

3105
E55
no. 813
cop. 2

An Economic Profile of Josephine County, Oregon

Special Report 813 / October 1987



OREGON STATE UNIVERSITY EXTENSION SERVICE

Contents

	Page
Figures	i
Tables	ii
Summary	1
I. Introduction	3
II. Recent Economic Trends in Nonmetropolitan America	4
III. Recent Economic Trends in Nonmetropolitan Oregon	6
IV. Recent Trends in Josephine County	11
Population	
Income	
Employment	
Location Quotients	
Retail Trade and Trade Area Capture	
Travel and Tourism	
V. Population and Employment Projections	27
VI. Conclusions	31
Appendix	32

Figures

1. Percentage change in nonmetropolitan employment in the U.S., 1979-82	5
2. Nonmetropolitan employment in Oregon, 1976-85	7
3. Percentage of Oregon's employment found in nonmetropolitan areas, 1976-85	7
4. Percentage change in Oregon's nonmetropolitan employment, 1982-85	8
5. Percentage change in Oregon's nonmetropolitan employment, 1979-85	8
6. Leading employment sectors in Oregon's nonmetropolitan counties, 1979 and 1985	9
7. Percentage of total employment attributable to major sectors, Oregon and nonmetropolitan areas, 1985	9
8. Estimated percentage contribution of travel and tourism to wage and salary employment in Oregon, 1985	10
9. Index of population for the U.S., Oregon, Josephine County, and Jackson County, 1970-85	12
10. Average annual percentage change in population by age group for Oregon and Josephine County, 1970-80, 1980-82, and 1982-85	13
11. Total personal income in Josephine County, 1970-84, in current and in 1970 dollars	15
12. Real per capita income in Oregon, Josephine County, and Jackson County, 1970-84	15

	Page
13. Index of real per capita income in Oregon, Josephine County, and Jackson County, 1970-84	15
14. Percentage of personal income by source for the U.S., Oregon, Josephine County, and Jackson County, 1976, 1980, and 1984	16
15. Percentage of transfer payments by source for the U.S., Oregon, Josephine County, and Jackson County, 1976, 1980, and 1984	17
16. Civilian labor force and wage and salary employment in Josephine County, 1976-86	19
17. Unemployment rates in the U.S., Oregon, Josephine County, and Jackson County, 1976-86	19
18. Percentage of employment by sector for Oregon, Josephine County, and Jackson County, 1976, 1980, and 1986	20
19. Index of projected population for the U.S., Oregon, Josephine County, and Jackson County, 1986-2000	28

Tables

1. Location Quotients by Sector in Josephine County, 1976, 1980, and 1984	21
2. Location Quotients by Source of Personal Income in Josephine County, 1976, 1980, and 1984	23
3. Retail Sales and Trade Area Capture by Sector in Josephine County, 1976, 1980, and 1984	25
4. Oregon's 20 Fastest-Growing Economic Sectors in Percentage Terms, 1984-92	29
5. Oregon's 20 Fastest-Growing Economic Sectors in Net Terms, 1984-92	30

AN ECONOMIC PROFILE OF JOSEPHINE COUNTY, OREGON

P.E. Corcoran and S.R. Kale

Summary

Oregon's economy was hard hit by the recession of the early 1980's. Many Oregonians lost their jobs, and immigration patterns so prevalent during the 1970's were reversed. Economic decline was especially widespread in rural counties outside the Portland, Eugene, Salem, and Medford metropolitan areas. From 1979 to 1982, nonmetropolitan Oregon experienced a greater percentage decline in employment than nonmetropolitan portions of any other state.

Josephine County has fared better than much of the rest of Oregon during the 1980's. The recession was not as severe as in most other Oregon counties, and recovery from the recession has occurred relatively more rapidly.

Despite the recession, Josephine County's population has continued to increase. During the past 15 years, population has grown at a greater rate than has population in the United States, Oregon, or Jackson County. The population is relatively older than in all but five of Oregon's counties. Additionally, only five counties had fewer high school graduates or persons with 4 or more years of college.

Josephine County had the lowest per capita income in Oregon during 1984. In recent years, per capita income has been rising less rapidly in Josephine County than in Oregon or Jackson County. The proportion of personal income attributable to earnings is much less than in the United States, Oregon, or Jackson County. On the other hand, transfer payments, which are mostly retirement incomes, are proportionally greater than in the United States, Oregon, or Jackson County. Because there is probably considerable unreported income from other activities (some illegal), published data may understate the level of economic well-being in the area.

Although the recession did not affect employment as severely as in much of the rest of Oregon, unemployment rates in Josephine County have remained higher than in the United States, Oregon, and Jackson County. Since 1982, unemployment rates have dropped substantially. In 1986, there were more jobs in the trade sector than in any other sector in Josephine County. Ten years earlier, manufacturing was the leading employer. Like much of the rest of nonmetropolitan Oregon, Josephine County is relatively more dependent on manufacturing than on services. The county's services sector, however, has grown more rapidly than any other sector during the last 10 years.

Patrick Corcoran, graduate student, and Steven Kale, assistant professor, are in the Department of Geography, Oregon State University. R.C. Hinman, Extension agent, Josephine County, Oregon State University, requested the analysis and provided background information.

The following sectors are relatively more important to the county's economy than they are to the U.S. economy: agricultural services, forestry, fishing and other; manufacturing (especially durable manufacturing); retail trade; and government. The high level of specialization in these sectors indicates the importance of the timber industry, tourism, and retirement to the local economy.

Farming, nondurable manufacturing, wholesale trade, transportation and utilities, and finance, insurance, and real estate activities are less represented in the county than in the United States as a whole. This probably reflects the county's limited amount of land suitable for farming, heavy reliance on timber products manufacturing, and the importance of nearby Medford as a distribution and financial center.

The trade sector is the largest employer; during the last half of the 1970's, retail trade in the county doubled. Growth in retail sales slowed during the early 1980's, and it was less than the state average from 1980 to 1984. Based on measures of statewide buying patterns and relative levels of per capita income, retail sales have been stronger than in the State as a whole during the last 10 years. Recent completion of the Rogue Valley Mall in Medford may have significant impacts on retail sales in Grants Pass and other communities in Josephine County.

Travel and tourism is an important generator of jobs. In terms of employment, payroll, and local tax receipts, Josephine County ranks about fifteenth in travel and tourism among Oregon's counties. There are approximately the same proportion of travel-related jobs in the county as there are in the State as a whole.

Population is projected to increase more rapidly than in the United States, Oregon, or Jackson County. Employment in Oregon is projected to grow most rapidly in the services sector. Only a few manufacturing sectors are projected to be among the 20 fastest-growing, and one manufacturing sector--lumber and wood products--is projected to experience the greatest net decline in employment. Substantial gains in employment are also projected for the trade sector.

In conclusion, the economic picture for Josephine County is mixed. On the one hand, population has continued to increase, and the recession of the early 1980's was less severe than in most Oregon counties. On the other hand, the county ranks low in reported per capita income, and its unemployment rate remains higher than the state average. To ensure that Josephine County fully participates in the Oregon Comeback, continuing efforts to improve the county's economy are needed.

I. Introduction

Josephine County has long been an important contributor to the development of southwestern Oregon. The county's early economy centered on its location along the Applegate Trail. One of the few remaining overnight resting places along the trail, the Wolf Creek Tavern in the northern part of the county, was established in 1857 and is a continuing reminder of the area's role in Oregon's early economic history. Gold mining brought in many people in the mid- to late 1800's, and in the 1900's, Grants Pass, the county seat, developed into a timber and trade center. The region's mild and sunny climate also was an early attraction, as was the county's major stream, the Rogue River.

After World War II, growth began to occur more rapidly. By 1970, the population had reached 35,746, a gain of 19,445 (119 percent) from 1940. The 1970's likewise were characterized by impressive growth. From 1970 to 1980, population increased by 65 percent, the second-highest increase among Oregon's counties. Moreover, during the decade of the 1970's, employment grew by nearly 68 percent.

In the early 1980's, however, Josephine County, like much of the rest of Oregon and the Pacific Northwest, underwent a recession. From 1980 to 1982, wage and salary employment dropped by 8.4 percent. During the same period, the unemployment rate rose to 15.2 percent, and more people left than moved to the county. While there has been somewhat of a recovery since 1982, the county still faces an uncertain economic future. Unemployment in 1986 was 9.6 percent, compared to the State average of 8.5 percent. In terms of earnings, Josephine County's per capita income of \$8,661 in 1984, the latest year for which data are available, ranked last among all counties in Oregon.

Concerns about the economy in Grants Pass and Josephine County have led to increased efforts to understand recent trends and to anticipate future opportunities. The purpose of this economic profile is to contribute to ongoing efforts in analyzing recent economic trends for the Josephine County area. We begin by reviewing how trends in Oregon compared with those elsewhere in recent years, and by examining county-level trends in Josephine and other counties across Oregon. Then we look at a more detailed analysis of Josephine County, and where appropriate, provide comparative information for the United States, Oregon, and neighboring Jackson County. We also include projections of future population and employment.

Our intention is to focus on trends that, for the most part, have not been discussed in existing publications on Josephine County. We also have attempted to analyze data in ways that may provide new insights about how Josephine County compares with other areas. It is our hope that the material presented herein will be helpful to local leaders in their efforts to anticipate and plan for the future.

II. Recent Economic Trends in Nonmetropolitan America

Josephine is one of 28 nonmetropolitan counties in Oregon. Jackson County, on the other hand, is classified as "metropolitan" and is one of four metropolitan areas in the state. To be classified as metropolitan, a county must (1) contain a city of at least 50,000 population, (2) have a densely populated urbanized area of at least 50,000 and a population of at least 100,000 in the metropolitan area, or (3) be an urbanized area strongly linked by commuting patterns to a county with a large city or cities. In Oregon, there are eight metropolitan counties.

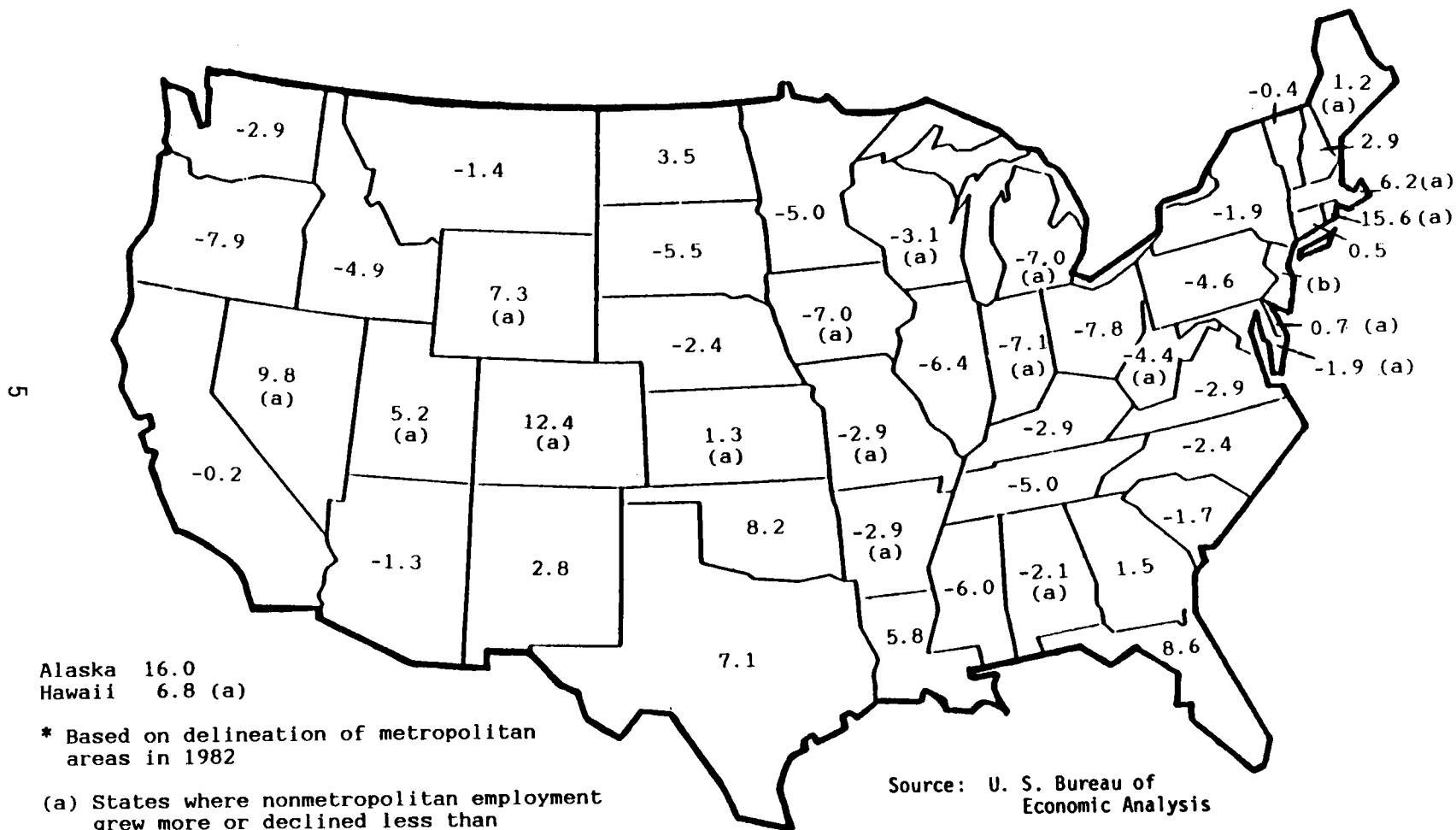
In terms of area, most of Oregon is nonmetropolitan (nonmetro)--and so is most of the United States. Far more people and jobs, however, are located in metropolitan areas than in nonmetropolitan areas. While Josephine County is one of the more populated nonmetro areas in Oregon, its economy probably most closely resembles those of other nonmetro counties.

This section reviews recent economic trends in nonmetropolitan areas, with specific references to how Oregon's nonmetro areas have compared to those in other states. Part III discusses recent economic trends among nonmetro counties within Oregon.

Wage and salary employment in nonmetropolitan America reached its peak in 1979. The recession of the early 1980's severely affected many areas of nonmetro America; between 1979 and 1983, 500,000 jobs were lost. By contrast, metro America gained 650,000 jobs during the same period. This metro/nonmetro difference in economic performance indicates that nonmetro America's share of the nation's employment decreased during the early 1980's, a trend that actually began during the late 1970's.

From 1979 to 1982, Oregon's percentage loss (-7.9 percent) of employment in nonmetro areas was greater than the decline in nonmetro areas of any other state (figure 1). Lower prices for energy suggest that nonmetro areas in some of the other western states have undergone hard times since 1982.

Figure 1. --Percentage change in nonmetropolitan employment in the U.S., 1979-82*



* Based on delineation of metropolitan areas in 1982

(a) States where nonmetropolitan employment grew more or declined less than metropolitan employment

(b) New Jersey had no nonmetropolitan areas in 1982.

III. Recent Economic Trends in Nonmetropolitan Oregon

Nonmetropolitan employment in Oregon peaked in 1979, then deteriorated until 1982 (figure 2). A modest recovery began by 1983, but by 1985, nonmetro employment had not yet reached the 1979 level. The nonmetro share of Oregon's employment in 1985 was lower than in any other year during the preceding decade (figure 3). This indicates that Oregon's nonmetro areas have fared worse than the State's metro areas, a trend similar to the national metro/nonmetro pattern.

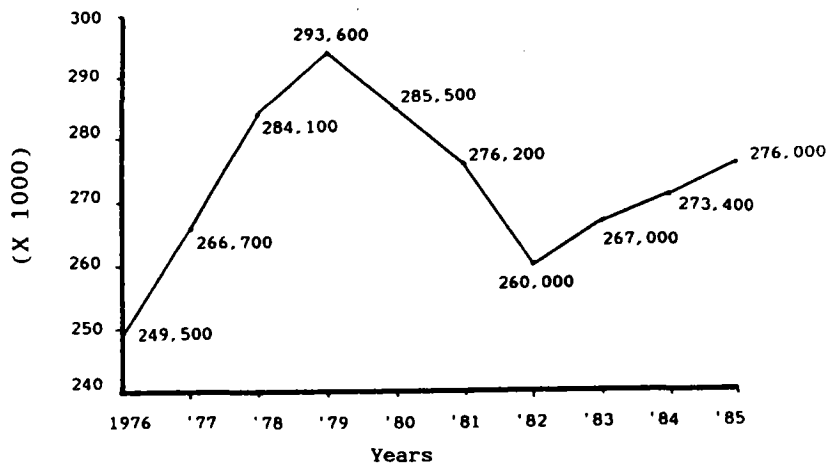
Most of Oregon's nonmetro counties have recovered somewhat from the recession of the early 1980's (figure 4). Josephine County's increase in employment (10.2 percent) from 1982 to 1985 ranked seventh among the State's 28 nonmetro counties. Despite the upturn from 1982 to 1985, few counties had reached 1979 levels of employment by 1985 (figure 5). Josephine County's employment was 1.2 percent less in 1985 than in 1979. Nonetheless, figure 5 shows that Josephine County was not as severely affected as most nonmetro counties by the recession of the 1980's.

In 1979, manufacturing was the leading employment sector among nonmetro counties in Oregon (figure 6). By 1985, the government sector had become the leading sector, followed by trade. In Josephine County, manufacturing was the leading sector in 1979, but by 1985, trade had become more important in terms of employment.

In 1985, more nonmetro Oregonians were employed by the government sector than by any other sector (figure 7). Government and manufacturing were more important generators of jobs in nonmetro areas than for the State as a whole. Conversely, services and trade provided a smaller proportion of jobs for nonmetro areas than for Oregon.

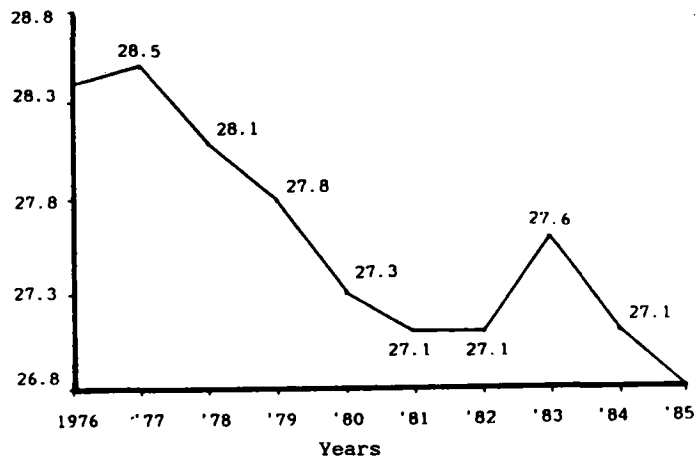
Travel and tourism is another important source of jobs in nonmetro Oregon. This sector is not easily measured, but is generally considered to consist of selected portions of employment in the services and trade sectors. In 1985, travel and tourism accounted for 5.8 percent of Oregon's wage and salary employment. Among nonmetro counties, travel and tourism's contribution ranged from 1.2 to 53 percent of employment (figure 8). In Josephine County, travel and tourism's contribution to employment in 1985 was estimated to be 5.6 percent.

Figure 2.--Nonmetropolitan employment in Oregon, 1976-85



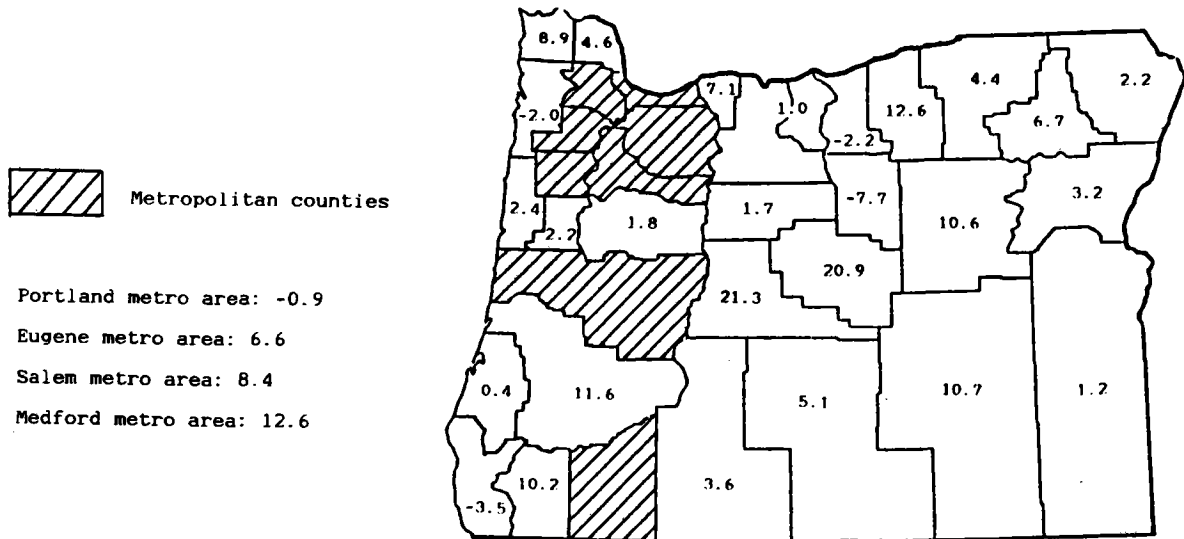
Source: Oregon Department of Human Resources,
Employment Division

Figure 3.--Percentage of Oregon's employment found in nonmetropolitan areas, 1976-85



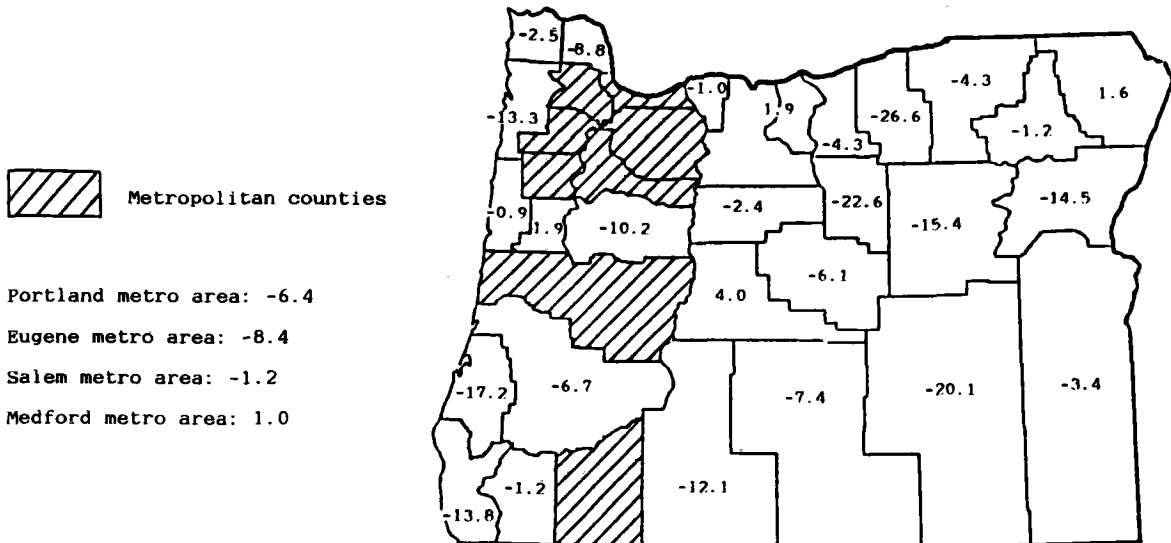
Source: Oregon Department of Human Resources,
Employment Division

Figure 4.--Percentage change in Oregon's nonmetropolitan employment, 1982-85



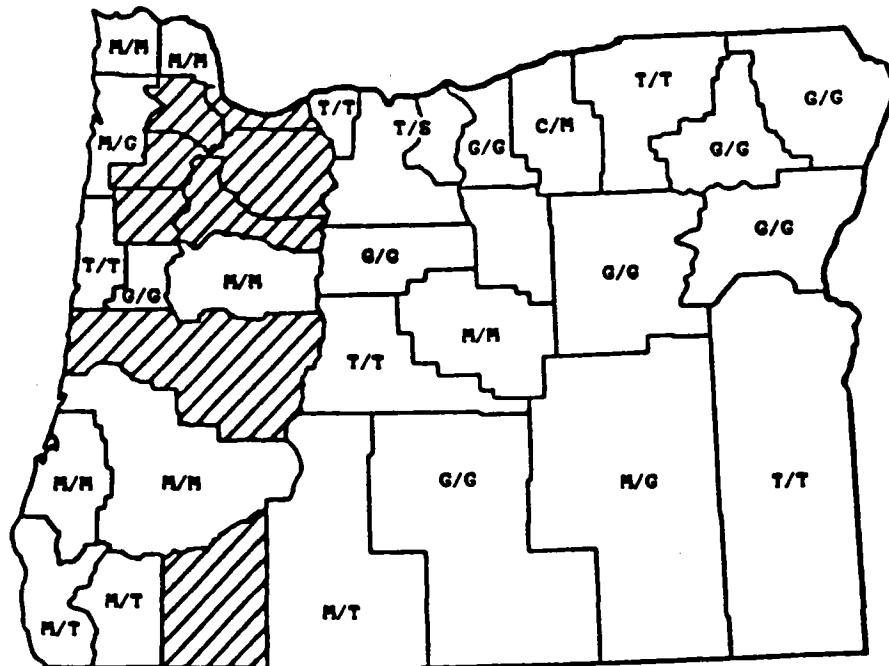
Source: Oregon Department of Human Resources, Employment Division

Figure 5.--Percentage change in Oregon's nonmetropolitan employment, 1979-85



Source: Oregon Department of Human Resources, Employment Division

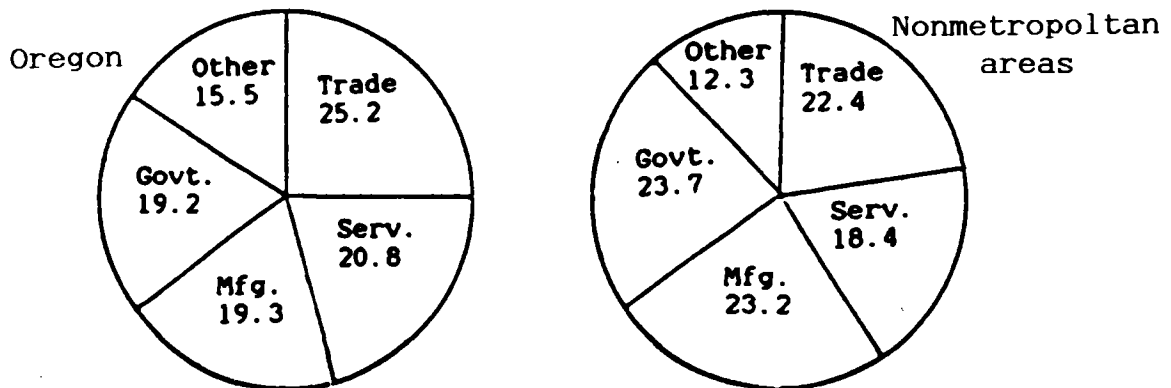
Figure 6.--Leading employment sectors in Oregon's nonmetropolitan counties, 1979 and 1985



		1979	1985
Metropolitan counties			
		Portland metro area:	T T
		Eugene metro area:	T T
		Salem metro area:	G G
		Medford metro area:	T T
(C) Construction	Top letter: 1979		
(G) Government	Bottom letter: 1985		
(M) Manufacturing			
(S) Services			
(T) Trade			

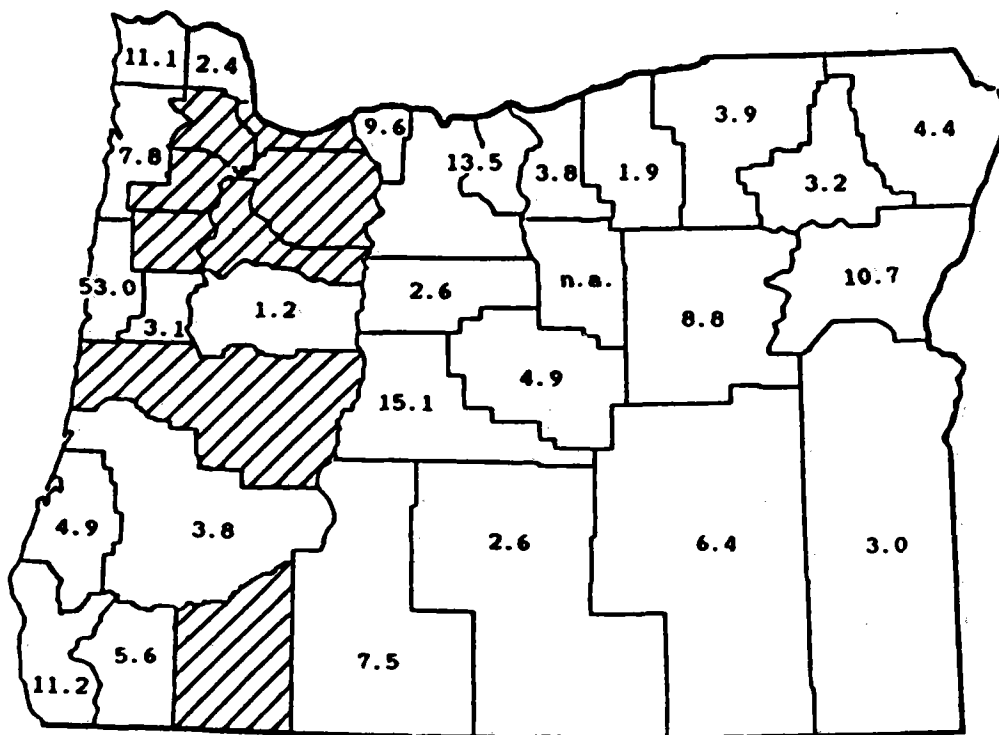
Source: Oregon Department of Human Resources,
Employment Division

Figure 7.--Percentage of total employment attributable to major sectors, Oregon and nonmetropolitan areas, 1985



Source: Oregon Department of Human Resources,
Employment Division

Figure 8.--Estimated percentage contribution of travel and tourism to wage and salary employment in Oregon, 1985



Metropolitan counties

Portland metro area: 5.2

Eugene metro area: 5.5

Salem metro area: 2.4

Medford metro area: 6.3

Source: U.S. Travel Data Center,
"The Economic Impact of Travel
on Oregon Counties 1985"

IV. Recent Trends in Josephine County

Population

As both a cause and effect of economic growth, change in population is often a good indicator of a region's overall economic well-being. Although many people receive income from "nonemployment" sources such as investments and retirement funds, most people live near where they work. Thus economic well-being can be measured, in part, by reviewing regional changes in population.

In July 1986, Josephine County's population was estimated to be 61,450, an increase of 2,595 (4.4 percent) from 1980. Jackson County's population increased from 132,456 to 138,400 (4.5 percent) during the same period. Gains in Josephine and Jackson counties were relatively greater than those for the State as a whole, which grew by just 1 percent from 1980 to 1986.

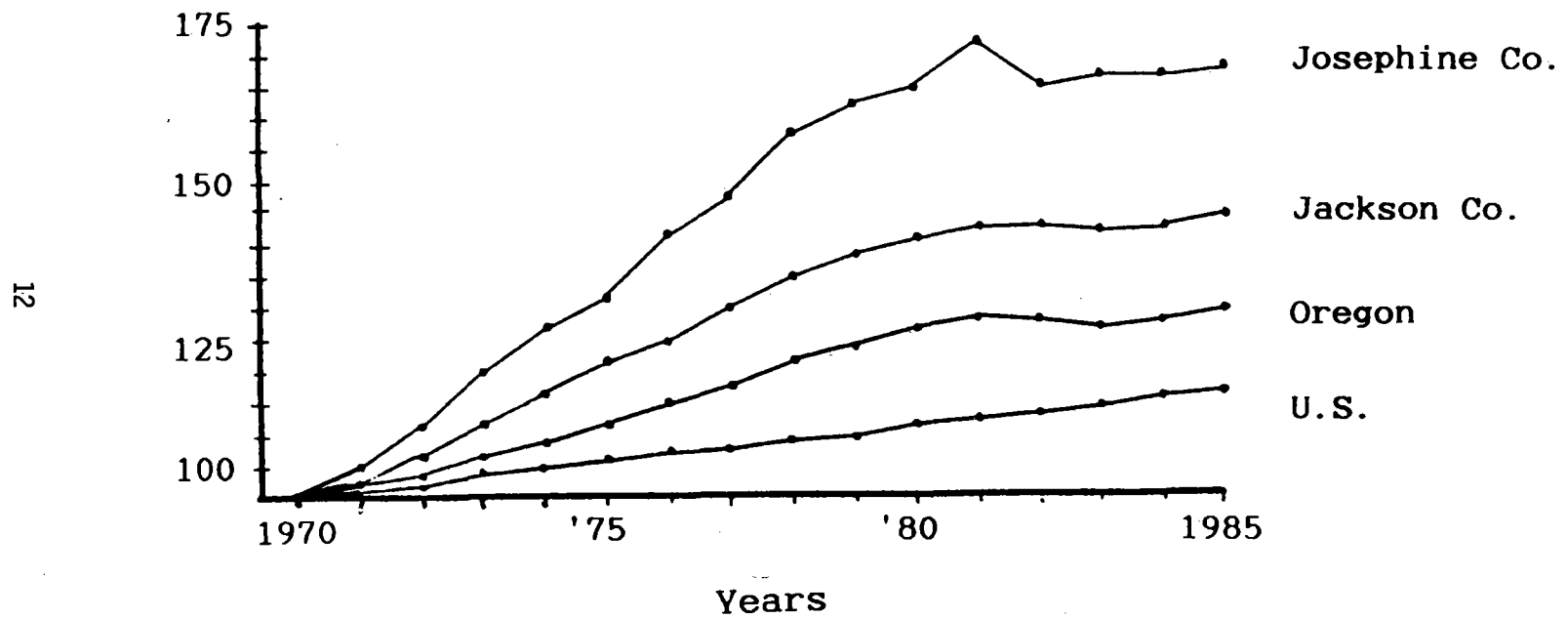
Figure 9 shows changes in population for the United States, Oregon, and Josephine and Jackson counties from 1970 to 1985. Changes are indicated in terms of an index where the population for each region in 1970 has the value of 100. From 1970 to 1985, Oregon, Josephine County, and Jackson County all grew faster than the United States. Moreover, Josephine County's rate of growth in population was greater than the rates for Oregon and Jackson County. From 1981 to 1982, the decline in population for Josephine County differed substantially from the trend in other regions shown in figure 9. Since 1983, its pattern of change in population has been similar to those for the United States, Oregon, and Jackson County.

Change in population by age group is shown for Oregon and Josephine County in figure 10. From 1970 to 1980, the annual percentage change of population was greater for all age groups in Josephine County than in Oregon. The greatest growth was in the 20-to-24 age group, which increased by an average of nearly 12 percent annually in Josephine County. In the early 1980's, the County's population continued to increase in the 20-24 and 65-and-over age groups. However, for the 25-64 and 0-19 age groups, there were declines in population from 1980 to 1982, suggesting outmigration of families where the primary wage earner was of working age. As the economy began to recover in the 1982-to-1985 period, increases were once again experienced by the 25-64 age group.

It is interesting to note that the county's population is relatively older than the population in much of the rest of Oregon. In 1980, the county's median age was 33.7, fifth highest in Oregon. In Jackson County the median age was 31.3, and the State average was 30.3. Josephine County's proportion of population in the 65-and-over age group was 15.2 percent in 1980, again the fifth highest in Oregon. Proportions in the 65-and-over group were 12.6 percent and 11.5 percent in Jackson County and Oregon, respectively.

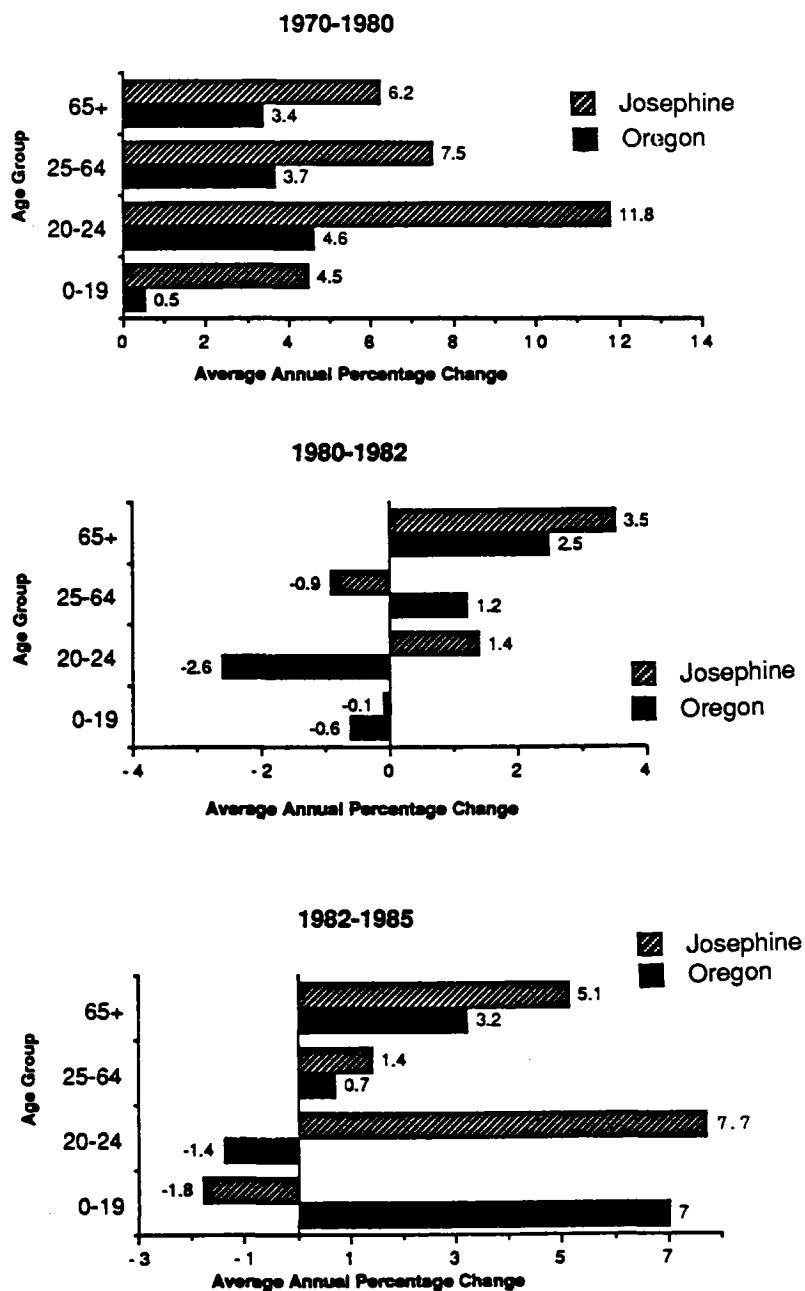
Another revealing characteristic about Josephine County's population is that a comparatively small proportion has graduated from high school and college. In 1980, 68.1 percent of the population 25 years or older had graduated from high school; only five counties had a smaller proportion. Similarly, only five counties had smaller proportions of persons 25 or older with four or more years of college.

Figure 9.--Index of population for the U.S., Oregon, Josephine County, and Jackson County, 1970-85 (1970=100)



Source: Center for Population Research and Census, Portland State University

Figure 10.--Average annual percentage change in population by age group for Oregon and Josephine County, 1970-80, 1980-82, and 1982-85



Source: Center for Population Research and Census, Portland State University

Income

Measuring changes in income over time is another way to monitor changes in regional economic well-being. Changes in income can be measured in current dollars and in constant dollars. Income measured in current dollars represents purchasing power for the year when the income was earned. Income measured in constant dollars incorporates the effects of inflation by calculating income over time in terms of the cost of goods and services purchased by consumers in a given base period. For this report, the base period is 1970.

Total personal income in current and constant (1970) dollars is shown for Josephine County in figure 11. The difference between the two curves in the figure represents the effects of inflation. Despite inflation, personal income has risen substantially since 1970. The recession of the early 1980's adversely affected growth in income, but after 1982 the rate of growth was similar to that of the 1970's.

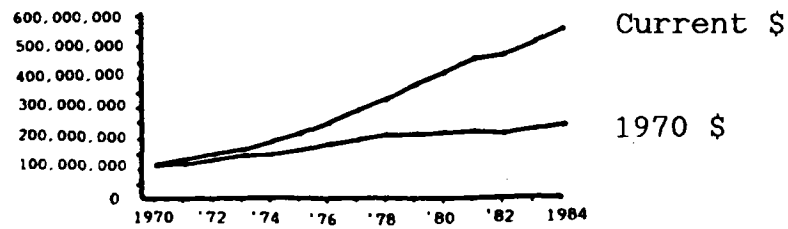
Per capita personal income is another measure of regional economic well-being. This measure is calculated by dividing an area's total personal income by the area's population. Per capita personal income also can be measured in terms of current and constant dollars.

Several comparisons of per capita personal income are shown in figures 12 and 13. Both figures show that since 1970, Josephine County's per capita personal income has generally been less than income in Oregon and in Jackson County. As noted in the introduction, Josephine County had the lowest per capita personal income in the state during 1984. Moreover, in recent years the county's per capita income has increased less rapidly than has income in Oregon and Jackson County. Because of the presence of illegal activities (for example, cultivation of marijuana), reported data may understate the level of income for the area.

Personal income is derived from three sources: (1) net earnings (wages and salaries, other labor income, and proprietors' income), (2) investment incomes (dividends, interest, and rent), and (3) transfer payments (retirement pensions, unemployment insurance, public assistance payments, etc.). Sources of personal income in 1976, 1980, and 1984 are shown for the United States, Oregon, and Josephine and Jackson counties in figure 14. The greatest contribution to personal income is made by net earnings. Since 1976, however, the proportion of Josephine County's personal income attributable to earnings has been decreasing, while the proportion contributed by investments and transfer payments has been increasing. Additionally, the contribution of net earnings to personal income is less than 50 percent and is much less than in the U.S., Oregon, and Jackson County. Transfer payments and investment incomes are more important for Josephine County than for the other regions shown in figure 14.

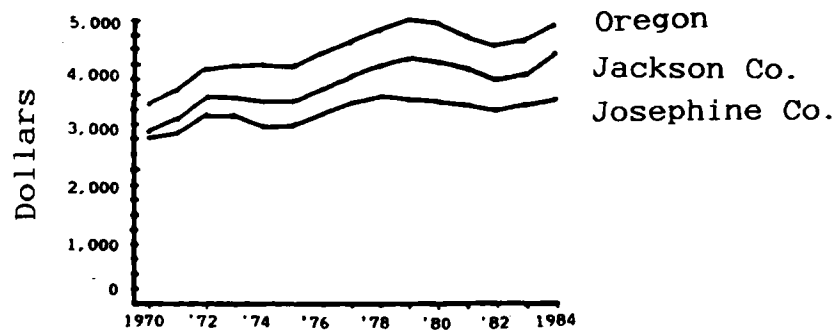
The composition of transfer payments over time (figure 15) reflects the relatively high proportion of persons in the 65-and-over age group. In 1984, retirement incomes accounted for nearly 84 percent of Josephine County's transfer payments, up from 73 percent in 1976. Retirement incomes were proportionally greater than in Jackson County, Oregon, and the nation.

Figure 11.--Total personal income in Josephine County, 1970-84, in current and in 1970 dollars



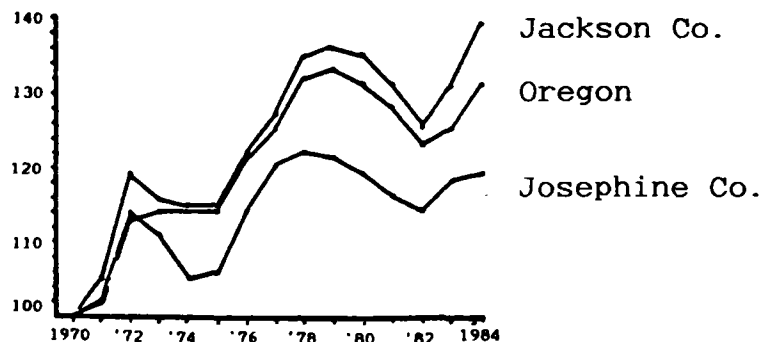
Source: U.S. Bureau of Economic Analysis

Figure 12.--Real per capita income in Oregon, Josephine County, and Jackson County, 1970-84



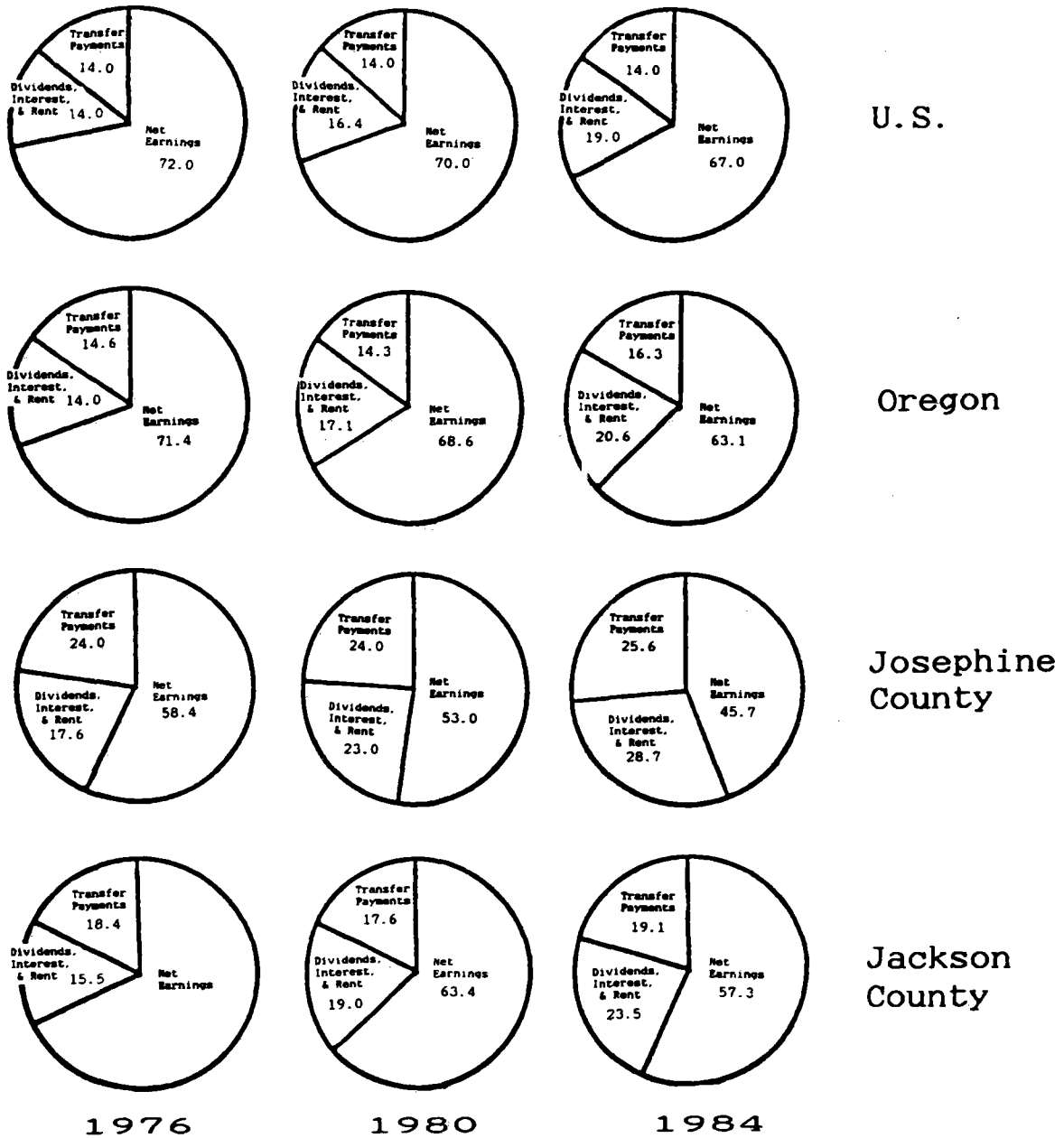
Source: U.S. Bureau of Economic Analysis

Figure 13.--Index of real per capita income in Oregon, Josephine County, and Jackson County, 1970-84 (1970=100)



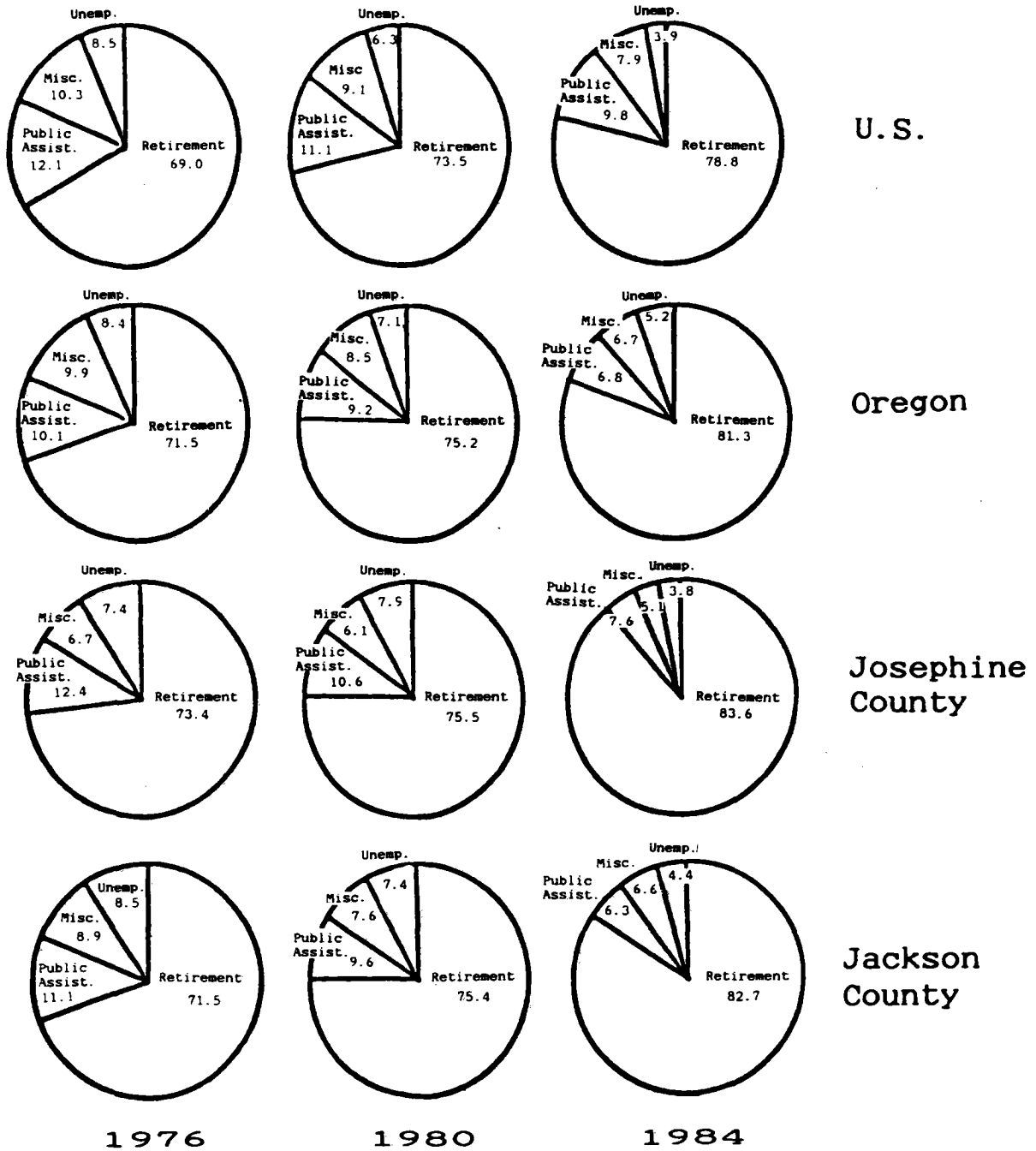
Source: U.S. Bureau of Economic Analysis

Figure 14.--Percentage of personal income by source for the U.S., Oregon, Josephine County, and Jackson County, 1976, 1980, and 1984



Source: U.S. Bureau of Economic Analysis

Figure 15.--Percentage of transfer payments by source for the U.S., Oregon, Josephine County, and Jackson County, 1976, 1980, and 1984



Source: U.S. Bureau of Economic Analysis

Employment

Measuring changes in employment and unemployment also can be useful in monitoring regional economic well-being. Employment often is categorized according to place of residence or place of work. For example, "civilian labor force" refers to the number of employed and unemployed persons who live in an area but who do not necessarily work there. "Wage and salary employment" refers to persons who work in a given area but who do not necessarily live there.

Totals for civilian labor force and wage and salary employment are shown for 1976 to 1986 in figure 16. Except for declines in the early 1980's, the county's civilian labor force and wage and salary employment generally have been increasing since 1976.

Unemployment rates from 1976 to 1986 are shown for the United States, Oregon, and Josephine and Jackson counties in figure 17. In 1986, Josephine County's unemployment rate was 9.6 percent (2,390 persons), down from a high of 15.2 percent in 1982. Throughout the latter half of the 1970's and into the early 1980's, the unemployment rate has been higher than those for the other regions shown in figure 17. Fluctuations in the unemployment rate for Josephine County have been similar to those in the other regions.

Figure 18 shows wage and salary employment by economic sector for Oregon, Josephine County, and Jackson County in 1976, 1980, and 1986. In 1986, the trade sector employed more people than any other sector in Josephine County. In 1976, however, trade was only the third-largest sector in Josephine County, following manufacturing and government. The trade sector was also the largest sector in Oregon and Jackson County in 1986. Manufacturing was much more important in Josephine County than in Oregon as a whole or in Jackson County during 1986. Services have become relatively more important as an employer, while government has become relatively less important. These trends are similar to those in Oregon and in Jackson County.

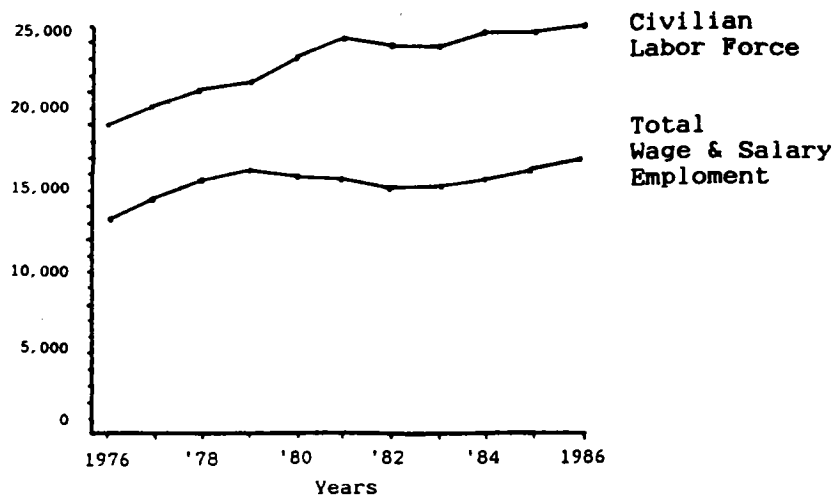
Location Quotients

The preceding sections on population, income, and employment over the last decade or so have provided an overall picture of economic well-being in Josephine County as compared to the United States, Oregon, and Jackson County. This section extends the preceding discussion by identifying economic sectors that are relatively more represented in Josephine County than in a given base region, which in this analysis is the United States.

Location quotients are sometimes used to compare regional economies to the national economy. Table 1 shows location quotients in Josephine County's economy in 1976, 1980, and 1984.

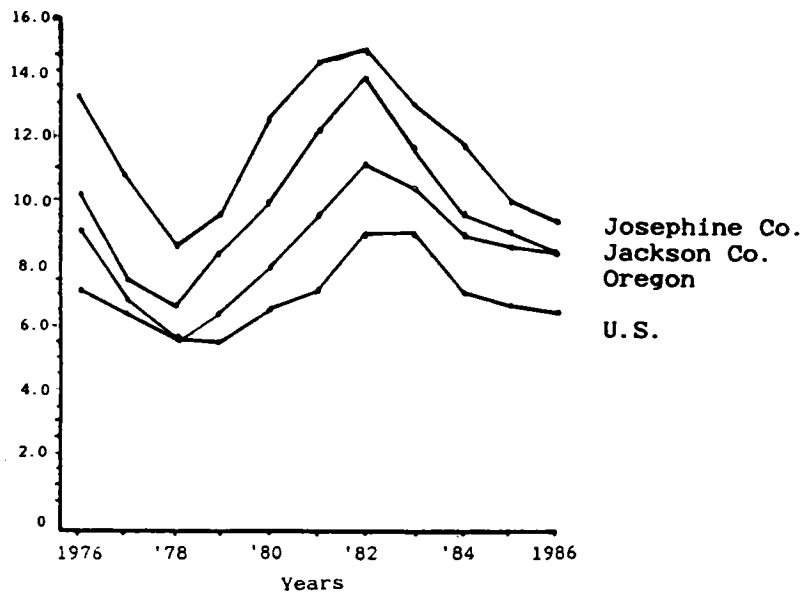
- * If the location quotient for an economic sector equals 1, then that sector's share of total earnings in Josephine County equals the sector's share of earnings in the United States.

Figure 16.--Civilian labor force and wage and salary employment in Josephine County, 1976-86



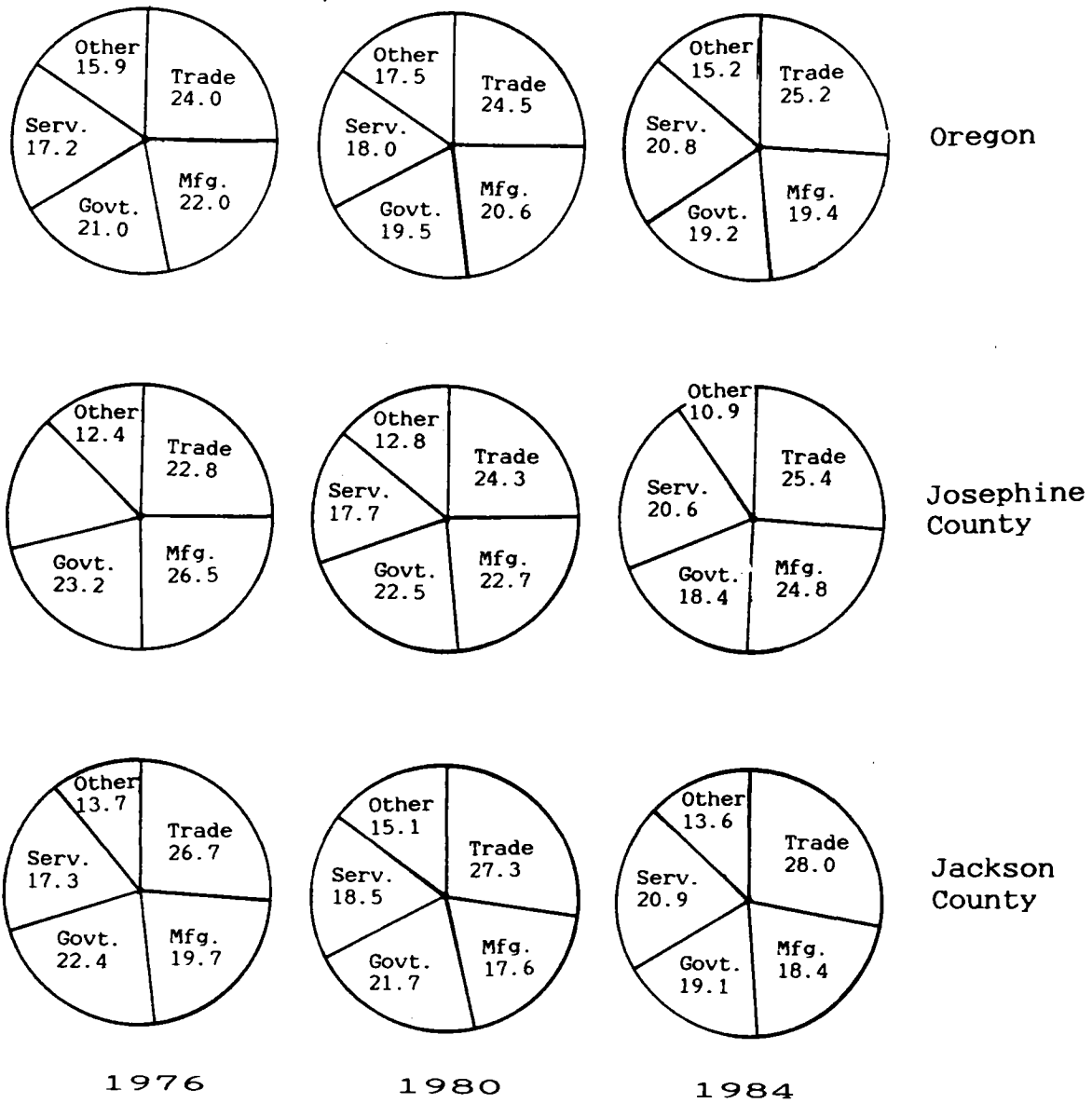
Source: Oregon Department of Human Resources, Employment Division

Figure 17.--Unemployment rates in the U.S., Oregon, Josephine County, and Jackson County, 1976-86



Source: Oregon Department of Human Resources, Employment Division

Figure 18.--Percentage of employment by sector for Oregon, Josephine County, and Jackson County, 1976, 1980, and 1986



Source: Oregon Department of Human Resources, Employment Division

**Table 1. Location Quotients by Sector in Josephine County,
1976, 1980, and 1984**

	1976	1980	1984
Farm	0.80	0.73	0.61
Agricultural services, forestry, fisheries, and other	2.25	(d)	1.55
Mining	0.18	(d)	0.14
Construction	1.04	1.12	0.70
Manufacturing	1.24	1.09	1.33
Durable	1.82	1.53	1.94
Nondurable	0.24	0.28	0.27
Transportation and public utilities	0.77	0.78	0.69
Wholesale trade	0.49	0.34	0.35
Retail trade	1.53	1.62	1.59
Finance, insurance, and real estate	0.65	0.73	0.51
Services	0.74	0.88	0.91
Government	1.04	1.15	1.09
Federal	0.63	0.58	0.67
State and local	1.25	1.43	1.30

* The method for calculating location quotients is shown in the appendix. Location quotients are based on income by place of work.

(d): data not disclosed for Josephine County

Source: U. S. Bureau of Economic Analysis, Local Area Personal Income, various volumes (Washington, D.C.: Government Printing Office)

- * If the location quotient is less than 1, then that sector is relatively less important in Josephine County than in the Nation.
- * If the location quotient is greater than 1, then that sector is relatively more important in Josephine County than in the Nation.

As table 1 indicates, all location quotients are either above or below 1. The following sectors are relatively more represented in Josephine County than in the United States: agricultural services, forestry, fisheries, and other; manufacturing (especially durable manufacturing); retail trade; and State and local government. Location quotients for these sectors suggest the importance of the timber industry, tourism, and retirement to the local economy.

Several sectors are less represented in Josephine County than in the U.S. as a whole: farm; nondurable manufacturing; wholesale trade; transportation and public utilities; finance, insurance, and real estate; and Federal Government. These trends probably reflect the county's limited amount of land suitable for farming, heavy reliance on timber products as compared to other types of manufacturing, and the regional importance of nearby Medford as a distribution and financial center. The data further suggest that the county's economy has become relatively less specialized in resource-based activities and more specialized in services since 1976.

Location quotients for net labor and proprietors' income, transfer payments, and dividends, interest, and rent are shown in table 2. Values are above 1 for transfer payments and dividends, interest, and rent, and below 1 for net labor and proprietors' income. Location quotients for transfer payments and dividends, interest, and rent increased from 1976 to 1984; location quotients for net labor and proprietors' income declined during the same period.

High location quotients for transfer payments and dividends, interest, and rent may help account for high location quotients for retail trade. Increases in location quotients for transfer payments and dividends, interest, and rent may help explain increases in location quotients for services. This "nonearned" income from transfer payments and property may be contributing significantly to the purchase of services and retail goods. As noted earlier (page 14), earnings in the services and retail trade sectors also may be partly attributable to purchases by residents whose incomes are not included in reported data.

**Table 2. Location Quotients by Source of Personal Income
in Josephine County, 1976, 1980, and 1984***

	1976	1980	1984
Net labor and proprietors' income	0.80	0.76	0.68
Transfer payments	1.72	1.74	1.86
Dividends, interest, and rent	1.34	1.40	1.51

* The method for calculating location quotients is shown in the appendix. Location quotients are based on income by place of residence.

Source: U. S. Bureau of Economic Analysis, Local Area Personal Income, various volumes (Washington, D.C.: Government Printing Office)

Retail Trade and Trade Area Capture

As noted in several preceding sections, retail trade is an important part of Josephine County's economy. For example, since the early 1980's, the trade sector has been the largest employer. Moreover, in 1984 the location quotient was higher for the retail trade sector than for any other major economic sector.

During the last half of the 1970's, the dollar value of retail sales doubled (table 3). This increase was greater than the statewide gain of 81 percent, but slightly less than the increase in Jackson County. Growth in retail sales slowed considerably during the recession of the early 1980's. Josephine County's increase of 3 percent from 1980 to 1984 was less than the State average (8 percent), but greater than Jackson County's increase of 1 percent.

The relative strength of the retail trade sector can be shown by an index for trade area capture. This index compares retail sales in a county to what might be expected based on statewide buying patterns and on the level of per capita personal income in the county relative to per capita income statewide. An index greater than 1 indicates that a county's sales of a given type of merchandise are greater than might be expected based on statewide buying patterns and income of local residents relative to residents statewide. An index less than 1 for a given type of merchandise indicates that there is a relatively smaller amount of sales in the county than might be expected.

Indexes of trade area capture for Josephine County in 1976, 1980, and 1984 are shown in table 3. For all types of retail sales except general merchandise, indexes of trade area capture are greater than 1. This suggests the relative strength of the county's retail trade sector. The strongest sectors are food, pharmaceuticals, and automotive. No clear pattern of changes from 1976 to 1984 is observable; however, in one sector--furniture and appliances--there has been a notable decline in the index. There also appears to be a substantial increase in the index for the food sector. Overall, the index was about the same in 1984 (1.26) as in 1976 (1.27).

Recent completion of the Rogue Valley Mall in Medford may have significant impacts on retail sales of some types of merchandise in Josephine County. Calculation of indexes of trade area capture during the remainder of the 1980's will help in assessing the mall's impact on retail businesses in the area.

Table 3. Retail Sales and Trade Area Capture by Sector in Josephine County, 1976, 1980, and 1984*

	Retail sales (X 1,000)			Index for trade area capture		
	1976	1980	1984	1976	1980	1984
Food	\$ 33,793	\$ 66,418	\$ 67,313	1.07	1.87	1.75
Eating and drinking	13,460	26,740	28,291	1.16	1.14	1.02
General merchandise	6,802	26,891	27,150	0.55	0.74	0.71
Furniture and appliances	12,213	15,800	11,476	1.92	1.37	1.05
Automotive	38,802	74,879	84,822	1.51	1.91	1.55
Drugs	8,501	12,129	10,748	2.35	1.55	1.61
Other	42,828	91,443	94,272	1.34	1.47	1.41
TOTAL	\$156,399	\$314,300	\$324,072	1.27	1.40	1.26

* The method for calculating trade area capture indexes is shown in the appendix.

Source: Sales and Marketing Management, Survey of Buying Power, July, various years.

U. S. Bureau of Economic Analysis, Local Area Personal Income, various volumes (Washington, D.C.: Government Printing Office)

Travel and Tourism

The impact of travel and tourism on Josephine County's economy is significant but difficult to estimate. Impacts are generally greatest in various parts of the trade and services sectors--for example, in restaurants, grocery stores, gasoline stations, and lodging establishments. The majority of tourism-related expenditures probably are made by persons traveling on Interstate 5 and U.S. Highway 199, and by persons enjoying various activities on the Rogue River.

Estimates of the impacts from travel and tourism in Josephine County and elsewhere in Oregon have been made by the U.S. Travel Data Center under contract with the Tourism Division of the Oregon Economic Development Department. Specifically, the Travel Data Center has estimated the impacts from "travelers," defined as persons who made an overnight trip, or who made a 1-day trip in which they travelled 100 miles or more away from home. The estimates do not include impacts from foreign visitors, commuters, carrier transportation, military travel, or travel by students away at school. Additionally, the estimates measure only the direct impacts from tourism, and do not include indirect and induced impacts created through the multiplier process.

The Travel Data Center estimates that in 1985, expenditures directly related to travel in Josephine County amounted to \$35,939,000. These expenditures generated 894 jobs, a payroll of \$7,142,000, and \$571,000 in local tax receipts. In terms of these measures, Josephine County ranked about fifteenth among Oregon's counties. In terms of economic specialization using employment data, there is about the same proportion of travel-related jobs in Josephine County as there is in the State as a whole.

V. Population and Employment Projections

Population

Projections of population from 1986 to the year 2000 are shown for the United States, Oregon, and Josephine and Jackson counties in figure 19. These projections, which are based upon previous growth rates, indicate that Josephine County's population will continue to increase at a rate greater than those for the United States, Oregon, and Jackson County. In the year 2000, it is projected that the county's population will be about 83,000, an increase of 22,000 (36 percent) from 1986.

Employment

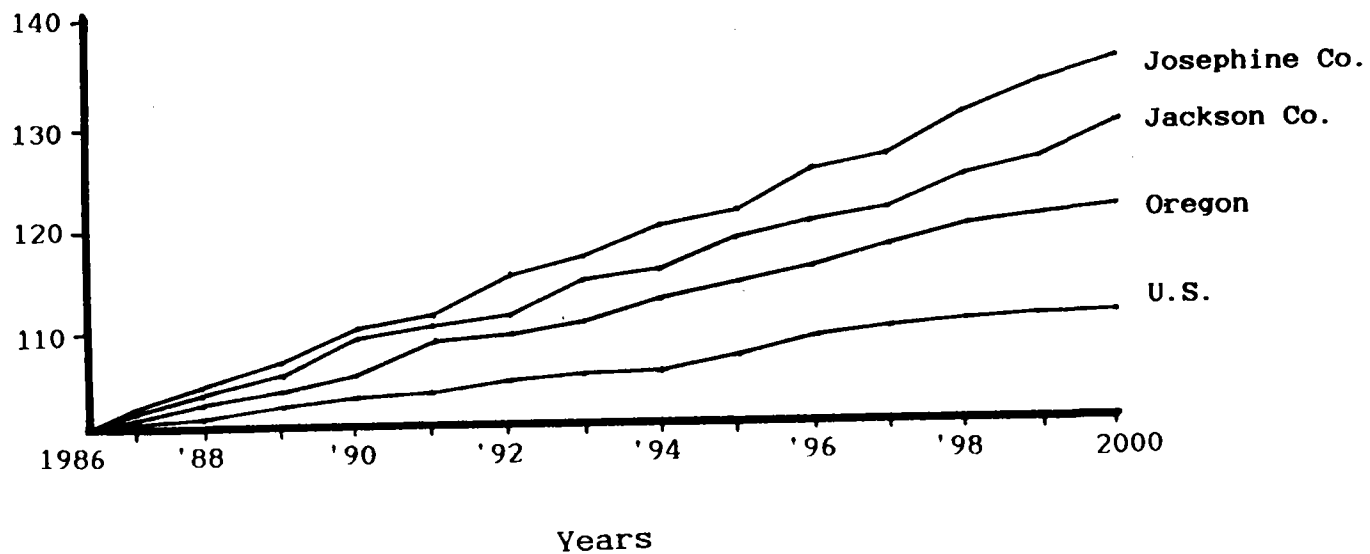
Tables 4 and 5 show projected employment for Oregon's 20 fastest-growing industries from 1984 to 1992. Both tables reveal that much of Oregon's future employment growth will occur in the services sectors. Altogether, services are projected to account for about 40,700 additional jobs--one-third of net growth in employment--from 1984 to 1992. Business services is projected to be the fastest-growing sector in net terms as well as in percentage, and will contribute about 12 percent of the net new jobs.

Only a few manufacturing sectors are projected to be among the 20 fastest-growing, and one manufacturing sector--lumber and wood products--is projected to experience the greatest net decline (4,272). Overall growth in manufacturing is projected to be 3.3 percent, which is lower than the rate of all other sectors except that of the mining sector and the agriculture, forestry, and fishing sector. Most of the growth in manufacturing will occur in the fabricated metals, machinery and equipment, and printing and publishing sectors.

Another sector in which Josephine County specializes economically--trade--is projected to grow by 37,729 jobs (14.9 percent) statewide. Employment gains in this sector are projected to be second-highest among all sectors in net terms and third-highest in percentage. Over two-fifths of the growth in the trade sector is projected to occur in the food stores and eating and drinking sectors.

The growth rate of the government sector (9.0 percent) is projected to be less than Oregon's overall rate of growth (11.9 percent). Nonetheless, government is projected to gain 17,479 employees, which is the third greatest increase among all major sectors. More than half of these new jobs will be generated by local governments, but the rate of growth is projected to be slightly higher for the Federal Government than for State and local governments.

Figure 19.--Index of projected population for the U.S., Oregon, Josephine County, and Jackson County, 1986-2000



Source: Center for Population Research and Census, Portland State University

Table 4. Oregon's 20 Fastest-Growing Economic Sectors in Percentage Terms, 1984-92

SIC Grouping*		Employment		Percent change
		1984	1992	
73	Business services	31,339	45,730	45.9
47	Transportation services	2,942	3,905	32.7
17	Special trade contractors	16,707	21,850	30.8
54	Food stores	27,859	35,790	28.5
37	Transportation equipment	8,461	10,840	28.1
15	General building contractors	7,189	9,150	27.3
62	Security, commodity brokers, and services	1,981	2,500	26.2
83	Social services	13,355	16,800	25.8
51	Wholesale trade--nondurable goods	26,620	33,100	24.3
79	Amusement and recreation services	7,564	9,350	23.6
81	Legal services	7,058	8,700	23.3
76	Miscellaneous repair services	3,349	4,090	22.1
30	Rubber and miscellaneous plastic products	2,809	3,411	21.4
39	Miscellaneous manufacturing industries	2,594	3,140	21.0
42	Trucking and warehousing	18,185	21,980	20.9
89	Miscellaneous services	9,751	11,650	19.5
70	Hotels and other lodging places	13,985	16,680	19.3
07	Agricultural services	4,184	4,980	19.0
45-46	Air transportation and pipelines	2,204	2,620	18.9
63	Insurance carriers	<u>12,127</u>	<u>14,383</u>	<u>18.6</u>
TOTAL		220,263	280,649	27.4

* SIC: Standard Industrial Classification

Source: Oregon Department of Human Resources, Employment Division

Table 5. Oregon's 20 Fastest-Growing Economic Sectors in Net Terms, 1984-92

SIC Grouping*	Employment		Net change
	1984	1992	
73 Business services	31,339	45,730	14,391
80 Health services	67,476	77,259	9,783
58 Eating and drinking places	67,568	76,100	8,532
54 Food stores	27,859	35,790	7,931
51 Wholesale trade--nondurable goods	26,620	33,100	6,480
Local education	70,531	76,530	5,999
17 Special trade contractors	16,707	21,850	5,143
50 Wholesale trade--durable goods	38,144	43,100	4,956
Other local government	42,683	46,874	4,191
42 Trucking and warehousing	18,185	21,980	3,795
83 Social services	13,355	16,800	3,445
Federal government	29,071	32,100	3,029
Other state government	28,748	31,745	2,997
70 Hotels and other lodging places	13,985	16,680	2,695
35 Machinery, except electrical	15,623	18,250	2,627
53 General merchandise stores	25,357	27,950	2,593
59 Miscellaneous retail	21,210	23,800	2,590
37 Transportation equipment	8,461	10,840	2,379
55 Automotive dealers and service stations	23,956	26,260	2,304
63 Insurance carriers	<u>12,127</u>	<u>14,383</u>	<u>2,256</u>
TOTAL	599,005	697,121	98,116

* SIC: Standard Industrial Classification

Source: Oregon Department of Human Resources, Employment Division

VI. Conclusions

Josephine County's current economic picture is mixed. On the one hand, the county has gone through the recession of the early 1980's relatively better than most Oregon counties. Moreover, despite the recession, population has continued to increase.

On the other hand, the county ranks last among Oregon counties in per capita personal income, and the unemployment rate remains higher than the State average. Low per capita incomes and high unemployment rates may be related to low levels of education among residents, and to a high proportion of persons in the 65-and-over age group. Because of the presence of an undetermined, but probably significant, amount of unreported income, available data may understate the level of economic well-being in the area.

Although employment gains in the trade and services sectors have helped to diversify the county's economy, the manufacturing sector is relatively more important than for the State as a whole. Over half of the county's employment in manufacturing is in the timber products sector, which is projected to experience the greatest decline in employment during the next few years.

The contribution of the trade and services sectors to the county's economy will likely continue to increase. Travel and tourism, an increasing number of retirees, and relatively high levels of unreported income probably have accounted for much of the strength of these sectors. Wages in trade and services, however, have been low historically. Completion of the Rogue River Mall in Medford may affect trade adversely in Josephine County.

Ongoing analysis of the trends profiled in this report should help community leaders better understand Josephine County's current and future economy. Additionally, it will be important to monitor State, national, and international events because much of what occurs in the local economy depends on these events. Knowledgeable community leaders are significant assets in ensuring that Josephine County fully participates in the Oregon Comeback.

Appendix

Calculation of location quotients

Location quotients were calculated as follows:

$$\frac{A}{B} \div \frac{C}{D} ,$$

where A is income for sector i in Josephine County,

B is total income in Josephine County,

C is income for sector i in the United States, and

D is total income in the United States.

Calculation of indexes of trade area capture

Indexes of trade area capture were calculated as follows:

$$A \div \frac{B \times C/D}{E} ,$$

where A is retail sales of merchandise type i in Josephine County,

B is Oregon's per capita expenditures for merchandise type i,

C is per capita income for Josephine County,

D is per capita income for Oregon, and

E is population for Josephine County.

Extension Service, Oregon State University, Corvallis, O.E. Smith, 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.

Oregon State University Extension Service offers educational programs, activities, and materials—without regard to race, color, national origin, sex, or disability—as required by Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, and Section 504 of the Rehabilitation Act of 1973. Oregon State University Extension Service is an Equal Opportunity Employer.
