Welfare Division, Research and Statistics Section, May 1973.

Table 56. Public Welfare Payments for Assistance, Multnomah County
August, 1972

Category	Cases	Average Payment
<u>Cases receiving non-medical payments</u>		
Old Age Assistance.....	2,448	\$ 64.47
Aid to the Blind.....	267	118.59
Aid to the Disabled.....	3,415	97.00
Aid to Dependent Children <u>1/</u>	30,047	50.69
General Assistance.....	1,305	72.09
Foster care.....	NA	NA
<u>Physicians services 1/</u>		
OAA.....	541	\$ 19.76
AB.....	63	21.90
AD.....	1,150	26.65
ADC.....	5,592	18.80
GA.....	580	19.70
FC.....	261	17.61
<u>Hospital payments 1/</u>		
OAA.....	68	\$227.69
AB.....	7	1,194.82
AD.....	139	821.44
ADC.....	531	423.56
GA.....	102	725.36
FC.....	13	497.54
<u>Drug payments 1/</u>		
OAA.....	1,878	\$ 18.88
AB.....	83	21.03
AD.....	1,538	20.81
ADC.....	2,964	6.70
GA.....	318	9.90
FC.....	121	7.93

NA - not available.

1/ Persons not cases.

SOURCE: Oregon State Department of Human Resources, Public Welfare Division,
Public Welfare in Oregon, August, 1972 edition.

The State of Oregon operates three special schools for the handicapped, all located at Salem in Marion County. The School for the Blind provides special education for approximately 100 children with acute vision problems in a boarding school situation. The School for the Deaf provides parallel training for severely handicapped children from four years of age through high school. Oregon Fairview Home provides in-and-out patient training for mentally deficient minors and adults.

Housing

Table 57. Housing Occupancy and Facilities, Multnomah County, 1970

Subject	Multnomah County		State
	Number units	Percent	Percent
Occupancy			
All housing units.....	208,950	100.00	100.0
Seasonal or migratory....	82	.03	1.3
Owner occupied.....	120,457	57.64	61.3
Renter occupied.....	79,134	37.87	31.5
Vacant year-round.....	9,277	4.43	5.9
Population in housing units per unit			
Owner occupied.....	2.7	-	-
Renter occupied.....	3.0	-	-
Persons per room			
All occupied units.....	199,591	100.00	100.0
1.00 or less.....	192,322	96.35	94.7
1.01-1.50.....	5,906	2.95	4.2
1.51 or more.....	1,363	.68	1.1
Facilities			
Lacking some or all plumbing facilities....	7,993	3.8	3.6
Telephone available.....	182,385	91.4	89.5
Air conditioning.....	19,079	9.13	10.3
	- number -		- number -
Median number of rooms.....	4.9	-	5.0
Median value <u>1/</u>	\$15,200	-	\$11,300
Median gross rent <u>2/</u>	\$110	-	\$ 107

1/ Specified owner occupied. Limited to one-family homes on less than 10 acres and no business on property.

2/ Specified renter occupied. Excludes one-family homes on 10 acres or more.

SOURCE: U.S. Bureau of the Census, Census of Housing, 1970 Detailed Housing Characteristics, Final Report, HC(1)-B39, Oregon, U.S. Government Printing Office, Washington, D.C., 1972.

Table 58. Housing, Occupancy, and Facilities for Places with over 2,500 Inhabitants, Multnomah County, 1970

Subject	Portland		Gresham	
	Number	Percent	Number	Percent
Occupancy				
All year-round housing units.....	151,980	100.00	3,168	100.00
Owner occupied.....	81,841	53.84	1,995	62.97
Renter occupied.....	63,179	41.57	924	29.16
Vacant year-round...	696	.45	249	7.85
Facilities				
Telephone available.	NA	NA	2,761	94.55
Air conditioning....	473	7.2	231	
Median gross rent of renter occupied.....	\$91		\$150	

NA - not available.

SOURCE: U.S. Bureau of the Census, Census of Housing, 1970 Detailed Housing Characteristics, Final Report HC(1)-B39, Oregon, U.S. Government Printing Office, Washington, D.C., 1972.

THE COUNTY'S ECONOMY

Trade, both wholesale and retail, is the largest industry in Multnomah County as of 1970 and employs 23 percent of the employed. Government and private services rank second, then manufacturing, transportation, construction, furniture, lumber and wood products manufacture, agriculture and food and kindred products.

Wholesale and retail trade have had increases, probably due to the migration of population and better transportation systems.

Agriculture

Agriculture in Multnomah County is highly diversified. The temperate climate conditions and fertile valley soils are conducive to production of a multitude of agricultural products. Within the county is Portland, the population center of Oregon, offering ready markets for many of the farm products.

Agriculture in Multnomah County is affected by the pressures of the growing urban population, which has resulted in a shifting of agricultural land to other uses, higher taxes and inflated values on much of the remaining agricultural land, and more part-time farms. The expansion of the urban communities will undoubtedly continue to cause rapid changes in the agricultural sector of the economy.

Table 59. Farm Size and Value, Multnomah County, 1959, 1964, and 1969

Subject	1959	1964	1969
Approximate acres of land area.....	217,360	270,725	270,400
Proportion in farms.....	32.9	24.6	26.2
Total number of farms.....	1,104	918	623
Acres in farms.....	89,379	66,728	70,792
Average size of farms.....	81.0	72.7	113.6
Value of land and buildings.....	NA	NA	\$63,133,196
Average per farm.....	\$40,100	\$64,161	101,337
Average per acre.....	758.55	896.44	891.81

SOURCE: U.S. Bureau of the Census, Census of Agriculture, 1969, Vol. 1, Area Reports, Part 47, Oregon, U.S. Government Printing Office, Washington, D.C., 1972.

Table 60. Number and Percent of Farms by Size, Multnomah County, 1959, 1964, and 1969

Size	Number			Percent		
	1959	1964	1969	1959	1964	1969
Less than 10 acres...	400	308	176	36.23	33.55	28.25
10 to 49 acres.....	451	385	260	40.85	41.93	41.73
50 to 69 acres.....	61	50	43	5.52	5.44	6.90
100 to 139 acres.....	48	39	23	4.34	4.24	3.69
140 to 179 acres.....	21	24	19	1.90	2.61	3.04
180 to 219 acres.....	15	17	9	1.35	1.85	1.44
220 to 259 acres.....	12	4	8	1.08	.43	1.28
260 to 499 acres.....	32	32	26	2.89	3.48	4.17
500 to 999 acres.....	6	2	8	.54	.21	1.28
1,000 to 1,999 acres..	4	5	3	.36	.54	.48
2,000 acres or more..	5	2	1	.45	.10	.16
Total farms.....	1,104	918	623	100.00	100.00	100.00

SOURCE: U.S. Bureau of the Census, Census of Agriculture, 1964 and 1969, Vol. 1, Area Reports, Part 47, Oregon, U.S. Government Printing Office, Washington, D.C., 1972.

Classification of farms by economic class considers only those classified by the U.S. Department of Agriculture as "Commercial farms."

In general, all farms with a total value of products sold amounting to \$2,500 or more are classified as commercial. Farms with sales of \$50 to \$2,499 are classified as commercial if the farm operator was under 65 years of age and (1) he did not work off the farm 100 or more days during the year and (2) the income received by the operator and members of his family from nonfarm sources was less than the value of all farm products sold.

Table 61. Farm Operators by Tenure, Multnomah County, 1959, 1964, and 1969

Tenure	1959	1964	1969
Full owners.....	NA	659	399
Part owners.....	198	181	143
Managers.....	10	-	-
Tenants.....	66	72	81
Total operators.....	1,104	918	623

NA - not available.

SOURCE: U.S. Bureau of the Census, Census of Agriculture, 1964 and 1969, Vol. 1, Area Reports, Part 47, Oregon, U.S. Government Printing Office, Washington, D.C., 1967, 1972.

Table 62. Farms by Economic Class, Multnomah County, 1959, 1964 and 1969

Economic Class	Number			Percent		
	1959	1964	1969	1959	1964	1969
Commercial farms						
Class I (sales of \$40,000 or more).....	59	72	77	5.34	7.84	12.35
Class II (sales of \$20,000 to \$39,999).....	85	72	69	7.69	7.84	11.07
Class III (sales of \$10,000 to \$19,999).....	158	79	51	14.31	8.60	8.18
Class IV (sales of \$5,000 to \$9,999).....	131	83	67	11.86	9.04	10.75
Class V (sales of \$2,500 to \$4,999).....	97	101	80	8.78	11.00	12.84
Class VI (sales of \$50 to \$2,499).....	30	71	38	2.71	7.73	6.09
Other farms.....						
Part-time.....	395	307	210	35.77	33.44	33.70
Part-retirement.....	160	130	30	14.49	14.16	4.81
Abnormal.....	6	3	1	.54	.32	.16
Total farms.....	1,104	918	623	100.00	100.00	100.00

SOURCE: U.S. Bureau of the Census, Census of Agriculture, 1964 and 1969, Volume 1, Area Reports, Part 47, Oregon, U.S. Government Printing Office, Washington, D.C., 1967, 1972.

The income of farmers in the county contributes in several ways. It provides returns to farm labor inputs, sales of farm products provide for payment of land investment, and is used in other farm expenditures. The farms provide raw materials that contribute to transportation, processing, and other industries. Income from all crops, livestock, and livestock products was about 17.9 million dollars in 1970.

Income from crops amounted to 83 percent, and income from livestock amounted to 17 percent of the total income. Horticultural crops rank first with 45 percent of total agricultural income. Then comes vegetables fresh and for processing at 23 percent; all berries 9 percent; dairy products 8 percent; poultry products 3 percent; cattle and calves 3 percent; and all grains and hay seeds at 2 percent.

Table 63. Farm Operators by Age and Years of School Completed,
Multnomah County, 1959, 1964 and 1969

Subject	1959	1964	1969
Average age (years).....	53.3	53.4	51.6
65 years and over.....	227	202	89
Years of school completed			
Elementary: 0-4 years..	NA	-	NA
5-7 years..	NA	61	NA
8 years....	NA	177	NA
High School: 1-3 years..	NA	149	NA
4 years....	NA	322	NA
College: 1-3 years..	NA	126	NA
4 years or more.....	NA	83	NA

NA - not available.

SOURCE: U.S. Bureau of the Census, Census of Agriculture, 1964 and 1969, Volume 1, Area Reprots, Part 47, Oregon, U.S. Government Printing Office, Washington, D.C., 1972.

Table 64. Acres of Crops Harvested Multnomah County, 1969 and 1970

Crops Harvested	1969	1970 <u>1/</u>
Small grains		
Wheat.....	900	400
Oats.....	200	200
Barley.....	400	500
Hay crops.....	6,250	5,700
Vegetables		
Potatoes.....	850	700
Sweet corn.....	500	400
Snap beans.....	1,200	1,000
Berries		
Strawberries.....	450	420
Blackberries.....	320	280
Raspberries.....	825	690
Tree fruits, nuts, and grapes <u>1/</u>	373	NA

1/ Preliminary figures.

NA - not available.

SOURCE: Oregon State University Extension Service and U.S.D.A. cooperating, "Oregon Commodity Data Sheets," 1971-72.

Table 65. Value of Farm Products Sold 1/, Multnomah County, 1966-1970

Product	1966	1967	1968	1969	1970 <u>2/</u>
- - - - - thousand dollars - - - - -					
All crops, livestock and livestock products.....	16,692	17,575	16,750	18,139	17,981
All crops.....	13,535	14,488	13,640	14,925	14,810
All grain, hay and seeds	273	248	193	187	167
All seed crops.....	3	6	-	10	15
All grain and hay.....	270	242	193	177	152
All hay.....	204	162	127	106	103
All grains.....	66	80	66	71	49
Wheat.....	47	56	48	52	29
Barley.....	9	16	10	12	13
Vegetables, fresh and for processing.....	3,981	4,129	3,767	3,691	3,800
All berries.....	2,034	1,706	1,542	2,043	1,562
Strawberries.....	NA	NA	382	366	385
All tree fruits and nuts	64	59	66	117	177
Specialty field crops...	-	-	-	-	3
Specialty horticultural crops.....	6,800	8,004	7,727	8,407	8,772
All potatoes.....	370	321	330	460	309
All livestock and livestock products.....	3,157	3,087	3,110	3,214	3,171
Dairy products.....	1,309	1,474	1,485	1,503	1,562
Poultry products.....	283	261	267	306	265
Cattle and calves.....	678	642	739	721	770
Sheep and lambs.....	19	21	23	22	25
Hogs.....	231	221	195	202	181

NA - not available.

1/ Crop year includes quantities sold or held for sale.2/ Preliminary figures.

SOURCE: Oregon State University Extension Service and USDA cooperating, "Oregon Commodity Data Sheets," Oregon State University, 1971-72.

Table 66. Livestock and Poultry Numbers, Multnomah County, 1950, 1960, 1969, and 1970

Category <u>1/</u>	1950	1960	1969	1970 <u>2/</u>
All cattle.....	10,800	14,000	11,500	11,000
Dairy cattle.....	6,100	5,100	2,800	2,600
Sheep and lambs.....	700	2,700	1,000	1,100
Hogs.....	2,800	2,900	2,200	NA
Chickens.....	NA	NA	67,000	60,000
Turkeys raised.....	NA	NA	200	-

NA - not available.

1/ Numbers as of January 1, unless otherwise indicated.2/ Preliminary figures.

SOURCE: Oregon State University Extension Service and USDA cooperating, "Oregon Commodity Data Sheets," Oregon State University, 1971-72.

Table 67. Food and Kindred Products Manufacturing, Multnomah County, 1970

Product Group	Number of Firms	Employment
	1970	1970
Meat products.....	21	1,243
Dairy products.....	12	1,351
Canning and preserving fruits, vegetables and sea foods.....	21	477
Grain mill products.....	12	529
Bakery products.....	26	2,313
Confectionery and related products.....	8	160
Beverages.....	14	914
Miscellaneous food products....	14	472

SOURCE: Oregon State Executive Department, Economic Development Division,
Directory of Oregon Manufacturers, 1970.

Logging and Wood Products

Table 68. Lumber and Wood Products Manufacturing Excluding Furniture, Multnomah County, 1970

Product Group	Number of Firms	Employment
	1970	1970
Logging camps and contractors.....	9	318
Sawmills, general.....	29	1,930
Special product sawmills.....	4	55
Millwork.....	18	642
Veneer and plywood.....	4	495
Prefabricated wooden buildings.....	9	8,383
Nailed and lock corner wooden boxes	6	444
Wire bound boxes and crates.....	1	75
Wood preserving.....	1	85
Packaging materials.....	3	633
Wood products, not elsewhere classified.....	13	124

SOURCE: Oregon State Executive Department, Economic Development Division,
Directory of Oregon Manufactuerers, 1970

Logging and sawmill operations began in Multnomah County at the time of settlement. Lumber production exceeded timber harvest in the county until 1955; since then timber harvest has led slightly. The large cargo mills have closed, and lumber is now mainly produced by smaller more efficient mills. The number of plywood plants has increased greatly since 1950, and their resources are mostly from local timber.

Table 69. Timber Harvest by Ownership, Multnomah County, 1970 1/

Ownership	Production <u>2/</u>	Percent of Total
Total timber harvest.....	52,910	100.00
Private <u>3/</u>	1,370	2.58
Bureau of Land Management <u>4/</u>	-	-
National forest <u>5/</u>	51,531	97.41
State <u>3/</u>	-	-

1/ Includes volume removed as logs but not volume removed for poles, piling, and woodcutting operations.

2/ Scribner log rule - thousand board feet.

3/ Compiled by State Forester.

4/ Compiled by Bureau of Land Management.

5/ Compiled by U.S. Forest Service.

SOURCE: Wall, Brian R., "1970 Timber Harvest," U.S.D.A. Forest Service Resource Bulletin PNW-38, Pacific Northwest Forest and Range Experiment Station, 1971.

Table 70. Log Consumption in Thousand Board Feet by Species and Industry, Multnomah County, 1968 1/

Species	Type of Industry		
	Sawmills	Veneer and Plywood	Shake and Shingle
All species.....	97,810	113,000	NA
Douglas-fir.....	44,686	77,045	"
Hemlock.....	24,829	25,606	"
True firs.....	1,323	1,068	"
Spruce.....	396	6,138	"
Pine.....	17,280	-	"
Other softwoods....	2,296	3,143	"
Hardwoods.....	7,000	-	"

1/ Scribner log rule

NA - not available.

SOURCE: Manock, Eugene, R., Grover A. Choate, and Donald R. Gedney, Oregon Timber Industries, 1968, Wood Consumption and Mill Characteristics, Oregon State Department of Forestry jointly with U.S. Forest Service, Salem, Oregon 1968.

Table 71. Installed 8-hour Capacity of Wood-Using Industries, Multnomah County, 1968

Industry	Capacity
Sawmill-lumber <u>1/</u>	412
Veneer and plywood <u>2/</u>	360
Pulp and board mills <u>3/</u>	-

1/ Scribner log rule - board feet.

2/ Square feet, 3/8 inch basis, veneer and lay-up.

3/ 24 hour capacity in tons.

SOURCE: Manock, Eugene, R., Grover A. Choate, and Donald R. Gedney, Oregon Timber Industries, 1968, Wood Consumption and Mill Characteristics, Oregon State Dept. of Forestry jointly with U.S. Forest Service, 1968.

Manufacturing

Table 72. Value Added by Major Manufacturing Industries, Multnomah County, 1967

Item	Value Added	Percent of Total
	millions of dollars	
All manufacturing.....	650.8	100.00
Food and kindred products.....	120.3	18.48
Meat products.....	9.4	1.44
Canned, cured, frozen foods....	8.6	1.32
Apparel, textile products.....	19.7	3.02
Lumber, wood products.....	45.6	7.00
Millwork, plywood, related products.....	28.9	4.44
Furniture and fixtures.....	18.7	2.87
Paper and allied products.....	15.2	2.33
Printing and publishing.....	43.1	6.62
Commercial printing.....	15.7	2.41
Chemicals and allied products....	36.2	5.56
Stone, clay and glass products....	20.5	3.14
Concrete, gypsum, plaster products.....	8.7	.13
Fabricated metal products.....	51.5	7.19
Fabricated structural metal products.....	28.8	4.42
Machinery, except electrical.....	68.9	10.58
Misc. machinery exc. electrical	7.9	1.21
Electrical equipment and supplies	15.4	2.36
Transportation equipment.....	88.4	13.58
Misc. manufacturing industries...	8.8	1.35
Misc. manufactures.....	5.6	.86

SOURCE: U.S. Bureau of the Census, Census of Manufactures, 1967, Area Statistics, Oregon, MC67(3)-38, U.S. Government Printing Office, Washington, D.C., 1970.

Table 73. Manufacturing, Other than Lumber and Wood Products; Food and Kindred Products and Mineral, Metal, and Related Products Manufacturing, Multnomah County, 1970

Product Group	Number of Firms	Employment
	1970	1970
Ordnance and accessories.....	1	20
Textile mill products.....	16	2,756
Apparel and other products from fabrics.....	63	2,990
Furniture and fixtures.....	61	2,608
Paper and allied products.....	20	1,121
Printing, publishing and allied industries.....	182	3,738
Chemicals and allied products.....	75	1,731
Petroleum refining and related industries.....	11	424
Rubber and misc. plastic products...	30	810
Leather and leather products.....	11	123
Machinery, exc. electrical.....	183	7,469
Electrical machinery.....	45	1,770
Transportation equipment.....	69	4,814
Professional, scientific controlling instruments.....	28	1,077
Miscellaneous manufacturing.....	59	478

SOURCE: Oregon State Executive Department, Economic Development Division, Directory of Oregon Manufacturers, 1970.

Mining

Sand and gravel, lime, stone, and clays are the minerals of greatest economic value in the county. Their value to the total economy and their production depends largely on construction activity in Multnomah and neighboring counties.

Table 74. Value of Mineral Production, Multnomah County

Year	Value	Minerals Produced in Order of Value
1963.....	\$5,043,000	Sand and gravel, lime, stone, clays
1965.....	5,198,000	Sand and gravel, lime, stone, clays
1967.....	6,748,000	Sand and gravel, lime, stone, clays
1970.....	7,402,000	Sand and gravel, lime, stone, clays

SOURCE: U.S. Bureau of the Mines, Minerals Yearbook, Bureau of Economic Research, Oregon Economic Statistics, various years, University of Oregon.

Table 75. Mineral, Metal and Related Manufacturing, Multnomah County, 1970

Product Group	Number of Firms	Employment
	1970	1970
Glass and glassware, pressed or blown....	1	400
Glass products of purchased glass.....	3	22
Structural clay products.....	1	45
Pottery and related products.....	2	26
Concrete gypsum and plaster products.....	25	551
Cut stone and stone products.....	2	19
Abrasive, asbestos and misc. non-metallic products.....	19	433
Blast furnaces, steelworks and finishing mills.....	3	770
Iron and steel foundries.....	8	2,018
Primary smelting and refining (non-ferrous).....	3	946
Rolling, drawing, extruding non-ferrous metals.....	1	3
Non-ferrous foundries.....	4	789
Misc. primary metal industries.....	6	240
Metal cans.....	2	292
Cutlery, hand tools, hardware.....	9	2,041
Heating apparatus and plumbing fixtures..	8	109
Fabricated structural metal products.....	78	4,191
Screw machine products, bolts, rivets, washers.....	3	99
Metal stampings.....	13	127
Coating, engraving and allied services...	24	346
Misc. fabricated wire products.....	6	155
Misc. fabricated metal products.....	23	671

SOURCE: Oregon State Executive Department, Economic Development Division, Directory of Oregon Manufacturers, 1970.

Outdoor Recreation

Outdoor recreation has been an important part of the lives of Multnomah County residents for years. Recently, increased urbanization of the county has caused more people to seek the out-of-doors to "get away from it all" through camping, picnicking, wilderness travel, sight-seeing, and related activities. Better and faster transportation, higher family incomes, and increased leisure time have enabled people to spend more time and money on recreation and to travel farther for recreation.

Popular activities include sight-seeing, hiking, picnicking, swimming, fishing, hunting, boating, water skiing, and skin and scuba diving.

The Willamette and Columbia Rivers are used for a variety of recreational activities, but pollution has tended to limit the attractiveness of the main stem of the Willamette. The lakes and streams in the county are visited by fishermen, campers, and sight-seers.

The developed public recreational facilities in Multnomah County consist of a National Forest and Bureau of Land Management recreational areas, state parks, county parks, and city parks.

The camps range in size from 1 to 59 family units. The facilities available range from primitive to piped water, shelters, bathtubs, and flush toilets although all these refinements may not necessarily be found in one forest camp.

Table 76. Multnomah County Park and Recreation Facilities, 1972

Ownership and Name	Facilities and Activities ^{1/}
<u>State Parks</u>	
Lewis and Clark.....	TC, TS, PS, St, BR, F, H, S, Sw
Rooster Rock.....	PS, St, BR, BH, C, GP, BD, F, S, V, Sw
Benson.....	PS, BR, BH, GP, F, L, V, Sw
Sheppards Dell.....	T, G, S, V, W
Guy W. Talbot.....	PS, St, T, S, N, V, W
Crown Point.....	C, V
Dabney.....	TC, TS, PS, St, Bh, F, S, Sw
Portland Womens Forum.....	V
Ainsworth.....	TC, TS, PS, St, UB, T, DS, V
John B. Yeon.....	T, S, V, W
<u>County Parks</u>	
Blue Lake.....	PS, St, BH, C, GP, PA, T, F, L, Sw
Oxbow.....	TS, TC, PS, St, BR, GP, T, F, S, V
<u>U.S. Forest Service Parks</u>	
Multnomah Falls.....	C, T, S, V, W
Wahkeenah Falls.....	PS, T, St, F, S, V, W
Larch Mountain.....	PS, St, T, V

^{1/} Facilities and Activities code:

TC - tent camping	T - trails
TS - trailer sites	UB - utility building
PS - picnic sites	F - fishing
ST - stoves, wood or electric	G - geology
BR - boat ramp	H - history
Bh - bath house	L,S - lake, stream
BD - boat dock	N - nature study
C - concession	R - rockhounding
GC - group camp	V - scenic views
GP - group picnic	Sw - swimming
DS - trailer dumping station	W - water falls

SOURCE: Oregon State Highway Division, Travel Information Section, 1972 Oregon Parks.

Table 77. Attendance at State Parks in Multnomah County

Park and Use	Attendance			
	1968-69	1969-70	1970-71	1971-72
<u>Day Visitor Attendance</u>				
Lewis and Clark.....	203,653	397,502	356,228	249,456
Rooster Rock.....	391,648	606,012	506,838	504,644
Benson.....	131,876	126,134	125,525	160,094
Guy W. Talbot.....	205,212	259,966	238,599	269,041
Crown Point.....	449,868	537,252	628,973	1,022,068
Dabney.....	326,844	394,564	368,744	509,964
<u>Overnight Attendance</u>				
Ainsworth.....	12,436	14,712	14,960	15,429
Dabney.....	8,643	8,851	8,715	6,245
Lewis and Clark.....	7,231	8,624	8,135	10,892

SOURCE: Oregon State Department of Transportation, State Highway Division, "Day Visitor Attendance" and "Overnight Camping by the Public," State Parks and Recreation Section, 1972.

Hunting is also a recreational activity available in the county. However, because of the increasingly urban nature of the county, most of the hunters in the county go outside the county to hunt.

Table 78. Multnomah County Game Harvest

Game	Hunters		Harvest		Days Hunted
	Number	Percent of State Total	Number	Percent of State Total	
Ducks.....	3,500	6.27	46,380	8.15	23,700
Geese.....	830	2.95	1,490	2.34	6,270
Pheasant.....	2,323	3.22	5,575	2.29	10,081
Quail.....	332	1.27	666	.42	1,198
Blue & ruffed grouse.....	136	1.76	364	2.16	419
Band-tailed pigeon.....	448	3.61	1,949	1.61	1,364
Mourning dove.	350	2.14	2,578	1.31	1,496

SOURCE: Oregon State Game Commission, "1966 Upland Game Questionnaire," 1967; "Waterfowl Estimates, 1969-70 Season," 1970; Oregon State Game Commission Bulletin, May, 1972.

Business

Businesses are the most important aspect of Multnomah County's economy and will probably continue to be so because of the urbanization of the county. The following tables give detailed data on wholesale trade, retail trade, and services in the county.

Table 79. Retail Trade, Multnomah County, 1967

Kind of Business	Establishments	Paid 1/ Employees	Sales
	- - number - -	- number -	\$1,000
Retail trade, total.....	4,874	37,114	1,161,226
Lumber, building materials, hardware, farm equipment dealers			
Total.....	168	705	28,796
Lumber and building materials dealers.....	99	487	19,440
Hardware stores.....	57	146	6,080
Farm equipment dealers.....	12	72	3,276
General merchandise group stores			
Total.....	112	8,606	262,294
Department stores.....	14	6,178	161,964
Limited price variety stores.....	46	2/	2/
Miscellaneous general merchandise.	52	2/	2/
Food stores			
Total.....	625	4,096	219,718
Grocery stores.....	442	3,546	204,938
Meat markets and fish stores.....	49	148	6,642
Fruit stores, vegetable markets...	19	2/	2,162
Candy, nut, confectionary stores..	24	99	1,678
Retail bakeries.....	46	2/	2,223
Other food stores.....	45	67	2,075
Automotive dealers			
Total.....	284	3,421	200,709
Motor vehicle dealers.....	142	2,672	170,131
Tire, battery, and accessory dealers.....	84	487	14,381
Miscellaneous automotive dealers..	58	262	16,197
Gasoline service stations			
Total.....	637	2,066	71,931
Apparel, accessory stores			
Total.....	232	2,103	57,446
Ready-to-wear stores.....	63	938	21,670
Women's accessory and specialty stores.....	15	42	742
Other apparel, accessory stores...	145	1,092	33,926
Furniture, home furnishing, equipment stores			
Total.....	295	1,526	58,140
Furniture stores.....	89	534	19,530
Household appliances.....	62	334	14,090
Radio, TV, music stores.....	73	377	16,351
Home furnishing stores.....	71	281	8,169
Eating, drinking places			
Total.....	1,112	9,537	103,627
Eating places.....	702	7,458	76,177
Drinking places (alcoholic bev.).	410	2,079	27,450
Drug stores, proprietary stores			
Total.....	136	954	23,355
Drug stores.....	3/	2/	3/
Proprietary stores.....	3/	2/	3/

Table 79, cont. Retail Trade, Multnomah County, 1967

Kind of Business	Establishments	Paid ^{1/} Employees	Sales
	- - number - -	- number -	\$1,000
Other retail stores			
Total.....	909	2,636	102,607
Liquor stores.....	47	316	29,478
Antique, secondhand stores....	136	326	6,350
Cigar stores and stands.....	26	41	1,282
Sporting goods stores.....	48	188	5,083
Florists.....	61	206	3,933
Jewelry stores.....	78	248	9,575
Fuel, ice dealers.....	62	552	20,454
Other stores.....	451	759	26,452
Nonstore retailers			
Total.....	364	1,464	32,603
Mail order houses.....	15	940	14,308
Merchandising machine operator	44	<u>2/</u>	10,292
Direct selling establishments.	305	<u>2/</u>	8,003

^{1/} Excludes active proprietors of unincorporated businesses.

^{2/} Withheld to avoid disclosure.

^{3/} Data not provided because establishments with no payroll are classified only at the next broader kind of business level.

SOURCE: U.S. Bureau of the Census, Census of Business, 1967 Retail Trade: Oregon, BC 67 - RA 39, U.S. Government Printing Office, Washington, D.C., 1969.

Table 80. Wholesale Trade, Multnomah County, 1967

Kind of Business	Establishments	Paid <u>1/</u> Employees	Sales
	- - number - -	- number -	\$1,000
Wholesale trade, total.....	1,750	25,044	4,222,513
Motor vehicles and automotive equipment	199	2,632	369,439
Drugs, chemicals & allied products.....	78	1,171	133,102
Piece goods, notions, apparel.....	37	314	40,479
Groceries and related products.....	185	2,112	397,480
Farm products - raw materials.....	36	595	971,081
Electrical goods.....	120	1,767	263,031
Hardware, plumbing, heating equipment..	106	1,387	120,218
Machinery, equipment and supplies.....	408	5,811	401,157
Metals and minerals.....	61	1,165	191,510
Petroleum and petroleum products.....	56	939	237,970
Scrap and waste materials.....	20	609	23,231
Tobacco and its products.....	8	<u>2/</u>	<u>2/</u>
Beer, wine, and distilled alcoholic beverages.....	18	233	23,005
Paper and its products.....	57	1,170	104,308
Furniture and home furnishings.....	51	654	57,596
Lumber and construction materials.....	125	2,411	679,604
Other kinds of wholesale business.....	185	<u>2/</u>	<u>2/</u>

1/ Excludes active proprietors of unincorporated businesses.

2/ Withheld to avoid disclosure.

SOURCE: U.S. Bureau of the Census, Census of Business, 1967 Wholesale Trade:
Oregon, BC67-WA39, U.S. Government Printing Office, Washington, D.C.,
1969.

Table 81. Selected Services, Multnomah County, 1967

Kind of Business	Establishments	Receipts	Paid 1/ Employees
	- - number - -	\$1,000	- number -
Selected services, total.....	4,014	269,735	17,780
Hotels, motels, tourist courts, camps, total.....	248	33,984	3,266
Hotels.....	119	20,735	2,178
Motels, motor hotels, tourist centers.....	94	11,594	1,017
Trailer parks, camps.....	28	1,472	65
Personal services, total.....	1,373	44,291	3,766
Laundries, laundry service, etc....	323	21,559	1,926
Beauty shops.....	374	989	8,441
Barber shops.....	380	3,474	208
Photographic studios.....	95	2,944	165
Shoe repair, shine, and hat cleaning shops.....	71	835	2/
Funeral service and crematories....	27	5,091	2/
Other personal services.....	103	1,947	165
Miscellaneous business services, total.....	968	91,292	5,681
Advertising.....	116	24,132	408
Services to dwellings, buildings...	190	6,420	937
Business, management consulting, public relations.....	127	7,413	425
Other.....	535	53,327	3,911
Auto repair, services, garages, total	528	56,735	2,355
Auto repair shops.....	342	24,488	1,264
Auto parking.....	101	5,715	375
Auto, truck renting, services.....	85	16,532	716
Miscellaneous repair services, total.	540	20,635	1,011
Electrical repair shops.....	180	6,731	359
Reupholstery and furniture repair..	86	1,683	83
Other repair shops and related services.....	274	12,221	569
Motion pictures, total.....	59	8,186	517
Motion picture theaters.....	34	4,866	2/
Amusement, recreation services, exc. motion pictures, total.....	298	14,612	1,184
Producers, orchestras, entertainers	133	1,617	240
Bowling, billiards, pool.....	26	2,569	229
Other commercial recreation and amusement services.....	139	10,426	715

1/ Excludes active proprietors of unincorporated businesses.

2/ Withheld to avoid disclosure.

SOURCE: U.S. Bureau of the Census, Census of Business, 1967, Selected Services, Oregon, BC67-SA39, U.S. Government Printing Office, Washington, D.C., 1969.

PUBLIC SERVICE

Transportation

Multnomah County has an excellent road and highway system. The major north-south routes are Interstate 5, U.S. 99W, U.S. 99E, Oregon 211, and Oregon 213. Routes east-west are Interstate 80, U.S. 30, U.S. 26, and Oregon 8. A good system of secondary roads has been developed, along with many access roads in the forest areas. Regularly scheduled bus and motor freight service is available to incorporated cities and towns in Multnomah County.

The County also has a good railroad system. Five major railroads are located here. They provide both freight and passenger service. The southern Pacific and Spokane, Portland, and Seattle Railways extend south of Portland which branches to serve many cities and towns. The Union Pacific serves in an eastwardly direction. The Great Northern and Northern Pacific enter Portland from the north and terminate in the city.

An international airport is located in Portland and serves as the major air passage center. Flights are available to major population centers in the U.S. and connecting flights are available to virtually anywhere in the world.

The Columbia and Willamette Rivers are used extensively by shallow-draft vessels, moving freight in barges and towing log rafts. Also, the rivers are navigated by ocean-going vessels carrying goods to Portland. In 1956, there were 1,600 ships that called, ranking Portland 11th in the nation for ships' arrivals and departures. In 1960, 5,796,000 short tons were imported to Portland, and 3,080,000 short tons were exported. The majority of the export was agricultural products.

Table 82. Miles of Roadway in Multnomah County, 1972

Agency	Miles
Federal agency roads.....	117
State agency roads.....	255
County and public usage roads <u>1/</u>	991
City streets.....	1,356
Total.....	2,719

1/ Public usage roads are roads under county jurisdiction but generally privately maintained.

SOURCE: Transportation Research Institute, Oregon State University, Functional Classification of Public Roads in Oregon, 1970.

Table 83. Motor Vehicle Registration, Multnomah County, 1970 and 1971

Vehicle	Number of Vehicles	
	1970	1971
Passenger vehicles.....	331,481	329,017
Buses.....	191	446
Trucks.....	24,763	31,551
All trailers.....	20,128	14,884
Motorcycles.....	13,411	14,866
Recreational 1/.....	15,742	18,513
Snowmobiles.....	NA	303
Total vehicles.....	405,716	409,580

NA - not available.

1/ Includes campers and travel trailers.

SOURCES: Oregon State Department of Transportation, Motor Vehicle Division, 1970 figures taken from Bureau of Business and Economic Research, Oregon Economic Statistics, 1972, University of Oregon; 1971 figures from unpublished data received from State Motor Vehicles Division.

Table 84. Number of Aircraft and Boats in Multnomah County, 1968

Subject	Number
Aircraft.....	260
Boats.....	17,776

SOURCE: Oregon State Executive Department, Program Planning Division, District Facts, 1970.

Communication

Multnomah County is served by 25 radio stations and five television stations. Telephone service is provided by Pacific Northwest Bell Company and telegraph service by Western Union.

Multnomah County has nine newspapers that serve the surrounding area. The Oregonian and Oregon Journal are distributed throughout the Willamette Valley area, also.

Table 85. Communication Facilities, Multnomah County

Type Service	Location	Network Affiliation
<u>Radio</u>		
KRDR.....	Gresham	-
KEX.....	Portland	
KGW.....	"	NBC
KINK - FM.....	"	-
KISN	"	-
KJIB - FM.....	"	-
KLIQ.....	"	ABC
KLIQ - FM.....	"	ABC
KKEY.....	"	-
KOIN.....	"	CBS
KOIN - FM.....	"	CBS
KPAM.....	"	-
KPAM - FM.....	"	-
KPDQ.....	"	-
KPDQ - FM.....	"	-
KPOK.....	"	MBS
KPOK - FM.....	"	-
KQEM.....	"	-
KWJJ.....	"	ABC
KXL.....	"	ABC
KXL - FM.....	"	ABC
KBOO.....	"	
<u>Television - Commercial</u>		
KATU - TV.....	Portland	ABC
KGW - TV.....	"	NBC
KOIN - TV.....	"	CBS
KPTV.....	"	-
<u>Television - Educational</u>		
KOAP - TV.....	Portland	NET
<u>Radio - Educational</u>		
KBPS - AM.....	Portland	NER/NPR
KOAP - FM.....	"	NER/NPR
KRRC - FM.....	"	
<u>Radio - Campus limited</u>		
KDUP.....	Univ. of Portland	ICBS
KLC.....	Lewis & Clark College	ICBS
KPCC.....	Portland Comm. College, Mt. Hood Comm. College	
<u>Newspapers</u>		
Outlook.....	Gresham	Days Published Thursday
Daily Journal of Commerce	Portland	Daily exc. Sunday
Daily Shipping News.....	"	Daily exc. Sat & Sun
Oregon Journal.....	"	Daily exc. Sunday
Oregonian.....	"	Daily
The Press.....	"	Thursday

Table 85, cont. Communication Facilities, Multnomah County

Type Service	Location	Network Affiliation
<u>Newspapers, cont.</u>		
St. John's Review.....	Portland	Thursday
Sellwood - Moreland Bee....	"	Thursday
Oregon Labor Press.....	"	Friday
<u>Telephone Service</u>		
Columbia Telephone Co.....	Corbett	
General Telephone of the Northwest.....	Gresham	
Pacific Northwest Bell.....	Portland	

SOURCES: Oregon Association of Broadcasters, Directory of Radio and Television Stations for the State of Oregon, 1972.
Oregon State Executive Department, Clay Myers, Secretary of State, Oregon Blue Book, 1973-74, January 1973.
Pacific Northwest Bell, unpublished data.

Table 86. Residential Communication Facilities, Multnomah County
1960 and 1970

Facilities	Number of Housing Units	
	1960	1970
<u>Battery radio sets</u>		
Yes.....	166,565	149,541
No.....	11,861	50,029
<u>Telephone available</u>		
Yes.....	158,804	182,385
No.....	19,692	17,206
<u>Television sets</u>		
None.....	23,877	11,948
One.....	134,838	125,635
Two or more.....	19,711	61,987
<u>UHF equipped</u>		
Yes.....	NA	67,133
No.....	NA	120,489

SOURCE: U.S. Bureau of the Census, Census of Housing: 1970 Detailed Housing Characteristics, Final Report HC(1)-B39, Oregon, U.S. Government Printing Office, Washington, D.C., 1972.

NA - not available.

Table 87. Multnomah County Libraries, by City of Location, 1969-70

City	Volumes	Circulation	Circ./Capita	Hrs. Open Per Week	Operating Expend.	Expend./Capita
County total...	951,263	3,355,134	6.0	-	\$2,552,105	\$4.60
Portland Hdqts.	NA	1,100,142	NA	68	NA	NA
Albina.....	"	23,917	"	59	"	"
Arleta.....	"	58,691	"	39	"	"
Belmont.....	"	101,792	"	39	"	"
Brooklyn.....	"	21,740	"	34	"	"
Gregory Hts....	"	133,017	"	51	"	"
Gresham.....	"	90,570	"	51	"	"
Hollywood.....	"	218,042	"	59	"	"
Lents.....	"	39,343	"	34	"	"
Lombard.....	"	33,453	"	34	"	"
Midland.....	"	242,134	"	59	"	"
Montavilla.....	"	73,316	"	39	"	"
N. Portland....	"	84,647	"	51	"	"
Rockwood.....	"	199,216	"	51	"	"
St. Johns.....	"	38,458	"	34	"	"
Selwood.....	"	58,318	"	34	"	"
Southwest Hills	"	229,617	"	59	"	"
University Pk..	"	41,780	"	34	"	"
Vernon.....	"	37,066	"	28	"	"
Woodstock.....	"	201,310	"	51	"	"

SOURCE: Oregon State Library, Directory of Oregon Libraries, Annual Statistics for the year ending June 30, 1970.

Utilities

Table 88. Housing Units by Water Supply and Sewage Disposal, Multnomah County, 1970

Subject	Multnomah County		State
	Number	Percent 1/	Percent 1/
Water source			
Public system or private company.	205,708	98.48	79.8
Individual well.....	2,575	1.23	16.9
Other or none.....	582	.27	3.3
Sewage disposal			
Public sewer.....	154,985	74.20	61.0
Septic tank or cesspool.....	53,127	25.43	37.5
Other or none.....	753	.36	1.5

1/ Percent of all year-round housing.

SOURCE: U.S. Bureau of the Census, Census of Housing: 1970 Detailed Housing Characteristics, Final Report HC(1)-B39, Oregon, U.S. Government Printing Office, Washington, D.C., 1972.

Table 89. Housing Units by Water Supply and Sewage Disposal for Places with Over 2,500 Inhabitants, Multnomah County, 1970

Subject	Portland		Gresham	
	Number	Percent	Number	Percent
Water source				
Public system or private company.....	151,512	99.78	3,072	96.96
Individual well.....	326	.22	80	2.52
Other.....	-	-	12	.37
Sewage disposal				
Public sewer.....	138,495	91.21	2,781	87.78
Septic tank or cesspool..	13,152	8.66	371	11.71
Other or none.....	191	.37	12	.37

SOURCE: U.S. Bureau of the Census, Census of Housing: 1970 Detailed Housing Characteristics, Final Report HC (1)-B39, Oregon, U.S. Government Printing Office, Washington, D.C., 1972.

The majority of the housing units in Multnomah County use electricity and utility gas for power and fuel. The table below shows fuels used by households in 1970 for heating, water heating and cooking.

Table 90. Types of Fuels for Heating, Cooking, Number of Housing Units, Multnomah County, 1960 and 1970

Type of Fuels	Home Heating Fuel		Water Heating Fuel		Cooking Fuel	
	1960	1970	1960	1970	1960	1970
Utility gas.....	32,737	52,196	29,932	32,370	32,545	25,173
Fuel oil, kerosene, etc.	123,170	102,346	19,532	12,407	409	1,086
Coal or coke.....	1,545	365	402	182	382	18
Wood.....	NA	1,024	NA	220	NA	366
Electricity.....	11,873	39,147	121,817	151,380	137,301	169,251
Bottled, tank, or LP gas	1,552	1,552	2,733	1,206	4,084	1,634
Other fuel.....	7,364	2,827	2,290	936	1,912	254
None.....	185	113	1,720	869	1,793	1,788
All housing units.....	178,496	208,901	178,496	208,901	178,496	208,901

SOURCE: U.S. Bureau of the Census, Census of Housing, 1960 and 1970 Detailed Housing Characteristics, Final Report, HC(1)-B39, Oregon, U.S. Government Printing Office, Washington, D.C., 1972.

Table 91. Electric Power Generating Plants in Multnomah County

Ownership	City	Type <u>1/</u>	Kilowatts Existing
U. of Oregon Medical School.....	Portland	IC, S	440
Pacific Power and Light - Lincoln.....	Portland	S	35,500
Portland General Electric			
Portland L.....	Portland	S	75,500
Trojan.....	Prescott	N	1,105,000 <u>2/</u>

1/ Type code: IC - internal combustion
S - steam
N - nuclear

2/ Under construction.

SOURCE: U.S. Department of the Interior, BPA - Branch of Power Resources, Electric Power Plants in the Pacific Northwest and Adjacent Areas, December 31, 1969.

PUBLIC FINANCE

Table 92. Selected Items of Local Government Finances,
Multnomah County, 1966-67

Item	Multnomah County		State
	Total Amount	Per Capita Amount	Per Capita Amount
	\$1,000	- - - - dollars - - - -	
General revenue, exc. interlocal..	\$178,766	\$334.20	\$308
Intergovernmental revenue.....	39,982	74.75	97
From state government.....	36,865	68.92	83
From local sources.....	138,783	259.46	210
Taxes.....	101,899	190.50	156
Property.....	95,912	179.31	151
Other.....	5,987	11.19	5
Charges and miscellaneous.....	36,884	68.96	54
Direct general expenditure.....	178,602	333.90	316
Capital outlay.....	33,579	62.78	62
Other.....	145,023	271.12	254
Education.....	80,809	151.07	180
Other than capital outlay.....	73,227	136.90	152
Highways.....	9,238	17.27	30
Other than capital outlay.....	6,416	12.00	20
Public welfare.....	1,232	2.30	2
Hospitals.....	3,873	7.24	6
Other than capital outlay.....	3,864	7.22	-
Health.....	3,105	5.80	4
Police protection.....	11,216	20.97	12
Sewerage.....	4,485	8.39	8
Other than capital outlay.....	1,225	2.29	3
Sanitation other than sewerage..	1,233	2.31	2
Parks and recreation.....	12,453	23.28	10
Natural resources.....	709	1.32	4
Housing and urban renewal.....	4,522	8.45	4
Correction.....	1,641	3.07	2
Libraries.....	2,090	3.91	3
Financial administration.....	3,372	6.30	5
General control.....	4,050	7.57	8
General public buildings.....	1,021	1.91	3
Interest on general debt.....	2,344	4.38	6
Other and unallocable.....	22,313	41.71	21
Water supply revenue.....	8,843	16.53	12
Water supply expenditure.....	8,073	15.09	13
General debt outstanding.....	85,359	159.58	214
Long-term.....	73,589	137.57	203
Local schools.....	20,185	37.74	101
Other.....	53,403	99.84	101

SOURCE: U.S. Bureau of the Census, Census of Governments, 1967, Compendium of Government Finances, Vol. 4, No. 5, U.S. Government Printing Office, Washington, D.C., 1969.

Table 93. City Valuation, Tax Rates and Taxes Extended in Multnomah County
for 1971-72 Fiscal Year

Item	Portland	Gresham	Troutdale
Population.....	383,934	12,388	1,475
True Cash Value (TCV)..<	\$3,659,101,319	\$98,820,051	\$6,451,594
Per capita TCV.....	9,531	7,977	4,374
City tax.....	30,846,224	266,814	45,290
Consolidated tax.....	107,561,513	3,232,454	249,190
Per capita tax			
City.....	80	22	31
Consolidated.....	280	261	169
Percentage of total			
levy			
County.....	17.6	15.9	13.4
City.....	28.7	8.3	18.2
School.....	50.1	73.2	58.8
Other.....	3.6	2.7	9.6
Average rate/1000\$TCV			
basis			
County.....	5.18	5.19	5.19
City.....	8.43	2.70	7.02
School.....	14.73	23.93	22.70
Other.....	1.06	.89	3.72
Total.....	29.40	32.71	38.62

Item	Maywood Park	Fairview	Wood Village
Population.....	1,295	1,115	1,925
True Cash Value (TCV)..<	\$7,305,838	\$4,822,046	\$8,933,449
Per capita TCV.....	5,642	4,325	4,641
City tax.....	-	14,466	11,345
Consolidated tax.....	240,873	165,978	292,815
Per capita tax			
City.....	-	13	6
Consolidated.....	186	149	152
Percentage of total			
levy			
County.....	15.7	15.1	15.8
City.....	.0	8.7	3.9
School.....	71.1	65.5	68.8
Other.....	13.2	10.7	11.5
Average rate/1000\$TCV			
basis			
County.....	5.19	5.19	5.19
City.....	.00	3.00	1.27
School.....	23.44	22.55	22.55
Other.....	4.34	3.68	3.77
Total.....	32.94	34.42	32.78

SOURCE: Oregon State Department of Revenue, Summary of Assessment and Tax Rolls for the 1971-72 Fiscal Year and 1969-70 and 1970-71 Property Tax Collections, Research and Special Services Division, 1972.

Table 94. Summary of 1971-72 Property Tax Levies and Assessments,
Multnomah County

Item	Amount in Dollars
<u>Levies</u>	
County.....	\$26,304,583
Cities.....	31,126,226
Community colleges.....	5,325,282
Elementary and secondary school districts	
Intermediate county.....	24,197,069
Education joint.....	13,868
Elementary and unified.....	51,508,442
Union high.....	2,360,789
County unit.....	-
Total school districts.....	78,080,168
Special districts	
Cemetery.....	-
Fire protection.....	3,467,516
Hospital.....	-
Park and recreation.....	-
Port.....	5,283,460
Road.....	-
Sanitary.....	-
Water supply.....	392,999
Other.....	61,739
Total special districts.....	9,205,714
Total gross ad valorem levies.....	150,041,973
Special assessments	
Fire patrol.....	8,478
Forest fee.....	785
Diking and drainage.....	132,412
Irrigation.....	-
Lighting.....	301,167
Other.....	-
Total special assessments.....	442,842
Total gross levies and assessments.....	150,484,815
Less property relief money	
Senior citizens.....	1,049,533
Game commission.....	11,920
Total net ad valorem levies.....	148,980,520
Net ad valorem taxes by class	
Real property.....	114,127,641
Personal property.....	22,128,090
Utility property.....	12,724,790

SOURCE: Oregon State Department of Revenue, Summary of Assessment and Tax Rolls for the 1971-72 Fiscal Year and 1969-70 and 1970-71 Property Tax Collections, Research and Special Services Division, 1972.

Table 95. Summary of Assessment Rolls for 1971-72 Fiscal Year Real Property, Personal Property and Utilities, Multnomah County

Item	Assessed Value	Percent of Total
	\$1000	
<u>Class</u>		
Real property		
Lands inside corporate limits.....	\$920,137	18.01
Lands outside corporate limits.....	314,811	6.16
Improvements inside corporate limits.....	2,035,986	39.86
Improvements outside corporate limits.....	736,155	14.41
Timber (excludes land).....	812	.01
Less veterans exemptions.....	54,105	1.05
Less senior citizens residence exemptions....	33,595	.65
Taxable real property.....	3,920,200	76.76
Personal property		
Merchandise and stock in trade.....	398,057	7.79
Furniture, fixtures and equipment.....	93,246	1.82
Farm machinery and equipment.....	1,476	.02
Other machinery and equipment.....	247,698	4.85
Livestock.....	771	.01
Miscellaneous.....	18,851	.36
Less veterans exemptions.....	463	1/
Less senior citizens residence exemptions....	416	1/
Taxable personal property.....	759,222	14.86
Total taxable real and personal property.....	4,679,422	91.63
Utilities		
Airline companies.....	30,166	.59
Electric companies.....	136,213	2.66
Express companies.....	178	1/
Gas companies.....	45,632	.89
Heating companies.....	1,755	.03
Pipeline companies.....	3,010	.05
Railroad companies.....	33,241	.65
Tank and private car companies.....	1,478	.02
Telegraph companies.....	3,750	.07
Telephone companies.....	165,480	3.24
Water companies.....	249	1/
Water transportation companies.....	6,196	.12
Taxable utility property.....	427,348	8.36
Total taxable real, personal and utility property.....	5,106,770	100.00

1/ Less than .01%.

SOURCE: Oregon State Department of Revenue, Summary of Assessments and Tax Rolls for the 1971-72 Fiscal Year and 1969-70 and 1970-71 Property Tax Collections, Research and Special Services Division, 1972.

Table 96. Amount and Percent of Unpaid 1970-71 Property Tax,
As of June 30, 1971, Multnomah County

Item	Total Amount	Amount Unpaid	Percent Unpaid
Property taxable			
Real.....	\$103,826,963	\$9,134,910	8.8
Personal.....	22,256,621	1,880,162	8.4
Public utilities.....	11,827,406	409,404	3.5
Western Oregon additional timber tax.....	1,916	-	-
Yield tax.....	7,877	-	-
Other.....	294,740	NA	NA
Total for collection.....	138,215,523		

NA - not available.

SOURCE: Oregon State Department of Revenue, Summary of Assessment and Tax
Rolls for the 1971-72 Fiscal Year and 1969-70 and 1970-71 Property
Tax Collections, Research and Special Services Division, 1972.

Selected List of Agencies

The following list gives names and addresses of agencies that have served as data sources for this publication and may provide further or more current data on subjects of interest.

In addition, a number of local and county offices are available to offer local information and assistance, including:

Agriculture Stabilization and Conservation
Assessor
City Library
Corrections and Parole
City Engineer
County Extension
County Surveyor
Employment Division
Game Commission
Health Department
Public Welfare
Soil Conservation Service

1. Bureau of Business and Economic Research, University of Oregon, Eugene, Oregon 97403
2. Center for Population Research and Census, Portland State University, 724 S.W. Harrison, Portland, Oregon 97201
3. Children Services Division, Oregon State Department of Human Resources, Public Services Building, Salem, Oregon 97310
4. Department of Environmental Quality, 1234 S.W. Morrison, Portland, Oregon 97204
5. Economic Research Service, U.S.D.A. Extension Hall, Oregon State University, Corvallis, Oregon 97331
6. Extension Service, Oregon State University, Corvallis, Oregon 97331
7. Fish Commission of Oregon, 1400 S.W. 5th St., Portland, Oregon 97201
8. 4-H Youth Office, Extension Hall, Oregon State University, Corvallis, Oregon 97331
9. Forest Service, U.S.D.A., 319 S.W. Pine St., Portland, Oregon 97204
10. Governor's Office, Economic Development Special Projects, State Capitol Building, Salem, Oregon 97310

11. Local Government Relations Division, Oregon Executive Department, 240 Cottage S.E., Salem, Oregon 97310
12. Oregon Association of Broadcasters, Allen Hall, University of Oregon, Eugene, Oregon 97403
13. Oregon Board of Higher Education, School Finance and Statistical Services, 942 Lancaster Dr. N.E., Salem, Oregon 97310
14. Oregon Department of Geology and Mineral Industries, 1400 S.W. 5th St., Portland, Oregon 97201
15. Oregon Educational Coordinating Council, 4263 Commercial S.E., Salem, Oregon 97310
16. Oregon State Department of Revenue, State Office Building, Salem, Oregon 97310
17. Oregon State Employment Division, Community Manpower, Research and Statistics, or Rural Manpower Sections, Labor and Industries Building, Salem, Oregon 97310
18. Oregon State Game Commission, 1634 Alder, Portland, Oregon 97214
19. Oregon State Health Division, Department of Human Resources, 1400 S.W. 5th, Portland, Oregon 97201
20. Oregon State Highway Division, State Parks and Recreation Section, 8009 E. Burnside, Portland, Oregon 97215
21. Oregon State Lands Division, 502 Winter N.E., Salem, Oregon 97310
22. Oregon State Library, State Library Building, Salem, Oregon 97310
23. Oregon State Public Welfare Division, Department of Human Resources, Public Services Building, Salem, Oregon 97310
24. Pacific Northwest Forest and Range Experiment Station, U.S. Forest Service, 809 N.E. 6th St., Portland, Oregon 97232
25. Secretary of State's Office, State Capitol Building, Salem, Oregon 97310
26. Soil Conservation Service, U.S.D.A., 1218 S.W. Washington, Portland, Oregon 97205
27. State Water Resources Board, 1158 Chemeketa N.E., Salem, Oregon 97310
28. U.S. Department of Commerce, 921 S.W. Washington, Portland, Oregon 97204 (for copies of U.S. Census publications)

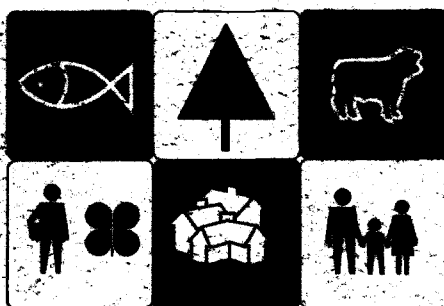
Selected Bibliography

1. Bureau of Business and Economic Research, Oregon Economic Statistics 1972, University of Oregon, 1972.
2. Carolan, W. B. Jr., Federal Land Oregon, Oregon State University, 1963.
3. Coppedge, Robert O., Agriculture in Oregon Counties - Farm Sales and General Characteristics, Special Report 330, Oregon State University Extension Service, Corvallis, Oregon, 1971.
4. Center for Population Research and Census, Population Estimates of Counties and Incorporated Cities of Oregon, Portland State University, July 1972.
5. Legislative Fiscal Committee, Inventory of State-Owned Real Property, By County, Sec. 7, 115 State Capital, Salem, Oregon, 1970.
6. Manock, Eugene R., Grover A. Choate, Donald R. Gedney, Oregon Timber Industries, 1968, Wood Consumption and Mill Characteristics, Oregon State Department of Forestry jointly with U.S. Forest Service, Salem, Oregon, 1968.
7. Nielsen, Alice M., Editor, Directory of Oregon Libraries, annual statistics for the year ending June 30, 1970, Oregon State Library, Salem, Oregon.
8. Office of the Governor, Planning Division, Health Facts, 1969.
9. Oregon Association of Broadcasters, Directory of Radio and Television Stations for the State of Oregon, 1972.
10. Oregon Board of Higher Education, 1969 School Directory and 1971-72 Oregon School-Community College Directory, School Finance and Statistical Services.
11. Oregon Conservation Needs Committee, Oregon Soil and Water Conservation Needs Inventory, U.S.D.A. Soil Conservation Service and Oregon State University Extension Service, 1971.
12. Oregon Department of Planning and Development, Resources for Development, 1964.
13. Oregon Educational Coordinating Council, Post Secondary Enrollment in Oregon, An Analysis of the Statewide Student Enrollment Data Survey, 1972.
14. Oregon State Board of Census, Components of Population Growth, Population Bulletin P-3, 1961.
15. Oregon State Board of Health, Oregon Plan for Construction and Modernization of Hospitals, Public Health Centers and Medical Facilities, 1971 Annual Revision, Health Facility Planning and Construction Section, 1971.

16. Oregon State Department of Employment, 1965 Oregon Farm Labor Report, 1966.
17. Oregon State Department of Environmental Quality, Water Quality Control In Oregon, Oregon Sanitary Authority, 1970.
18. Oregon State Department of Human Resources, Children Services Division, Adolescent Population and Commitment Data by County, by Calendar Year 1967-1970.
19. Oregon State Department of Human Resources, Employment Division, Labor Force and Employment in Oregon by County 1968 through 1971 publications, Research and Statistics Section, 1969, 1972.
20. Oregon State Department of Human Resources, Employment Division, 1971 Annual Rural Manpower Report, 1972.
21. Oregon State Department of Human Resources, Employment Division, Oregon Covered Employment and Payrolls, 1970 and 1971, Summary Data, Research and Statistics Section, 1971, 1972.
22. Oregon State Department of Human Resources, Oregon Public Welfare Division, Public Welfare in Oregon, various editions.
23. Oregon State Department of Human Resources, Oregon State Health Division, Implementation and Enforcement Plan for the Public Waters of the State of Oregon, Oregon Sanitary Authority, Portland, Oregon, 1967.
24. Oregon State Department of Human Resources, Oregon State Health Division, Vital Statistics Annual Report, Vital Statistics Section, 1971.
25. Oregon State Department of Revenue, First Biennial Report 1968-70.
26. Oregon State Department of Revenue, Summary of Assessment and Tax Rolls for the 1971-72 Fiscal Year and 1969-70 and 1970-71 Property Tax Collections, Research and Special Services Division, 1972.
27. Oregon State Department of Transportation, State Highway Division, "Day Visitor Attendance", State Parks and Recreation Section, 1972.
28. Oregon State Department of Transportation, State Highway Division, "Over-night Camping by the Public", State Parks and Recreation Section, 1972.
29. Oregon State Department of Transportation, State Highway Division, "The State Park Visitor in Oregon", State Parks and Recreation Division.
30. Oregon State Executive Department, Clay Meyers, Secretary of State, Oregon Blue Book, 1973-74, January 1973.
31. Oregon State Executive Department, Economic Development Division, Directory of Oregon Manufacturers - 1970.

32. Oregon State Executive Department, Program Planning Division, District Facts, 1970.
33. Oregon State Fisheries Commission, 1968 and 1971 Annual Report.
34. Oregon State Game Commission, 1968 and 1971 Annual Report, Oregon State Game Commission.
35. Oregon State Game Commission, "Oregon State Game Commission Bulletin", May 1972.
36. Oregon State Water Resources Board, River Basin Reports.
37. Simenson, G. H., E. G. Knox, H. W. Hill, and R. W. Mayko, General Soil Map Reports with Irrigable Areas, Oregon State University Agricultural Experiment Station with U.S.D.A. Soil Conservation Service in cooperation with Oregon State Water Resources Board.
38. U.S. Bureau of the Census, Census of Agriculture, 1969, Vol. 1, Area Reports, Part 47, Oregon, U.S. Government Printing Office, Washington, D.C., 1972.
39. U.S. Bureau of the Census, Census of Business, 1967 Retail Trade: Oregon, BC 67 - RA 39, U.S. Government Printing Office, Washington, D.C., 1969.
40. U.S. Bureau of the Census, Census of Business, 1967 Wholesale Trade: Oregon, BC 67 - WA 39, U.S. Government Printing Office, Washington, D.C., 1969.
41. U.S. Bureau of the Census, Census of Governments, 1967, Vol. 4, No. 5: Compendium of Government Finances, U.S. Government Printing Office, Washington, D.C., 1969.
42. U.S. Bureau of the Census, Census of Governments, 1967, Vol. 3, No. 2: Compendium of Public Employment, U.S. Government Printing Office, Washington, D.C., 1969.
43. U.S. Bureau of the Census, Census of Housing: 1970 Detailed Housing Characteristics, Final Report HC(1) - B39, Oregon, U.S. Government Printing Office, Washington, D.C., 1972.
44. U.S. Bureau of the Census, Census of Manufacturers, 1967, Area Services: Oregon, MC 67(3) - 38, U.S. Government Printing Office, Washington, D.C., 1970.
45. U.S. Bureau of the Census, Census of Population, General Demographic Trends for Metropolitan Areas, 1960 to 1970, Final Report PHC(2) - 39, U.S. Government Printing Office, Washington, D.C., 1971.
46. U.S. Bureau of the Census, Census of Population: 1970 General Population Characteristics, Final Report PQ(1) - B39, Oregon, U.S. Government Printing Office, Washington, D.C., 1971.

47. U.S. Bureau of the Census, Census of Population: 1970 General Social and Economic Characteristics, Final Report PC(1) - C39, Oregon, U.S. Government Printing Office, Washington, D.C., 1972.
48. U.S.D.A. and Oregon State University Extension service cooperating, "Oregon Commodity Data Sheets", Oregon State University, 1971-72.
49. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Environmental Data Service, Climatological Data, Annual Summary 1971, Vol. 77, No. 13, 1971.
50. U.S. Department of Commerce, Weather Bureau, Decennial Census of U.S. Climate, Supplement for 1951 through 1960, Oregon No. 86-31, 1965.
51. U.S. Forest Service, Forest statistics publications for various Oregon regions, Resource Bulletins, Pacific Northwest Experiment Station.
52. U.S. Soil Conservation Service, Soil Survey Reports.
53. Valde, Gary R. and Robert O. Coppedge, Income and Poverty Data for Racial Groups: A Compilation for Oregon Census County Divisions, Special Report 367, Oregon State University Extension Service, Corvallis, Oregon, 1972.
54. Wall, Brian R., "1970 Timber Harvest", U.S.D.A. Forest Service Resource Bulletin PNW-38, U.S. Forest Service, Pacific Northwest Forest and Range Experiment Station, Portland, Oregon, 1971.



OREGON STATE UNIVERSITY
**EXTENSION
SERVICE**

Extension Service, Oregon State University, Corvallis, Joseph R. Cox, director. This publication was produced and distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914. Extension work is a cooperative program of Oregon State University, the U. S. Department of Agriculture, and Oregon counties.
