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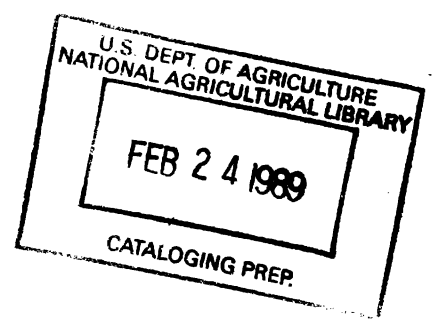
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Employment and Population Growth in Nine Nonmetro Kentucky Counties



EMPLOYMENT AND POPULATION GROWTH IN NINE NONMETRO KENTUCKY
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ABSTRACT

Inmigrants did not necessarily have an advantage over long-term residents in obtaining jobs in a rapidly growing nonmetro community in south-central Kentucky. Most new workers in the area were youth and/or women. New firms were an important source of new jobs, particularly in the private service sector.

Keywords: Rural employment growth, Rural labor force, Migrants

ACKNOWLEDGMENTS

This report is based on preliminary results of a study analyzing the impact of rural economic growth on selected target groups. Stan Daberkow, Linda M. Ghelfi, Maurice R. Landes, and Donald K. Larson designed the study. Daberkow and Larson participated in the analysis. Douglas Kleweno, Howard Utter, and Lawrence S. Williams participated in developing the sample and collecting the data. The study was performed under the general direction of Thomas A. Carlin and Robert Coltrane.

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CONTENTS

	<u>Page</u>
HIGHLIGHTS.....	iv
INTRODUCTION.....	1
Study Site.....	2
Survey.....	3
RESULTS.....	4
Private Sector Firms and Government Units.....	4
Labor Force Characteristics.....	5
IMPLICATIONS.....	13

HIGHLIGHTS

Long-term residents can successfully compete with immigrants for jobs in a nonmetropolitan (nonmetro) community experiencing rapid economic growth. But early immigrants, those arriving in the community during the early phases of the growth process, appear to have the edge when paychecks are passed out. Early immigrants in executive and managerial positions receive the highest pay of any local workers. Workers migrating to a nonmetro community during later phases of the growth process appear to have no particular pay advantage.

These are some preliminary findings from a recent Economic Research Service study of employment growth in a fast growing nonmetro area in south-central Kentucky.

About 43 percent of the workers living in the study area at the survey time had not been working there 5 years earlier. About 54 percent of these new workers were long-term residents and early migrants not employed 5 years earlier, and over 36 percent recently moved to the study area and took local jobs. The majority of the newly employed were youth and/or women.

Twenty-two percent of wage jobs reported by private business establishments and government units located in the study area had not existed 5 years earlier. Over 55 percent of these new jobs were provided by private service-producing businesses. Half the new jobs were furnished by firms not in business 5 years before the survey.

Employment and Population Growth in Nine Nonmetro Kentucky Counties

INTRODUCTION

The Economic Research Service (ERS) is studying the effect that economic development has had on specific groups of nonmetropolitan (nonmetro) residents, particularly long-term residents, immigrants, and women. Such research is now particularly relevant to nonmetro areas because, for the first time in 150 years, rural and smalltown population is growing faster than the metro population.

This report presents preliminary findings from a recent ERS survey in south-central Kentucky. It begins to fill a research need for information on the characteristics of persons and households affected by the new pattern of rural growth. Previous research has relied principally on small amounts of highly aggregated data on population, employment, and income--all from secondary sources.

Study Site

A nine-county area in south-central Kentucky was chosen because it experienced extremely high population and employment growth during the seventies (fig. 1). About 226,800 people resided in the area in 1980, according to the 1980 Population Census. This was 30 percent higher than in 1970, and the area growth rate was more than 2 1/2 times the national population growth rate for the decade. The population resides in small towns and open country. The largest town, Somerset, had about 11,000 residents in 1980. The nearest metropolitan areas--the Knoxville, Tenn., Standard Metropolitan Statistical Area (SMSA), population of about 477,000, and the Lexington, Ky., SMSA with over 318,000 people--are about 80 miles away. 1/

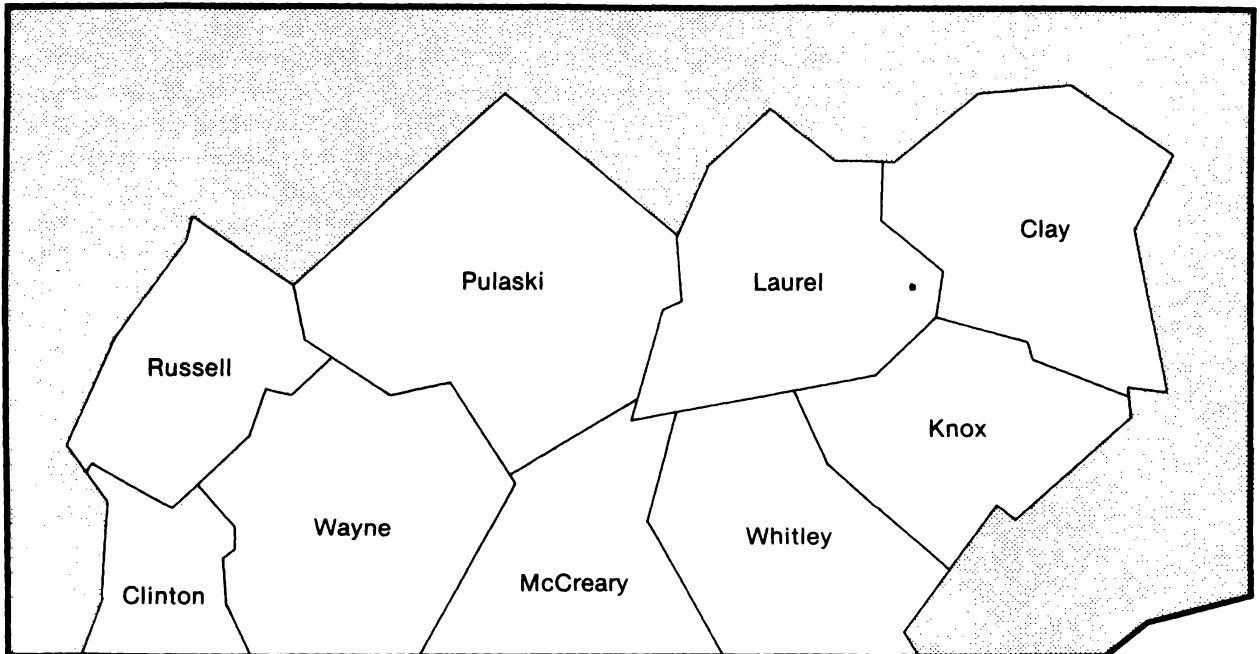
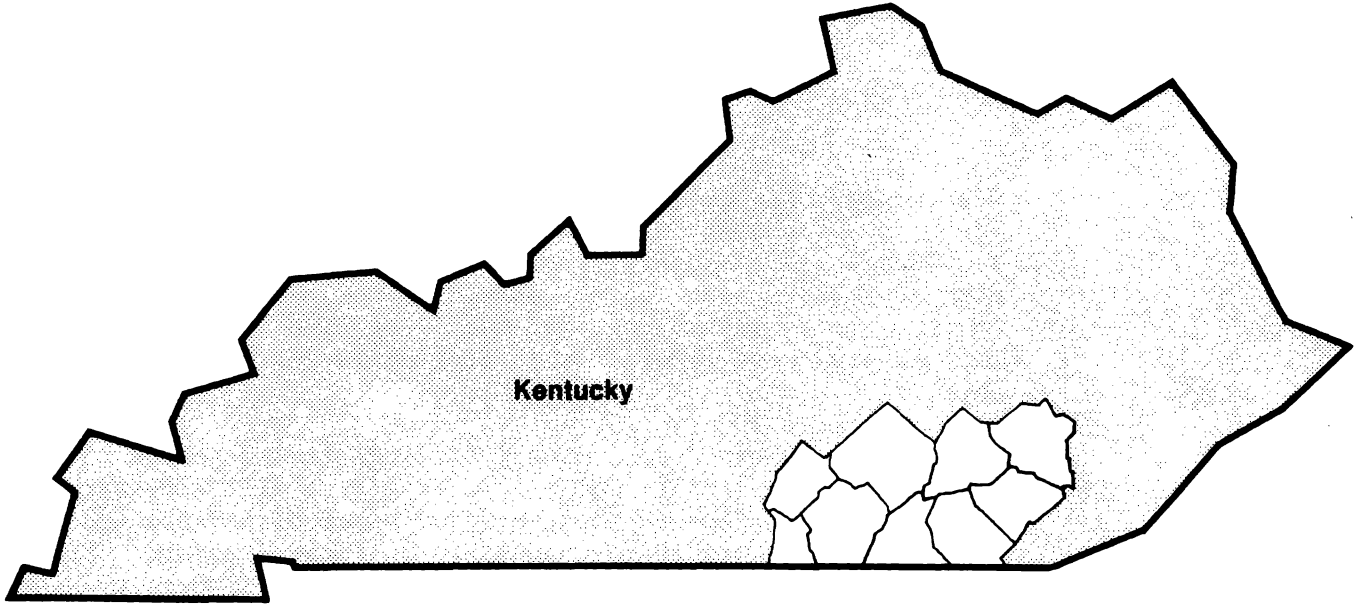
Employment in the area grew by 44 percent between 1970 and 1979. Industries with the largest employment growth were manufacturing, wholesale and retail trade, mining, and services. 2/ The manufacturing base was comprised of food processing, apparel and textile products, wood products, primary and fabricated metal products, and electrical and nonelectrical machinery.

1/ Bureau of the Census, 1980 Census of Population and Housing, Advance Reports, U.S. Department of Commerce, Washington, D.C., 1981.

2/ Bureau of Economic Analysis, U.S. Department of Commerce.

Figure 1

Counties in Study Area



Although the population and employment growth rates in the study area were above average for all nonmetro areas, the economic base of this area is similar to that of many nonmetro labor markets. General relationships found in the study should hold for other similar areas, although the size of the study area does not permit extrapolation of actual statistical results to nonmetro areas as a whole.

Survey

Data for this study were obtained from a sample of firms, government agencies, and households. The firms and government agencies interviewed were drawn from a list obtained from the Kentucky State Employment Security Office and supplemented with the names of establishments found in local telephone directories and the names of government units obtained from area sources. An area sampling procedure was used to collect information from a sample of firms not included on the list. Information on ownership, organizational structure, employment, occupational structure, and wages was obtained from 364 private sector firms and 40 government units representing all sizes and types of industry in the area.

A sample of employees was drawn from the establishments interviewed as the basis for the household phase of the study. These employees, interviewed in their homes, were asked to supply information on household composition, characteristics of household members, employment of all household members 16 years and older, residence history, and household income. An area sample of households was used to gather information about households in which members were employed in establishments not on the list, and households in which all members were out of the labor force or unemployed. Information was obtained from 900 households containing 2,673 people. This unique sampling procedure permitted the cross-referencing of information on households and persons employed with the characteristics of their employers. This means that a direct link can be made between employment change in a specific industry and the individual and household characteristics of the employees.

Data were collected by personal interview. All respondents, firms, government units, and households were asked to provide the requested information for 1974 and 1979. The interviews were made during December 1979 and January 1980.

Estimates of the study are based on a sample. Therefore, they may differ somewhat from figures that would have been derived from a complete census, or another sample even if taken using the same schedules and enumerators. This survey was a probability survey and standard errors can be derived for each of the estimates. All statements of comparison appearing in the text,

but not necessarily in the tables or figures, are significant at the 90-percent confidence level or higher.

RESULTS

Results of the ERS south-central Kentucky survey describe the private sector firms and government units and the people within the area. Since 1974, more than 13 percent of the January 1980 population migrated to the area, representing a high rate of immigration. Almost 11,000 new jobs have been added since 1974, and half of these new jobs were provided by the 890 establishments new to the area since 1974.

Private Sector Firms and Government Units

Data from the sampled firms and government units represent an estimated 4,500 establishments or employers in the nine-county area (table 1). The primary activity of most establishments, including government, was to provide services to households and other businesses both inside and outside the area. The largest number of service-producing firms was in wholesale and retail trade. Ninety-two percent of the establishments were small, employing fewer than 20 employees.

Approximately 3,080 or 68 percent of the establishments in business at the time of interview indicated they were located in the area in 1974. Of the establishments in business in 1974, 34 percent, or about 1,000, experienced an increase in the number

Table 1--Estimated number of private sector business establishments and government units in the area, December 1979

Item	:	Firms
		Number
Total	:	4,500
Goods-producing industries	:	550
Manufacturing	:	160
Mining and construction	:	390
Private service-producing industries	:	3,730
Wholesale and retail trade	:	2,140
TCPU and FIRE <u>1/</u>	:	480
Other services <u>2/</u>	:	1,110
Government	:	220

1/ TCPU is transportation, communications, and public utilities. FIRE is finance, insurance, and real estate.

2/ Includes hotels, personal, business, amusement, health, legal, education, and social services.

of employees hired between 1974 and 1979. New managers of 530 establishments were uncertain when their firms began operation. However, about 890 establishments were definitely new to the area since 1974, and the approximately 5,500 jobs provided by these establishments did not exist in the area in 1974.

The employment changes reported do not represent total changes in area employment between 1974 and 1979. Since information was collected only from establishments in operation at the time of the survey, no data were obtained from firms in operation in 1974 but not in operation between 1974 and the time of survey, or from firms starting and ending operations between 1974 and the time of survey. Thus, the net 1974-79 change in employment in the area was less than survey data indicated by the amount of employment loss due to establishment closings between 1974 and 1979.

The estimated total nonfarm employment in the nine-county area in December 1979 was about 53,510 (table 2). Over 90 percent of this employment was in wage jobs. Most of the remainder was in self-employed jobs, and these were concentrated largely in private service establishments.

About 44 percent of the total wage employment was in private service establishments, with wholesale and retail trade the dominant employer in this group. Twenty-one percent of the area's wage employment was in the government sector. The remainder was in goods-producing establishments, primarily manufacturing. Sixty-eight percent of the wage jobs were in larger establishments, those employing 20 or more workers.

About 10,850 jobs reported by establishments in December 1979 did not exist in 1974 in the nine-county area. This represents about 22 percent of all wage jobs in 1979. Private service-producing establishments reported the most new jobs. Almost 30 percent of the jobs in these establishments in 1979 did not exist in 1974.

Half of the new jobs were provided by firms not in business in the nine-county area in 1974. Such new firms played a particularly important role in job expansion in the private service sector where 75 percent of the new wage jobs were provided by new firms. On the other hand only 18 percent of the new wage jobs in the goods-producing sector were from new firms.

Labor Force Characteristics

Data from the sampled households represent about 61,500 households and 175,000 persons. About 99 percent of the area population was White and not of Hispanic origin, according to the survey data. Most of the remaining 1 percent was Black.

Table 2--Estimated employment in private sector business establishments and government units, December 1979

Item	Total : nonfarm : employment	Total : wage : employment	New jobs : since : 1974
	-----Number-----		
Total	53,510	48,510	10,850
Type of industry:			
Goods-producing industries	17,880	17,260	3,200
Manufacturing	14,910	14,760	2,400
Mining and construction	2,970	2,500	800
Private service-producing industries	25,570	21,190	6,170
Wholesale and retail trade	16,320	13,460	4,110
TCPU and FIRE ^{1/}	3,260	2,940	560
Other services ^{2/}	5,990	4,790	1,500
Government	10,060	10,060	1,480
Size of firm:			
Less than 20 employees	20,410	15,590	3,370
20 or more employees	33,100	32,920	7,480

^{1/} TCPU is transportation, communications, and public utilities. FIRE is finance, insurance, and real estate.

^{2/} Includes hotels, personal, business, amusement, health, legal, educational, and social services.

This area, like many nonmetropolitan areas, has experienced high rates of immigration in recent years. About 27 percent of the household heads and 26 percent of the adult population age 16 years and over moved into the area since 1965. Over half of the adult immigrants were recent migrants, moving into the area since 1974 (table 3). About 70 percent of all immigrants were return migrants; that is, they had lived in the area at some time prior to 1965, moved away, and then moved back after 1965.

Slightly over half of the January 1980 adult population was in the labor force, either working or looking for work, with the remaining 49 percent having no direct attachment to the labor

Table 3--Estimated adult population by residency status,
January 1980

Item	Amount	Distribution
	<u>Number</u>	<u>Percent</u>
Population, 16 years and over	129,280	100.0
Long-term residents <u>1/</u>	95,220	73.7
Early migrants <u>2/</u>	16,610	12.8
Recent migrants <u>3/</u>	17,450	13.5

1/ Long-term residents lived in the nine-county area continuously between December 31, 1964, and January 1980.

2/ Early migrants moved to the nine-county area between January 1, 1965, and December 31, 1974.

3/ Recent migrants moved to the nine-county area between January 1, 1975, and January 1980.

force (table 4). Most of the employed worked at jobs in the nine-county area, with 3,700 or 6.3 percent, commuting to jobs outside the area.

Table 4--Estimated adult population and labor force,
January 1980

Item	Amount
	<u>Number</u>
Population, 16 years and over	129,280
Labor force	65,950
Employed <u>1/</u>	58,620
Unemployed	7,330
Not in labor force	63,330
	<u>Percent</u>
Unemployment rate	11.1
Labor force participation rate	51.0

1/ The number of employed cited in this report is equivalent to the number of employed individuals as opposed to the number of jobs. The employment estimates were not adjusted to account for multiple jobs held simultaneously by individuals.

The majority of the employed were in the prime working age group of 25 to 54 years, were male, had completed high school, and were long-term residents of the area (fig. 2). Roughly 66 percent were between 25 and 54 years of age and 63 percent were male. About 25 percent of the workers had some college education and the remainder were about evenly distributed between high school graduates and those who had not completed high school.

A central issue related to impacts of rural economic development is how well long-term residents compete with immigrants for jobs. The survey data indicate that long-term residents were as likely to be employed as immigrants, contrary to common assumptions. Long-term residents comprised about 72 percent of the employed at the time of the survey, and a similar percentage of the adult population. Thus, immigrants appeared to have little, if any, advantage over long-term residents in finding employment in the nine-county area.

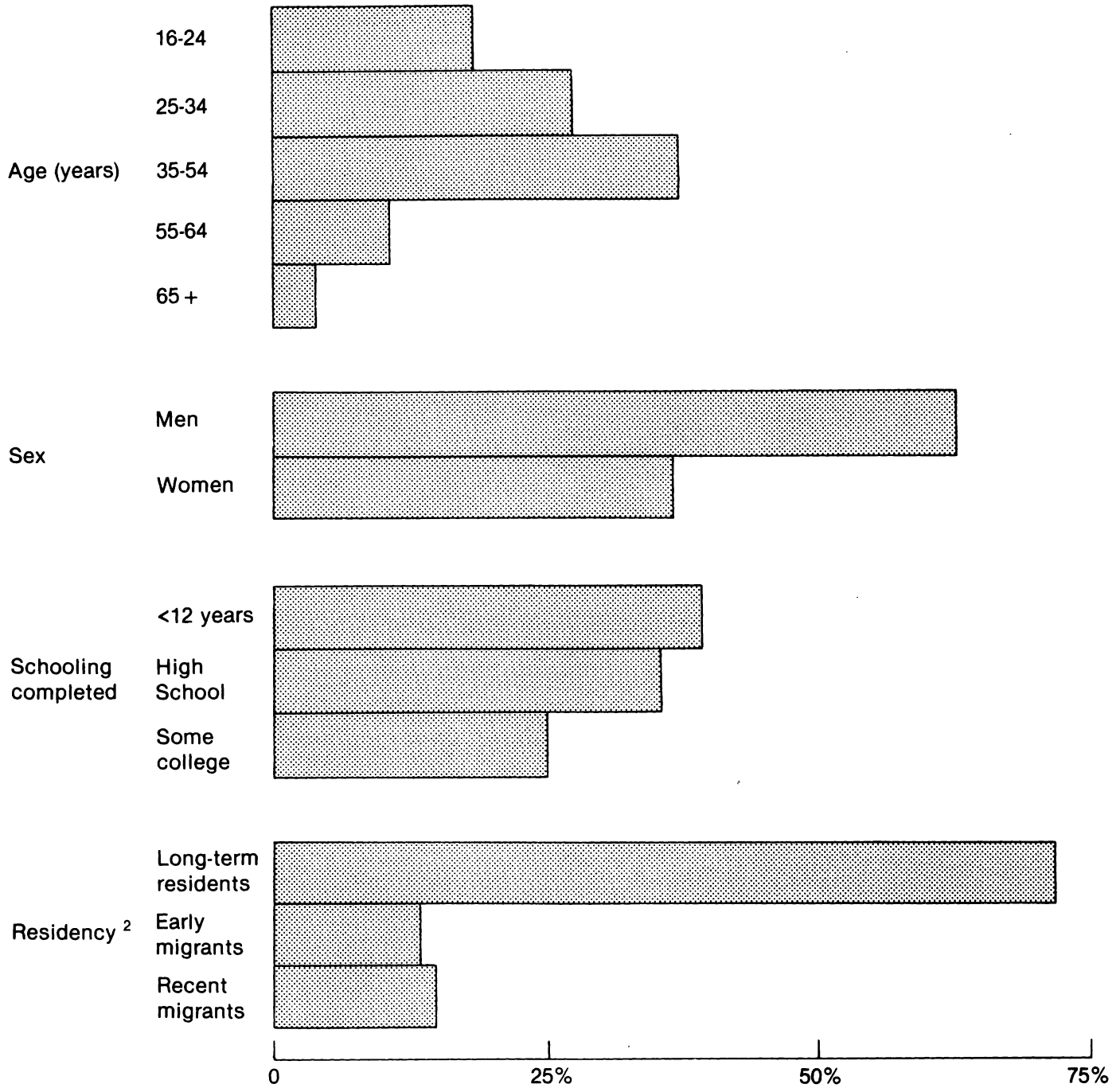
The average duration of employment during the previous year was about 48 weeks for those employed at the time of interview (fig. 3). The number of weeks employed varied by age, sex, education, and residency status. Workers under 25 years of age were employed fewer weeks during the year than workers 25 to 64 years. Many of the younger workers were going to school part of the year and others took their first job during 1979. Women were employed on the average about 3 fewer weeks than men, and workers with less than a high school education averaged fewer weeks of employment than workers with high school or more education.

Many of the 7,330 unemployed workers had been unemployed for several weeks between January 1979 and January 1980; the average was about 19 weeks. This estimate represents all unemployment during the year; however, weeks of unemployment may not have been consecutive. The average number of weeks of unemployment was not significantly different for long-term residents and immigrants, men and women, and workers age 16 to 24 years, 25 to 64 years, and 65 years or older.

Among wage and salary workers working 30 or more hours per week in January 1980, men had significantly higher average earnings than women, early migrants had higher earnings than long-term residents, but there was little difference in earnings of long-term residents and recent migrants (fig. 4). While the relationship between residency status and earnings also holds for most occupations, the earnings differences for executives, managers, and professionals were especially noteworthy. For these occupations, earnings of early migrants were about 50 percent higher than earnings of long-term residents and recent migrants.

Figure 2

Characteristics of the Employed, January 1980¹

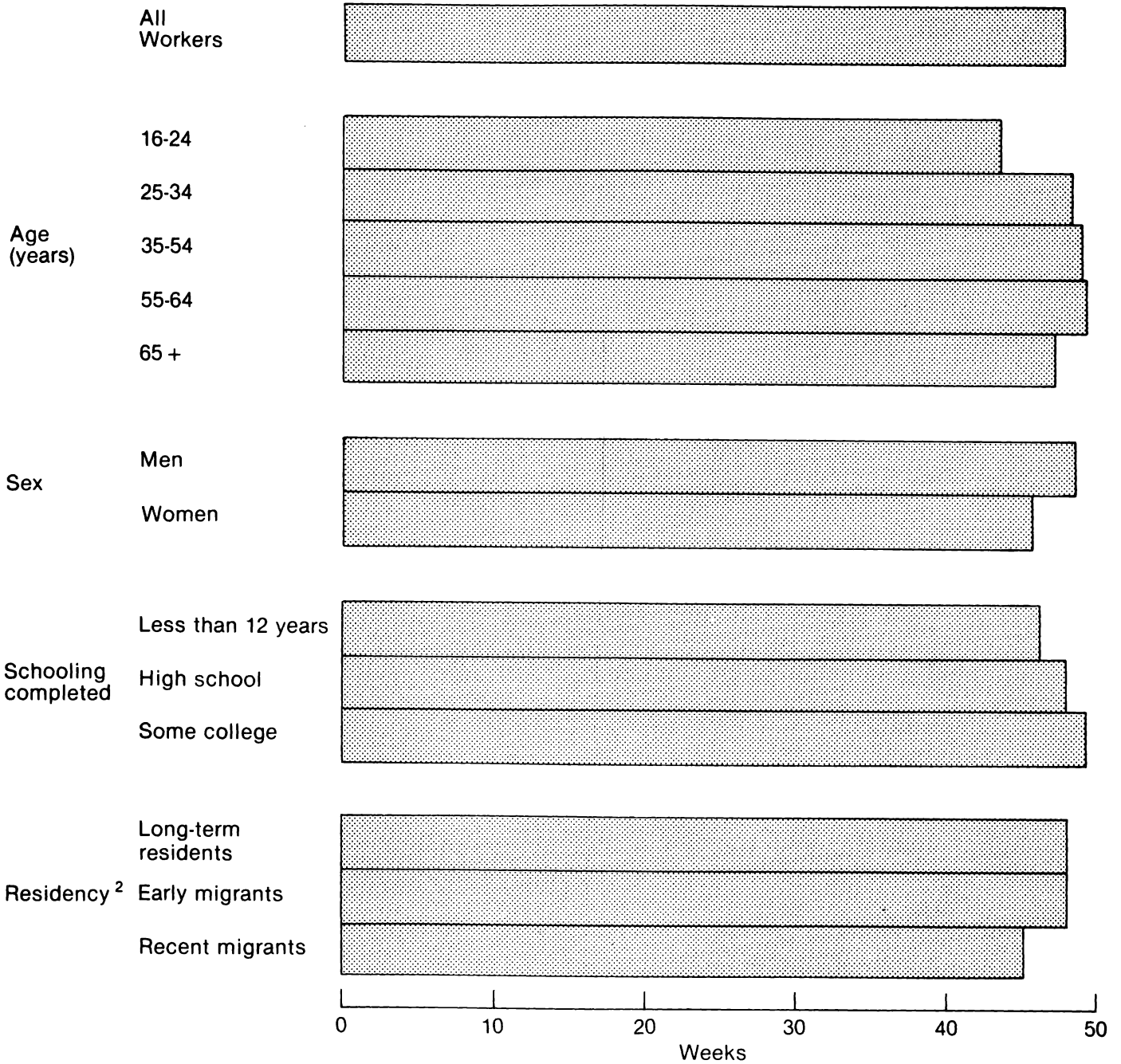


¹ The total employed was 58,620.

² Long-term residents lived in the nine-county area continuously between December 31, 1964, and January 1980. Early migrants moved to the nine-county area between January 1, 1965, and December 31, 1974. Recent migrants moved to the nine-county area between January 1, 1975, and January 1980.

Figure 3

Average Duration of Employment by Selected Characteristics ¹

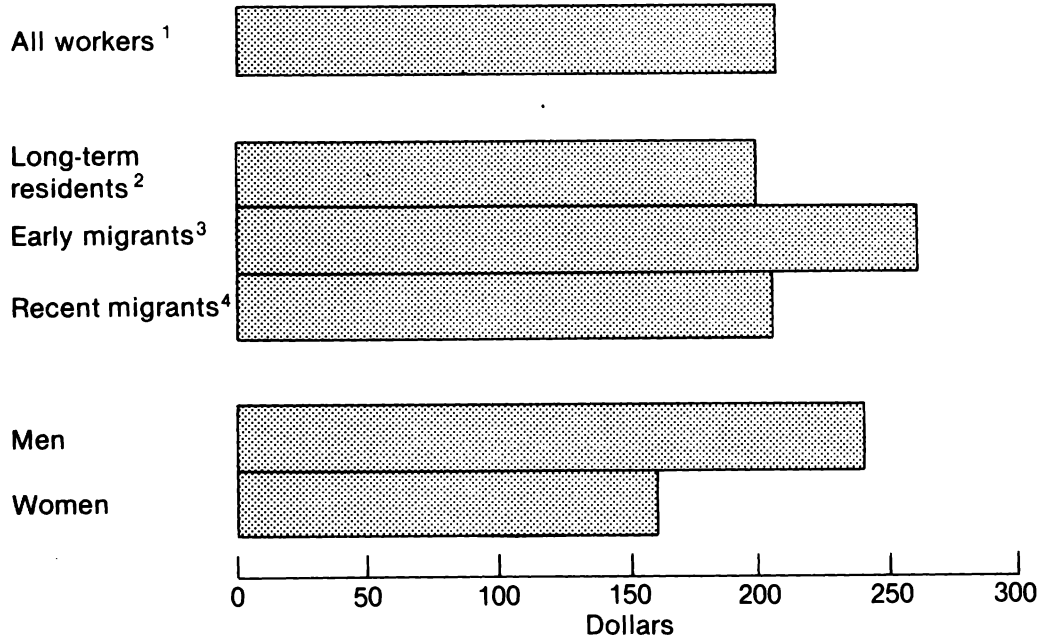


¹Duration of employment from January 1979 to January 1980 of persons employed in January 1980. The total employed was 58,620.

²Long-term residents lived in the nine-county area continuously between December 31, 1965, and January 1980. Early migrants moved to the nine-county area between January 1, 1965, and December 31, 1974. Recent migrants moved to the nine-county area between January 1, 1975, and January 1980.

Figure 4

Average Weekly Earnings of Workers by Residency Status, January 1980



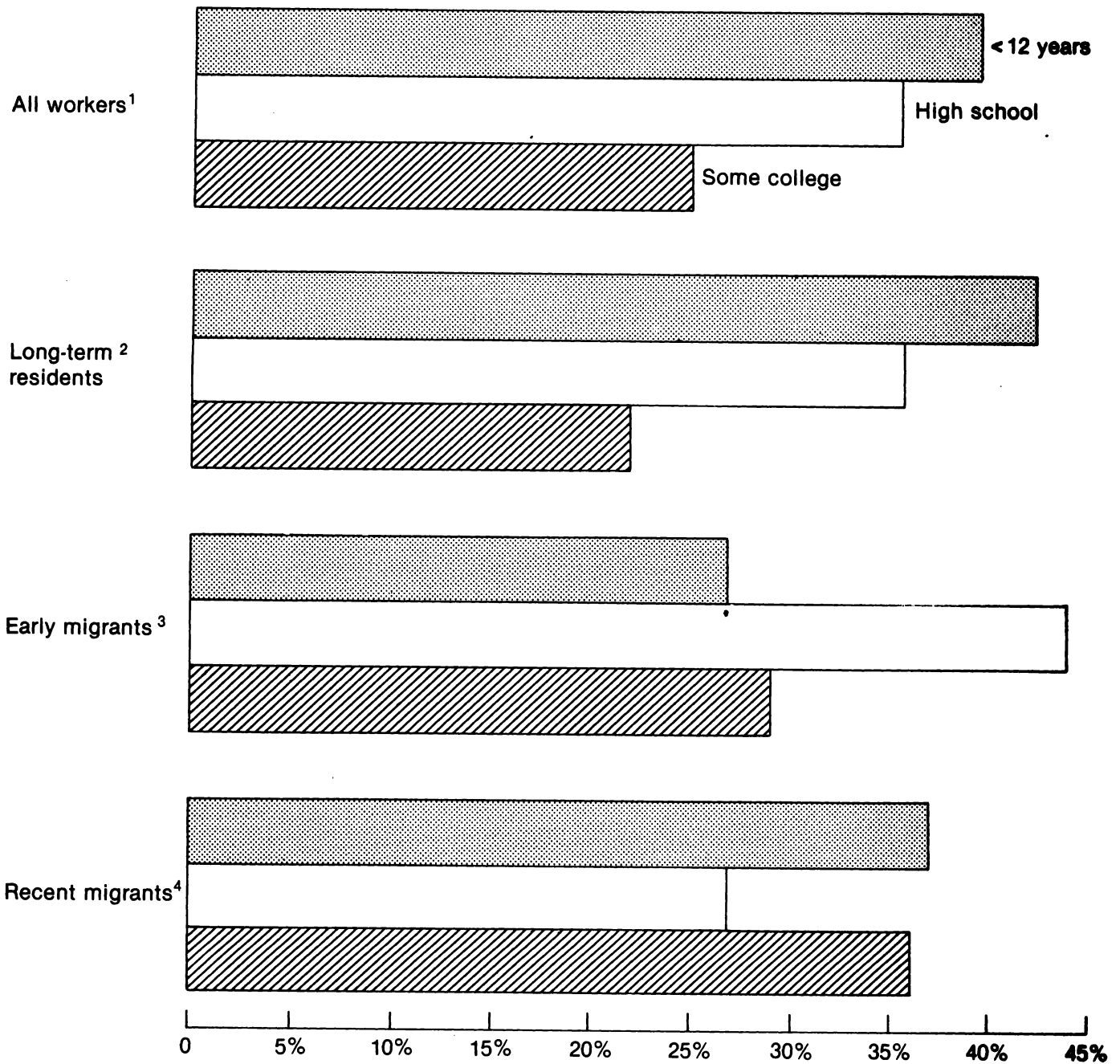
- ¹ Includes all wage and salary workers working 30 hours or more per week. The total number of workers was 42,790.
- ² Long-term residents lived in the nine-county area continuously between December 31, 1964, and January 1980.
- ³ Early migrants moved to the nine-county area between January 1, 1965, and December 31, 1974.
- ⁴ Recent migrants moved to the nine-county area between January 1, 1975, and January 1980.

Many of the 1965-74 immigrants may have more of the higher salaried jobs because they moved to the area at a time of rapid expansion of both new manufacturing and other establishments specifically to take managerial and highly skilled jobs. Over one-third of the manufacturing establishments and 30 percent of all private sector establishments began operations under current management between 1965 and 1974.

At the time of the survey, nearly 40 percent of the employed workers had not completed high school. The proportion of long-term residents with fewer than 12 years of school was significantly higher than that of recent migrants (fig. 5). A larger percentage of both recent and early migrants had attended college than that of long-term residents, but there was not a significant difference among the three residency groups in the proportion of workers with a high school education.

Figure 5

Education Level of the Employed by Residency Status, January 1980



¹ The total employed was 58,620.

² Long-term residents lived in the nine-county area continuously between December 31, 1964, and January 1980.

³ Early migrants moved to the nine-county area between January 1, 1965, and December 31, 1974.

⁴ Recent migrants moved to the nine-county area between January 1, 1975, and January 1980.

The establishment data showed that about 10,850 of all jobs existing at the time of the survey had been added since 1974. The household survey data confirm that employment opportunities increased during the 5-year reference period. Only about 57 percent of the employed 1979 residents were employed in the area 5 years earlier (fig. 6). ^{3/} The remainder were either not employed in 1974 or employed outside the area. Sixty-nine percent of those employed outside the area in 1974 were immigrants who moved to the area since 1974. Most of these persons (about 9 percent of the employed in 1979) left jobs in their former locations and took new jobs after they moved to the study area. The rest of those employed in 1974 were area residents who commuted to jobs outside the area. About 8 percent of those employed one or more weeks in 1979 commuted to jobs outside the area.

About 30 percent of the persons employed in 1979 were not employed 5 years earlier. This includes those taking new jobs in and outside the nine-county area during 1974-79. The majority of the newly employed group were youth and women. About 75 percent were under 25 years of age in 1974, and 60 percent were women. The majority of those not employed in 1974 were area residents in 1974.

About 6 percent of the adult population left jobs between 1974 and 1979; 35 percent of the job leavers were 60 years or older in 1979 (fig. 7). Slightly over 54 percent were women, and 57 percent were long-term residents.

IMPLICATIONS

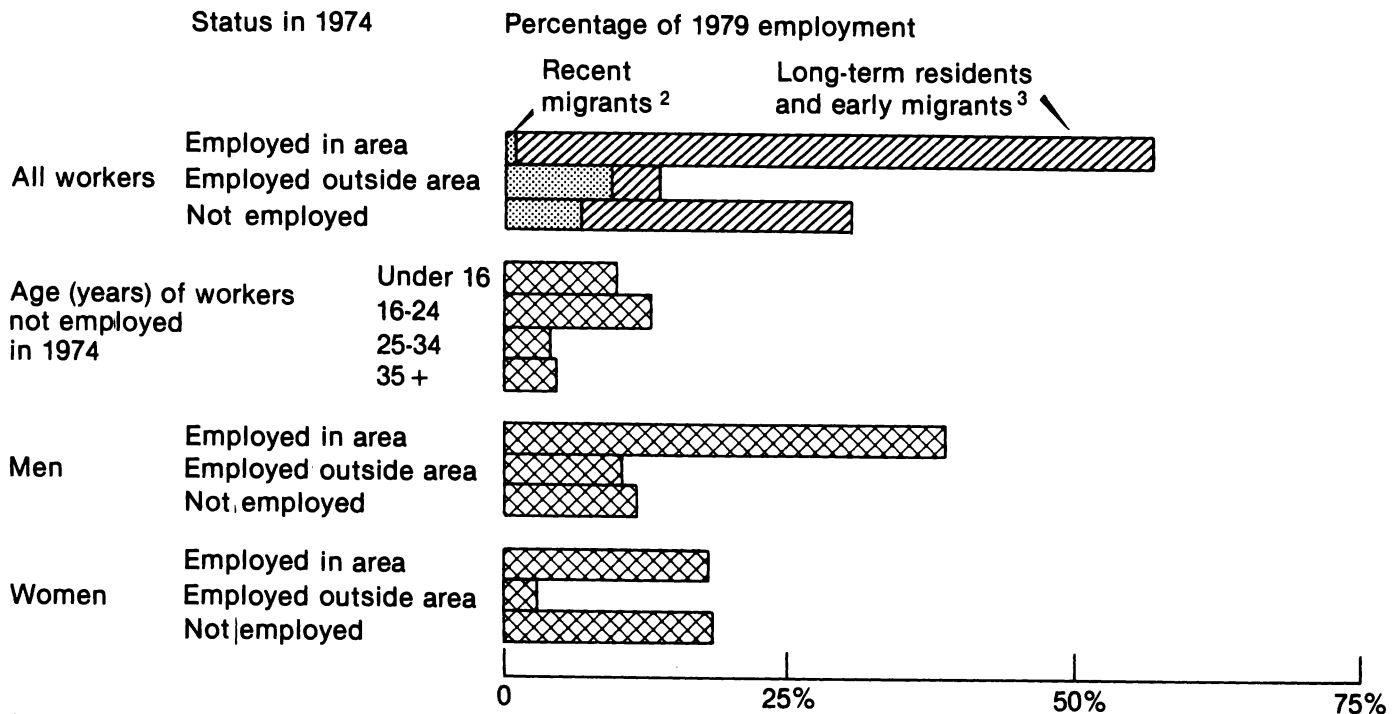
The study area epitomizes recent economic and demographic changes observed in nonmetro areas across the Nation. The area's population and employment growth rates were large during the seventies, and the reverse migration flows were typical of those reported for other nonmetro areas.

The area has a manufacturing-trade-service economy of recent origin. Over two-thirds of the manufacturing establishments began operation under current management after 1959. Growth in the trade and service sectors was even more recent, with over 50 percent of the establishments starting operation in the seventies. Mining and agriculture contributed to the goods-producing sector.

^{3/} The data for 1974 include only the 1974 status of residents living in the area at the time of interview. Thus, the data do not measure the total adult population or the total employed in the area in 1974.

Figure 6

Labor Force, Age, and Residency Status in 1974 of Persons Employed in 1979¹



¹ Includes all persons employed one or more weeks in 1979. The total employed was 68,810.

² Recent migrants moved to the nine-county area between January 1, 1975, and January 1980.

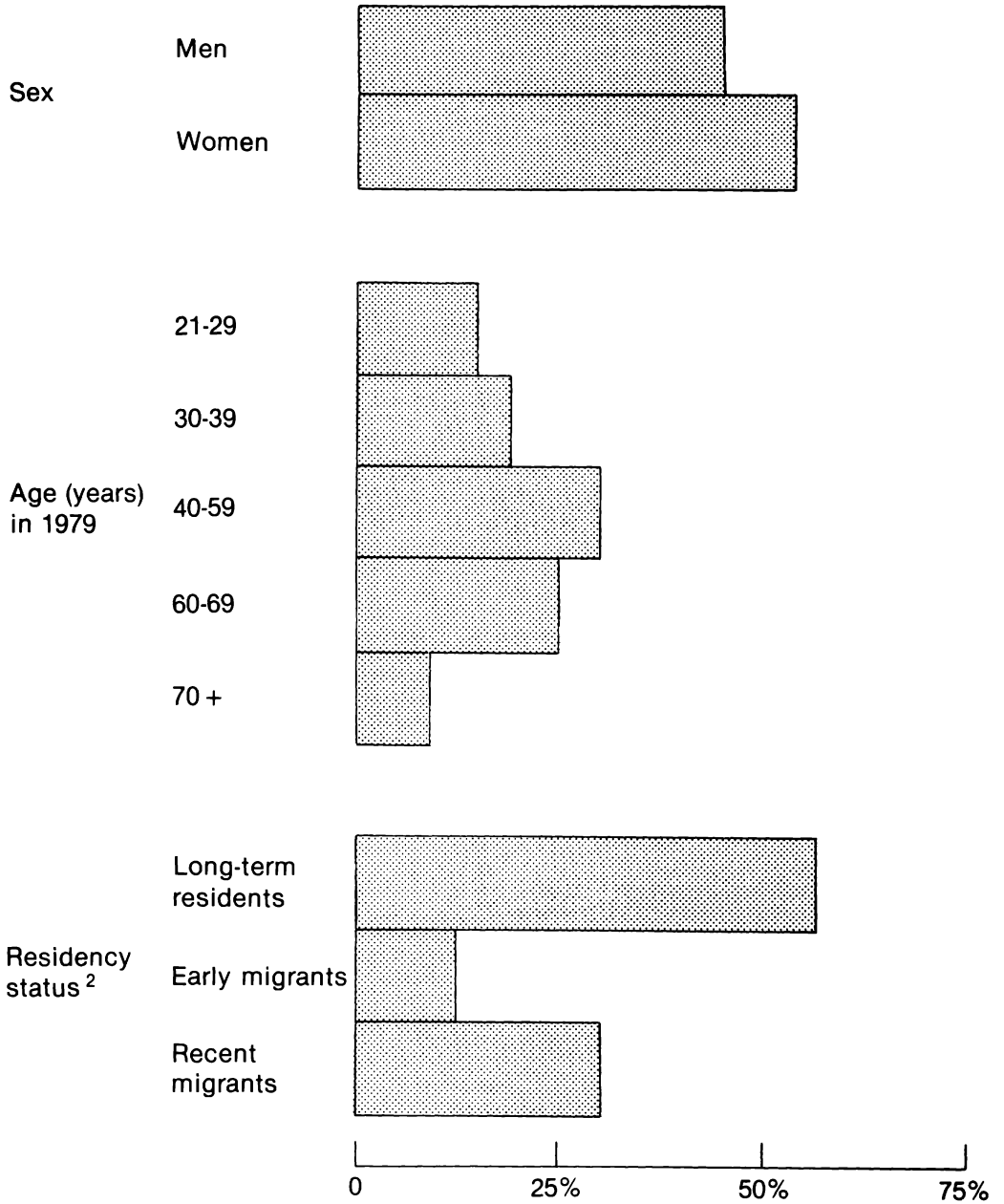
³ Long-term residents lived in the nine-county area continuously between December 31, 1964, and January 1980. Early migrants moved to the nine-county area between January 1, 1965, and December 31, 1974.

Several issues concerning the impacts of economic development on subgroups of the nonmetro population were addressed in this study. The preliminary results confirm some widely-held beliefs about the impacts of development, but also present evidence that is contrary to other impressions of expected results of development.

Contrary to popular belief, long-term residents were able to successfully compete with immigrants for jobs, according to this study. While persons moving to the study area after 1964 did comprise nearly 30 percent of the 1979 employment, the rate at which adult long-term residents were employed was as large as the rate for immigrants. This indicates that long-term residents successfully competed with immigrants for jobs in a rapid growth nonmetro area.

Figure 7

Characteristics of Persons Employed in 1974 But Not Employed in 1979¹



¹ Includes 8,210 persons employed for one or more weeks in 1974 but not employed in 1979.

² Long-term residents lived in the nine-county area continuously between December 31, 1964, and January 1980.

Early migrants moved to the nine-county area between January 1, 1965, and December 31, 1974. Recent migrants moved to the nine-county area between January 1, 1975, and January 1980.

A related issue concerns the kinds of jobs long-term residents and immigrants hold. Results of this study confirm the widely held belief that immigrants have an advantage over long-term residents for better paying jobs. Immigrants, particularly those moving to the area between 1965 and 1974, held a disproportionate share of executive, professional, and managerial positions and had higher annual earnings than long-term residents.

The central objective of this study is to determine the impact of growth on the employment and income status of population groups. Groups of particular interest, in addition to long-term residents and immigrants, are youth and women. The area has a dynamic job market, and each of these groups was actively involved in the market during the reference period. Slightly less than half of the employed 1979 residents were not employed in the area 5 years earlier. Outcommuters and immigrants employed in their former location constituted nearly a third of this group, while two-thirds were not employed at any location in 1974. Women and youth comprised the majority of the newly employed. The growth process apparently made employment opportunities available to persons with little, if any, work experience.

About 20 percent of the jobs available in December 1979 did not exist in 1974. A majority of the new jobs were in the private service-producing industries, indicating that the economy is in a service development phase. Manufacturing is still the major driving force of the area's economy, but it contributed fewer new jobs during the reference period than wholesale and retail trade.

This report includes only some of the major results of this study. Future ERS analysis of this survey will explore the findings reported here in more detail and also look at the characteristics of employees and employee households by the type and size of the employing establishment. Those analyses will permit conclusions regarding the employment and income impact of specific industries and plant sizes. In addition, the impact of economic development on household income distribution, and on occupational and wage mobility of population subgroups will be assessed.