ROLE OF THE CENTRAL CITY IN THE METROPOLITAN AREA ECONOMY: A CROSS-SECTION ANALYSIS

by

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ABSTRACT

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Submitted to the Department of Urban Studies and Planning on October 27, 1969 in partial fulfillment of the requirements for the degree of Master of City Planning.

The usual practice in evaluating central cities' role in their corresponding metropolitan areas is to use such traditional measures of the central city economy as employment by place of residence, population by age composition, households by age of head, households by income level, per capita personal income received, and total personal income received. In 1960, for 29 selected large metropolitan areas central cities' share of corresponding metropolitan area employment by residence location was little over fifty percent; and this ratio, in its turn, was slightly higher than central cities' share of corresponding metropolitan area population which was fifty percent. Both population by age composition and households by age of heads showed a relatively larger concentration of old people in central cities than in their corresponding metropolitan areas. Households by income class showed a relatively larger concentration of poor households in central cities than in their corresponding metropolitan areas. Per capita personal income received was lower in central cities than in their corresponding metropolitan areas. In consequence, central city share of corresponding metropolitan area receipt of personal income was even lower than central city share of corresponding metropolitan area population. Proportion of total metropolitan area population accounted for by corresponding central cities was quite low (fifty percent), indicating a high degree of suburbanization of metropolitan area population. Suburbanization of population in its turn induced suburbanization of metropolitan area employment, especially construction, manufacturing, and wholesale and retail trade employment.

Evaluation of central cities' role in their corresponding metropolitan area economy on the basis of traditional measures of central city economy, thus, results in conclusions that the central cities are withering away. While drawing such inferences what is overlooked is that the traditional measures of the central city economy that are usually used to evaluate central cities' role in their corresponding metropolitan area economy provide only a partial picture of central cities' role in their corresponding metropolitan area economy. For example, central city employment by place of residence shows central city residents' role in corresponding metropolitan area employment which is different from central cities' role

in their corresponding metropolitan area employment. On the other hand, while personal income received shows both central city residents' role and central cities' role in the corresponding metropolitan area receipt of personal income, it does not provide any idea about central cities' role as contributors to corresponding metropolitan area production of goods and services.

In this study an attempt has been made to provide a relatively more comprehensive picture of central cities' role in their corresponding metropolitan area economy. The traditional measures of central city economy describe central cities as place of residence and as recipients of metropolitan area receipts of personal income. This study has developed estimates of central city employment by place of work, central city labor productivity by place of work, and central city earned personal income by place of work to describe central cities as place of work and as producers of goods and services. Central cities' role in their corresponding metropolitan area economy has been evaluated, both on the basis of the new measures and also on the basis of the traditional measures. Central cities' role in their corresponding metropolitan area economy as represented by the new measures is compared with central cities' role in their corresponding metropolitan area economy as depicted by the traditional measures. Comparison of selected central cities' role as contributors to corresponding metropolitan area production of goods and services with selected central cities' role in sharing corresponding metropolitan area population and receipt of personal income is presented for all the 29 selected metropolitan areas taken together, for metropolitan areas of five different size classes, for metropolitan areas in eight regions, and for 29 selected individual metropolitan areas.

It is shown that while selected central cities represented only fifty percent of corresponding metropolitan area population and less than fifty percent of corresponding metropolitan area receipt of personal income, they accounted for close to three-fourths of corresponding metropolitan area employment by place of work and earned personal income. From this the principal inferences drawn are that central cities' role as contributors to their corresponding metropolitan area production of goods and services is much larger than central cities' role in sharing corresponding metropolitan area population and receipt of personal income, and that central cities' role as contributors to their corresponding metropolitan area production of goods and services is too large to be ignored. In any design of metropolitan area based National economic development, therefore, central cities would have to be assigned a share of development role appropriate to their potential.

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Of course, I alone am responsible for any shortcomings of the present study.

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ROLE OF THE CENTRAL CITY IN THE METROPOLITAN AREA ECONOMY: A CROSS-SECTION ANALYSIS

Ι

INTRODUCTION AND SUMMARY

It has become a popular belief that the central cities are decadent obsolete institutions fit to be forgotten and abandoned. This impression is formed primarily from the traditional measures used to describe the central city economy. The principal traditional measures used to describe the central city economy are employment by place of residence, population by age composition, households by age of head, households by income level, per capita personal income received, and total personal income received. Employment by central city residence location shows that, on the average, central city employment was little over half the corresponding metropolitan area employment and that central city share of corresponding metropolitan area employment by residence location was only slightly higher than central city share of corresponding metropolitan area population. Only half of the selected metropolitan area population were residents of corresponding central cities. Population by age composition shows that compared to that in their corresponding metropolitan areas central cities had a relatively larger concentration of old people. This is also reflected by distribution of households by age of head which shows that central cities had a larger concentration of households with older household heads than their corresponding metropolitan areas had. Similarly, distribution of

households by income level shows a relatively larger concentration of poor households in central cities than in their corresponding metropolitan areas. Per capita personal income received is lower in central cities than in their corresponding metropolitan areas. As a result central cities' share in their corresponding metropolitan area receipt of personal income was even lower than central cities' share of corresponding metropolitan area population. Central cities' share in their corresponding metropolitan area population has been pretty low on account of the increasing degree of suburbanization of population.

Suburbanization of population, on the other hand, is inducing suburbanization of employment, especially construction, manufacturing, and wholesale and retail trade employment. These are some of the traditional measures describing the central city economy which provide an impression that the central cities are withering away.

However, the traditional measures used to describe the central city economy represent central city residents' role in corresponding metropolitan area economy. Central city residents' role in corresponding metropolitan area economy is not always equal to central cities' role in their corresponding metropolitan area economy. The traditional measure of employment, that is, employment by central city residence location, shows central city residents'role in corresponding metropolitan area employment, but this is different from central cities' employment role in their corresponding metropolitan area employment. Similarly, while personal income received shows both central city residents' role and central cities' role in sharing metropolitan area receipt of personal

income, it does not provide any indication as to central cities' role in metropolitan area production of goods and services. Moreover, the traditional measure of population by age composition shows central cities' potential for labor supply as also burden of dependents. Similarly, personal income received, per capita personal income received, and distribution of households by income class show potential for central city residents' savings and expenditures. While these are important components of an economy, these are not the only components of an economy that matter. The other most important indicator of economic strength of an area is the level of production of goods and services. It is shown in this study that it is in this area that real strength of central city economy lies.

The traditional measures describing central city economy, thus, provide only partial picture of central cities' role in their corresponding metropolitan area economy. This shows that there is need for developing new measures which would fill up the gaps in the picture of central cities' role in their corresponding metropolitan area economy. This study is an attempt to develop such new measures and to evaluate central cities' role in their corresponding metropolitan area economy on the basis of both new measures and traditional measures. More specifically, in this study, three new measures of central city economy, namely, employment by central city work location, per worker earned personal income by work location, and total earned personal income by work location, describing central city economy as unit of production have been developed. The role of central cities in their corresponding metropolitan area economy has been evaluated both on the basis of new

measures, that is, employment by place of work, per worker earned personal income by place of work, and total earned personal income and also on the basis of traditional measures, namely, population by age composition, households by age of heads, employment by place of residence, households by annual income, per capita personal income received, and total personal income received. Further, the role of central cities in their corresponding metropolitan area economy as represented by new measures of central city economy is compared with central cities' role in their corresponding metropolitan area economy as depicted by traditional measures of central city economy. From this comparison some important inferences have been drawn. The basic conclusions drawn are that central cities' role in their corresponding metropolitan area production of goods and services is much larger than central cities' role in sharing corresponding metropolitan area population or receipt of personal income, and that central cities' role in their corresponding metropolitan area production of goods and services is too important to be ignored.

The impression that the central cities are decaying, obsolete institutions fit to be forgotten and abandoned is not borne out by a fuller picture of central cities' role in their corresponding metropolitan area economy. On the contrary, central cities' role in their corresponding metropolitan area economy as depicted by the new measures clearly points to central cities' predominance in metropolitan area production of goods and services. Central cities' role in their corresponding metropolitan area production of goods and services is quite impressive and it provides an impression of remarkable vitality of central city

economy rather than an impression of decay as is provided by the traditional measures of central city economy. While the 29 selected large central cities accounted for only half of the corresponding metropolitan area population and personal income received, they claimed close to three-fourths of the corresponding metropolitan area employment by place of work, and earned personal income. What appears to be even more significant is that the Nation's large central cities have been experiencing growth in both per worker earned personal income and total output, reflecting a transformation of economic structure and an upgrading of jobs and industry. The rate of growth of output per worker in manufacturing and services was as fast in central cities as in corresponding metropolitan areas; in some cases the rate of growth in output per worker was even faster in central cities than in their corresponding metropolitan areas. This growth in total output and especially the growth in productivity of labor points to a favorable economic potential for central cities, provided their specific identifiable problems can be accommodated.

Over the next 25 years - time horizon for long range planning - proportion of metropolitan production of goods and services accounted for by their corresponding central cities is likely to decline. In spite of this very likely trend, by the end of the next 25 years the larger central cities of the Nation are still expected to claim over half of the total metropolitan area production of goods and services. This points to the possibility of long continued importance of central city economy in their corresponding metropolitan area economy. Metropolitan area economy in its turn, as is well known, plays a predominant

part in the U.S. National economy. In any design of metropolitan area based national economic development, therefore, central city economy should have to get their appropriate share of attention.

Currently, there are a number of important problems which are standing in the way of economic growth of the central cities, pointing to the need for new economic development policies and programs. One of the key problems now facing central cities is fiscal squeeze resulting from a high level of nondevelopmental expenditures. Compared to their surrounding suburban cities and towns, the central cities have a higher rate of taxation; but in spite of this larger tax effort the developmental resources of the central cities are limited by their larger outlays for health, welfare, and safety. The high level of expenditures for health, welfare, and safety reduces the much needed resources available for education and manpower training, urban redevelopment, transportation improvement, and provision of other incentives to industries. However, each of these measures is key to the revitalization of the central city economy. Revitalization of central city economy would be incomplete without massive participation of currently disadvantaged people in metropolitan area economic activity. There is, therefore, urgent need for manpower training and education to help bring the disadvantaged citizens of central cities into the mainstream of upgraded job opportunities. There are large needs for urban redevelopment to correct inefficiency in land uses, and for development and reparceling of land for new residential, commercial, and industrial uses. There are urgent requirements for improvement of transportation facilities to make possible efficient and smooth transportation of growing volume of

passengers, goods, and services. Above all, there is a need for new measures for economic development to attract a new margin of industry, to promote expansion of existing industries, and to create new and upgraded jobs.

The new measures of central city economy, namely, employment by place of work, and earned personal income by place of work, may provide a new standard for Federal revenue sharing favoring the central cities and thus helping them to ease their resource position. In Federal revenue sharing the role of the central cities as producers of goods and services should receive recognition by including "earned personal income" share and/or "place of employment" share in the revenue sharing formulas.

Development of new measures describing central cities as production units is expected to be helpful not only for evaluating central cities' role in their corresponding metropolitan area economy or in providing a new standard for Federal revenue sharing favoring the central cities but also for designing economic development plan for central cities.

While quantitative measures treating central cities as place of residence and as recipient of income is essential, this, however, is not a sufficient data base for the development of realistic economic development program. For the designing of a proper economic development program for the central cities, what is more important is adequate quantitative measures which treat the central cities as a place of work and producers of goods and services. Such measures are not, however, readily at hand. However, such measures when developed would be useful for setting up of realistic goals, design of appropriate programs, and meaningful review

and evaluation of results. Such measures would also make possible flexibility in program design, that is, varying program design according to the variation in economic and population structure, size class, and regional location of central cities. In addition, the new measures would facilitate evaluation of costs and benefits of alternative packages of programs. They would also be helpful for assessing the impact of state and city taxes on earned personal income, which are becoming increasingly popular.

This study does not cover all the central cities. It focuses on 29 selected largest central cities and their corresponding metropolitan areas. The 29 selected largest metropolitan areas covered in this study account for 38.3 percent of total U.S. population and 60.6 percent of total metropolitan area population. The measures and analyses of central cities and metropolitan areas as production units, place of residence, and recipients of personal income have been presented for individual central cities and their corresponding metropolitan areas. With a view to bring out the differences between central cities and metropolitan areas of different sizes and between central cities and metropolitan areas of different regions, the measures and the analyses have also been presented by metropolitan area population size groups, and regional groupings of metropolitan areas and central cities.

The results of the study can be briefly summarized as follows:

In 1960 for all the 29 selected large metropolitan areas taken together there was a total population of 68,422 thousand; compared to this the corresponding 29 selected large central cities had a total population of 34,321 thousand. Thus central city share of corresponding metropolitan

area population was 50.2 percent. This, in other words, means that, on the average, fifty percent of the selected metropolitan area population were already living in suburban areas, indicating a high degree of suburbanization of population. Suburbanization of population in its turn has induced suburbanization of employment. Age composition of population shows that compared to that in their corresponding metropolitan areas central cities had a relatively smaller proportion of their total population in age groups under 18 years, and 18 to 44 years, and a relatively larger proportion of their total population in age groups 45 to 64 years, and 65 years and over, indicating relatively older age composition of central city population compared to age composition of corresponding metropolitan area population. All the selected central cities taken together had 66.7 percent of their total population in age group up to 44 years; compared to this all the corresponding metropolitan areas taken together had 70.0 percent of their total population in age group up to 44 years. On the other hand, all the 29 selected large central cities taken together had 33.3 percent of their total population in age group 45 years and over, whereas all the corresponding metropolitan areas taken together had 30.0 percent of their total population in age group 45 years and over.

That compared to that in their corresponding metropolitan areas selected central cities had a larger concentration of older people is also reflected in percentage distribution of households by age of heads. Both all the selected central cities taken together and their corresponding metropolitan areas taken together had 46.5 percent of their total households with heads aged under 45 years. In contrast, all the

selected central cities taken together had 17.9 percent of their total households with heads aged 65 years and over; compared to this all the corresponding metropolitan areas had 15.8 percent of their total households with heads aged 65 years and over.

Similarly, distribution of households by income class shows that compared to that in their corresponding metropolitan areas central cities had a larger concentration of people in poverty income class, that is, in income class under \$4,000. Distribution of households by income level also shows that compared with that in their corresponding metropolitan areas central cities had a larger concentration not only of poor households, but also of households in highest income class, that is, in income class \$15,000 and over. All the 29 selected large central cities taken together had 23.4 percent of their total households in income class under \$4,000; compared to this all the corresponding metropolitan areas taken together had 22.1 percent of their total households in income class under \$4,000. Similarly, all the selected central cities taken together had 15.6 percent of their total households in income class \$15,000 and over; compared to this, all the corresponding metropolitan areas taken together had 14.0 percent of their total households in income class \$15,000 and over.

Per capita personal income received was lower in central cities than in their corresponding metropolitan areas. As a result, central city share in their corresponding metropolitan area receipt of personal income was even lower than central city share of corresponding metropolitan area population. Per capita personal income received was \$2,581 for all the 29 selected large central cities taken together; compared to

this per capita personal income received was \$2,715 for all the corresponding metropolitan areas taken together. Per capita personal income received in all the selected central cities taken together was, thus, 95.1 percent of per capita personal income received in all the corresponding metropolitan areas taken together. Total personal income received was \$88.6 billion for all the selected central cities taken together and \$185.8 billion for all the corresponding metropolitan areas taken together. Total personal income received in all the selected central cities taken together was 47.7 percent of total personal income received in all the selected central cities taken together was 47.7 percent of total personal income received in all the selected central cities taken together. Thus, all the selected central cities taken together represented 50.2 percent of corresponding metropolitan area population, but they claimed only 47.7 percent of corresponding metropolitan area receipt of personal income.

When traditional measures of employment, that is, employment by place of residence is considered, all the selected central cities taken together had a total employment of 13,655 thousand; compared to this all the corresponding metropolitan areas taken together had a total employment of 26,260 thousand. Thus, considering traditional measure of employment all the selected central cities taken together claimed only 52.0 percent of total employment in all the corresponding metropolitan areas taken together. As mentioned earlier, all the selected central cities taken together represented 50.2 percent of corresponding metropolitan area population. A comparison of central city share of corresponding metropolitan area employment by residence location with

central city share of corresponding metropolitan area population shows that central cities were more important as place of work than as place of residence. Thus, even when traditional measure of employment, that is, employment by place of residence is considered, central cities' role in employment is seen to be larger than central cities' role as place of residence. In this particular case this inference is, however, based on the assumption that the employees who live in central cities also work in central cities. Moreover, the difference between central cities' share in their corresponding metropolitan area employment by residence location and central cities' share in their corresponding metropolitan area population was not much. The former ratio was only slightly higher than the latter ratio.

The traditional measures used to describe the central city economy represent the weaknesses of central city economy rather than representing their strengths. In contrast, central cities' role in their corresponding metropolitan area economy as depicted by the new measures provides an altogether different impression about the strength of central city economy. For example, while all the selected central cities taken together accounted for 13,655 thousand of employment by place of residence, they claimed 18,870 thousand of employment by place of work. Thus, while all the selected central cities taken together claimed 52.0 percent of corresponding metropolitan area employment by residence location, these same central cities taken together claimed 71.9 percent of corresponding metropolitan area employment by place of work. This shows that selected central city share of corresponding metropolitan area employment by place of work as much larger than selected central

city share of corresponding metropolitan area employment by place of residence. As already mentioned, selected central city share of corresponding metropolitan area employment by place of residence was slightly larger than selected central city share of corresponding metropolitan area population. This means that selected central city share of corresponding metropolitan area employment by place of work was much larger than both selected central city share of corresponding metropolitan area population and employment by place of residence.

All industry average of central city labor productivity for all the selected central cities taken together was slightly higher than all industry average of corresponding metropolitan area labor productivity. As a result selected central city share of corresponding metropolitan area earned personal income was even higher than selected central city share of corresponding metropolitan area employment by place of work. This contrasts sharply with the fact that per capita personal income received was lower in selected central cities than in the corresponding metropolitan areas and that selected central city share of corresponding metropolitan area receipt of personal income was even lower than selected central city share of corresponding metropolitan area population. All industry average of per worker earned personal income was \$5,803 for all the selected central cities taken together and \$5,721 for all the corresponding metropolitan areas taken together. All industry average of per worker earned personal income for all the selected central cities taken together was 101.4 percent of all industry average of per worker earned personal income in all the corresponding metropolitan areas taken together. All the selected central cities taken together generated a

total earned personal income of \$110.0 billion; compared to this corresponding metropolitan areas generated a total earned personal income of \$150.2 billion. Total earned personal income generated in all the selected central cities taken together represented 73.2 percent of total earned personal income generated in corresponding metropolitan areas. Thus, while selected central city share of corresponding metropolitan area earned personal income was 73.2 percent, selected central city share of corresponding metropolitan area receipt of personal income was 47.7 percent and selected central city share of corresponding metropolitan area population was 50.2 percent. This shows that selected central cities' role as contributors to corresponding metropolitan area production of goods and services was much larger than selected central cities' role in sharing metropolitan area population and receipt of personal income.

Selected central cities' larger role in their corresponding metropolitan areas as contributors to corresponding metropolitan area production of goods and services than as location of corresponding metropolitan
area residences and as recipients of corresponding metropolitan area
receipts of personal income is confirmed not only when selected central
cities' role in their corresponding metropolitan area economy is
evaluated for all the selected metropolitan areas taken together, but
also when selected central cities' role in their corresponding metropolitan areas is evaluated by metropolitan area size class, by region or even
by individual metropolitan areas.

Central cities' larger role in their corresponding metropolitan areas as producers of goods and services than as location of metropolitan

area residences and as recipients of metropolitan area receipts of personal income is found to be true in all the selected large metropolitan areas irrespective of the broad differences in population and economic structure, population size class, and regional location. The relatively larger role as producers of goods and services is equally the case for large service activity centers such as Boston and New York, industrial centers such as Baltimore and Detroit, government service centers such as Washington, D.C., recreation centers such as Miami, auto-age oriented spread city areas such as Los Angeles, and newer areas with still growing central cities such as Houston and Dallas.

The plan of the present study is as follows: Chapter II describes the concepts of the new measures and the traditional measures used to describe the central city economy. The methods used to derive the new measures and sources of data used are also described. In Chapter III central cities' role in their corresponding metropolitan area economy has been evaluated both on the basis of the new measures of central city economy and traditional measures of central city economy for all the selected metropolitan areas taken together. Central cities' role in their corresponding metropolitan area economy as depicted by the new measures is also compared with central cities' role in their corresponding metropolitan area economy as represented by the traditional measures of central city economy. Chapters IV, V, and VI evaluate central cities' role in their corresponding metropolitan area economy, both on the basis of the new measures and the traditional measures of central city economy, and compare central cities' role in their corresponding metropolitan area economy as represented by the new measures with central cities'

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role in their corresponding metropolitan area economy as depicted by the traditional measures by metropolitan area size groups, by regions, and by individual metropolitan areas respectively. CONCEPT AND METHOD: MEASURING THE CENTRAL CITY AS A PRODUCTION UNIT, IN COMPARISON WITH ITS SURROUNDING METROPOLITAN AREA

This chapter describes the concepts of the new measures and the traditional measures used to evaluate central cities' role in their corresponding metropolitan area economy. Source and methods used to derive these measures are also described. The new measures developed for the purpose of evaluating central cities' role in their corresponding metropolitan areas are employment by place of work, per worker earned personal income, and total earned personal income. The traditional measures used to evaluate central cities' role in their corresponding metropolitan areas are population by age and income, employment by residence location, per capita personal income received and total personal income received.

The basic differences between the new measures and the traditional measures are that the new measures describe the central cities as place of work and production unit, the traditional measures describe the central cities as place of residence and recipients of income. For example, the traditional measure of employment is employment by place of residence. This shows the number of central city residents employed. The traditional measure of employment, thus, shows central city residents' employment role in metropolitan area employment and not central cities employment role in their corresponding metropolitan areas. It has been shown later (Chapter VI) that in all the selected

central cities, excepting in San Antonio, the number of central city residents employed was lower than the number of jobs that was located in central cities. Central cities provided jobs not only to central city residents, but also to many who lived outside central city. The new measure of employment take into account this fact. New measure of employment is employment by place of work. It is a count of all the jobs that are located in central cities irrespective of whether they are held by central city residents or by people living outside central cities. The new measure of central city employment when compared with corresponding metropolitan area employment shows central cities' employment role in their corresponding metropolitan areas. In most metropolitan areas central cities' employment role is much larger than central city residents' employment role. It is shown in Chapter III that in all the selected metropolitan areas taken together central city resident employment represented 52.0 percent of corresponding metropolitan area employment and as compared to this central city employment by place of work represented 71.9 percent of corresponding metropolitan area employment.

The traditional measure of income, that is, per capita personal income received and total personal income received, again, view income from central city residents point of view. It is income measured on "where-received" basis. As a result it depends upon population resident in an area and not on population who work in that same area. Traditional measure of income represents current income received by residents of an area from all sources. The broad items of income included are wages and salaries, "other labor income," proprietors income, property income,

transfer payments excluding personal contributions to social security, government retirement, and other social insurance programs.

In contrast, the new measure of income, that is, per worker earned personal income, and total earned personal income, are viewed by place of origin. This is income measured on "where-earned" basis. As a result it depends upon employment by place of work, rather than on population by residence location or resident employment. The broad items of income included in earned personal income are wages and salaries, "other labor income," and proprietors income. It is shown in Chapter III that in all the selected metropolitan areas taken together traditional measure of income, that is, per capita personal income received, was lower in central city than in corresponding metropolitan area; as a result central city share of corresponding metropolitan area receipt of personal income was even lower than central city share of corresponding metropolitan area population. On the other hand, in all the metropolitan areas taken together, all industry average of per worker earned personal income was slightly higher in central city than in corresponding metropolitan area; as a result central city share of corresponding metropolitan area earned personal income was even higher than central city share of corresponding metropolitan area employment by place of work. This also meant that central city share of corresponding metropolitan area employment by place of work was much larger than central city share of corresponding metropolitan area population or employment by residence location. Similarly, central city share of corresponding metropolitan area earned personal income was much larger than central city share of corresponding metropolitan area receipt of personal income. New measures describing

central cities as production unit shows that central cities role in their corresponding metropolitan area economy was much larger than what is shown by the traditional measures describing central cities as place of residence and recipients of personal income.

A. PERSONAL INCOME, BY PLACE OF RESIDENCE

Personal income by place of residence is the traditional measure used to describe the economy of an area. This is income measured on "where-received" basis. This measure of income is useful in the analysis of consumer markets and purchasing power. The other measures which are useful for this same purpose are population by age composition, and households by income level. Per capita personal income by place of residence is also an indicator of living standards and welfare levels. Personal income by place of residence used in this study is taken from special tabulation of the M.I.T. Laboratory for Environmental Studies, based on U.S. Census of Population, 1960. Money income adjusted to U.S. Office of Business Economics personal income concept. The concept of personal income used in estimating personal income is equivalent to that adopted by the Office of Business Economics (OBE) in its national and state personal income series. That is, personal income of an SMSA or Central City represents the current income received by residents in the area from all sources. It includes monetary income before taxes as well as several types of non-monetary income or income received in kind; it excludes personal contributions to social security, government retirement, and other social insurance programs. The broad items included are wages and salaries, other labor income, proprietors income, property

income, transfer payments excluding personal contributions to social security, government retirement and other social insurance programs.

Total personal income for SMSA's and mean household income for central cities used are as in special tabulation of M.I.T. Total personal income for central cities was obtained by multiplying mean household income by the total number of households. Per capita personal income both for the SMSA's and the central cities was obtained by dividing total personal income by the total number of population

It is shown in Chapter III that in all the selected metropolitan areas taken together per capita personal income received was lower in central city than in corresponding metropolitan area. As a result central city share of corresponding metropolitan area receipt of personal income was lower than central city share of corresponding metropolitan area population.

B. EARNED PERSONAL INCOME, BY PLACE OF WORK

Earned personal income by place of work is income measured on "where-earned" basis. This measure shows income by area as production unit where it is generated. This measure of income is useful in the analysis of the income structure of a given area by industrial origin and income type. Such measure and analysis of income structure are important for the design of economic development plan of a given area. The treatment of a given area as a place of work and producer of income is useful for the establishment of realistic goals, design of appropriate programs for development, and intelligent review and evaluation of the

results. In recent years the idea of imposition of taxes on earned personal income has found increasing favor with state and city governments. Development of measure of earned personal income would, therefore, make possible the assessment of the impact of imposition of state and city taxes on earned personal income. Such measure is useful for changing program design according to variation in economic and population structure, size class, and regional location of an area. This would also facilitate evaluation of costs and benefits of alternative combination of programs.

C. MEASURE OF EARNED PERSONAL INCOME

The data for total earned personal income for SMSA's used are as developed by the Office of Business Economics, U.S. Department of Commerce. The data are partly published and partly yet unpublished. From the OBE source data for earned personal income were directly available for all the selected large SMSA's excepting for Phoenix, and for some constituent parts of the New York Standard Consolidated Area and Chicago Standard Consolidated Area. These constituent parts were Jersey City and Garry-Hammond-East Chicago. For these three areas earned personal income for 1959 was indirectly estimated from OBE personal income and earned personal income series for 1966 and personal income series for 1959. In August 1968 issue of "Survey of Current Business" OBE published personal income by type of income and earned personal income by industrial origin for 1966 for SMSA's and non-SMSA areas. In the same issue of "Survey of Current Business" OBE also published personal

income for 1959 for SMSA's and non-SMSA areas. To estimate earned personal income by industrial origin for 1959 from these data it was assumed that ratio of total earned personal income to total personal income, and the percentage distribution of total earned personal income between different industry groups in 1959 were the same with that in 1966. As a first step, therefore, percentage distribution of earned personal income between different industry groups in 1966 and the ratio of total earned personal income to total personal income in 1966 were computed for the three cities. To find total earned personal income in 1959, total personal income in 1959 was multiplied by the 1966 ratio of total earned personal income to total personal income. Total earned personal income for 1959 thus obtained was then distributed between different industry groups following the percentage distribution of total earned personal income between different industry groups that prevailed in 1966. Per worker earned personal income for SMSA's were obtained by dividing total earned personal income by the total number of workers.

The concept of earned personal income is relatively limited in scope as compared to the concept of personal income received. The concept of personal income received by place of residence are wages and salaries, "other labor income," proprietor's income, property income, and transfer payments excluding personal contributions to social security, government retirement, and other social insurance programs. Compared to this earned personal income by place of work include only the first three categories of personal income, namely, wages and salaries, "other labor income," and proprietor's income.

Total earned personal income or per worker earned personal income for central cities were not available from any published data source. These were, therefore, estimated indirectly from earned personal income for SMSA's. Earned personal income per worker in central cities was obtained by multiplying earned personal income per worker in SMSA's by the ratio of value added per worker in central city to value added per worker in SMSA. Total earned personal income in central cities was obtained by multiplying per worker earned personal income by the total number of workers. As a first step, however, the ratios of value added per worker in central cities to value added per worker in SMSA's, and estimates of employment by central city work location had to be developed.

U.S. Census of Population: 1960 records employment by place of residence. In case of employment figures for the SMSA's as recorded in the U.S. Census of Population it has been assumed that employment by place of residence is the same with employment by place of work. Number of people living outside and working inside a SMSA or number of people working outside and living inside a SMSA is considered to be negligible. This, however, could not be assumed for central city employment. Central city employment by place of residence as recorded in U.S. Census of Population: 1960 is not equal to central city employment by place of work. Central city employment by place of work for 1960 is not available from any published data source. This was, therefore, estimated indirectly.

U.S. Census of Population: 1960, Subject Report Journey to Work recorded among others journey of workers by place of work and place of

residence for various categories of spatial divisions of place of work and place of residence within and around SMSA's of population size 250,000 or more. Journey to work data collected during the Census week were shown by twelve broad categories of employer industry groups. From this source appropriate data were collected to obtain figures for workers by place of work in central city and workers by place of residence in central city. Initially, data were collected for all the twelve industry groups which were later condensed first into nine groups, next into five groups, and finally into four broad groups of industries. Using these data ratios of workers by place of work in central city to workers by place of residence in central city were computed for each of the 29 selected large central cities. For each of the 29 selected large central cities these ratios were computed for three different levels of aggregation of the industry groups, namely, for nine broad industry groups, five broad industry groups and finally for four broad industry groups. Summary Table I-1 shows these ratios for all the central cities taken together and for four broad groups of industries. However, for estimating employment by place of work in central city, ratios for the nine groups of industries were used. To obtain employment by place of work in central city employment by place of residence in central city as recorded in U.S. Census of Population: 1960 was multiplied by the ratio of workers by place of work in central city to workers by place of residence in central city. Thus, employment by place of work in central city was estimated for nine broad industry groups and for each of the 29 selected large central cities. Later on these data were aggregated as desired.

TABLE II-1

KEY PARAMETERS FOR ESTIMATING THE ROLE OF CENTRAL CITIES AS PRODUCERS OF GOODS AND SERVICES (CENTRAL CITIES OF 29 SELECTED LARGE METROPOLITAN AREAS)

	(1)	(2)
	Ratio of	Estimated
	Workers	Per Worker
	by Place of	Earned Personal
	Work to	Income, by
	Workers by	Place of Work,
	Place of	in Central City,
	Residence	1959
	in Central	(Dollars)
	Cities, 1960	
All Industries	1.4	5,803
	1.5	6,624
Construction	1.5	0,024
_	1.5	5,963
Manufacturing		
Unclosed and Detail Trade	1.3	6,384
Wholesale and Retail Trade		
Public Administration and Service	1.3	5,395

Sources: Col. (1) --

Based on the 1960 Census of Population, Journey to Work Report.

Col. (2) ---

Manufacturing, Trade & Selected Services --) Earned Personal Income Per Worker, by Industry, in Metropolitan Areas, (Unpublished Tabulation of the U.S. Dept. of Commerce, Office of Business Economics, Regional Economic's Division, Described in Survey of Current Business, August 1968, in Article Entitled "Metropolitan Area Incomes, 1929-66", Robert E. Graham, Jr. and Edwin J. Coleman, Washington, D.C.), Multiplied by Ratio of Central City --Metropolitan Area Value Added Per Worker, Trade Sales Per Worker, and Selected Service Receipts Per Worker, in 1958 and 1963, Interpolated for 1959. Construction and Public Administration --Assumed to be the Same as in Metropolitan Areas.

U.S. Census of Manufacturing recorded both employment and value added data for 1958 and 1963. No such data, however, were collected for 1960, the year in which this study is interested. Employment, value added, trade sales, and selected service receipts data were collected for 1958 and 1963. Employment and trade sales data for the two separate categories, namely, wholesale trade and retail trade, were added together as we are for this study interested in the combined category wholesale and retail trade. As value added, trade sales, and selected service receipts, figures were in current price, 1958 value added, trade sales, and selected service receipts figures were converted to 1963 price. Employment, value added, trade sales, and selected service receipts data were available for both SMSA's and central cities. From data for total value added, trade sales, selected services receipts and total employment, value added per worker, trade sales per worker, and selected services receipts per worker were computed. Using these later data ratios of value added per worker in central cities to value added per worker in SMSA's, ratios of trade sales per worker in central cities to trade sales per worker in SMSAS, and ratios of selected services receipts per worker in central cities to selected services receipts per worker in SMSAS were computed for 1958 and 1963, and then ratios for 1960 were interpolated. Per worker earned personal income in SMSA's was multiplied by these ratios to obtain per worker earned personal income in central cities. Through this process per worker earned personal income for central cities was obtained for manufacturing, wholesale and retail trade, and selected services. The kind of data collected by the U.S.

Census of Manufacturing were not available for construction and public administration. For these two industry groups, therefore, it was assumed that per worker earned personal income in central cities was the same with that in the SMSA's. Summary Table I-l shows all-central-city average of per worker earned personal income for four broad industry groups. It also shows the all-industry average of per worker earned personal income for all the central cities taken together.

Total earned personal income was obtained by multiplying per worker earned personal income in an industry in a central city by the total number of workers in the same industry in the same central city. To find per worker earned personal income for the combined industry group public administration and services, total earned personal income estimated separately for these two industry groups were added together and then total earned personal income thus obtained was divided by the combined employment of public administration and services.

In Chapter III it has been shown that in all the selected metropolitan areas taken together all industry average of per worker earned
personal income was slightly higher in central city than in corresponding metropolitan area. As a result central city share of corresponding
metropolitan area earned personal income was higher than central city
share of corresponding metropolitan area employment by place of work.

Central city share of corresponding metropolitan area employment by
place of work, in its turn, was much higher than central city share of
corresponding metropolitan area population or employment by residence
location. Also, central city share of corresponding metropolitan area

earned personal income was much larger than central city share of corresponding metropolitan area receipt of personal income. Thus, the role of central cities in their corresponding metropolitan area economy as depicted by the new measures, such as employment by place of work and earned personal income was much larger than the role of central cities in their corresponding metropolitan area economy as represented by such traditional measures as population, employment by residence location, and personal income received.

Data on population by age composition both for metropolitan areas and central cities used in this study are as published in U.S. Census of Population: 1960. Data on households by age of head for metropolitan areas are also from U.S. Census of Population: 1960. Statistics for households by age of head for central cities and households by income level for both metropolitan areas and central cities are taken from special tabulation of the M.I.T. Laboratory for Environmental Studies, based on U.S. Census of Population, 1960. Detailed source for these data is cited in Table III-5.

It is shown in Chapter III that the traditional measure of population by age composition shows that compared to that in their corresponding metropolitan areas central cities had a larger concentration of old people. Similarly, distribution of households by income level shows that, compared to that in their corresponding metropolitan areas central cities had a larger concentration of population in poverty income class.

CENTRAL CITIES' ROLE AS PRODUCERS OF GOODS AND SERVICES; COMPARISONS WITH THEIR METROPOLITAN AREAS; RELATION TO TRADITIONAL MEASURES

This chapter presents a summary view of the selected central cities' role in their corresponding metropolitan area economy as depicted by the new measures developed for this purpose. These new measures are employment by place of work, per worker earned personal income, and earned personal income. The central cities' role in their corresponding metropolitan area economy as represented by the new measures is then compared with central cities' role in their corresponding metropolitan area economy as represented by such traditional measures as population, age composition of population, income distribution, per capita personal income received, and total personal income received. It has been shown that the traditional measures used to describe the central cities' economy seriously underestimate the selected central cities' role in their corresponding metropolitan area economy. When new measures are used it is found that central cities' role in their corresponding metropolitan area economy is much larger than what is represented by the traditional measures.

The differences result from the fact that the traditional measures evaluate central cities' role primarily as place of residence, whereas the new measures treat the central cities as place of work.

It has been shown that central cities' role as place of work and producers of goods and services is much larger than central cities' residents' role in corresponding metropolitan area population,

employment, and receipts of personal income. More people work in central cities than the number of people both live and work in central cities. Moreover, on the average, central city labor productivity is slightly higher in selected central cities than in their corresponding metropolitan areas. In contrast, per capita personal income received is lower in selected central cities than in their corresponding metropolitan areas. An added factor is the high degree of suburbanization of population in most metropolitan areas. Relatively small concentration of the selected metropolitan area population in their corresponding central cities combined with low per capita personal income in selected central cities than in their corresponding metropolitan areas insured a smaller role of the selected central cities in their corresponding metropolitan area receipt of personal income. On the other hand, the fact that more people worked in central cities than those who both lived and worked in central cities combined with the fact that selected central city labor productivity was slightly higher than corresponding metropolitan area labor productivity insured a larger central cities' role in their corresponding metropolitan area production of goods and services. In consequence selected central cities' role as contributors to their corresponding metropolitan area earned personal income happened to be much larger than selected central cities' role in sharing corresponding metropolitan area population and receipt of personal income.

It is also shown that this contrasting role of the selected central cities in sharing metropolitan area production of goods and services, and population and receipt of personal income prevailed in

metropolitan areas of five different size classes, in the eight regions and also in most of the individual metropolitan areas. With respect to size class differences, regional differences, and differences between individual metropolitan areas only summary results have been presented in this chapter. More detailed views on these three aspects are presented in chapters IV, V, and VI.

A. CENTRAL CITY ROLE IN EMPLOYMENT; COMPARISON WITH TRADITIONAL MEASURES

1. The Central City Employment Structure

Given labor productivity by industry, total output of goods and services in an area would depend upon level of total employment and distribution of total employment between different industry groups.

Amalysis of central city employment structure thus forms an important constituent of analysis of central cities' role as producers of goods and services.

In this section, to start with, brief comments have been made with respect to central city employment structure and corresponding metropolitan area employment structure using new measure of employment, that is, employment by place of work. This has been followed by a comparison of central city employment by place of work, by industry with corresponding metropolitan area employment, by place of work, by industry. This comparison is intended to provide an idea of central cities' role as location of metropolitan area employment by place of work. Next, short comments have been made on central city employment structure using traditional measure of employment, that is

employment by central city residence location and then central city employment by residence location, by industry is compared with corresponding metropolitan area employment by residence location, by industry to obtain an idea of central cities' role in metropolitan area employment as indicated by traditional measure of employment.

A comparison of central cities' role in corresponding metropolitan area employment as indicated by new measure of employment with central cities' role in corresponding metropolitan area employment as indicated by traditional measure of employment shows that the former was much larger than the latter. That is, central cities' role as location of metropolitan area employment by place of work is much larger than central cities' role in metropolitan area employment by residence location. It is also shown that central cities' role as location of metropolitan jobs was much larger than central cities' role as location of metropolitan area residences. Thus, central cities' role in metropolitan area employment by place of work was much larger than both central cities' role as location of metropolitan area employment by residences, and central cities' role in metropolitan area employment by residence location.

Central cities' role in corresponding metropolitan area employment by residence location is also larger than central cities' role as location of metropolitan area residences indicating central cities' relatively larger role as place of work than as place of residence. However, central cities' share of corresponding metropolitan area employment by

residence location was only slightly larger than central cities' share of corresponding metropolitan area population. Compared to this central city share of corresponding metropolitan area employment by place of work was much larger than both central city share of corresponding metropolitan area population and employment by residence location. While use of traditional measure of employment provides a relatively dim view of central cities' role in corresponding metropolitan area employment, consideration of new measure of employment points up an altogether new dimension of central cities' importance as location of metropolitan area jobs.

Employment that is important as an element in central cities' role as producers of goods and services is employment by place of work. The method followed for estimating employment by place or work in central cities has been described in Chapter II. Table III-1 shows estimated employment by central city work location for four broad groups of industries and for all the 29 selected large central cities taken together.

All the 29 selected large central cities taken together provided a total employment of 18,870 thousand. The distribution of this total employment between the five broad industry groups were: 902 thousand in construction, 5,478 thousand in manufacturing, 3,509 thousand in wholesale and retail trade, and 8,981 thousand in public administration and services. Of the total employment in all the 29 selected large central cities single largest proportion or 47.6 percent of total employment was provided by public administration and services. The

TABLE III-1

CENTRAL CITIES ROLE IN METROPOLITAN AREA
EMPLOYMENT, BY WORK LOCATION & RESIDENCE LOCATION, 1960

(29 SELECTED LARGE METROPOLITAN AREAS)

	(1) Estimated Employment, by Industry, by Central City Work Location (Thousands)	(2) Employment by Industry, by Metro- politan Areas (Thousands)	(3) Central City Share in Metropolitan Area Employment (Percent)	(4) Employment by Industry by Central City Residence Location (Thousands)	(5) Central City Employment by Residence in Relation to Metropolitan Area Employment (Percent)	
All Industries	18,870	26,260	71.9	13,655	52.0	-47-
Construction	902	1,404	64.2	615	43.8	7-
Manufacturing	5,478	7,671	71.4	3,734	48.7	
Wholesale & Retail Trade	3,509	4,917	71.4	2,608	53.0	
Public Administra- tion & Services	8,981	12,268	73.2	6,698	54.6	

Sources: Col. (1) -- Ratio of Workers by Place of Work to Workers by Place of Residence (See Table I-1),
Multiplied by Census of Population, 1960, Report on 1960 Central City Labor Force,
by Industry.

Col. (2) -- Census of Population, 1960

Col. (3) -- Col. (1) Divided by Col. (2).

Col. (4) -- Census of Population, 1960.

Col. (5) -- Col. (4) Divided by Col. (2).

next in importance were manufacturing providing 29.0 percent of total employment, wholesale and retail trade providing 18.6 percent of total employment, and construction accounting for 4.8 percent of total employment. Thus ranking of the industries in descending order of their importance as source of employment by central city work location for all the central cities taken together were public administration and services, manufacturing, wholesale and retail trade, and construction.

2. <u>Comparison with SMSA Employment</u>

All the 29 selected large SMSAS taken together provided a total employment of 26,260 thousand. The distribution of this total employment between the four different broad industry groups were 1,404 thousand in construction, 7,671 thousand in manufacturing, 4,917 thousand in wholesale and retail trade, and 12,268 thousand in public administration and services. Thus of the total employment of 26,260 thousand single largest proportion or 46.7 percent of total employment was provided by public administration and services. Next in importance as source of employment were manufacturing providing for 29.2 percent of total employment, wholesale and retail trade accounting for 18.7 percent of total employment, and construction providing for 5.3 percent of total employment. Thus for all the 29 selected large SMSAS taken together, the pattern of distribution of total employment between different industry groups was similar to that for all the central cities taken together. There was, however, some small, but interesting, differences between distribution of

employment by industry in central city and that in SMSA. The proportion of total employment provided by public administration and services was higher in central cities than in the SMSAS. On the other hand, proportion of total employment provided by construction, manufacturing, and wholesale and retail trade were slightly higher in SMSAS as compared to that in the central cities. This appears to show a relative preference for suburban location for such industries as construction, manufacturing, and wholesale and retail trade, and a relative preference for central city location for such activities as public administration and services which include finance, insurance and real estate, entertainment and recreation, professional and related services, transportation and communication, personal services, business and repair services, etc.

The importance of central cities as location of metropolitan jobs is shown by column(3) in Table III-1. Column(3) in Table III-1 shows the proportion of total SMSA employment provided by different broad industry groups located in central cities. Of all-industry total employment of 26,260 thousand in all the 29 selected large SMSAS taken together 18,870 thousand or 71.9 percent of the total SMSA employment was located in the central cities. It will be seen later that of the total population of 68,422 thousand in all the 29 selected large SMSAS taken together 34,321 thousand or 50.2 percent of total SMSA population was resident of corresponding central city. Thus, while all the 29 selected large central cities taken together accounted for only 50.2 percent of total population in all the

corresponding SMSAS taken together, they provided for 71.9 percent of total employment in all the selected SMSAS taken together.

The proportion of total employment in the 29 selected large SMSAS accounted for by the corresponding central cities varied from industry to industry. All the selected central cities taken together accounted for 71.9 percent of total employment in all the corresponding SMSAS. As compared to this, the proportion of total SMSA construction employment, manufacturing employment, and wholesale and retail trade employment accounted for by the corresponding central cities were 64.2 percent, 71.4 percent, and 71.4 percent respectively. On the other hand, the proportion of total SMSA public administration and services employment located in the corresponding central cities was 73.2 percent. Thus, compared to the ratio of all industry central city employment to all-industry SMSA employment, the proportion of total SMSA employment claimed by the corresponding central cities was higher in case of public administration and services and lower in case of construction, manufacturing, and wholesale and retail trade, indicating preference for suburban location for such industries as construction, manufacturing, and wholesale and retail trade, and preference for central city location for public administration and services. The proportion of total SMSA employment accounted for by public administration taken separately from services was 75.7 percent. Thus, proportion of total SMSA employment located in corresponding central cities was highest for public administration and lowest for construction. The share of total SMSA service employment taken separately from public administration accounted for by corresponding central cities was 73.2 percent. This is equal to the proportion of total SMSA public administration and services employment taken together accounted for by corresponding central cities. This shows predominance of services employment in the combined total of public administration and services employment.

While ratio of central city employment by central city work location to total SMSA employment was the lowest for construction (64.2 percent) compared to that for manufacturing (71.4 percent), wholesale and retail trade (71.4) and public administration and services (73.2 percent), yet the ratio for construction was much higher than 50.2 percent, that is, the proportion of total SMSA population accounted for by the corresponding central cities. The proportion of total SMSA employment accounted for by corresponding central cities as shown by column(3) of Table III-1 clearly points to the predominance of central cities as location of SMSA jobs.

3. <u>Comparison with Traditional Measure of Employment</u>

The traditional measure of central city employment is, as already mentioned earlier, employment by central city residence location. Column(l) in Table III-l shows employment by central city residence location for four broad groups of industries and for all the 29 selected large central cities taken together. In all the 29 selected large central cities taken together there was 13,655 thousand employment by central city residence location. The

distribution of this total employment between different industry groups were 6,698 thousand in public administration and services, 3,734 thousand in manufacturing, 2,608 thousand in wholesale and retail trade, and 615 thousand in construction. Of total employment by central city residence location, single largest number of employment or 49.1 percent of total employment was accounted for by public administration and services. Next in importance were manufacturing accounting for 27.3 percent of total employment, wholesale and retail trade accounting for 19.1 percent of total employment, and construction accounting for 4.5 percent of total employment.

Thus, ranking of different industries as source of employment by central city residence location was the same as that seen for total SMSA employment or employment by central city work location. A close examination, however, would show that while ranking of different industry groups as source of employment is the same, there are some differences in emphasis on different industries within the same broad distribution pattern. For example, while public administration and services was the single largest source of employment both in the SMSAS and the central cities, it accounted for 46.7 percent of total SMSA employment, 47.6 percent of total employment by central city work location, and 49.1 percent of total employment by central city residence location. On the other hand, manufacturing which was the second largest source of employment accounted for 29.2 percent of total SMSA employment, 29.0 percent of total employment by central

city work location and 27.3 percent of total employment by central city residence location. Thus, if instead of comparing the structure of employment by central city work location with the structure of employment in the SMSAS, one compares the structure of employment by central city residence location with the structure of employment in the SMSAS, role of public administration and services as a source of employment is overemphasized and role of manufacturing as a source of employment is underestimated.

Column(5) in Table III-1 shows employment by central city residence location in 29 selected large central cities taken together as percentage of corresponding SMSA total employment. All the 29 selected large central cities taken together accounted for a total employment by central city residence location of 13,655 thousand. As compared to this, all the corresponding 29 selected large SMSAS accounted for a total employment of 26,260 thousand. Total central city employment by residence location thus accounted for 52.2 percent of total SMSA employment. It has been stated earlier that total employment by central city work location accounted for 71.9 percent of total SMSA employment. Consideration of traditional measure of employment, that is, employment by central city residence location rather than employment by central city work location would thus seriously play down the role of central cities as location of metropolitan jobs.

All the selected central cities taken together accounted for 50.2 percent of total population of the corresponding SMSAS; but total employment by central city work location for all the selected central cities taken together accounted for 71.9 percent of total

employment of corresponding SMSAS, and total employment by residence location for all the central cities taken together accounted for 52.2 percent of total employment of corresponding SMSAS. Thus, even if employment by central city residence location is considered, the importance of the central cities as place of work than as place of residence is clearly indicated. This is, however, much more clearly brought out when employment by central city work location is compared with SMSA employment. Employment by central city residence location, in all the selected central cities taken together, as percentage of corresponding SMSA employment were 43.8 for construction, 48.7 for manufacturing, 53.0 for wholesale and retail trade, and 54.6 for public administration and service. As compared with this employment by central city work location, in all the selected central cities taken together, as percentage of corresponding SMSA employment were 64.2 for construction, 71.4 for manufacturing, 71.4 for wholesale and retail trade, and 73.2 for public administration and services. If the traditional measure of employment, that is employment by central city residence location is compared with the corresponding SMSA employment it is found that in the case of two industry groups, namely construction and manufacturing, the central cities' share of employment in corresponding SMSA employment was lower than the central city share of population in corresponding SMSA population. But employment by central city work location as percentage of corresponding SMSA employment was much larger than central city population as percentage of corresponding SMSA population in the case of all the individual industry groups without any exception. The ratio of employment by central city work location for all the selected central cities to corresponding SMSA employment was the lowest (64.2 percent) for construction, but even this was much higher compared to the ratio of all the selected central city population to corresponding SMSA population (50.2 percent). On the other hand, the ratio of employment by central city residence location for all the selected central cities to corresponding SMSA employment was lowest (43.8 percent) for construction, but this was even lower than the ratio of corresponding central city population to SMSA population. The traditional measure of central city employment, that is, employment by central city residence location is thus an inadequate measure of both actual and potential role of central cities as location of jobs and production.

B. PRODUCTIVITY IN CENTRAL CITIES IN COMPARISON WITH THEIR METRO-POLITAN AREAS

Given level of employment and distribution of employment by industry, level of total output is determined primarily by productivity of labor.

Central city labor productivity is thus an important element influencing central cities' role in corresponding metropolitan area production of goods and services. In this section data on labor productivity by industry have been presented both for central cities and corresponding metropolitan areas accompanied by short comments primarily on interindustry differences noticed. This has been followed by a comparison of level of central city labor productivity by

industry with level of corresponding metropolitan area labor productivity by industry. This comparison is intended to provide an idea as to how central city labor productivity compares with corresponding metropolitan area labor productivity. Results of such comparison showed that on the average, central city labor productivity was at least as high as that in the corresponding metropolitan areas. Indeed in many cases central city labor productivity was even higher than corresponding metropolitan area labor productivity. This indicates that management and technological transformations in central cities have kept pace with similar transformations in their corresponding metropolitan areas. Central cities are at least at par with their corresponding metropolitan areas in the race for improvement in labor productivity; in case of some industries central cities are even ahead of their corresponding metropolitan areas in achieving progress in labor productivity.

The record of central city labor productivity in comparison with that in their corresponding metropolitan areas contrasts sharply with the record of per capita personal income received in central city in comparison with that in their corresponding metropolitan areas. Per capita personal income received in all the selected central cities taken together was lower than per capita personal income received in all the corresponding metropolitan areas taken together. Consideration of traditional measure of income, that is, per capita personal income received would, thus, provide a relatively depressive view of economic strength and potential of the central cities; but, in con-

trast, the new measure of income, that is, per capita earned personal income provide an extremely favorable picture of the vitality and potential of central city economy.

Table III-2 shows all SMSA average of per worker earned personal income for four broad industry groups, namely construction, manufacturing, wholesale and retail trade, and public administration and services. As Table III-2 shows per worker earned personal income for all the 29 selected large SMSAS taken together was \$5,721. All-SMSA average of per worker earned personal income for construction, manufacturing, wholesale and retail trade, and public administration and services were \$6,688, \$6,235, \$5,829, and \$5,244 respectively. All-SMSA average of per worker earned personal income for services taken separately was \$4,252. Thus all-SMSA average of per worker earned personal income for construction, manufacturing, and wholesale and retail trade were higher than all-industry average of per worker earned personal income for all the SMSAS taken together. On the other hand, all-SMSA average of per worker earned personal income for public administration and services was lower than all-industry average of per worker earned personal income for all the SMSAS taken together. All-SMSA average of per worker earned personal income for construction, manufacturing, wholesale and retail trade, and public administration and services were 116.9 percent, 109.0 percent, 101.9 percent, and 91.7 percent respectively of all-industry average of per worker earned personal income for all the SMSAS taken together.

In case of the central cities separate estimates of per worker

TABLE III-2

SIMILAR ORDER OF MAGNITUDE OF PRODUCTIVITY IN CENTRAL CITIES IN COMPARISON WITH THAT IN METROPOLITAN AREAS

(29 Selected Large Metropolitan Areas)	(1) Earned Personal Income Per Worker, by Industry, in Metro- politan Areas	(2) Earned Personal Income Per Worker, by Industry in Central Cities, As a Percent of That in Metrpolitan Areas
	(Dollars)	(Percent)
All Industries	5,721	101.4
Construction	6,688	*
Manufacturing	6,235	95.6
Wholesale & Retail Trade	5,829	109.5
Public Administration and Services	5,244	*

^{*}Assumed to be the same as in metropolitan areas.

Sources: Col. (1) -- U.S. Office of Business Economics, Regional Economics Division, Unpublished Tabulation, Op. Cit.

Col. (2) -- Col. (2), Table I-1, Divided by Col. (1), Table II-2.

earned personal income were possible for manufacturing, wholesale and retail trade, and services. Per worker earned personal income for construction, and public administration in the central cities were assumed to be the same as that for the SMSAS. All-industry average of per worker earned personal income for all the 29 selected large central cities taken together was \$5,803. All selected central city average of per worker earned personal income for manufacturing, wholesale and retail trade, and services were \$5,963, \$6,384, and \$4,405 respectively. Thus compared to all-industry average, both manufacturing, and wholesale and retail trade had a higher per worker earned personal income. Per worker earned personal income for manufacturing was 102.8 percent of all-industry average of per worker earned personal income and per worker earned personal income for wholesale and retail trade was 110.0 percent of all-industry average of per worker earned personal income. On the other hand, all selected central city average of per worker earned personal income for services was smaller compared to all-industry average of per worker earned personal income for all the selected central cities taken together. All selected central city average of per worker earned personal income for services was 75.9 percent of all-industry average of per worker earned personal income. Considering only three industry groups, namely manufacturing wholesale and retail trade, and services, in all the 29 selected central cities taken together per worker earned personal income for manufacturing was higher than per worker earned personal encome for services; and per worker earned personal income for wholesale and retail trade was higher than per worker earned personal income for

both services and manufacturing. Compared to this in all the selected SMSAS taken together per worker earned personal income for wholesale and retail trade was higher than per worker earned personal income for services, and per worker earned personal income for manufacturing was higher than per worker earned personal income for both wholesale and retail trade, and services. In all the selected central cities taken together per worker earned personal income for wholesale and retail trade was higher than per worker earned personal income for namufacturing; but in all the selected SMSAS taken together per worker earned personal income for manufacturing was higher than per worker earned personal income for manufacturing was higher than per worker earned personal income for wholesale and retail trade.

Column(3) in Table III-2 shows per worker earned personal income in central cities as percentage of per worker earned personal income in corresponding SMSAS. All-industry average of per worker earned personal income in all the 29 selected large central cities taken together was 101.4 percent of all-industry average of per worker earned personal income for all the corresponding SMSAS taken together. Thus, on the average, per worker earned personal income in the central cities was of the similar order of magnitude to that for the SMSAS. However, per worker earned personal income in central cities as percentage of per worker earned personal income in the corresponding SMSAS varied between different industry groups. For all the 29 selected large central cities taken together per worker earned personal income in central cities as percentage of per worker earned personal income in central cities as percentage of per worker earned personal income in the corresponding SMSAS was 95.6 percent for

manufacturing, 103.6 percent for services, and 109.5 percent for wholesale and retail trade. Thus, on the average, per worker earned personal income for manufacturing was lower in the central cities than in the SMSAS. On the other hand, on the average, per worker earned personal income for wholesale and retail trade, and services was higher in the central cities than in the SMSAS. On the average, the difference between per worker earned personal income in the central cities and that in their corresponding SMSAS was the largest for wholesale and retail trade, and the smallest for services. Thus, compared to per worker earned personal income in SMSAS, the record of per worker earned personal income in the corresponding central cities is quite favorable; in some cases, on the average, per worker earned personal income in the central cities was even higher as compared to that for the SMSAS. It will be seen later (Section F, Chapter III) that the record of per worker earned personal income in central cities in comparison with that in their corresponding metropolitan areas contrasts sharply with record of per capita personal income received in central cities in comparison with that in their corresponding metropolitan areas. Unlike per worker earned personal income, per capita personal income received was lower in central cities than in their corresponding metropolitan areas.

C. CENTRAL CITIES' ROLE IN THE PRODUCTION OF GOODS AND SERVICES

Compared to that in their corresponding metropolitan areas the level and structure of employment by central city work location, and the record of per worker earned personal income in central city by

industry that have been discussed in the previous chapter have already provided a preview of the importance of the selected central cities as producers of goods and services within their corresponding SMSAS. In this section earned personal income by industry in central city has been compared with earned personal income by industry in corresponding metropolitan areas. It has been shown that central cities' role in their corresponding metropolitan area production of goods and services was much larger than central cities' role in sharing corresponding metropolitan area population or employment by residence location. It is also shown that central city share of corresponding metropolitan area earned personal income was even slightly higher than central city share of corresponding metropolitan area earned personal somewhat higher average labor productivity in central cities than in their corresponding metropolitan areas.

The role of central cities as contributors to corresponding metropolitan area production of goods and services contrasts sharply with central cities' role as recipients of corresponding metropolitan area receipts of personal income. As per capita personal income received was lower in all the selected central cities taken together than in their corresponding metropolitan areas, central city share of corresponding metropolitan area receipts of personal income was even lower than central city share of corresponding metropolitan area population.

Column(1) in Table III-3 shows earned personal income by industrial origin for all the 29 selected large central cities taken together. All the 29 selected large central cities taken together generated a total earned personal income of \$110.0 billion. The distribution of this total earned personal income of \$110.0 billion between different industry groups were \$48.5 billion in public administration and services, \$32.7 billion in manufacturing, \$22.4 billion in wholesale and retail trade, and \$6.0 billion in construction. Thus, of the total earned personal income the single largest proportion or 44.3 percent of total earned personal income was accounted for by public administration and services. As contributor to total earned personal income next in importance were manufacturing, accounting for 29.8 percent of total earned personal income, wholesale and retail trade accounting for 20.5 percent of total earned personal income, and construction accounting for 5.5 percent ot total earned personal income. As stated earlier, of the total employment in all the selected central cities public administration and services, manufacturing, wholesale and retail trade, and construction provided 47.6 percent, 29.0 percent, 18.6 percent and 4.8 percent respectively. Thus, each of the broad industry groups excepting public administration and services accounted for a larger proportion of total earned personal income as compared to the proportion of total employment that

TABLE III-3

CENTRAL CITIES AS PRODUCERS OF GOODS AND SERVICES

(29 Select Metropolit		in Central Cities	(2) Personal Income in Metropolitan Areas as of Dollars)	Central Cities as a Percent of Metropolitan Areas
All Indust	ries	110.0	150.2	73.2
Constructi	on	6.0	9.4	63.8
Manufactur	ring	32.7	47.8	68.4
Wholesale	& Retail Trade	22.4	28.7	78.0
Public Adm	inistration & Services	48.5	64.3	75.4
Sources:	Col. (1) Col. (2)	Col. (1	2), Table I-1, 1 1), Table II-1. 1), Table II-2, 2), Table II-2.	
	Col. (3)	Col. (1	l) Divided by C	ol. (2).

they provided for. This is explained by the fact that per worker earned personal income for all the individual industry groups except public administration and services was higher than the all-industry average of per worker earned personal income for all the 29 selected large central cities taken together.

Column(2) in Table III-3 shows earned personal income by industrial origin for all the 29 selected large SMSAS taken together. The distribution of total earned personal income between different industry groups in all the SMSAS taken together showed more or less similar characteristics as is shown in the case of the central cities. All the 29 selected large SMSAS taken together generated a total earned personal income of \$150.2 billion. In this total earned personal income contribution of the different industry groups in descending order of magnitude of contribution were public administration and services 42.8 percent, manufacturing 31.8 percent, wholesale and retail trade 19.1 percent, and construction 6.3 percent. As stated earlier, in all the 29 selected SMSAS taken together the proportion of total employment accounted for by different industry groups were public administration and services 46.7 percent, manufacturing 29.2 percent, wholesale and retail trade 18.7 percent, and construction 5.3 percent. Thus, all the different industry groups except public administration and services accounted for a larger proportion of total earned personal income as compared to the proportion of total employment that they accounted for. This again is explained by the fact that per worker earned personal income in all the different industry

groups except public administration and services was higher than the all-industry average of per worker earned personal income.

Column(3) in Table III-3 shows total earned personal income generated in 29 selected large central cities as percentage of total earned personal income generated in the corresponding SMSA. The ratios are presented for four broad industry groups and for 29 selected large central cities and SMSAS taken together. All-industry total of earned personal income generated in all the 29 selected central cities taken together as percentage of all-industry total of earned personal income generated in the corresponding SMSAS was 73.2 percent. Thus, the 29 selected central cities taken together accounted for 50.2 percent of corresponding SMSA population, 71.9 percent of corresponding SMSA employment, and 73.2 percent of corresponding SMSA total earned personal income. Thus, all the selected central cities taken together accounted for a much larger proportion of total SMSA employment as compared to the proportion of total SMSA population that they accounted for. Also all the selected central cities taken together accounted for a slightly higher proportion of total SMSA earned personal income as compared to the proportion of total SMSA employment that they accounted for. This shows that the central cities were clearly much more important as place of work than as place of residence, and also that, on the average, labor productivity in the central cities was at least as high, if not higher, as

that in the SMSAS.

The proportion of total SMSA earned personal income accounted for by the central cities varied from industry to industry. proportion of all-SMSA total earned personal income accounted for by all the corresponding central cities taken together was 63.8 percent for construction, 68.4 percent for manufacturing, 78.0 percent for wholesale and retail trade, and 75.4 percent for public administration and services. Thus, central cities accounted for over threefourths of total SMSA earned personal income generated in wholesale and retail trade, and public administration and services, and over two-thirds of total SMSA earned personal income generated in manufacturing. Central cities claimed 63.8 percent of total SMSA earned personal income generated in construction. As stated earlier, central cities provided 71.9 percent of total SMSA employment, 64.2 percent of total SMSA construction employment, 71.4 percent of total SMSA manufacturing employment, 71.4 percent of total wholesale and retail trade employment and 73.2 percent of total SMSA public administration and services employment. Thus, the proportions of total SMSA earned personal income in wholesale and retail trade and public administration and services accounted for by central cities were higher as compared to the respective proportions of SMSA wholesale and retail trade employment and public administration and services employment accounted for by the central cities. On the other hand, the proportion of total SMSA earned personal income in manufacturing accounted for by the central cities was lower compared to the proportion of

total SMSA manufacturing employment accounted for by the central cities. These results point to the fact that per worker earned personal income for wholesale and retail trade, and public administration and services were higher in central cities than in SMSAS. On the other hand, per worker earned personal income for manufacturing was higher in SMSAS than in central cities. In any case, the data presented appear to show clearly that on the average the selected central cities accounted for close to three-fourths of the corresponding SMSA total earned personal income. This points to the key role played by the central cities as producers of goods and services in their corresponding metropolitan areas.

While this section shows that selected central cities' role as producers of goods and services in their corresponding metropolitan areas was much larger than selected central cities role in claiming corresponding metropolitan area population, in a subsequent section (Section F, Chapter III) it has been shown that selected central cities' role in corresponding metropolitan area production of goods and services was also much higher than selected central cities' role in sharing corresponding metropolitan area receipt of personal income. Selected central city share of corresponding metropolitan area receipt of personal income was even lower than selected central city share of corresponding metropolitan area population, reflecting that per capita personal income received was lower in selected central cities than in their corresponding metropolitan areas.

D. OLDER AGE COMPOSITION OF CENTRAL CITY POPULATION IN RELATION TO THEIR METROPOLITAN AREAS

The popular misconception that the central cities are withering away, that they are obsolete and should better be abandoned, results to a great extent from the use of the traditional measures of economic indicators. One such measure is population by central city residence location which shows that the central city population include a relatively larger proportion of old people than does corresponding SMSA population. This is taken as one of the indices of state of decay of the central cities.

It is shown in this section that compared to that in their corresponding metropolitan areas selected central cities had a relatively smaller proportion of their total population in age groups under 18 years, and 18 to 44 years and a relatively larger proportion of their total population in age groups 45 to 64 years and 65 years and over. That selected central cities had a relatively larger concentration of old people is also reflected in central city share of corresponding metropolitan area population by age group. Selected central city share of corresponding metropolitan area population in age groups under 18 years, and 18 to 44 years were lower than selected central city share of corresponding metropolitan area total population. On the other hand, selected central city share of corresponding metropolitan area population in age groups 45 to 64 years and 65 years and over were higher than selected central city share of corresponding metropolitan area total population.

Column(1) in Table III-4 shows central city population by age

(29 Selected Large Metropolitan Areas)	Central Cities	Metropolitan Areas	Central Cities	Metropolitan Areas
	(Thousands of Persons)		(Percentage Distributi	
	(1)	(2)	(3)	(4)
Population, Total	34,321	68,422	100.0	100.0
Under 18	10,595	23,033	30.9	33.7
18 to 44	12,293	24,871	35.8	36.3
45 to 64	7,942	14,568	23.1	21.3
65 and over	3,491	5,950	10.2	8.7

Sources: U.S. Census of Population, 1960.

composition for all the 29 selected central cities taken together. For all the 29 selected central cities taken together there was a total population of 34,321 thousand in 1960. The distribution of this total population between different age groups were 10,595 thousand in age group under 18 years, 12,293 thousand in age group 18 to 44 years, 7,942 thousand in age group 45 to 64 years, and 3,491 thousand in age group 65 years and over. Thus, of the total central city population 30.9 percent was in the age group 18 to 44 years, 23.1 percent was in the age group 65 years and over. The single largest proportion of total population was in age group 18 to 44 years. The next in importance were age group under 18 years accounting for 30.9 percent of total central city population, and age group 65 years and over accounting for 10.2 percent of total population.

Column(2) in Table III-4 shows SMSA population by age composition. For all the 29 selected large SMSAS taken together there was a total population of 68,422 thousand in 1960. Of this total SMSA population the single largest proportion or 36.3 percent was in the age group 18 to 44 years. The next in importance were age group under 18 years accounting for 33.7 percent of total population, age group 45 to 64 years accounting for 21.3 percent of total population and age group 65 years and over accounting for 8.7 percent of total population. Thus, the pattern of age composition of the central city population was similar to that of the SMSA population, though the actual relative magnitudes of the population distributed in different age groups were somewhat different. Compared to the SMSAS, in central cities

there were smaller proportion of population in the age groups under 18 years and 18 to 44 years, and a larger proportion of population in the age groups 45 to 64 years and 65 years and over. In the age group up to 44 years central cities had 66.7 percent of their total population and SMSAS had 70.0 percent of their population; compared to this in the age group 45 years and over central cities had 33.3 percent of their total population and the SMSAS had 30.0 percent of their total population.

Central city population expressed as percentage of corresponding SMSA population tells the same story. The selected central cities accounted for 50.2 percent of the corresponding SMSA population of all ages, 46.0 percent of SMSA population in age group under 18 years, 49.4 percent of SMSA population in age group 18 to 44 years, 54.5 percent of SMSA population in age group 45 to 64 years, and 58.7 percent of SMSA population in age group 65 years and over. Thus, the central cities accounted for a smaller proportion of total SMSA population in age groups under 18 years and 18 to 44 years as compared to the proportion of total SMSA population of all ages that they accounted for. In contrast the central cities accounted for a relatively higher proportion of total SMSA population in age groups 45 to 64 years and 65 years and over as compared to the proportion of total SMSA population of all ages that they accounted for. This clearly points to relatively older age composition of central city population as compared to that of SMSA population. This, however, does not necessarily mean that the proportion of total population in

"dependent" age group was higher in the central cities than in the SMSAS. Indeed, the evidence obtainable from Table III-4 is to the contrary. The proportion of total population in the age groups under 18 years and 65 years and over taken together was higher in the SMSAS than in the central cities. These proportions were 42.4 percent in the SMSAS and 41.1 percent in the central cities.

E. DISTRIBUTION OF HOUSEHOLDS BY INCOME LEVELS IN CENTRAL CITIES AND METROPOLITAN AREAS

Another traditional measure of central city economy which depicts it in an unfavorable color is the distribution of household heads by income level which shows that there is a somewhat higher concentration of households in poverty income class in central cities as compared to that in their corresponding SMSAS.

In this section it is shown that compared to that in their corresponding metropolitan areas selected central cities had a relatively larger proportion of their total households in poverty income class, that is, in income class under \$4,000. It is also shown that as compared to that in their corresponding metropolitan areas selected central cities had a relatively larger proportion of their total households not only in poverty income class, but also in the highest income class, that is, in income class \$15,000 and over. While evaluating economic importance of central cities in their corresponding metropolitan areas, usual practice is to point to relatively larger concentration of poor households in central cities as a sign of their weakness while ignoring the fact that central cities also

show a relatively larger concentration of households in the higher income class.

Column(1) in Table III-5 shows households by income class of the household heads for all the 29 selected central cities taken together. For all the 29 selected central cities taken together there was a total of 11,013 thousand household heads. Of the total number of household heads of 11,013 thousand, 2,573 thousand had income under \$4,000, 3,097 thousand had income between \$4,000 and \$8,000, 3,628 thousand had income between \$8,000 and \$15,000, and 1,715 thousand had income ranging \$15,000 and over. Thus, the percentage distribution of the total number of household heads were 32.9 percent in the income class \$8,000 to \$15,000, 28.1 percent in the income class \$4,000 to \$8,000, 23.4 percent in the income class under \$4,000, and 15.6 percent in the income class \$15,000 and over.

Column(2) in Table III-5 shows households by income class of the household heads for all the 29 selected SMSAS taken together. For all the 29 selected SMSAS taken together there was a total of 21,006 thousand household heads. The distribution of this total number of households between different income classes were 32.7 percent in income class \$8,000 to \$15,000, 31.2 percent in income class \$4,000 to \$8,000, 22.1 percent in income class under \$4,000, and 14.0 percent in income class \$15,000 and over. Thus, the pattern of distribution of the household heads between different income classes was the same in the SMSAS as in the central cities. However, though the pattern of distribution was the same, the exact magnitude of the proportion

TABLE III-5

HOUSEHOLDS, BY INCOME CLASS,
IN CENTRAL CITIES AND METROPOLITAN AREAS, 1960

(29 Selected Large Metropolitan Areas)	Central Cities (Thousands	Metropolitan Areas of Households)	Central Cities (Percentage	Metropolitan Areas Distribution)
	(1)	(2)	(3)	(4)
Households, Total	11,013	21,006	100.0	100.0
Under \$4,000	2,573	4,647	23.4	22.1
\$4,000 - \$8,000	3,097	6,551	28.1	31.2
\$8,000 - \$15,000	3,628	6,867	32.9	32.7
\$15,000 and over	1,715	2,941	15.6	14.0

Source:

Special Tabulation of the M.I.T. Laboratory for Environmental Studies, Based on U.S. Census of Population, 1960. Money Income Adjusted to U.S. Office of Business Economics, Personal Income Concept. See Irving Silver, Urban Population, Households and Housing: Postwar Characteristics and Growth; Perspectives to 1985, Massachusetts Institute of Technology, Department of City & Regional Planning, Cambridge, Mass., 1968.

of total household heads distributed in different income classes varied somewhat between central cities and SMSAS. Thus, in the central cities 23.4 percent of the household heads was in income class under \$4,000; but compared to this in the corresponding SMSAS 22.1 percent of the household heads were in the income class under \$4,000. The proportion of total household heads in the poverty income class was, therefore, larger in the central cities than in the SMSAS. Both the central cities and the SMSAS had about the same proportion of total household heads in income class \$8,000 to \$15,000. What is more interesting, central cities had a larger proportion of household heads in income class \$15,000 and over than did the corresponding SMSAS. The proportion of household heads in income class \$15,000 and over was 15.6 percent for the central cities and 14.0 percent for the corresponding SMSAS. Compared to the SMSAS, the corresponding central cities had a larger proportion of household heads both in the poverty income class (under \$4,000) and in the highest income class (\$15,000 and over). This, apparently, points to higher degree of inequality in income distribution in the central cities as compared to that in the SMSAS.

The number of household heads in the central cities expressed as percentage of the number of household heads in the corresponding SMSAS expresses the same fact in a different form. All the 29 selected large central cities taken together accounted for 52.4 percent of the total housahold heads in the corresponding SMSAS. The same central cities taken together accounted for 55.4 percent of

total SMSA household heads in income class under \$4,000, 47.3 percent of total SMSA household heads in income class \$4,000 to \$8,000, 52.8 percent of total SMSA household heads in income class \$8,000 to \$15,000, and 58.3 percent of total SMSA household heads in income class \$15,000 and over. Thus, central cities accounted for relatively smaller proportion of total SMSA household heads in income class \$4,000 to \$8,000 as compared to the proportion of total SMSA households in all income classes that they accounted for. On the other hand, the central cities accounted for a relatively higher proportion of total SMSA household heads in income classes under \$4,000, and \$15,000 and over as compared to the proportion of total SMSA household heads in all income classes that they accounted for.

F. ROLE OF CENTRAL CITY RESIDENTS IN METROPOLITAN PERSONAL INCOME

One other important traditional measure used to describe the central city economy is personal income received. Personal income received, like population and employment by central city residence location or distribution of household heads by income class, points to the weaknesses of the central cities rather than to their strength; because per capita personal income received is usually lower in the central cities than in the SMSAS.

In this section it is shown that per capita personal income in all the selected central cities taken together was lower than per capita personal income in all the corresponding metropolitan areas taken together. As a result, selected central city share of corresponding metropolitan area receipt of personal income was even lower

than selected central city share of corresponding metropolitan area population.

Table III-6 shows total personal income and per capita personal income for all the 29 selected large central cities taken together and for their corresponding SMSAS. As Table III-6 shows, per capita personal income for all the 29 selected large central cities taken together was \$2,581; compared to this per capita personal income for all the corresponding SMSAS taken together was \$2,715. Per capita personal income in all the selected central cities taken together was, thus, 95.1 percent of per capita personal income in the corresponding SMSAS. Using per capita personal income as a measure for economic vitality would show central cities at a disadvantage as compared to the corresponding SMSAS.

The low per capita personal income received in the central cities is reflected in the total personal income received in the central cities. All the 29 selected large central cities taken together received a total personal income of \$88.6 billion; compared to this all the corresponding SMSAS taken together received a total personal income of \$185.8 billion. All the selected central cities taken together accounted for 47.7 percent of total corresponding SMSA personal income. Thus, the selected central cities accounted for 50.2 percent of total corresponding SMSA population, but they accounted for only 47.7 percent of total corresponding SMSA personal income. The central city-resident-population thus plays a poor role in the matter of claiming metropolitan personal income.

TABLE III-6

PERSONAL INCOME, TOTAL AND PER CAPITA, OF RESIDENTS
OF CENTRAL CITIES AND METROPOLITAN AREAS, 1960

(29 Selected Large Metropolitan Areas)	Personal of Reside	=	Central Cities as a	
•	Central Cities	Metropolitan Areas	Percent of Metropolita Areas	
	(1)	(2)	(3)	
Total (Billions of Dollars)	88.6	185.8	47.7	
Per Capita (Dollars)	2,581	2,715	95.1	

Source: U.S. Census of Population, 1960. Money Income Adjusted to Personal Income Concept, and 1959 Data Adjusted to 1960. See Irving Silver, op. cit.

G. CENTRAL CITY ROLE IN THE METROPOLITAN AREA ECONOMY, BY METRO-POLITAN AREA SIZE CLASS

In sections A to F the role of all the 29 selected large central cities taken together in all the corresponding SMSAS has been considered. In this section an attempt is made to provide an overview of central city role in metropolitan areas of different size classes.

It is shown that 29 selected metropolitan areas together accounted for 38.3 percent of total U. S. population and 60.6 percent of total metropolitan area population. The selected metropolitan areas and their corresponding central cities are grouped into five different population size classes, namely, over 5 million, 2 to 5 million, 1 to 2 million, less than 1 million, and 1 million and over. Relatively high concentration of population in SMSAS and central cities of the largest size class is clearly indicated. For example, metropolitan areas of size over 5 million accounted for 40.5 percent of total selected metropolitan area population. While, on the average, selected central cities claimed roughly half of corresponding metropolitan area population, selected central city share of corresponding metropolitan area population was higher both in the metropolitan areas of largest size class and in the metropolitan areas of smallest size class. This, in other words, indicated that the degree of suburbanization of population was higher in metropolitan areas of size 1 to 2 million, and 2 to 5 million than either in metropolitan areas of size over 5 million or metropolitan areas of size less than 1 million. In metropolitan areas of size over 5 million, 1 to 2 million, and less than 1 million selected central city share of corresponding metropolitan area population was higher than selected central city share of corresponding metropolitan area total population. Only in metropolitan areas of size 2 to 5 million that selected central city share of corresponding metropolitan area population was smaller than selected central city share of corresponding metropolitan area total population.

It is shown that distribution of selected metropolitan area employment between central cities and their corresponding suburban areas largely followed the distribution of metropolitan area population between central cities and their corresponding suburban areas. In general, central cities representing a relatively larger share of corresponding metropolitan area population also claimed a relatively larger share of corresponding metropolitan area employment by place of work. What is more important, in metropolitan areas of all the five different size classes selected central city share of corresponding metropolitan area employment by place of work was much larger than selected central city share of corresponding metropolitan area population. This indicated that selected central cities' role in corresponding metropolitan area employment by place of work was much larger than selected central cities' role in sharing corresponding metropolitan area population.

In metropolitan areas of all the five different size classes selected central cities' share of corresponding metropolitan area earned personal income was determined by selected central cities' share in corresponding metropolitan area employment by place of work

and the ratio of selected central city labor productivity to corresponding metropolitan area labor productivity. In general, selected central cities claiming a larger share of corresponding metropolitan area employment by place of work also claimed a larger share of corresponding metropolitan area earned personal income. However, in metropolitan areas of all the five different size classes selected central cities share of Corresponding metropolitan area earned personal income was much higher than selected central cities' share in corresponding metropolitan area population. As in metropolitan areas of all the five different size classes selected central city labor productivity was slightly higher than corresponding metropolitan area labor productivity, selected central city share of corresponding metropolitan area earned personal income was slightly higher than selected central city share of corresponding metropolitan area employment by place of work. This indicated that selected central cities' role in corresponding metropolitan production of goods and services was much larger than selected central cities' role in sharing corresponding metropolitan area population.

Similarly, a comparison of selected central cities' share of corresponding metropolitan area receipt of personal income with selected central cities' share of corresponding metropolitan area earned personal income shows that in SMSAS of all the five different size classes the latter share was much larger than the former share. This indicated that in SMSAS of all the five different size classes selected central cities' role as contributors to corresponding metro-

politan area production of goods and services was much larger than selected central cities' role as recipients of corresponding metropolitan area receipt of personal income. It has, thus, been shown that selected central cities' role as producers of goods and services in their corresponding metropolitan areas was much larger than selected central cities' role in sharing both metropolitan area population and metropolitan area receipt of personal income.

As Table III-7 shows (Column 1, Table III-7) 29 selected large metropolitan areas together accounted for 38.3 percent of total U. S. population and 60.6 percent of total metropolitan area population. This shows the significant role played by the 29 selected large metropolitan areas in sharing both total metropolitan area population and total national population. Within the 29 selected large metropolitan areas the predominance of metropolitan areas with population size 1 million and over is also indicated in Table III-7.

Column(1) in Table III-7 shows percentage distribution of total metropolitan population between SMSAS of five different size classes. Of the total population in all the 29 selected large central cities 91.7 percent was in SMSAS of size 1 million and over and only 8.3 percent was in SMSAS of size less than 1 million. This shows the predominance of the SMSAS of size 1 million and over in all the 29 selected large SMSAS. Within the broad size group 1 million and over the importance of the largest metropolitan areas, that is, metropolitan areas of size over 5 million is clearly marked. SMSAS of size over 5 million accounted for 40.5 percent of total population of the

TABLE III-7

CENTRAL CITY ROLE IN THE METROPOLITAN AREA ECONOMY,
BY METROPOLITAN AREA SIZE CLASS, 1960

(29 Selected Large Metropolitan Areas)	(1) Population Distribution by Metropolitan Area Size Class	(2) Central City Share of Metropolitan Area Population	(3) Central City Share of Metropolitan Area Employment by Place of	(4) Central City Share of Metropolitan Area Earned Personal	(5) Central City Share of Metropolitan Area Resident Personal	
Metropolitan Area Population Size Group		(Percent)	Work	Income	Income	
All 29 Selected Large Metropolitan Areas	100.0	50.2	71.9	73.2	47.7	
Over 5 Million	40.5	55.8	76.3	77.7	52.8	L
2 to 5 Million	26.2	38.1	57.2	58.4	35.4	.84-
1 to 2 Million	25.0	52.1	79.3	79.9	49.1	
Less than 1 Million	8.3	55.1	75.7	76.1	54.3	
Metropolitan Areas wit a Population of 1 Million & Over	91.7	49.7	71.9	73. 0	47.2	

Population of 29 Selected Large Metropolitan Areas as a Percent of:

Total Metropolitan Area Population -- 60.6

Total U.S. Population -- 38.3

Sources: Col. (1) -- From U.S. Census of Population, 1960; See Table A-15.

Col. (2) -- From U.S. Census of Population, 1960; See Tables III-7 and A-14.

Col. (3) -- See Source Citation in Table II-1; see Tables III-2, A-3 and A-4.

<u>Col. (4)</u> -- See Tables II-3, III-4, A-7 and A-8.

Col. (5) -- See Tables II-6 and III-5.

selected SMSAS and 44.2 percent of total population of the SMSAS of size 1 million and over. SMSAS of size 1 to 2 million, and SMSAS of size 2 to 5 million accounted for 25.0 percent, and 26.2 percent respectively of total SMSA population. Thus, in case of the metropolitan areas the larger the population size class of the metropolitan areas the larger the proportion of total selected SMSA population that they accounted for.

The proportion of total selected SMSA population accounted for by the corresponding selected central cities is shown in Column(2) of Table III-7 for SMSAS of five different size classes. The proportion of total SMSA population accounted for by the corresponding central cities were 50.2 percent for all the SMSAS, 55.8 percent for SMSAS of size over 5 million, 38.1 percent for SMSAS of size 2 to 5 million. 52.1 percent for SMSAS of size 1 to 2 million, 55.1 percent for SMSAS of size less than 1 million, and 49.7 percent for SMSAS of size 1 million and over. All the selected central cities taken together accounted for 50.2 percent of corresponding SMSA population; but they accounted for 55.8 percent of total SMSA population in SMSA size class over 5 million, 55.1 percent of total SMSA population in SMSA size class less than 1 million, and 52.1 percent of total SMSA population in SMSA size class 1 to 2 million. Thus, as compared to the proportion of total SMSA population that they accounted for, the central cities accounted for a higher proportion of total SMSA population in all SMSA size classes except in SMSA size class 2 to 5 million. The degree of suburbanization of population measured as the

proportion of total SMSA population residing in the suburbs was relatively smaller both in the largest SMSAS, that is, SMSAS of size over 5 million and in relatively smaller SMSAS, that is SMSAS of size up to 2 million.

The proportion of total SMSA employment by work location accounted for by the corresponding selected central cities is shown in Column(3) of Table III-7. All the 29 selected large central cities taken together accounted for 71.9 percent of corresponding SMSA employment. The proportion of total SMSA employment accounted for by corresponding central cities in SMSAS of different size classes were 76.3 percent for SMSAS of size over 5 million, 57.2 percent for SMSAS of size 2 to 5 million, 79.3 percent for SMSAS of size 1 to 2 million, and 75.7 percent for SMSAS of size less than 1 million. The ratios of central city-employment by central city-work location to corresponding SMSA employment show that the central cities claimed a relatively much larger proportion of corresponding SMSA employment as compared to the proportion of total SMSA population that they claimed. This relationship was true for all the 29 selected SMSAS taken together, and also for SMSAS of broad five different size classes. A comparison of column (2) with column (3) in Table III-7 shows that the degree of suburbanization of employment measured by the proportion of total SMSA employment+located in the suburban area broadly followed the pattern of suburbanization of population. Usually, the central cities which claimed a relatively higher proportion of corresponding SMSA population also claimed a higher proportion of corresponding

SMSA employment. What is, however, more important is that in SMSAS of all the five different size classes the central cities accounted for a much larger proportion of total SMSA employment by work location as compared to the proportion of total SMSA population. For example in the largest size SMSAS, that is, in SMSAS of size over 5 million, the corresponding central cities accounted for 55.8 percent of total SMSA population and 76.3 percent of total SMSA employment. Similarly, in the selected smallest size SMSAS, that is, in SMSAS of size less than 1 million, the corresponding central cities accounted for 55.1 percent of total SMSA population and 75.7 percent of total SMSA employment.

The proportion of total SMSA earned personal income generated in the corresponding 29 selected large central cities is shown in Column(4) of Table III-7 for SMSAS of five different size classes.

All the 29 selected large central cities taken together accounted for 73.2 percent of the total earned personal income of the corresponding SMSAS. The proportion of total SMSA earned personal income accounted for by the corresponding central cities in SMSAS of five different size classes were 77.7 percent in SMSAS of size over 5 million, 58.4 percent in SMSAS of size 2 to 5 million, 79.9 percent in SMSAS of size 1 to 2 million, 76.1 percent in SMSAS of size less than 1 million, and 73.0 percent in SMSAS of size 1 million and over. A comparison of figures in Column(4) with figures in Column (3) shows that the proportion of total SMSA earned personal income accounted for by the corresponding central cities was largely influenced by the proportion

of total SMSA employment accounted for by the corresponding central cities. The proportion of total SMSA earned personal income accounted for by the corresponding central cities was larger where the proportion of total SMSA employment accounted for by the corresponding central cities was larger. However, in SMSAS of all the five different size classes the proportion of total SMSA earned personal income accounted for by the corresponding central cities was much larger than the proportion of total SMSA population accounted for by the corresponding central cities. A comparison of Figures in Column(4) with figures in Column(3) of Table III-7 shows that in SMSAS of all the five different size classes the proportion of total SMSA earned personal income accounted for by the corresponding central cities was higher as compared to the proportion of total SMSA employment accounted for by the corresponding central cities. This points to the fact that per worker earned personal income in central cities was slightly higher than per worker earned personal income in corresponding SMSAS for SMSAS of all the five different size classes. Thus, compared with the proportion of total SMSA population accounted for by the corresponding central cities in SMSAS of five different size classes the proportion of total SMSA employment by work location accounted for by the corresponding central cities in SMSAS of five different size classes was much higher. Further the proportion of total SMSA earned personal income accounted for by the corresponding central cities was slightly higher as compared to the proportion of total SMSA employment accounted for by the corresponding central

cities. Like the proportion of employment, the proportion of total SMSA earned personal income accounted for by the corresponding central cities was higher for both the largest SMSA group, that is, SMSAS of size over 5 million and the smaller SMSA group, that is, SMSAS of size up to 2 million as compared to that for SMSAS of size 2 to 5 million.

Central city share of metropolitan area resident personal income is shown in Column(5) of Table III-7 for SMSAS of five different size classes. All the 29 selected large central cities taken together claimed 47.7 percent of total corresponding SMSA personal income. The proportion of total SMSA personal income received by the corresponding central cities in SMSAS of five different size classes were 52.8 percent for SMSAS of size over 5 million, 35.4 percent for SMSAS of size 2 to 5 million, 49.1 percent for SMSAS of size 1 to 2 million, and 54.3 percent for SMSAS of size less than 1 million.

A comparison of figures in Column(2) with figures in Column(5) of Table III-7 shows that the proportion of total SMSA personal income accounted for by the corresponding central cities was largely influenced by the proportion of total SMSA population accounted for by the corresponding central cities. Central cities accounted for a larger proportion of corresponding SMSA population in SMSA size classes over 5 million, 1 to 2 million, and less than 1 million as compared to that in SMSAS of size 2 to 5 million. Similarly, the proportion of total SMSA personal income claimed by corresponding central cities was larger in SMSAS of size over 5 million, 1 to 2

million, and less than I million as compared to that in SMSAS of size 2 to 5 million. In SMSAS of all the five different size classes the proportion of total SMSA personal income accounted for by the corresponding central cities was smaller as compared to the proportion of total SMSA population accounted for by the corresponding central cities. This indicated that per capita personal income received was higher in the SMSAS as compared to that in the corresponding central cities in SMSAS of all the five different size classes.

H. CENTRAL CITY ROLE IN THE METROPOLITAN AREA ECONOMY, BY REGION.

To bring out the regional differences, if any, in the central city role in the metropolitan area economy, the 29 selected large metropolitan areas and their corresponding central cities have been grouped by the eight regions, namely, New England, Mid East, Great Lakes, Plains, South East, South West, Rocky Mountain, and Far West.

It is shown that over three-fourths of total population of the 29 selected metropolitan areas were concentrated only in three regions, namely, Mid East, Great Lakes, and Far West. Of the 29 selected metropolitan areas 16 were located in these three regions. Of the eight regions, New England, a long urbanized and suburbanizing region showed the highest degree of suburbanization of population and South West, a region characterized by still rapidly growing central cities, showed the lowest degree of suburbanization of population. Far West characterized by auto age oriented spread cities also showed a high degree of suburbanization of population.

In general, concentration of employment by place of work by region followed the concentration of population by region. The three regions, namely, Mid East, Great Lakes, and Far West which contained 16 of the 29 selected metropolitan areas and claimed 77.5 percent of total selected metropolitan area population also claimed 78.0 percent of total selected metropolitan area employment. Similarly, in general, central city share of corresponding metropolitan area employment by place of work followed central city share of corresponding metropolitan area population. However, in each region selected central city share of corresponding metropolitan area employment by place of work was much higher than selected central city share of corresponding metropolitan area population. This indicated that in each of the eight regions selected central cities' role as location of metropolitan area jobs was much larger than selected central cities' role as location of metropolitan area residence.

Selected central cities' role in metropolitan area production of goods and services is determined by selected central cities' role in metropolitan area employment by place of work and selected central city labor productivity in relation to corresponding metropolitan area labor productivity. Out of eight regions in six selected central city labor productivity was higher than corresponding metropolitan area labor productivity. In consequence, out of eight regions in six, selected central cities' share in corresponding metropolitan area earned personal income was higher than selected central city share

of corresponding metropolitan area employment by place of work. The two regions showing lower labor productivity in selected central cities than in their corresponding metropolitan areas are Plains and South East. However, in each region without any exception selected central city share of corresponding metropolitan area earned personel income was much larger than selected central city share of corresponding metropolitan area population.

It is also shown that out of eight regions in five, per capita personal income received was lower in selected central cities than in their corresponding metropolitan areas. As a result out of eight regions in five, selected central city share of corresponding metropolitan area receipt of personal income was even lower than selected central city share of corresponding metropolitan area population. Even in the three regions, namely, South West, Rocky Mountain, and Far West, where per capita personal income received was higher in central cities than in their corresponding metropolitan areas, selected central city share of corresponding metropolitan area earned personal income was much higher than selected central city share of corresponding metropolitan area receipt of personal income. This Showed that in each of the eight regions selected central cities' role as contributors to corresponding metropolitan area production of goods and services was much larger than selected central cities' role in representing both metropolitan area population and receipt of personal income.

The regional distribution of the total population of the 29 selected large metropolitan areas is shown in column(1) of Table III-8. The precentage distribution of population by region shows that the larger metropolitan areas were concentrated in three regions, namely, Mid East, Great Lakes, and Far West. Mid East with six selected SMSAS, namely, Baltimore, Buffalo, New York Standard Consolidated Area, Philadelphia, Pittsburgh, and Washington, D. C. accounted for the single largest proportion or 37.9 percent of the total selected SMSA population. Next in importance was Great Lakes which with five of the selected SMSAS, namely, Chicago Standard Consolidated Area, Cincinnati, Cleveland, Detroit, and Milwaukee accounted for 21.3 percent of the total selected SMSA population. The third largest region in metropolitan population size was Far West which with five of the selected SMSAS, namely, Los Angeles Long Beach, San Bernardino-Riverside-Ontario, San Diego, San Francisco-Oakland, and Seattle-Everett accounted for 18.2 percent of the total selected SMSA population. Out of the total of 29 selected large SMSAS as many as 16 are located in these three regions, namely, Mid East, Great Lakes, and Far West. All the SMSAS in these three regions taken together accounted for 77.4 percent of the total selected SMSA population.

The proportions of total SMSA population accounted for by the corresponding central cities are shown by region in Column(2) of Table III-8. The percentage of total SMSA population accounted for by the corresponding central cities were 26.9, 52.4, 52.6, 44.1, 51.9,

TABLE III-8

CENTRAL CITY ROLE IN THE METROPOLITAN

AREA ECONOMY, BY REGION

(29 Selected Large Metropolitan Areas)	(1) Metropolitan Area Population Distribution, by Region	(2) Central City Share of Metropolitan Area Population	(3) Central City Share of Metropolitan Area Employ- ment by Place of Work	(4) Central City Share of Metropolitan Area Earned Personal Income	(5) Central City Share of Metropolitan Area Resident Personal Income	
	(Per	cent)				
All 29 Selected Large						
Metropolitan Areas	100.0	50.2	71.9	73.2	47.7	
By Region						
New England	3.8	26.9	55.9	59.0	23.3	-9
Mid East	37.9	52.4	73.1	74.6	49.2	94-
Great Lakes	21.3	52.6	75.6	77.2	49.4	
Plains	6.7	44.1	78.1	77.5	42.2	
South East	5.3	51.9	77.5	77.1	48.3	
South West	5.4	71.9	84.2	84.9	72.3	
Rocky Mountain	1.4	53.2	76.5	77.4	53. 8	
Far West	18.2	42.7	62.0	62.6	42.9	

Sources: Col. (1) -- From U.S. Census of Population, 1960; See Table B-16.

Col. (2) -- From U.S. Census of Population, 1960; See Tables IV-5, B-15 and B-16.

Col. (3) -- See Source Citation in Table II-1; See Tables IV-1, B-2 and B-3.

Col. (4) -- See Tables II-3, IV-2, B-6 and B-7.

Col. (5) -- See Tables II-6 and IV-4.

71.9, 53.2, and 42.7 for New England, Mid East, Great Lakes, Plains, South East, South West, Rocky Mountain, and Far West respectively. The figures for the proportion of total SMSA population accounted for by their corresponding central cities in different regions shows that New England was the most suburbanized region and South West the least suburbanized. New England as a long urbanized and suburbanizing region sharply contrast with South West where central cities are still growing and the suburbanizing process has hardly begun. Far West, on the other hand, contains auto age oriented spread cities with large suburban growth. Except South West all the regions showed substantial suburbanization of population. In most regions close to 50.0 percent of the total SMSA population were resident of the suburban areas.

Central city share of metropolitan area employment by place of work (Column(3) of Table III-8) in each region without any exception was much higher as compared to central city share of metropolitan area population (Column(2) of Table III-8). Central city share of metropolitan area employment by place of work varied from 55.9 percent in New England to 84.2 percent in South West. New England, the region claiming highest degree of suburbanization of population claimed lowest concentration of employment by place of work in central city. On the other hand, South West, the region claiming the lowest degree of suburbanization claimed the highest concentration of metropolitan area employment in central cities. The degree of concentration of

metropolitan area employment in central cities broadly followed the pattern of degree of concentration of metropolitan area population in the central cities.

Central city share of metropolitan area earned personal income (Column(4) of Table III-8) in its turn was largely determined by the central city share of metropolitan area employment by work location. A comparison of figures in Column(4) with figures in Column(3) in Table III-8 shows that in all the regions excepting two, namely, Plains, and South East, central city share of metropolitan area earned personal income was larger as compared to the central city share of metropolitan area employment by work location, indicating a slightly higher per worker earned personal income in central cities than in the corresponding SMSAS. In Plains and South East regions per worker earned personal income was slightly higher in SMSAS than in the central cities.

Central city share of metropolitan area resident personal income by region is shown in Column(5) of Table III-8. A comparison of figures in Column(5) with figures in Column(2) shows that the central city share of metropolitan area resident personal income was largely determined by the central city share of metropolitan area population. In all regions except three, namely, South West, Rocky Mountain, and Far West, central city share of metropolitan area resident personal income was smaller as compared to the central city share of metropolitan area population, indicating a generally lower per capita

personal income in central cities as compared to that in the SMSAS. In South West, Rocky Mountain, and Far West central city share of metropolitan area resident personal income was slightly higher as compared to the central city share of metropolitan area population, indicating slightly higher per capita personal income in central cities as compared to that in the SMSAS in these three regions. A comparison of figures in Column(3) with figures in Column(2) shows that in all regions central city share of metropolitan area employment by place of work was much higher as compared to the central city share of metropolitan area population. Similarly, a comparison to figures in Column(4) with figures in Column(5) shows that in all regions central city share of metropolitan area earned personal income was much higher as compared to the central city share of metropolitan area resident personal income.

I. CENTRAL CITY ROLE IN THE METROPOLITAN AREA ECONOMY; COMPARISONS OF 29 SELECTED LARGE METROPOLITAN AREAS.

In this section brief comments have been made on some of the broad differences in the selected central cities' role in their corresponding metropolitan areas noticed between individual metropolitan areas. The principal objective, however, has been to show that irrespective of many structural differences between individual metropolitan areas in most of them selected central cities' role in corresponding metropolitan area production of goods and services was much larger than selected central cities' role in sharing metropolitan area population

or metropolitan area receipt of personal income.

Percentage of total population of the 29 selected large SMSAS accounted for by individual SMSAS (Column(1) of Table III-9) shows that the population of the selected SMSAS was highly concentrated in a small number of SMSAS. Only three SMSAS, namely, New York Standard consolidated Area, Chicago Standard Consolidated Area, and Los Angeles-Long Beach together accounted for 40.5 percent of the total population of the 29 selected large SMSAS taken together. Ten next largest SMSAS, namely, Boston, Baltimore, Philadelphia, Pittsburgh, Washington, D. C., Cleveland, Detroit, Minneapolis-St. Paul, St. Louis, and San Francisco-Oakland, taken together accounted for another 36.5 percent of the total population of all the 29 selected metropolitan areas. These two groups of SMSAS, that is thirteen of the twenty-nine selected SMSAS taken together claimed 77.0 percent of the total population of the 29 selected large central cities taken together.

The central city share of metropolitan area population as shown in Column(2) of Table III-9 indicated high degree of suburbanization of population in most metropolitan areas except those in South West and a few in South East. This contrasts remarkably with the relatively high degree of concentration of metropolitan area employment by place of work and earned personal income in their corresponding central city. Of all the 29 selected large central cities Pittsburgh indicated the highest degree of suburbanization of population. Central city of

TABLE III-9

CENTRAL CITY ROLE IN THE METROPOLITAN AREA ECONOMY,
IN 29 SELECTED METROPOLITAN AREAS

29 Selected Large Metropolitan Areas	(1) Metropolitan Area Population as a Percent of Total Selected Large Metropol- itan Areas	(2) Central City Share of Metropolitan Area Population	(3) Central City Share of Metropolitan Area Employment by Place of Work	(4) Central City Share of Metropolitan Area Earned Personal Income	(5) Central City Share of Metropolitan Area Resident Personal Income	
All Selected Metro-						
politan Areas	100.0	50.2	71.9	73.2	47.7	
Boston	3.8	26.9	55.9	59.0	23.3	ı
Baltimore	2.5	54.4	76.2	75.5	50.5	-99-
Buffalo	1.9	40.8	68.3	70.8	37.3	
New York Consolidated	20.7	61.6	80.5	82.6	57.0	
Philadelphia	6.4	46.1	61.8	61.2	42.7	
Pittsburgh	3.5	25.1	40.6	39.4	23.8	
Washington, D.C.	2.9	38.5	76.3	77.8	33.6	
Chicago Consolidated	9.9	57.4	76.7	77.6	54.7	
Cincinnati	1.6	46.9	75.4	74.5	43.5	
Cleveland	2.6	48.7	78.3	79.2	41.8	
Detroit	5 . 5	44.4	69.3	73.2	41.5	
Milwaukee	1.7	62.1	83.4	85.6	60.4	
Kansas City	1.5	45.8	95.1	91.6	44.7	
Minneapolis-St. Paul	2.2	53.7	84.0	85.5	54.2	
St. Louis	3.0	36.4	64.7	64.5	32.2	

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Table III-9 (Continued)	(1) Metropolitan Area Population as a Percent of Total Selected Large Metropol- itan Areas	(2) Central City Share of Metropolitan Area Population	(3) Central City Share of Metropolitan Area Employment by Place of Work	(4) Central City Share of Metropolitan Area Earned Personal Income	(5) Central City Share of Metropolitan Area Resident Personal Income
Atlanta	1.5	47.9	80.0	81.7	43.3
Miami	1.4	31.2	69.2	69.3	28.7
New Orleans	1.3	72.4	87.1	81.3	69.1
Tampa-St. Petersburg	1.1	59.1	74.2	75.2	59.3
Dallas	1.6	62.7	78.3	81.2	65.0
Houston	1.8	75.5	87.9	84.1	73.8
Phoenix	1.0	66.1	79.1	85.9	71.5
San Antonio	1.0	85.6	94.6	95.4	85.7
Denver	1.4	53.2	76.5	77.4	53.8
Los Angeles-Long Beach San Bermardino-Riverside-	9.9	41.8	66.5	66.3	42.1
Ontario	1.2	27.5	54.8	57.1	31.3
San Diego	1.5	55.5	76.3	78.9	56.4
San Francisco-Oakland	4.1	39.8	43.9	44.7	39.6
Seattle-Everett	1.6	54.1	74.5	76.3	52.8

Sources: Col. (1) -- From U.S. Census of Population, 1960; See Table C-16.

Col. (2) -- From U.S. Census of Population, 1960; See Tables V-6, C-15 and C-16.

Col. (3) -- See Source Citation in Table II-1; See Tables V-3, C-1 and C-2.

Col. (4) -- See Tables II-3, V-4, C-5 and C-6.

Col. (5) -- See Tables II-6 and V-5.

Pittsburgh accounted for only 25.1 percent of Pittsburgh SMSA population; compared to this Pittsburgh central city claimed 40.6 percent of total SMSA employment and 39.4 percent of total SMSA earned personal income. Pittsburgh is one of the few exceptional cases where per worker earned personal income in central cities is slightly lower than per worker earned personal income in the SMSA. The next highest degree of suburbanization of population was indicated by Boston which is located in a highly urbanized area. Nonetheless, Boston central city accounted for 55.9 percent of the SMSA employment by place of work, and 59.0 percent of SMSA earned personal income as compared to 26.9 percent of the SMSA population that it accounted for.

In Miami, a recreation center, central city represented only 31.2 percent of the SMSA population, but it claimed 69.2 percent of the SMSA employment by work location, and 69.3 percent of the SMSA earned personal income. That Miami central city accounted for a slightly higher proportion of metropolitan area earned personal income as compared to metropolitan area employment points to slightly higher per worker earned personal income in central city as compared to that in the SMSA. Washington, D. C. central city with 38.5 percent of metropolitan area population, and government services as economic base claimed 76.3 percent of the SMSA employment by work location, and 77.8 percent of the SMSA earned personal income. The higher proportion of SMSA earned personal income compared to the proportion of SMSA employment claimed shows that per worker earned personal

income was higher in central city than in the SMSA.

Los Angeles-Long Beach an auto-age oriented spread city is characterized by high degree of suburbanization of population. The central city of Los Angeles-Long Beach claimed only 41.8 percent of SMSA population and yet it accounted for 66.5 percent of the SMSA employment by place of work and 66.3 percent of the SMSA earned personal income. In Detroit, another metropolitan area with a high degree of suburbanization of population, the central city represented 44.4 percent of the SMSA population, 69.3 percent of the SMSA employment by place of work and 73.2 percent of the SMSA earned personal income. That per worker earned personal income was higher in the central city than in the SMSA is indicated by the fact that the central city claimed a relatively larger proportion of the SMSA earned personal income as compared to the proportion of the SMSA employment by work location that it accounted for. Atlanta central city with 47.9 percent of the metropolitan area population claimed four-fifths of the metropolitan area employment by place of work and earned personal Baltimore central city, with slightly more than half of metropolitan area population, made up three-fourths of metropolitan area employment by work location and earned personal income. New York central city with three-fifths of consolidated area's population represented more than four-fifths of consolidated area's employment by place of work and earned personal income.

The central cities of South, and South West regions are still

rapidly growing. The process of suburbanization of population has hardly begun in these metropolitan areas. In spite of this the central cities in these metropolitan areas play a larger role as location of metropolitan jobs and producers of goods and services as compared to the role that they play as place of residence or receipient of personal income. Examples of such central cities are New Orleans, Dallas, Houston, Phoenix, and San Antonio.

Central city share of metropolitan area resident personal income (Column(5) of Table III-9) compares unfavorably not only with central city share of metropolitan area employment by work location (Column(3) of Table III-9) and earned personal income (Column(4) of Table III-9) but also with central city share of metropolitan area population (Column(2) of Table III-9). Out of 29 selected large SMSAS in 21 SMSAS central city share of metropolitan area resident personal income was lower compared to central city share of metropolitan area population. This indicated that in all of these 21 SMSAS per capita personal income was higher in the SMSAS than in the central cities. This contrasts markedly with the fact that, on the average per worker earned personal income was slightly higher in the central cities than in the SMSAS.

CENTRAL CITIES ROLE AS PRODUCERS OF GOODS AND SERVICES; COMPARISONS BY METROPOLITAN AREA SIZE CLASS

Chapter III primarily focused on a comparison of all selected central cities' role as producers of goods and services in their corresponding metropolitan areas with all selected central cities' role in sharing corresponding metropolitan area population and metropolitan area receipt of personal income. In this chapter the above mentioned comparison is carried out by metropolitan areas of five different size classes.

In support of the argument that in their corresponding metropolitan areas central cities' role as place of work was much larger than central cities' role as place of residence it has been shown that in metropolitan areas of all the five different size classes excepting in metropolitan areas of size 2 to 5 million, selected central cities' share of corresponding metropolitan area employment by residence was higher than selected central cities' share of corresponding metropolitan area population. Thus, even consideration of traditional measure of employment, that is employment by residence location, indicates that central cities are more important as location of jobs than as location of residences.

Consideration of traditional measure of employment, however, seriously understates the weight of the role played by central cities as location of jobs in their corresponding metropolitan areas. This becomes clear when the new measure of employment, that is, employment by place of work, is used to evaluate selected central cities role as location of

corresponding metropolitan area jobs. In metropolitan areas of all the five different size classes selected central cities share of corresponding metropolitan area employment by work location was much larger than selected central cities share of corresponding metropolitan area population and employment by residence location. In metropolitan areas of all the five different size classes, excepting in metropolitan areas of size 2 to 5 million, selected central cities claimed over three-fourths of corresponding metropolitan area employment by work location; compared to this in metropolitan areas of all the five different size classes excepting in metropolitan areas of size 2 to 5 mission selected central cities claimed little less than three-fifths of corresponding metropolitan area employment by residence location. That selected central cities claimed over three-fourths of corresponding metropolitan area employment by work location in metropolitan areas of size up to 2 million, and over 5 million points to the significant role played by central cities as location of metropolitan area employment by work location; because metropolitan areas of size up to 2 million and over 5 million together accounted for 75 percent of total selected metropolitan area employment. In metropolitan areas of size 2 to 5 million selected central cities claimed roughly three-fifths of metropolitan area employment by work location and two-fifths of metropolitan area employment by residence location.

Distribution of employment between central cities and their corresponding suburban areas followed the pattern of distribution of population between these two parts of metropolitan areas. Metropolitan areas of

size 2 to 5 million showed the highest degree of suburbanization of both population and employment. Compared to that in metropolitan areas of size 2 to 5 million degree of suburbanization of both population and employment was much lower in metropolitan areas of size up to 2 million and over 5 million. On the other hand, compared to that in metropolitan areas of size up to 2 million in metropolitan areas of size over 5 million degree of suburbanization of population was lower and degree of suburbanization of employment was higher.

Besides employment by place of work, the other important element determining central cities' role as producers of goods and services in their corresponding metropolitan areas is central city labor productivity as compared to corresponding metropolitan area labor productivity. It has been shown that in metropolitan areas of all the five different size classes central city labor productivity was, on the average, at least as high as that in their corresponding metropolitan areas. In fact, in metropolitan areas of all the five different size classes selected central city labor productivity was slightly higher than corresponding metropolitan area labor productivity.

Both in selected central cities and in their corresponding metropolitan areas labor productivity increased with increase in size of
metropolitan areas. However, with increase in size of metropolitan
areas central city labor productivity increased at a relatively faster
rate than did corresponding metropolitan area labor productivity. As a
result the ratio of central city labor productivity to corresponding metropolitan area labor productivity was higher for larger metropolitan areas than

for smaller metropolitan areas. This strengthened central cities' role as producers of goods and services in their corresponding metropolitan areas because there was a high concentration of selected metropolitan area employment in relatively larger metropolitan areas and central cities claimed over three-fourths of these metropolitan area employment.

Large central city share of corresponding metropolitan area employment by place of work and slightly larger central city labor productivity compared to corresponding metropolitan area labor productivity in metropolitan areas of all the five different size classes ensured large central city share in corresponding metropolitan area earned personal income. In metropolitan areas of all the five different size classes selected central city share of corresponding metropolitan area earned personal income was much larger than selected central city share of corresponding metropolitan area population or employment by residence location. This indicated that central cities' role in corresponding metropolitan area production of goods and services was much larger than central cities' role in sharing corresponding metropolitan area population, or central city residents role in corresponding metropolitan area employment.

In metropolitan areas of all the five different size classes central city share of corresponding metropolitan area earned personal income was also higher than central city share of corresponding metropolitan area employment by place of work. This indicated higher central city labor productivity as compared to corresponding metropolitan area labor productivity.

In contrast, in metropolitan areas of all the five different size classes per capita personal income received was lower in selected central cities as compared to that in their corresponding metropolitan areas. However, per capita personal income received both in central cities and in their corresponding metropolitan areas increased with increase in size of metropolitan areas. Unlike labor productivity, with increase in SMSA size per capita personal income received in central cities increased at a slower rate than did corresponding metropolitan area receipt of per capita personal income. As a result, ratio of per capita personal income received in central cities to per capita personal income received in corresponding metropolitan areas was lower for larger SMSAS than for smaller SMSAS. Thus, while in metropolitan areas of all the five different size classes central city share of corresponding metropolitan area receipt of personal income was lower than central city share of corresponding metropolitan area population, the difference between these two ratios was higher for larger SMSAS than for the smaller SMSAS. This also meant that in metropolitan areas of all the five different size classes central city share of corresponding metropolitan area receipt of personal income was much lower than central city share of corresponding metropolitan area earned personal income. Thus in metropolitan areas of all the five different size classes selected central cities role as contributors to corresponding metropolitan area production of goods and services was much larger than selected central cities role in sharing corresponding metropolitan area receipt of personal income.

Age composition of population by five different size classes of metropolitan areas showed that both in selected central cities and in their corresponding metropolitan areas proportion of total population in age groups under 18 years, and 65 years and over declined with increase in SMSA size, whereas the proportion of total population in age group 18 to 64 years increased with increase in metropolitan area size. indicates that in metropolitan areas of larger size as compared to that in metropolitan areas of smaller size there were smaller proportions of total population in "dependent-age" group and larger proportion of total population in "working-age" group. In metropolitan areas of all the five different size classes selected central cities had a relatively smaller proportion of their total population in age group under 18 years than their corresponding metropolitan areas had. On the other hand, in metropolitan areas of all the five different size classes central cities had a relatively larger proportion of their total population in age group 65 years and over than their corresponding metropolitan areas had. This indicated that compared to that in their corresponding metropolitan areas selected central cities had a larger concentration of old people.

In the same way it has been shown that in metropolitan areas of all the five different size classes selected central cities had relatively larger concentration of poor households than their corresponding metropolitan areas had. It is also shown that in metropolitan areas of all the five different size classes selected central cities had a relatively larger proportion of their total population in the highest income class, that is, in income class \$15,000 and over. Thus compared

with that in their corresponding metropolitan areas selected central cities had a larger concentration not only of poor households but also of high income households.

Both in selected central cities and in their corresponding metropolitan areas proportion of total households in income classes under \$4,000, and \$4,000 to \$8,000 declined with increase in metropolitan area size. On the other hand, both in selected central cities and in their corresponding metropolitan areas, proportion of total households in income classes \$8,000 to \$15,000, and \$15,000 and over increased with increase in metropolitan area size. This is reflected in rise in per capita personal income received in both selected central cities and in their corresponding metropolitan areas with increase in metropolitan area size.

A. CENTRAL CITY ROLE IN METROPOLITAN AREA EMPLOYMENT IN METROPOLITAN AREAS OF FIVE DIFFERENT SIZE CLASSES

In this section it is shown that in metropolitan areas of four different size classes selected central cities' residents role in corresponding metropolitan area employment was larger than selected central cities' role in sharing corresponding metropolitan area population. Only in metropolitan areas of size 2 to 5 million that selected central cities share in corresponding metropolitan area employment by residence location was slightly lower than selected central cities share of corresponding metropolitan area population. This points to selected central cities larger role as place of work than as place of residence.

It is also shown that in metropolitan areas of all the five different size classes central cities role as location of metropolitan area jobs

was much larger than central cities role in sharing metropolitan area population and employment by residence location. The new measure of employment, that is, employment by place of work, thus shows a much larger role of selected central cities in their corresponding metropolitan areas than what is shown by the traditional measure of employment, that is, employment by central city residence location.

In metropolitan areas of all the five different size classes distribution of employment by place of work between central cities and their corresponding suburban areas roughly followed the distribution of population between central city and their corresponding suburban areas. Selected central cities claimed a relatively much larger proportion of their corresponding metropolitan area population and employment by place of work in metropolitan areas of size up to 2 million and over 5 million than in metropolitan areas of size 2 to 5 million. This was highly significant in that central cities of size up to 2 million, and over 5 million together accounted for three-fourths of total selected metropolitan area employment and four-fifths of total selected central cities employment.

It has been indicated earlier that the consideration of the traditional measure of employment, that is, employment by central city residence location understates the importance of the central cities as location of metropolitan jobs. Figures in column (1), Table IV-1, when compared with figures in column (1), Table IV-7, show that even the consideration of the traditional measure of employment points to the

TABLE IV-1

EMPLOYMENT BY CENTRAL CITY RESIDENCE LOCATION AS PERCENTAGE OF EMPLOYMENT BY SMSA RESIDENCE LOCATION, FOR 29 SELECTED LARGE CENTRAL CITIES AND SMSAS, BY SMSA SIZE, 1960

Industry Groups SMSA Size Group (Data are for 29 Total Construc-Manufac-Wholesale Public Selected Large tion turing & Retail Adminis-Central Cities/ Trade tration & SMSAS) Services (1) (2) (3) (4) (5) (Percent) Over 5 Million 58.2 47.2 55.7 50.5 60.9 2 to 5 Million 38.0 30.5 34.6 39.5 40.8 47.4 1 to 2 Million 55.0 52.2 55.9 56.4 Less than 1 Million 56.8 52.6 55.7 59.1 56.8 42.9 58.6 52.7 54.4 1 Million & Over 51.8 Total 52.2 43.8 48.7 53.2 54.6

Source: Computed from Table A-4 and Table A-5.

relatively larger role of the central cities as place of work rather than as place of residence.

Table IV-1 shows employment by central city residence location as percentage of SMSA employment for four broad groups of industries and for 29 selected large SMSAS grouped into five size classes. The proportion of SMSA employment accounted for by employment by central city residence location in corresponding central cities were 58.2 percent for SMSAS of size over 5 million, 38.0 percent for SMSAS of size 2 to 5 million, 55.0 percent for SMSAS of size 1 to 2 million, 56.8 percent for SMSAS of size less than 1 million, and 51.8 percent for SMSAS of size 1 million and over. The share of metropolitan employment represented by employment by central city residence location in corresponding central cities followed the proportion of total SMSA population accounted for by corresponding central city population. The share of SMSA population accounted for by the corresponding central cities were 55.8 percent for SMSAS of size over 5 million, 38.1 percent for SMSAS of size 2 to 5 million, 52.1 percent for SMSAS of size 1 to 2 million, 55.1 percent for SMSAS of size less than 1 million, and 49.7 percent for SMSAS of size 1 million and over. However, in SMSAS of all the different size classes excepting in SMSAS of size 2 to 5 million, the share of metropolitan area employment represented by corresponding central city employment by residence location was higher as compared to the share of metropolitan area population represented by the corresponding central cities. This appears to point to the larger central city role in metropolitan area as place of work rather than as place of residence.

This becomes more clear when selected central city share of corresponding metropolitan area employment by place of work is considered.

Table IV-2 shows the proportion of total SMSA employment by place of work accounted for by the corresponding central cities in SMSAS of five different size classes. Selected central city shares of corresponding metropolitan area employment by place of work were 76.3 percent for SMSAS of size over 5 million, 57.2 percent for SMSAS of size 2 to 5 million, 79.3 percent for SMSAS of size 1 to 2 million, 75.7 percent for SMSAS of size less than 1 million, and 71.9 percent for SMSAS of size 1 million and over, and 71.9 percent for all the SMSAS taken together.

Selected central cities of size 1 to 2 million accounted for the highest proportion (79.3 percent) of corresponding SMSA employment by place of work. The next highest proportions of selected SMSA employment accounted for by corresponding central cities were 76.3 percent for SMSAS of size over 5 million, 75.7 percent for SMSAS of size less than 1 million, 71.9 percent for SMSAS of size 1 million and over, and 57.2 percent for SMSAS of size 2 to 5 million. Both central cities of smaller size, and central cities of the largest size represented relatively larger proportion of the corresponding SMSA employment. However, neither the central cities of the largest size, that is central cities of size over 5 million, nor the central cities of the smallest size, that is, central cities of size less than 1 million did account for the largest proportion of corresponding SMSA employment. Instead the largest proportion of selected SMSA employment. Instead the largest proportion of selected SMSA employment accounted for by the corresponding central cities was for central cities of size 1 to 2 million which

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Industry Groups

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SMSA Size Group (Data are for 29 Selected Large Central Cities/ SMSAS)	Total	Construc- tion	Manufac- turing	Wholesale & Retail Trade	Public Adminis- tration & Services
	(1)	(2)	(3)	(4)	(5)
			(Perc	ent)	
Over 5 Million	76.3	66.0	76.8	74.3	77.8
2 to 5 Million	57.2	47.9	55.5	57.8	59.2
1 to 2 Million	79.3	72.3	81.0	78.5	78.4
Less than 1 Million	75.7	75.0	78.3	78.1	74.2
1 Million & Over	71.9	63.2	71.4	71.0	73.1
Total	71.9	64.2	71.4	71.4	73.2

Source: Computed from Table A-4 and Table A-3.

accounted for 79.3 percent of corresponding total SMSA employment. Selected central cities of size 1 to 2 million accounted for the largest proportion of corresponding SMSA employment in case of all the different industry groups excepting for construction. They accounted for 81.0 percent of corresponding SMSA manufacturing employment, 78.5 percent of corresponding SMSA wholesale and retail trade employment and 78.4 percent of corresponding SMSA public administration and services employment. The central cities of size 1 to 2 million claimed well over three-fourths of corresponding SMSA employment in manufacturing, wholesale and retail trade, and public administration and serivces. They accounted for 72.3 percent of corresponding SMSA construction employment; but compared to this central cities of size less than 1 million claimed 75.0 percent of corresponding SMSA construction employment. However, while central cities of size less than 1 million accounted for a higher proportion of corresponding SMSA construction employment, they also accounted for a higher proportion of corresponding SMSA population. Central cities of size less than 1 million accounted for 55.1 percent of corresponding SMSA population; compared to this central cities of size 1 to 2 million accounted for 52.1 percent of corresponding SMSA population. On the average, the central cities of size 1 million and over accounted for a relatively smaller proportion of corresponding SMSA employment than did central cities of size less than 1 million. Central cities of size 1 million and over claimed 71.9 percent of corresponding SMSA employment, but central cities of size less than 1 million accounted for 75.7 percent of corresponding SMSA employment.

But as already mentioned, central cities of size 1 to 2 million accounted for, on the average, highest proportion of corresponding SMSA employment, and central cities of size over 5 million accounted for a larger proportion of corresponding SMSA employment as compared to the proportion of SMSA employment accounted for by central cities of size 2 to 5 million. Thus central cities of size up to 2 million accounted for a large proportion of corresponding SMSA employment; the proportion of SMSA employment accounted for by the corresponding central cities declined in the case of central cities of size 2 to 5 million and then the proportion of SMSA employment accounted for by the corresponding central cities increased again in the case of the largest central cities, that is, central cities of size 5 million and over.

The pattern of distribution of employment between the central cities and the surrounding suburban areas appear to have roughly followed the pattern of suburbanization of population. Central cities of size less than 1 million accounted for 55.1 percent of corresponding SMSA population and 75.7 percent of corresponding SMSA employment. Central cities of size 1 to 2 million accounted for 52.1 percent of corresponding SMSA population and 79.3 percent of corresponding SMSA employment. Thus, compared to SMSAS of size less than 1 million, in case of SMSAS of size 1 to 2 million the degree of suburbanization of population increased but yet the degree of concentration of SMSA jobs in the central city location increased. However, both the proportion of total SMSA population and the proportion of total SMSA employment accounted for by central cities of size less than 1 million were relatively small compared to the proportion

of total SMSA population and employment accounted for by central cities of size 1 to 2 million. Central cities of size up to 2 million taken together accounted for 52.9 percent of corresponding SMSA population, and 78.5 percent of corresponding SMSA employment. Central cities of size 2 to 5 million accounted for 38.1 percent of corresponding SMSA population and 57.2 percent of corresponding SMSA employment. In case of central cities of size 2 to 5 million the degree of suburbanization of both population and employment increased simultaneously. The degree of suburbanization of population measured as the ratio of suburban population to SMSA population was 47.1 percent for SMSAS of size up to 2 million, 61.9 percent for SMSAS of size 2 to 5 million, and 44.2 percent for SMSAS of size over 5 million. The degree of suburbanization of employment by work location measured as the ratio of suburban employment to SMSA employment was 21.5 percent for SMSAS of size up to 2 million, 42.8 percent for SMSAS of size 2 to 5 million, and 23.7 percent for SMSAS of size over 5 million. Thus compared to degree of suburbanization of population in SMSAS of size up to 2 million, the degree of suburbanization of population in SMSAS of size 2 to 5 million was 31 percent higher; but compared to degree of suburbanization of employment in SMSAS of size up to 2 million degree of suburbanization of employment in SMSAS of size 2 to 5 million was 99 percent higher. Thus compared to degree of suburbanization of population and employment in SMSAS of size up to 2 million, the increase in degree of suburbanization of employment in SMSAS of size 2 to 5 million was much larger than the increase in the suburbanization of population.

Central cities of size over 5 million accounted for 55.8 percent of corresponding SMSA population and 76.3 percent of corresponding SMSA employment. Thus in case of the largest SMSAS degree of suburbanization of population declined to 44.2 percent and degree of suburbanization of employment declined to 23.7 percent. Compared to degree of suburbanization of population and employment in SMSAS of size 2 to 5 million, degrees of suburbanization of population and employment in SMSAS of size over 5 million were lower by 28.6 percent and 44.6 percent, respectively.

That selected central cities of size up to 2 million, and over 5 million accounted for well over three-fourths of the corresponding SMSA employment clearly points to the key role played by the central cities as location of SMSA jobs. The central cities of size up to 2 million and over 5 million together claimed 80 percent of total central city employment. Similarly, SMSAS of size up to 2 million and over 5 million together accounted for 75 percent of total SMSA employment.

- B. CENTRAL CITY ROLE IN METROPOLITAN AREA EARNED PERSONAL INCOME IN METROPOLITAN AREAS OF FIVE DIFFERENT SIZE CLASSES
 - (1) Per Worker Earned Personal Income in Central Cities Is of Similar Order of Magnitude to that in SMSAS

Level of earned personal income generated in an area depends upon level of employment, distribution of employment in different industry groups, and per worker earned personal income in different industry groups. A comparison of per worker earned personal income in central cities with per worker earned personal income in corresponding SMSAS shows that in metropolitan areas of all the five different

size classes on the average per worker earned personal income in central cities was at least as high as that in corresponding SMSAS. This shows that modernization of central city plant facilities and job up-grading in central cities have made it possible for central city labor productivity to keep pace with rising labor productivity in suburban areas, the improvement in the latter being brought about by the concentration in the suburban areas of modern plants and equipments and skilled jobs.

In this section, first, a few comments are made about the differences noticed in the level of per worker earned personal income in SMSAS of different size classes and between different industry groups, and then labor productivity in central city by industry is compared with labor productivity by industry in the corresponding SMSA.

Appendix Table A-2 shows all industry average of per worker earned personal income and also per worker earned personal income separately for three broad groups of industries, namely manufacturing, wholesale and retail trade, and services for 29 selected large central cities grouped into five size classes. For all the 29 selected large central cities taken together all industry average of per worker earned personal income was \$5,803. Per worker earned personal income varied from industry to industry and also from SMSAS of one size class to another. Per worker earned personal incomes for all the different industry groups excepting services were higher than the all-industry average of per worker earned personal income. Considering only three broad industry groups, namely, manufacturing, wholesale and retail trade, and services for all the selected central cities taken together the highest per worker

earned personal income was for wholesale and retail trade, and the lowest per worker earned personal income was for services. For all the selected central cities taken together per worker earned personal income for the three broad groups of industries were \$6,382 for wholesale and retail trade, \$5,959 for manufacturing, and \$4,405 for services.

There were differences in per worker earned personal incomes between central cities of different size classes as between different industry groups. Generally, per worker earned personal income increased with increase in the size of the central city. This can be seen by comparing per worker earned personal incomes in central cities of size 1 million and over, and over 5 million with per worker earned personal income in central cities of size less than 1 million. All-industry average of per worker earned personal income for central cities of size 1 million and over, and over 5 million were 121.8 percent and 123.1 percent respectively of per worker earned personal income in central cities of size less than 1 million. For manufacturing per worker earned personal incomes in central cities of size 1 million and over, and over 5 million were 124.1 percent, and 121.6 percent respectively of per worker earned personal income in central cities of size less than 1 million. In case of wholesale and retail trade per worker earned personal income in central cities of size 1 million and over, and over 5 million were 136.7 percent and 143.8 percent of per worker earned personal income in central cities of size less than 1 million. Finally, for services per worker earned personal income in central cities of size 1 million and over, and over 5 million were 124.8 percent and 131.8 percent of per worker earned personal income in central cities of size less than 1 million.

Increase in per worker earned personal income with increase in size of the central cities was not, however, smooth for manufacturing. For manufacturing per worker earned personal income increased from \$4,843 for central cities of size less than 1 million to \$6,117 for central cities of size 1 to 2 million and to \$6,139 for central cities of size 2 to 5 million, and then for the largest central city group, that is, for central cities of size over 5 million it declined again to \$5,888.

It has already been mentioned that in central cities wholesale and retail trade showed a higher per worker earned personal income than did manufacturing. This relation was true for all central cities taken together and also for central cities of size 2 to 5 million, and over 5 million; but in case of central cities of size less than 1 million, and 1 to 2 million per worker earned personal income for manufacturing was higher than per worker earned personal income for wholesale and retail trade. Thus in relatively smaller central cities per worker earned personal income for manufacturing was higher than per worker earned personal income for wholesale and retail trade; but in larger central cities per worker earned personal income for wholesale and retail trade was higher than per worker earned personal income for manufacturing.

Per worker earned personal income in SMSAS showed more or less similar characteristics as that shown by per worker earned personal income in central cities with only few exceptions. Appendix Table A-6 shows per worker earned personal income for three broad industry groups, namely, manufacturing, wholesale and retail trade, and services for 29

selected large SMSAS grouped into five size classes. For all the 29 selected large SMSAS taken together all industry average of per worker earned personal income was \$5,721. Per worker earned personal income varied from industry to industry and also from SMSAS of one size class to another. Per worker earned personal incomes for all the different industry groups excepting services were higher than all-industry average of per worker earned personal income. Considering only three broad groups of industries, namely, manufacturing, wholesale and retail trade, and services for all the 29 selected large SMSAS taken together, the highest per worker earned personal income was generated by manufacturing and the lowest per worker earned personal income was generated by services. For all the selected SMSAS taken together per worker earned personal incomes generated by individual industry groups were \$6,235 for manufacturing, \$5,829 for wholesale and retail trade, and \$4,252 for services. It may be remembered that in case of the central cities wholesale and retail trade rather than manufacturing generated the highest per worker earned personal income.

Within any individual industry group, as for all the industry groups taken together, per worker earned personal income varied with the variation in the size of the SMSAS. In general, per worker earned personal income increased as the size of the SMSA increased. A comparison of per worker earned personal income for all the selected SMSAS taken together with per worker earned personal income for SMSAS of size 1 million and over shows small difference indicating the predominance of SMSAS of size 1 million and over in all the selected SMSAS. That per

worker earned personal income was higher for larger SMSAS can be seen from a comparison of per worker earned personal income by industry for SMSAS of size less than 1 million with per worker earned personal income by industry for SMSAS of size 1 million and over, and SMSAS of size over 5 million. All industry average of per worker earned personal incomes for SMSAS of size 1 million and over, and over 5 million were 120.6 percent, and 121.5 percent, respectively, of per worker earned personal income for SMSAS of size less than 1 million. Per worker earned personal income in manufacturing for SMSAS of size 1 million and over, and over 5 million were 125.2 percent, and 124.2 percent respectively of per worker earned personal income for SMSAS of size less than 1 million. In case of wholesale and retail trade per worker earned personal income for SMSAS of size 1 million and over, and over 5 million were 128.2 percent, and 133.7 percent respectively of per worker earned personal income for SMSAS of size less than 1 million. Similarly, in case of services per worker earned personal income for SMSAS of size 1 million and over, and over 5 million were 119.6 percent and 124.8 percent respectively of per worker earned personal income for SMSAS of size less than 1 million.

Manufacturing, however, did not show a smooth increase in per worker earned personal income with increase in the size of the SMSAS. Per worker earned personal income for manufacturing increased from \$5,020 for SMSAS of size less than 1 million to \$6,363 for SMSAS of size 1 to 2 million and then declined to \$6,301 for SMSAS of size 2 to 5 million and further to \$6,233 for SMSAS of size over 5 million.

As stated earlier, for all the selected central cities taken together, all industry average of per worker earned personal income was \$5,803. This is slightly higher than the all industry average per worker earned personal income of \$5,721 for all the selected SMSAS taken together. In this case the all industry average of per worker earned personal income for all the selected central cities taken together was 101.4 percent of corresponding all industry average of per worker earned personal income in all the SMSAS taken together. This is shown in Table IV-3 which shows per worker earned personal income by three industry groups in 29 selected large central cities grouped into five size classes as percentage of per worker earned personal income in corresponding SMSAS. When per worker earned personal income for different industry groups are considered separately, all the selected central cities taken together showed higher per worker earned personal income for both wholesale and retail trade, and services and lower per worker earned personal income for manufacturing compared to the corresponding per worker earned personal income shown by all the selected SMSAS taken together. For all the selected central cities taken together per worker earned personal income in wholesale and retail trade was 109.5 percent of corresponding SMSA per worker earned personal income in wholesale and retail trade. Similarly, for all the selected central cities taken together per worker earned personal income in services was 103.6 percent of corresponding SMSA earned personal income in services. On the other hand, for all the selected central cities taken together per worker earned personal income in manufacturing was 95.6 percent of corresponding SMSA per worker earned personal income for manufacturing.

TABLE IV-3

PER WORKER EARNED PERSONAL INCOME IN 29 SELECTED LARGE CENTRAL CITIES AS PERCENTAGE OF PER WORKER EARNED PERSONAL INCOME IN THE CORRESPONDING SMSAS, BY INDUSTRY, 1959

Industry Groups				
- Wholesale & Retail Trade	Services			
(3)	(4)			
(Percent)				
111.1	105.2			
111.6	104.0			
107.6	101.1			
103.3	99.7			
110.2	103.9			
109.5	103.6			
	Wholesale & Retail Trade (3) Percent) 111.1 111.6 107.6 103.3			

Source: Computed from Table A-6 and Table A-2.

However, as already mentioned, all industry average of per worker earned personal income was higher for all the central cities taken together than for the corresponding SMSAS. Also of the three industry groups considered for two, namely, wholesale and retail trade, and services all selected central city average of per worker earned personal income was higher as compared to corresponding all SMSA average of per worker earned personal income. This clearly shows that, on the average, labor productivity in selected central cities was at least as high as that in the corresponding metropolitan areas.

Average labor productivity in selected central city was slightly higher compared to labor productivity in corresponding SMSA not only for all the selected SMSAS taken together, but also for SMSAS of different size classes (Table IV-3). In SMSAS of size over 5 million, 2 to 5 million, 1 to 2 million, less than 1 million, and 1 million and over all industry average of labor productivity in selected central city as percentage of corresponding SMSA labor productivity were 101.8 percent, 102.2 percent, 100.8 percent, 100.5 percent, and 101.5 percent, respectively. In case of individual industry groups some differences were noticed between industry groups. For example, in case of manufacturing selected central city labor productivity was lower compared to labor productivity in corresponding SMSA in SMSAS of all the five different size classes. For services, selected central city labor productivity was higher than the corresponding SMSA labor productivity in SMSAS of all the different size classes excepting in SMSAS of size less than 1 million. In case of SMSAS of size less than 1 million

central city labor productivity for services was slightly lower than corresponding SMSA labor productivity. For wholesale and retail trade selected central city labor productivity was clearly higher than corresponding SMSA labor productivity in SMSAS of all the five different size classes. This shows that the record of central city labor productivity as compared to corresponding SMSA labor productivity was quite favorable, not only in case of all the selected SMSAS taken together, but also in case of SMSAS of all the five different size classes.

Another important aspect of the relationship of central city-SMSA labor productivity revealed by the data presented in Table IV-3 is that, in general, the difference between central city labor productivity and the corresponding SMSA labor productivity was higher the larger the size of the SMSAS. This can be seen immediately if the ratio of central city labor productivity to corresponding SMSA labor productivity in SMSAS of size less than 1 million is compared with the ratio of central city labor productivity to corresponding SMSA labor productivity in SMSAS of size 1 million and over or in SMSAS of size over 5 million. For all the industries taken together central city labor productivity as percentage of corresponding SMSA labor productivity were 100.5 percent, 101.5 percent, and 101.8 percent for SMSAS of size less than 1 million, 1 million and over, and over 5 million, respectively. In case of individual industry groups the only exception to this pattern was noticed for manufacturing. For manufacturing selected central city labor productivity as percentage of corresponding SMSA labor productivity were 96.5 percent, 95.6 percent, and 94.5 percent in SMSAS of size less than 1

million, 1 million and over, and over 5 million, respectively. On the other hand, in case of both wholesale and retail trade, and services central city labor productivity as percentage of corresponding SMSA labor productivity was higher the larger was the size of the SMSAS. For services central city labor productivity as percentage of corresponding SMSA labor productivity were 99.7 percent, 103.9 percent, and 105.2 percent for SMSAS of size less than 1 million, 1 million and over, and over 5 million, respectively. Similarly, for wholesale and retail trade central city labor productivity as percentage of corresponding SMSA labor productivity were 103.3 percent, 110.2 percent, and 111.1 percent for SMSAS of size less than 1 million, 1 million and over, and over 5 million, respectively. Thus, on the average, the level of labor productivity in central cities was at least as high as that in the corresponding SMSAS; in many cases, in fact, per worker earned personal income or labor productivity in central cities was slightly higher as compared to labor productivity in the corresponding SMSAS. Moreover, the difference between central city labor productivity and corresponding SMSA labor productivity was higher for larger size SMSAS than for smaller size SMSAS.

It has been stated earlier that, in general, per worker earned personal income both in central cities and in SMSAS increased with increase in size of the SMSAS. But ratio of per worker earned personal income in central city to per worker earned personal income in corresponding SMSA was larger for larger SMSAS as compared to that for smaller SMSAS. This shows that while per worker earned personal income for both

central cities and corresponding SMSAS increased with increase in size of SMSAS, per worker earned personal income in central cities increased at a faster rate with increase in size of the corresponding SMSAS than did per worker earned personal income in SMSAS. This phenomenon strengthened central cities role as producers of goods and services because larger central cities account for a high proportion of total metropolitan jobs. For example, metropolitan areas of size over 5 million accounted for 42.3 percent of total selected metropolitan area employment and central cities represented 76.3 percent of employment of metropolitan area size over 5 million.

(2) Central City Share of Metropolitan Area Earned Personal Income Is Higher as Compared to Central City Share of Metropolitan Area Employment

It has been stated earlier (Chapter III) that selected central city share of corresponding metropolitan area employment by residence location was higher than selected central city share of corresponding metropolitan area population. Similarly, selected central city share of corresponding metropolitan area employment by work location was higher compared to both selected central city share of corresponding metropolitan area population and selected central city share of corresponding metropolitan area employment by residence location. It has also been shown that selected central city share of corresponding metropolitan area earned personal income was higher as compared to selected central city share of corresponding metropolitan area population, selected central city share of corresponding metropolitan area employment by residence location, and selected central city share of corresponding metropolitan area

employment by work location. That selected central city share of corresponding metropolitan area employment by work location is much higher than selected central city share of corresponding metropolitan area population shows that central cities, as compared to their suburban areas, are much more important as place of work than as place of residence. Similarly, that selected central city share of corresponding metropolitan area earned personal income is higher than selected central city share of corresponding metropolitan area employment by work location shows that all industry average of per worker earned personal income was higher in selected central cities than in their corresponding metropolitan areas. This is directly shown by a comparison of per worker earned personal income in central cities with per worker earned personal income in corresponding SMSAS (Table IV-3). In this section it has been shown that in metropolitan areas of all the five different size classes selected central city share of corresponding metropolitan area earned personal income for all industries taken together was higher as compared to both selected central city share of corresponding metropolitan area population, and selected central city share of corresponding metropolitan area employment by work location.

Selected central city share of corresponding metropolitan area earned personal income in SMSAS of five different size classes are shown in Table IV-4. Central city earned personal income for all the industries taken together as percentage of corresponding SMSA earned personal income in SMSAS of size over 5 million, 2 to 5 million, 1 to 2 million, less than 1 million, and 1 million and over were 77.7 percent, 58.4 percent, 79.9 percent, 76.1 percent, and 73.0 percent, respectively. Compared to

TABLE IV-4

TOTAL EARNED PERSONAL INCOME IN 29 SELECTED LARGE CENTRAL CITIES AS PERCENTAGE OF TOTAL EARNED PERSONAL INCOME IN THE CORRESPONDING SMSAS, BY INDUSTRY, BY SMSAS OF DIFFERENT SIZE, 1959

Industry Groups SMSA Size Group Total Construc-Manufac-Wholesale Public (DATA are for 29 tion turing & Adminis-Selected Large **Retail** tration & Central Cities/SMSAS) Trade Services (1) (2) (3) (4) (5) (Percent) Over 5 Million 77.7 66.2 72.5 82.6 81.0 2 to 5 Million 58.4 48.0 54.1 64.5 61.0 1 to 2 Million 79.9 72.0 77.9 84.5 79.6 Less than 1 Million 76.1 73.2 75.6 80.7 74.9 1 Million & Over 73.0 63.0 68.3 78.3 75.4 Total 73.2 63.8 68.4 78.0 75.4

Source: Computed from Table A-8 and Table A-7.

this central city share of corresponding metropolitan area population in SMSAS of size over 5 million, 2 to 5 million, 1 to 2 million, less than 1 million, and 1 million and over were 55.8 percent, 38.1 percent. 52.1 percent, 55.1 percent, and 49.7 percent, respectively. Similarly compared to selected central city share of corresponding metropolitan area earned personal income in SMSAS of different size classes, selected central city share of corresponding metropolitan area employment by work location for all the industries taken together in SMSAS of size over 5 million, 2 to 5 million, 1 to 2 million, less than 1 million, and 1 million and over were 76.3 percent, 57.2 percent, 79.3 percent, 75.7 percent, and 71.9 percent, respectively. Thus central city share of corresponding metropolitan area earned personal income for all the industries taken together was higher than both central city share of corresponding metropolitan area population and central city share of corresponding metropolitan area employment by work location in SMSAS of all the five different size classes.

A comparison of central city share of corresponding metropolitan area earned personal income with central city share of corresponding metropolitan area employment by work location shows that the difference between these two ratios were larger for the SMSAS of larger size than for the SMSAS of smaller size. The difference between central city share of corresponding metropolitan area earned personal income, and central city share of corresponding metropolitan area employment by work location were 0.4 percentage points in SMSAS of size less than 1 million, and 1.4 percentage points in case of SMSAS of size over 5 million.

Increase in differences between central city share of metropolitan area earned personal income and central city share of metropolitan area employment by work location with increase in SMSA size reflects a faster rate of increase in central city labor productivity as compared to rate of increase in metropolitan area labor productivity with increase in SMSA size. This points to the relatively more favorable record of labor productivity in larger central cities as compared to that in the smaller central cities. In view of the high concentration of selected metropolitan area employment in larger central cities the relatively higher level of central city labor productivity in larger central cities focus on the strangth of the central cities role as producers of goods and services.

Central city share of corresponding metropolitan area earned personal income is determined by central city share of corresponding metropolitan area employment by work location and the ratio of central city labor productivity to metropolitan area labor productivity. It has been shown earlier that central city labor productivity as percentage of corresponding SMSA labor productivity was smaller than one hundred for manufacturing, and over one hundred for wholesale and retail trade, and services in case of SMSAS of all the five different size classes excepting that in SMSAS of size less than 1 million central city labor productivity as percentage of corresponding SMSA labor productivity was smaller than one hundred for services. As a result, for manufacturing, in SMSAS of all the five different size classes central city share of metropolitan area earned personal income was lower as compared to

central city share of metropolitan area manufacturing employment. On the other hand, for wholesale and retail trade, and services in SMSAS of all the five different size classes central city share of metropolitan area earned personal income was higher as compared to central city share of metropolitan area employment by work location, excepting that in case of SMSAS of size less than 1 million for services central city share of metropolitan area earned personal income was lower compared to central city share of metropolitan area employment by work location. However, as mentioned before for all the industries taken together central city share of metropolitan area earned personal income was higher as compared to central city share of metropolitan area earned personal income was higher as compared to central city share of metropolitan area employment in SMSAS of all the five different size classes, indicating a higher all-industry average of per worker earned personal income in central cities as compared to that in the corresponding SMSAS.

Central cities role as producers of goods and services in their corresponding metropolitan areas as represented by central city share of metropolitan area earned personal income is quite impressive. This contrasts sharply with central cities role as recipients of metropolitan area personal income. Central cities considered as producers of goods and services showed that central city share of metropolitan area employment by work location was much higher than central city share of metropolitan area population. Further, central city share of metropolitan area earned personal income was higher as compared to both

central city share of metropolitan area population and central city share of metropolitan area employment by work location. But central cities considered as recipients of personal income shows that central city share of metropolitan area receipts of personal income was even lower than central city share of metropolitan area population. This was true not only for all the SMSAS taken together, but also for SMSAS of all the five different size classes. This indicates that, on the average, per capita personal income was lower in central cities than in the SMSAS. This contrasts sharply with the central city-SMSA relationship with respect to per worker earned personal income. On the average, per worker earned personal income was higher for central cities than for corresponding SMSAS in SMSAS of all the five different size classes.

Considering both central cities and metropolitan areas as producers of goods and services, per worker earned personal income in both central cities and SMSAS increased with increase in the SMSA size. But with increase in the SMSA size per worker earned personal income in central cities increased at a faster rate than did per worker earned personal income in the corresponding SMSAS. As a result the ratio of central city labor productivity to corresponding SMSA labor productivity was higher for the larger SMSAS as compared to that for the smaller SMSAS. This would be considered as an additional indication of vitality of the central city economy as producers of goods and services, because larger central cities represent a high proportion of the total metropolitan area jobs. In contrast, considering both central cities and metropolitan areas as recipients of personal income, per capita personal income received

increased in both central cities and corresponding SMSAS with increase in the size of the SMSAS; but with increase in the size of the SMSAS per capita personal income for central cities increased at a slower rate than did per capita personal income for the corresponding SMSAS. As a result the ratio of per capita personal income in central cities to per capita personal income in the corresponding SMSAS was smaller for the larger SMSAS as compared to that for the smaller SMSAS. This also meant that while the central city share of corresponding metropolitan area receipts of personal income was lower compared to central city share of corresponding metropolitan area population in SMSAS of all the five different size classes, the difference between these two ratios was higher for larger SMSAS as compared to that for smaller SMSAS. Thus, consideration of traditional measure of income, that is, income received tend to provide an impression that as compared to their corresponding metropolitan areas the central cities are falling behind in respect of economic prosperity, that they are in a state of progressive decay.

Total personal income received, and per capita personal income received in central cities and SMSAS of five different size classes are shown in Table IV-6. Per capita personal income for all the central cities taken together was \$2,581. Per capita personal income in central cities of size over 5 million, 2 to 5 million, 1 to 2 million, less than 1 million, and 1 million or over were \$2,807, \$2,419, \$2,455, \$2,177, and \$2,622, respectively. Per capita personal income increased with increase in the size of the central cities excepting that per capita personal income in central cities of size 2 to 5 million was slightly smaller than

TABLE IV-6

PERSONAL INCOME, TOTAL AND PER CAPITA, FOR 29 SELECTED LARGE SMSAS AND CORRESPONDING CENTRAL CITIES, 1960

	SMSA			
SMSA Size Group (29 Selected Large SMSAS)	Total (Million Dollars)	Per Capita (Dollars)		
	(1)	(2)		
Over 5 Million	\$82,145.0	\$2,963		
2 to 5 Million	46,647.0	2,599		
1 to 2 Million	44,495.0	2,604		
Less than 1 Million	12,508.0	2,208		
1 Million & Over	173,287.0	2,761		
Total	185,795.0	2,715		

Source: Computed from Table C-9 and Table A-15.

SMSA Size Group	Central City			
(Data are for 29 Selected Large Central Cities)	Total (Million Dollars)	Per Capita (Dollars)		
	(1)	(2)		
Over 5 Million	\$43,413.1	\$2,807		
2 to 5 Million	16,526.0	2,419		
1 to 2 Million	21,859.7	2,455		
Less than 1 Million	6,791.2	2,177		
1 Million & Over	81,798.8	2,622		
Total	88,590.0	2,581		

Source: Computed from Table C.9 and Table A-14.

per capita personal income in central cities of size 1 to 2 million. Per capita personal income received in central cities of size 1 million and over was 120.4 percent of per capita personal income received in central cities of size less than 1 million. Similarly, per capita personal income received in central cities of size 1 to 2 million, 2 to 5 million, and over 5 million were 112.8 percent, 111.1 percent, and 128.9 percent, respectively, of per capita personal income in central cities of size less than 1 million.

Per capita personal income in central cities of size 2 to 5 million, 1 to 2 million, and less than 1 million were less than all central city average of per capita personal income. Only per capita personal income in central cities of size over 5 million was larger than all central city average of per capita personal income. This points to the high proportion (45.1 percent) of total selected central city population accounted for by the central cities of size over 5 million.

Per capita personal income for all the SMSAS taken together was \$2,715 (Table IV-6). As in central cities, in SMSAS per capita personal income increased with increase in SMSA size, excepting that per capita personal income in SMSAS of size 2 to 5 million was slightly lower than per capita personal income in SMSAS of size 1 to 2 million. Per capita personal income in SMSAS of size 1 million and over, 1 to 2 million, 2 to 5 million, and over 5 million were 125.0 percent, 117.9 percent, 117.7 percent, and 134.2 percent respectively of per capita personal income in SMSAS of size less than 1 million. In case of central cities, per capita personal income in central cities of size over 5 million was

128.9 percent of per capita personal income in central cities of size less than 1 million. Compared to this, in case of SMSAS, per capita personal income received in SMSAS of size over 5 million was 134.2 percent of per capita personal income in SMSAS of size less than 1 million. Thus considering our four size classes of SMSAS, namely, over 5 million, 2 to 5 million, 1 to 2 million, and less than 1 million, the difference between per capita personal income in the smallest and the largest size SMSAS, namely, SMSAS of size less than 1 million and SMSAS of size over 5 million was higher than the difference in per capita personal income in the corresponding smallest and the largest size central cities.

Per capita personal incomes in SMSAS of size 2 to 5 million, 1 to 2 million, and less than 1 million were lower than all SMSA average of per capita personal income. Only per capita personal income in SMSAS of size over 5 million was higher than all SMSA average of per capita personal income. This again shows the high concentration of the selected SMSA population in the SMSAS of size over 5 million.

Given per capita personal income, total personal income is determined by the size of population. This is shown in Table IV-6. As per capita personal income in central cities of size over 5 million was higher than all central city average of per capita personal income, the proportion of total selected central city personal income accounted for by central cities of size over 5 million was higher as compared to the proportion of total selected central city population that they accounted for. On the other hand, as per capita personal incomes in central cities of size

2 to 5 million, 1 to 2 million, and less than 1 million were lower than all central city average of per capita personal income, the proportions of total selected central city personal income represented by central cities of size 2 to 5 million, 1 to 2 million, and less than 1 million were lower as compared to the respective proportions of total selected central city population that they represented. Central cities of size over 5 million claimed 45.1 percent of total selected central city population and 49.0 percent of total selected central city personal income. On the other hand central cities of size up to 5 million accounted for 54.9 percent of total selected central city population and 51.0 percent of total selected central city personal income. In case of SMSAS this same pattern of distribution of personal income between metropolitan areas of different size classes was noticed.

Per capita personal income in central cities of different size classes as percentage of per capita personal income in corresponding SMSAS is shown in column (1), Table IV-5. As column (1) in Table IV-5 shows in SMSAS of all the five different size classes per capita personal income in central cities as percentage of per capita personal income in corresponding SMSAS was lower than one hundred. Moreover, the ratio of per capita personal income in central cities to per capita personal income in corresponding SMSAS was lower for larger SMSAS than for the smaller SMSAS. This is also reflected in central city share of metropolitan area receipt of personal income. In SMSAS of all the five different size classes central city share of metropolitan area receipt of personal income was lower as compared to central city share of metropolitan

TABLE IV-5

TOTAL PERSONAL INCOME, AND PER CAPITA PERSONAL INCOME IN 29 SELECTED LARGE CENTRAL CITIES AS PERCENTAGE OF TOTAL PERSONAL INCOME AND PER CAPITA PERSONAL INCOME RESPECTIVELY IN CORRESPONDING 29 SELECTED LARGE SMSAS, 1960

SMSA Size Group	Per Capita Personal Income	Total Personal Income	
(Data are for 29 Selected Large SMSAS/ Central Cities)	Central City as Percentage of SMSA	Central City as Percentage of SMSA	
	(1)	(2)	
	(Percentage Distribution)		
Over 5 Million	94.7	52.8	
2 to 5 Million	93.1	35.4	
1 to 2 Million	94.3	49.1	
Less than 1 Million	98.6	54.3	
		an and a state of the state of	
1 Million & Over	95.0	47.2	
Total	95.1	47.7	

Source: Computed from Table IV-6.

area population. Central City share of metropolitan area population were 55.8 percent, 38.1 percent, 52.1 percent, 55.1 percent, and 49.7 percent in SMSAS of size over 5 million, 2 to 5 million, 1 to 2 million, less than 1 million, and 1 million and over respectively. Compared to this central city share of metropolitan area receipt of personal income were 52.8 percent, 35.4 percent, 49.1 percent, 54.3 percent, and 47.2 percent in SMSAS of size over 5 million, 2 to 5 million, 1 to 2 million, less than 1 million, and 1 million and over respectively. While central city share of metropolitan area receipt of personal income was lower compared to central city share of metropolitan area population in SMSAS of all the five different size classes, the difference between central city share of metropolitan area receipt of personal income and central city share of metropolitan area population was larger for SMSAS of larger size than for SMSAS of smaller size. Thus in SMSAS of size less than 1 million central city share of metropolitan area population, and central city share of metropolitan area receipt of personal income were 55.1 percent and 54.3 percent respectively; compared to this in SMSAS of size over 5 million central city share of metropolitan area population and central city share of metropolitan area receipt of personal income were 55.8 percent and 52.8 percent respectively. In SMSAS of size less than 1 million the difference between central city share of metropolitan area population and central city share of metropolitan area receipt of personal income was only 0.8 percentage point; but in SMSAS of size over 5 million the difference between central city share of metropolitan area population and central city share of metropolitan area receipt of personal income was 3.0 percentage points.

D. HIGHER CONCENTRATION OF OLD PEOPLE IN CENTRAL CITIES IN COMPARISON WITH THAT IN CORRESPONDING METROPOLITAN AREAS

In Chapter III it has been shown that age composition of population in all the 29 selected large central cities taken together was older as compared to age composition of population in corresponding SMSAS. In this section it is shown that this was true not only for all the central cities taken together but also for central cities of all the five different size classes. In general, the proportion of total population in the age groups under 18 years and 65 years and over declined with the increase in size of central cities and SMSAS and the proportion of total population in the age group 18 to 44 years increased with increase in size of central cities and SMSAS.

Age composition of population in central cities compared with age composition of population in corresponding SMSAS showed that in SMSAS of all the five different size classes, namely, over 5 million, 2 to 5 million, 1 to 2 million, less than 1 million, and 1 million and over, central cities had a smaller proportion of their total population in the age group under 18 years than did corresponding metropolitan areas. On the other hand, in SMSAS of all the five different size classes, central cities had a larger proportion of their total population in the age groups 18 to 64 years, and 65 years and over than did corresponding SMSAS, excepting that only in SMSAS of size less than 1 million both central cities and SMSAS had roughly equal proportion of their total population in the age group 18 to 64 years.

If population age group 18 to 64 years is broken into population age groups 18 to 44 years and 45 to 64 years, it is found that in SMSAS

of all the five different size classes central cities had a smaller proportion of their total population in the age group 18 to 44 years than did corresponding SMSAS. On the other hand, in SMSAS of all the five different size classes central cities had a larger proportion of their total population in the age group 45 to 64 years than did corresponding SMSAS. Thus, in fact, in SMSAS of all the five different size classes central cities had a smaller proportion of their total population in age groups under 18 years, and 18 to 44 years than SMSAS had. On the other hand, in SMSAS of all the five different size classes central cities had a larger proportion of their total population in the age groups 45 to 64 years and 65 years and over than did corresponding metropolitan areas. Central cities thus had a larger proportion of their total population in the older age groups, that is, age groups 45 to 64 years, and 65 years and over than did corresponding SMSAS.

Central city population, by age, expressed as percentage of corresponding SMSA population by age also points to the larger concentration of old people in central cities than in corresponding SMSAS. In SMSAS of all the five different size classes central city share of metropolitan area population in age groups under 18 years, and 18 to 44 years was lower than central city share of metropolitan area total population. On the other hand, in SMSAS of all the five different size classes central city share of metropolitan area population in age groups 45 to 64 years, and 65 years and over was larger than central city share of metropolitan area total population.

Table IV-7 shows central city share of metropolitan area population by age groups for SMSAS of five different size classes. Central city share of metropolitan area total population for SMSAS of size over 5 million, 2 to 5 million, 1 to 2 million, less than 1 million, and 1 million and over were 55.8 percent, 38.1 percent, 52.1 percent, and 55.1 percent, and 49.7 percent respectively. In SMSAS of size 1 million and over, compared to central city share of metropolitan area total population of 49.7 percent central city share of metropolitan area population in age groups under 18 years, and 18 to 44 years were 45.3 percent and 49.1 percent respectively. Similarly, in SMSAS of size less than 1 million, compared to central city share of metropolitan area total population of 55.1 percent central city share of metropolitan area population in age groups under 18 years, and 18 to 44 years were 53.7 percent, and 53.3 percent respectively. In contrast, in SMSAS of size 1 million and over, central city share of metropolitan area population in age groups 45 to 64 years, and 65 years and over were 54.2 percent, and 58.5 percent respectively. Similarly, in SMSAS of size less than 1 million central city share of metropolitan area population in age groups 45 to 64 years, and 65 years and over were 58.1 percent and 60.6 percent respectively.

Percentage distribution of total central city population and total SMSA population is compared in Table VI-8. Comparison is shown for three broad age groups and for five different size classes of SMSAS.

Percentage of total central city population in age group under 18 years declined from 34.5 percent for central cities of size less than 1 million

TABLE IV-7

CENTRAL CITY SHARE OF METROPOLITAN AREA POPULATION
FOR 29 SELECTED SMSAS GROUPED INTO FIVE SIZE CLASSES, 1960

SMSA Size Group	Age Group					
(Data are for 29 Selected Large Central Cities/SMSAS)	Total	Under 18 Years	18 to 44 Years	45 to 64 Years	65 Years and Over	
	(Percent)					
Over 5 Million	55.8	51.3	55.4	59.9	63.0	
2 to 5 Million	38.1	33.9	36.8	43.0	47.4	
1 to 2 Million	52.1	48.0	51.5	56.3	63.2	
Less than 1 Million	55.1	53.7	53.3	58.1	60.6	
1 Million & Over	49.7	45.3	49.1	54.2	58.5	
Total	50.2	46.0	49.4	54.5	58.7	

Source: Derived from Tables A-14 and A-15.

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SMSA Size Group (Data are for 29 Selected Large Central Cities/ SMSAS)	Under 18 Years		18 to 64 Years		65 Years and Over		
	Central City	SMSA	Central City	SMSA	Central City	SMSA	
	(1)	(2)	(3)	(4)	(5)	(6)	
	(Percent			cent)			
Over 5 Million	29.4	32.0	60.4	59.0	10.2	9.0	
2 to 5 Million	30.2	34.0	58.7	57.1	11.0	8.9	
1 to 2 Million	32.6	35.4	57.9	56.7	9.5	7.8	
Less than 1 Million	34.5	35.4	55.2	55.3	10.3	9.4	
		···					
1 Million & Over	30.5	33.5	59.3	57.8	10.2	8.6	
Total	30.9	33.7	58.9	57.6	10.2	8.7	

Source: Table A-16 and Table A-17.

to 29.4 percent for central cities of size over 5 million. Similarly, percentage of total SMSA population in age group under 18 years declined from 35.4 percent for SMSAS of size less than 1 million to 32.0 percent for SMSA of size over 5 million. Percentage of total central city population or SMSA population in the age group 65 years and over declined only slightly with increase in the size of central cities or SMSAS. Thus percentage of total central city population in the age group 65 years and over declined from 10.3 percent in central cities of size less than 1 million to 10.2 percent in central cities of size over 5 million. In the same way, percentage of total SMSA population in the age group 65 years and over declined from 9.4 percent in SMSAS of size less than 1 million to 9.0 percent in SMSAS of size over 5 million. Thus, both in central cities and their corresponding SMSAS the proportion of total population in the age group under 18 years and 65 years and over declined as the central city size or the SMSA size increased. This, apparently, points to relatively smaller proportion of dependent-age population in larger size central cities and SMSAS as compared to that in smaller size central cities and SMSAS. On the other hand, both in central cities and SMSAS percentage of total population in the age group 18 to 64 years increased with increase in the central city or the SMSA size. In central cities the proportion of total population in the age group 18 to 64 years increased from 55.2 percent in central cities of size less than 1 million to 60.4 percent in central cities of size over 5 million. Similarly, in SMSAS the proportion of total population in the age group 18 to 64 years increased from 55.3 percent in SMSAS of

size less than 1 million to 59.0 percent in SMSAS of size over 5 million. This, apparently, points to larger proportion of working age population in larger size central cities and SMSAS as compared to that in smaller size central cities and SMSAS.

A comparison of percentage of total central city population with percentage of total corresponding SMSA population in different age groups shows that in SMSAS of all the five different size classes percentage of total central city population in the age group under 18 years was lower compared to percentage of total SMSA population in the same age group. For example, in SMSAS of size 1 million and over the proportion of total central city population, and the proportion of total SMSA population in age group under 18 years were 30.5 percent and 33.5 percent respectively. In SMSAS size less than 1 million, percentage of total central city population, and percentage of total SMSA population in age group under 18 years were 34.5 percent and 35.4 percent respectively. On the other hand, in SMSAS of all the five different size classes the percentages of total central city population in the age groups 18 to 64 years and 65 years and over were higher as compared to the percentages of total corresponding SMSA population in the respective age group. For example, in SMSAS of size 1 million and over the proportion of total central city population and the proportion of total SMSA population in age group 18 to 64 years were 59.3 percent and 57.8 percent respectively. Similarly, in SMSAS of size 1 million and over proportion of total central city population and proportion of total SMSA population in age group 65 years and over were 10.2 percent and 8.6 percent respectively. In metropolitan areas of size less than 1 million proportion of total central city

population, and proportion of total SMSA population were 10.3 percent and 9.4 percent respectively.

E. LARGER CONCENTRATION OF HOUSEHOLDS IN POVERTY INCOME CLASS IN CENTRAL CITIES COMPARED TO THAT IN CORRESPONDING METROPOLITAN AREAS

One of the reasons why central cities provide an impression of decay, lack of resources and of calling for large non-developmental expenditures is the concentration of large body of poor households, that is, households with annual income under \$4,000 in central cities. In Chapter III it has been shown that percentage share of households in poverty income class in total households was higher in all the 29 selected central cities taken together than in the corresponding metropolitan areas. In this section it is shown that in metropolitan areas of all the five different size classes excepting in SMSAS of size less than 1 million the percentage share of poor households in total households was higher in central cities than in the corresponding metropolitan areas. That the proportion of poor households in total households is higher in central cities than in the corresponding metropolitan areas tends to detract attention from another important piece of information, that proportion of households in the highest income bracket (\$15,000 and over) was also higher in central cities than in corresponding SMSAS. A more comprehensive picture is that, compared to that in their corresponding SMSAS the central cities had a larger proportion of their households both in poverty income class and in the highest income class. This points to higher degree of inequality in income distribution in central cities than in corresponding SMSAS. More importantly, it shows that

compared to that in corresponding SMSAS central cities claim a higher concentration not only of households in poverty income class, but also of households in the highest income class.

The proportion of total central city households and the proportion of total metropolitan area households having poverty income or income under \$4,000 is compared in Table IV-9. As Table IV-9 shows both in central cities and in SMSAS the proportion of total households having income below \$4,000 declined with increase in size of central cities or SMSAS. In central cities the proportion of total households having income below \$4,000 declined from 29.8 percent for central cities of size less than 1 million to 21.1 percent for central cities of size over 5 million. Similarly, in metropolitan areas the proportion of total households having income below \$4,000 declined from 31.4 percent for SMSAS of size less than 1 million to 20.9 percent for SMSAS of size over 5 million. Appendix Tables A-21 and A-22 show that both in central cities and in metropolitan areas the proportion of total households having income \$4,000 to \$8,000 also declined with increase in size of central cities and metropolitan areas. On the other hand, appendix Tables A-21 and A-22 also show that both in central cities and in SMSAS proportion of total households in income classes \$8,000 to \$15,000 and \$15,000 and over increased with increase in size of central cities and metropolitan areas. Thus, both larger central cities and larger metropolitan areas claimed a relatively larger proportion of total households in the higher income classes than did smaller size central cities and

TABLE IV-9

PERCENTAGE DISTRIBUTION OF HOUSEHOLDS, BY INCOME LEVELS, FOR SMSAS AND CORRESPONDING CENTRAL CITIES, BY SMSAS OF DIFFERENT SIZE, 1960

SMSA Size Group	Income Level Under \$4,000				
(Data are of 29 Selected Large	Central City				
Central Cities/ SMSAS)	(1)	(2)			
	(Percent)				
Over 5 Million	21.1	20.9			
over 5 million	21.1	20.9			
2 to 5 Million	25.6	21.5			
1 to 2 Million	23.6	21.7			
Less than 1 Million	29.8	31.4			
1 Million & Over	22.8	21.3			
Total	23.4	22.1			

Source: Table A-22 and Table A-21.

SMSAS. This is reflected in higher per capita personal income in larger central cities and SMSAS as compared to that in smaller central cities and SMSAS.

Table IV-9 shows that in SMSAS of all the five different size classes excepting in SMSAS of size less than 1 million proportion of poor households in total households was higher in central cities than in the corresponding metropolitan areas. For example, in SMSAS of size 1 million and over the proportion of households with income below \$4,000 in total households were 22.8 percent for central cities and 21.3 percent for corresponding metropolitan areas. On the other hand in SMSAS of size less than 1 million the proportion of poor households in total households were 29.8 percent for central cities and 31.4 percent for corresponding SMSAS. Similarly, appendix Tables A-21 and A-22 show that in SMSAS of all the five different size classes excepting in SMSAS of size 2 to 5 million proportion of total households in income class \$15,000 and over was higher for the central cities than for the corresponding metropolitan areas. For example, in SMSAS of size 1 million and over the proportion of total households in income class \$15,000 and over was 14.4 percent as compared to 15.9 percent in corresponding central cities. Similarly, in SMSAS of size less than 1 million the proportion of total households in income class \$15,000 and over was 9.8 percent as against 12.2 percent for the corresponding central cities. In SMSAS of size 2 to 5 million households in income class \$15,000 and over represented 13.4 percent of total households; compared to this in corresponding central cities households in income class \$15,000 and over made up 13.2 percent of total households.

That compared to that in their corresponding metropolitan areas, in central cities there were relatively larger concentration of households both in poverty income class and at the highest income class is also shown by central city share of corresponding metropolitan area households by income class (Table IV-10). This is shown by the fact that in SMSAS of all the five different size classes excepting in SMSAS of size 2 to 5 million central city share of corresponding metropolitan area households in income classes under \$4,000 and \$15,000 and over were higher than central city share of metropolitan area total households. In case of metropolitan areas of size 2 to 5 million central city share of metropolitan area households in income class under \$4,000 was higher than central city share of metropolitan area total households; but central city share of metropolitan area households in income class \$15,000 and over was lower than central city share of metropolitan area total households. Central city share of metropolitan area total households in SMSAS of size over 5 million, 2 to 5 million, 1 to 2 million, less than 1 million, and 1 million and over were 57.6 percent, 41.3 percent, 55.0 percent, 52.9 percent, and 52.4 percent respectively. Compared to this central city share of metropolitan area households in poverty income class, that is in income class under \$4,000 were 58.1 percent, 49.1 percent, 59.8 percent, 50.2 percent and 56.1 percent in SMSAS of size over 5 million, 2 to 5 million, 1 to 2 million, less than 1 million, and 1 million and over respectively. Similarly, central city share of metropolitan area households in highest income class, that is, in income class \$15,000 and over were 66.6 percent, 40.6 percent, 58.7

TABLE IV-10

HOUSEHOLDS, BY INCOME CLASS, IN 29 SELECTED LARGE CENTRAL CITIES AS PERCENTAGE OF HOUSEHOLDS, BY INCOME CLASS IN CORRESPONDING 29 SELECTED LARGE SMSAS, BY SMSA SIZE, 1960

SMSA Size Group	Income Class					
(Data are for 29 Selected Large Central Cities/	Under \$4,000	\$4,000 to \$8,000	\$8,000 to \$15,000	\$15,000 and Over	Total	
SMSAS)	(1)	(2)	(3)	(4)	(5)	
		-	(Percent)			
Over 5 Million	58.1	51.0	59.2	66.6	57.6	
2 to 5 Million	49.1	38.1	39.5	40.6	41.3	
1 to 2 Million	59.8	50.8	54.3	58.7	55.0	
Less than 1 Million	50.2	47.6	58.5	65.9	52.9	
1 Million & Over	56.1	4 7.2	52.4	57.8	52.4	
Total	55.4	47.3	52.8	58.3	52.4	

Source: Computed from Table A-20 and Table A-19.

percent, 65.9 percent, and 57.8 percent in SMSAS of size over 5 million, 2 to 5 million, 1 to 2 million, less than 1 million, and 1 million and over respectively. Thus distribution of households by income received shows that in SMSAS of all the five different size classes excepting in SMSAS of size less than 1 million central cities had a relatively larger proportion of their total households in poverty income class than corresponding SMSAS had. This also shows that in SMSAS of all the five different size classes excepting in SMSAS of size 2 to 5 million central cities had a larger proportion of their total households in highest income class, that is, in income class \$15,000 and over than corresponding SMSAS had.

CENTRAL CITIES ROLE AS PRODUCERS OF GOODS AND SERVICES; COMPARISONS BY REGION

In this chapter selected central cities' role in their corresponding metropolitan areas as revealed by such new measures as employment by place of work, per worker earned personal income, and total earned personal income is compared by region with selected central cities' role in their corresponding metropolitan areas as depicted by such traditional measures as population by age composition, employment by place of residence, distribution of households by income class, per capita personal income received, and total personal income received. This chapter primarily focuses on comparison by region of central cities' role in metropolitan area production of goods and services with central cities role in sharing metropolitan area population and receipt of personal income.

It is shown that in each of the eight regions, namely, New England, Mid East, Great Lakes, Plains, South East, South West, Rocky Mountain, and Far West, without any exception selected central cities share of corresponding metropolitan area employment by work location was much larger than selected central cities share of corresponding metropolitan area population, indicating that selected central cities role as place of work was much larger than selected central cities role as place of residence.

Employment by place of work for both selected central cities and their corresponding metropolitan areas were highly concentrated in a

relatively few regions. Out of eight regions only three, namely, Mid East, Great Lakes, and Far West together claimed close to four-fifths of total selected metropolitan area employment by place of work. Selected metropolitan areas in these three regions are also characterized by high degree of industrialization. Selected metropolitan areas in these three regions together represented over four-fifths of total selected metropolitan area manufacturing employment. Selected central cities highly significant role as location of corresponding metropolitan area employment is indicated by the high proportion of corresponding metropolitan area employment claimed by the selected central cities in these three regions. In selected metropolitan areas in Mid East and Great Lakes central cities claimed around three-fourths of total corresponding metropolitan area employment by place of work. Similarly, selected central cities in Far West represented over three-fifths of corresponding metropolitan area employment by place of work.

Selected central cities role as location of corresponding metropolitan area employment was equally remarkable in relatively less
industrialized regions such as South East, South West, and Rocky Mountain.
Selected metropolitan areas in South East, South West, and Rocky Mountain
represented 5.0 percent, 5.1 percent, and 1.3 percent respectively of
total selected metropolitan area total employment, but they claimed 2.8
percent, 3.4 percent, and 0.9 percent respectively of total selected
metropolitan area manufacturing employment. Selected central cities in
South East and Rocky Mountain represented over three-fourths of corresponding metropolitan area employment by place of work and selected

central cities in South West accounted for over four-fifths of corresponding metropolitan area employment by place of work.

It is shown that out of eight regions in six all industry average of per worker earned personal income were higher in selected central cities than in their corresponding metropolitan areas. The two regions in which all industry average of per worker earned personal income were slightly lower for selected central cities than in their corresponding metropolitan areas are Plains and South East. Selected metropolitan areas in these two regions taken together, however, represented relatively small proportion (11.7 percent) of total selected metropolitan area employment. What is more important, in the three regions, namely, Mid East, Great Lakes, and Far West where more than three-fourths of total selected metropolitan area employment were located, all industry average of per worker earned personal income in selected central cities were higher than all industry average of per worker earned personal income in corresponding metropolitan areas.

The fact that in each of the eight regions selected central city share of corresponding metropolitan area employment by place of work was much higher than selected central city share of corresponding metropolitan area population, and also that out of eight regions in six selected central city labor productivity was higher than corresponding metropolitan area labor productivity ensured that in each of the eight regions selected central cities share of corresponding metropolitan area earned personal income would be much higher than selected central cities share of corresponding metropolitan area population.

It is also shown that out of eight regions in six, selected central city share of corresponding metropolitan area earned personal income were larger than selected central city share of corresponding metropolitan area employment by place of work. This indicated that out of eight regions in six, all industry average of per worker earned personal income were higher in selected central cities than in their corresponding metropolitan areas. This contrasts sharply with the fact that out of eight regions in five, per capita personal income received were lower in central cities than in their corresponding metropolitan areas. In consequence, in these five regions, namely, New England, Mid East, Great Lakes, Plains, and South East, selected central city share of corresponding metropolitan area receipt of personal income were lower than selected central city share of corresponding metropolitan area population. What is more important, a comparison of selected central city share of corresponding metropolitan area earned personal income with selected central city share of corresponding metropolitan area receipt of personal income showed that in each of the eight regions selected central city share of corresponding metropolitan area earned personal income was much larger than selected central city share of corresponding metropolitan area receipt of personal income. Out of eight regions in six, selected central cities claimed only less than half of corresponding metropolitan area receipt of personal income; but compared to this out of eight regions in six, selected central cities represented three-fourths and over of corresponding metropolitan area earned personal income. In the remaining two regions, namely, New England and Far West selected central

cities claimed 23.3 percent and 47.7 percent respectively of corresponding metropolitan area receipt of personal income and 59.0 percent and 62.6 percent respectively of corresponding metropolitan area earned personal income. This clearly showed that in each of the eight regions selected central cities role as contributors to corresponding metropolitan area production of goods and services was much larger than selected central cities role in sharing corresponding metropolitan area receipts of personal income.

It is shown that in each of the eight regions selected central cities had a relatively smaller proportion of their total population in age group under 18 years than their corresponding metropolitan areas had. Similarly, out of eight regions in seven selected central cities had a relatively smaller proportion of their total population in age group 18 to 44 years than their corresponding metropolitan areas had. On the other hand, in each of the eight regions, compared with that in their corresponding metropolitan areas selected central cities had a larger proportion of their total population in age groups 45 to 64 years and 65 years and over. This indicated that compared to that in their corresponding metropolitan areas selected central cities had a larger concentration of old people.

In the same way, it has been shown that compared to that in their corresponding metropolitan areas selected central cities had a relatively larger concentration of households in poverty income class. It is also shown that compared to that in their corresponding metropolitan areas

selected central cities showed a larger concentration not only of poor households, but also of households in the highest income class.

A. CENTRAL CITIES ROLE IN EMPLOYMENT, BY REGION

In Chapter IV it has been shown that in SMSA's of all the five different size classes central city share of metropolitan area employment by work location was much higher as compared to central city share of metropolitan area population or central city share of metropolitan area employment by residence location. Consideration of new measure of employment, that is, employment by central city work location as an indicator of central cities role as producers of goods and services showed that in SMSA's of all the five different size classes, central cities role as producers of goods and services in their corresponding metropolitan areas was much larger than what can ordinarily be inferred from traditional measure of employment, that is, employment by central city residence location. In this section it is shown that consideration of new measure of employment, that is, employment by central city work location shows that in all the eight regions central cities role as producers of goods and services in their corresponding metropolitan areas was much larger than what is usually revealed by a consideration of traditional measure of employment, that is, employment by central city residence location.

Central city share of metropolitan area employment by work location is shown in Table V-1 for four broad groups of industries and by eight regions, namely, New England, Mid East, Great Lakes, Plains, South East,

TABLE V-1

EMPLOYMENT IN 29 SELECTED LARGE CENTRAL CITIES AS PERCENTAGE OF EMPLOYMENT IN CORRESPONDING SMSAS, BY INDUSTRY, BY REGION, 1960

Industry Groups Region (Date are for 29 Total Construc-Manufac-Wholesale Public Selected Large tion turing & Retail Adminis-Central Cities/ Trade tration & SMSAS) Services (2) (4) (1) (3) (5) (Percent) New England 55.9 45.1 49.7 55.0 61.1 76.3 Mid East 73.1 62.3 70.0 72.4 68.0 77.3 73.1 76.1 Great Lakes 75.6 81.1 77.3 77.7 78.1 68.1 Plains South East 77.5 71.9 77.2 78.5 78.0 South West 84.2 86.4 84.6 86.1 83.3 Rocky Mountain 76.5 72.0 79.1 77.3 75.8 Far West 62.0 56.1 63.9 62.3 61.6 Total 71.9 64.2 71.4 71.4 73.2

Source: Computed from Table B-3 and Table B-2.

South West, Rocky Mountains, and Far West. As Table V-1 shows selected central city share of corresponding metropolitan area employment by work location were 55.9 percent, 73.1 percent, 75.6 percent, 78.1 percent, 77.5 percent, 84.2 percent, 76.5 percent, and 62.0 percent for New England, Mid East, Great Lakes, Plains, South East, South West, Rocky Mountain, and Far West respectively. Compared to this selected central city share of corresponding metropolitan area employment by residence location were 28.1 percent, 55.2 percent, 54.7 percent, 47.6 percent, 53.5 percent, 73.8 percent, 55.5 percent, and 41.7 percent for New England, Mid East, Great Lakes, Plains, South East, South West, Rocky Mountain, and Far West respectively. Thus, in each of the eight regions selected central city share of corresponding metropolitan area employment by work location was much larger as compared to selected central city share of corresponding metropolitan area employment by residence location. Out of eight regions in seven, namely, New England, Mid East, Great Lakes, Plains, South East, South West, Rock Mountain, and Far West, selected central city share of corresponding metropolitan area employment by residence location was, however, higher than selected central city share of corresponding metropolitan area population. Only in Far West selected central city share of corresponding metropolitan area employment by residence location was lower than selected central city share of corresponding metropolitan area population. Selected central city share of corresponding metropolitan area population were 26.9 percent, 52.4 percent, 52.6 percent, 44.1 percent, 51.9 percent, 71.9 percent, 53.2 percent, and 42.7 percent for New England, Mid East, Great

Lakes, Plains, South East, South West, Rocky Mountain, and Far West respectively. That in each region selected central city share of corresponding metropolitan area employment by work location was higher than selected central city share of corresponding metropolitan area population shows that in each region, compared with their corresponding SMSAS, selected central cities were much more important as place of work than as place of residence.

Location of both central city employment and metropolitan area employment by region showed a high degree of concentration in a few regions. Out of eight regions three, namely, Mid East, Great Lakes, and Far West, together represented 77.0 percent of total selected central city employment by work location and 78.0 percent of total corresponding metropolitan area employment by place of work. These three regions are also among the highly industrialized areas. Selected metropolitan areas in these three regions together accounted for 82.5 percent of total selected metropolitan area manufacturing employment. Similarly, selected central cities in these three regions together represented 81.9 percent of total selected central city manufacturing employment. Central cities' importance as producers of goods and services in their corresponding metropolitan areas is shown by the high proportion of selected metropolitan area employment in these three regions that is accounted for by the corresponding central cities. Selected central cities in these three regions, namely, Mid East, Great Lakes, and Far West, accounted for 73.1 percent, 75.6 percent, and 62.0 percent respectively of total corresponding metropolitan area employment by work location. In Mid

East selected central city share of corresponding metropolitan area population, employment by residence location and employment by work location were 52.4 percent, 55.2 percent, and 73.1 percent respectively. In Great Lakes selected central city share of corresponding metropolitan area population, employment by residence location and employment by work location were 52.6 percent, 54.7 percent, and 75.6 percent respectively. Similarly, in Far West selected central city share of corresponding metropolitan area population, employment by residence location, and employment by work location were 42.7 percent, 41.7 percent, and 62.0 percent respectively. Selected central city share of corresponding metropolitan area employment by work location was also remarkably high in relatively less industrialized areas. Selected metropolitan areas in South East, South West, and Rocky Mountain accounted for 5.0 percent, 5.1 percent, and 1.3 percent respectively of total selected metropolitan area total employment, but they accounted for 2.8 percent, 3.4 percent, and 0.9 percent respectively of total selected metropolitan area manufacturing employment. Selected central cities share in corresponding metropolitan area employment by work location in South East, South West, and Rocky Mountain were 77.5 percent, 84.2 percent, and 76.5 percent respectively.

As can be seen from Table V-1 in 1960 selected central cities in each of the eight regions represented a high proportion of corresponding metropolitan area employment by work location in each broad industry groups without any exceptions. Selected central cities claimed a high proportion of corresponding metropolitan area employment even in such

industry groups as construction, manufacturing, and wholesale and retail trade for which location outside central cities are now considered to be more preferable.

B. PRODUCTIVITY IN CENTRAL CITIES IN COMPARISON WITH THEIR METROPOLITAN AREAS, BY REGION

Besides employment by place of work, the other most important indicator of central cities' role as producers of goods and services in their corresponding metropolitan areas is central city labor productivity in relation to corresponding metropolitan area labor productivity. In Chapter IV it has been shown that in SMSAS of all the five different size classes all industry average of per worker earned personal income was higher in selected central cities than in corresponding metropolitan areas. Central city labor productivity data comparable with corresponding metropolitan area labor productivity data were available only for three groups of industries, namely, manufacturing, wholesale and retail trade, and services. In metropolitan areas of all the five different size classes selected central city labor productivity in manufacturing was lower than corresponding metropolitan area labor productivity in manufacturing. On the other hand, in SMSAS of all the five different size classes, selected central city labor productivity in wholesale and retail trade was higher than corresponding SMSA labor productivity in wholesale and retail trade. In metropolitan areas of all the five different size classes excepting in SMSAS of size less than 1 million selected central city labor productivity for services was higher than corresponding

metropolitan area labor productivity for services.

In this section it is shown that out of eight regions in six, all industry average of per worker earned personal income in selected central cities was higher than per worker earned personal income in corresponding metropolitan areas. In two regions all industry average of per worker earned personal income in selected central cities was slightly lower than all industry average of per worker earned personal income in corresponding metropolitan areas. Unlike metropolitan areas grouped into five different size classes, metropolitan areas grouped by eight regions showed that at least in one region, namely, New England, selected central city manufacturing industry labor productivity was higher than corresponding SMSA manufacturing industry labor productivity. In all the other seven regions, however, selected central city manufacturing labor productivity was lower than corresponding SMSA manufacturing labor productivity. In constrast, in all the eight regions selected central city wholesale and retail trade labor productivity was higher as compared to corresponding metropolitan area wholesale and retail trade labor productivity. Out of eight regions in seven, selected central city service industry labor productivity was higher than corresponding metropolitan area service industry labor productivity. Thus in most regions selected central city wholesale and retail trade labor productivity and services labor productivity were in general higher than corresponding metropolitan area wholesale and retail trade labor productivity and services labor productivity respectively; on the other hand, in most regions selected central city manufacturing labor productivity was

lower than corresponding metropolitan area manufacturing labor productivity. However, in most of the regions all industry average of per worker earned personal income was higher for the selected central cities than for the corresponding metropolitan areas.

Table V-3 shows per worker earned personal income in 29 selected large central cities as percentage of per worker earned personal income in the corresponding metropolitan areas, by the eight regions. All industry average of per worker earned personal income in selected central cities expressed as percentage of all industry average of per worker earned personal income in corresponding metropolitan areas were 105.7 percent, 102.1 percent, 102.1 percent, 99.2 percent, 99.4 percent, 100.8 percent, 101.2 percent, and 100.9 percent in New England, Mid East, Great Lakes, Plains, South East, South West, Rocky Mountain, and Far West respectively. In Plains and South East all industry average of per worker earned personal income in selected central cities was lower than per worker earned personal income in corresponding metropolitan areas. In all other regions all industry average of per worker earned personal income in selected central cities was higher than all industry average of per worker earned personal income in corresponding metropolitan areas. However, selected metropolitan areas in Plains and South East together represented a relatively small proportion (11.7 percent) of total selected metropolitan area employment. In the three regions, namely, Mid East, Great Lakes, and Far West where more than three-fourths of total selected metropolitan area employment were concentrated, all industry average of per worker earned personal income in selected central cities was higher

TABLE V-3

PER WORKER EARNED PERSONAL INCOME IN 29 SELECTED LARGE CENTRAL CITIES AS PERCENTAGE OF PER WORKER EARNED PERSONAL INCOME IN THE CORRESPONDING SMSAS, BY REGION, 1959

n .	Industry Groups					
Region (Data are for 29 Selected Large Central Cities/SMSAS	Total	Manufac- turing	Wholesale & Retail Trade	Services		
	(1)	(2)	(3)	(4)		
		(Perc	ent)			
New England	105.7	105.2	118.0	106.1		
Mid East	102.1	92.2	113.3	105.8		
Great Lakes	102.1	99.5	111.3	101.7		
Plains	99.2	92.5	104.4	102.7		
South East	99.4	96.0	101.2	99.6		
South West	100.8	93.6	105.5	100.8		
Rocky Mountain	101.2	89.0	112.9	101.2		
Far West	100.9	96.0	104.6	102.5		
Total	101.4	95.6	109.5	103.6		

Source: Computed from Table B-5 and Table B-4.

than all industry average of per worker earned personal income in corresponding metropolitan areas. All industry average of selected central city labor productivity expressed as percentage of all industry average of corresponding metropolitan area labor productivity were 100.9 percent in Far West and 102.1 percent in both Mid East and Great Lakes.

In New England selected central city manufacturing labor productivity as percentage of corresponding metropolitan area manufacturing labor productivity was 105.2 percent. Thus in New England selected central city manufacturing labor productivity was higher than corresponding metropolitan area manufacturing labor productivity. In other regions the ratio of selected central city manufacturing labor productivity to corresponding metropolitan area manufacturing labor productivity varied from 89.0 percent in Rocky Mountain to 99.5 in Great Lakes. On the other hand, selected central city wholesale and retail trade labor productivity as percentage of corresponding metropolitan area wholesale and retail trade labor productivity varied from 101.2 percent in South East to 118.0 percent in New England. Similarly, the ratio of selected central city services labor productivity to corresponding metropolitan area services labor productivity ranged from 99.6 percent in South East to 106.1 percent in New England.

C. CENTRAL CITIES ROLE IN METROPOLITAN PRODUCTION OF GOODS AND SERVICES, BY REGION

Central cities role in metropolitan production of goods and services is determined by central city share of metropolitan area employment by work location and central city labor productivity in relation to

metropolitan area labor productivity. Section A above in this chapter has shown that in each region selected central city share of corresponding metropolitan area employment by work location was much larger than selected central city share of corresponding metropolitan area population or selected central city share of corresponding metropolitan area employment by residence location. Similarly, section B above in this chapter showed that in most of the regions all industry average of per worker earned personal income in selected central cities was slightly higher than all industry average of per worker earned personal income in corresponding metropolitan areas. These two facts together ensure that in most of the regions selected central city share of corresponding metropolitan area earned personal income would be much higher than selected central city share of corresponding metropolitan area population or selected central city share of corresponding metropolitan area employment by residence location. That in most of the regions all industry average of per worker earned personal income in selected central cities was slightly higher than all industry average of per worker earned personal income in corresponding metropolitan areas ensures that in most of the regions selected central city share of corresponding metropolitan area earned personal income will be higher than selected central city share of corresponding metropolitan area employment by work location. This is shown in this section. It is also shown that a comparison of selected central city share of corresponding metropolitan area earned personal income with selected central city share of corresponding metropolitan area personal income received would show that central cities role as

contributor to corresponding metropolitan area production of goods and services was much larger than selected central cities role as recipients of corresponding metropolitan area receipts of personal income.

Table V-2 shows earned personal income in 29 selected large central cities as percentage of earned personal income in corresponding metropolitan areas by region. As Table V-2 shows selected central city share of corresponding metropolitan area earned personal income were 59.0 percent, 74.6 percent, 77.2 percent, 77.5 percent, 77.1 percent, 84.9 percent, 77.4 percent, and 62.6 percent in New England, Mid East, Great Lakes, Plains, South East, South West, Rocky Mountain, and Far West respectively. Compared to this selected central city share of corresponding metropolitan area employment by work location were 55.9 percent, 73.1 percent, 75.6 percent, 78.1 percent, 77.5 percent, 84.2 percent, 76.5 percent, and 62.0 percent in New England, Mid East, Great Lakes, Plains, South East, South West, Rocky Mountain, and Far West respectively. Thus, in all regions excepting in Plains and South East selected central city share of corresponding metropolitan area earned personal income was higher than selected central city share of corresponding metropolitan area employment by work location. It has been shown previously (section A in this chapter) that in each of the eight regions selected central city share of corresponding metropolitan area employment by work location was much higher than selected central city share of corresponding metropolitan area population or employment by residence location. Table V-2 shows that in all the regions excepting in two selected central city share of corresponding metropolitan area earned personal income was

TABLE V-2

TOTAL EARNED PERSONAL INCOME IN 29 SELECTED LARGE CENTRAL CITIES AS PERCENTAGE OF TOTAL EARNED PERSONAL INCOME IN CORRESPONDING SMSAS, BY REGION, 1959

Industry Groups Region Total (Data are for 29 Construc-Manufac-Wholesale Public Selected Large tion turing Adminis-& Central Cities) Retail tration & Trade Services (1) (2) (3) (4) (5) (Percent) 59.0 45.1 52.2 64.9 New England 63.4 Mid East 74.6 62.3 64.6 82.0 79.9 Great Lakes 77.2 68.2 76.9 81.3 77.0 Plains 77.5 67.9 75.0 80.7 75.1 South East 77.1 71.6 74.1 77.9 79.5 South West 84.9 86.1 79.2 90.9 84.8 77.4 72.0 70.4 87.3 76.7 Rocky Mountain Far West 62.6 55.7 61.3 65.2 63.3 75.4 Total 73.2 63.8 68.4 78.0

Source: Computed from Table B-7 and Table B-6.

much higher than selected central city share of corresponding metropolitan area population or employment by residence location. That out of eight regions in six, selected central city share of corresponding metropolitan area earned personal income was larger than selected central city share of corresponding metropolitan area employment by work location reflects that in these six regions all industry average of per worker earned personal income was higher in selected central cities than in corresponding metropolitan areas.

A comparison of selected central city share of corresponding metropolitan area earned personal income (Table V-2) with selected central city share of corresponding metropolitan area receipt of personal income shows that the former share was much larger than the latter mentioned share. Selected central city share of corresponding metropolitan area receipt of personal income were 23.3 percent, 49.2 percent, 49.4 percent, 42.2 percent, 48.3 percent, 72.3 percent, 53.8 percent, and 42.9 percent in New England, Mid East, Great Lakes, Plains, South East, South West, Rocky Mountain, and Far West respectively. Thus in each of the eight regions selected central city share of corresponding metropolitan area receipt of personal income was much lower than selected central city share of corresponding metropolitan area earned personal income. This shows that selected central cities role in their corresponding metropolitan areas was much larger as producers of goods and services than as recipients of personal income.

D. CENTRAL CITIES ROLE AS RECIPIENTS OF METROPOLITAN AREA RECEIPT OF PERSONAL INCOME

In Chapter III it has been shown that per capita personal income received for all the selected metropolitan areas taken together was higher than per capita personal income received in corresponding central cities. As a result selected central cities' share of corresponding metropolitan area receipts of personal income was lower than selected central cities share of corresponding metropolitan area population. Chapter IV it has been shown that in metropolitan areas of all the five different size classes per capita personal income received in selected central cities was lower than per capita personal income received in corresponding metropolitan areas. As a result in metropolitan areas of all the five different size classes selected central city share of corresponding metropolitan area receipts of personal income was smaller than selected central city share of corresponding metropolitan area population. In this section it is shown that out of eight regions in five, per capita personal income received in selected central cities was lower than per capita personal income received in corresponding metropolitan areas. In consequence in five of the eight regions selected central city share of corresponding metropolitan area receipts of personal income was lower as compared to selected central city share of corresponding metropolitan area population. What is, however, more important is that a comparison of selected central city share of corresponding metropolitan area receipt of personal income with selected central city share of corresponding metropolitan area earned personal income shows that in each of the eight regions selected central city share of

corresponding metropolitan area earned personal income was much higher than selected central city share of corresponding metropolitan area receipts of personal income. This shows that central cities role as generator of corresponding metropolitan area earned personal income was much larger than central cities role as claimants of corresponding metropolitan area receipts of personal income. This points to the inadequacy of using the traditional measure of income alone to evaluate the importance of central cities role in their corresponding metropolitan area economy. Consideration of traditional measure of income, that is, personal income received, clearly results in serious under-estimation of the role played by the central cities in their corresponding metropolitan area economy.

Table V-4 shows per capita personal income in 29 selected large central cities as percentage of per capita personal income in corresponding 29 selected large metropolitan areas by region. Table V-4 also shows selected central city share of corresponding metropolitan area receipt of personal income by region. As Table V-4 shows per capita personal income in selected central cities as percentage of per capita personal income in corresponding metropolitan areas were 86.5 percent, 94.1 percent, 94.0 percent, 95.7 percent, 93.1 percent, 100.6 percent, 101.1 percent, and 100.5 percent in New England, Mid East, Great Lakes, Plains, South East, South West, Rocky Mountain, and Far West respectively. Thus, out of eight regions in five, namely, New England, Mid East, Great Lakes, Plains, and South East, per capita personal income received in selected central cities was lower than per capita personal income

TABLE V-4

PER CAPITA PERSONAL INCOME IN 29 SELECTED LARGE CENTRAL CITIES AS PERCENTAGE OF PER CAPITA PERSONAL INCOME IN CORRESPONDING 29 SELECTED LARGE SMSAS, BY REGION, 1960

	Per Capita Personal Income	Total Personal Income
	Central City as Percentage of SMSA	Central City as Percentage of SMSA
	(1)	(2)
	(Percent)'	(Percent)
Nov. Fnaland	86.5	23.3
New England	00.3	23,3
Mid East	94.1	49.2
Great Lakes	94.0	49.4
Plains	95.7	42.2
South East	93.1	48.3
South West	100.6	72.3
Rocky Mountain	101.1	53.8
Far West	100.5	42.9
Total	95.1	47.7

Source: Computed from Table C-9.

received in corresponding metropolitan areas. As a result in each of these five regions selected central city share of corresponding metropolitan area receipt of personal income was lower than selected central city share of corresponding metropolitan area population. Selected central city share of corresponding metropolitan area population in New England, Mid East, Great Lakes, Plains, and South East were 26.9 percent, 52.4 percent, 52.6 percent, 44.1 percent, and 51.9 percent respectively. Compared to this selected central city share of corresponding metropolitan area receipt of personal income were 23.3 percent, 49.2 percent, 49.4 percent, 42.2 percent, and 48.3 percent in New England, Mid East, Great Lakes, Plains, and South East respectively.

This contrasts with the fact that out of eight regions in six all industry average of per worker earned personal income in selected central cities was higher than all industry average of per worker earned personal income in corresponding metropolitan areas. Moreover, a comparison of selected central city share of corresponding metropolitan area receipt of personal income with selected central city share of corresponding metropolitan area earned personal income shows that in each region selected central city share of corresponding metropolitan area earned personal income was much higher than selected central city share of corresponding metropolitan area receipt of personal income. Selected central city share of corresponding metropolitan area earned personal income in the eight regions, namely, New England, Mid East, Great Lakes, Plains, South East, South West, Rocky Mountain, and Far West were 59.0 percent, 74.6 percent, 77.2 percent, 77.5 percent, 77.1 percent, 84.9

percent, 77.4 percent and 62.6 percent respectively. Compared to this selected central city share of corresponding metropolitan area receipt of personal income were 23.3 percent, 49.2 percent, 49.4 percent, 42.2 percent, 48.3 percent, 72.3 percent, 53.8 percent, and 42.9 percent in New England, Mid East, Great Lakes, Plains, South East, South West, Rocky Mountain, and Far West respectively. Out of eight regions in six selected central city share of corresponding metropolitan area receipt of personal income was lower than half. In contrast out of eight regions in six selected central city share of corresponding metropolitan area earned personal income was three-fourths and over. This highlights the highly significant role played by the central cities in their corresponding metropolitan area production of goods and services.

E. AGE COMPOSITION OF POPULATION IN SELECTED CENTRAL CITIES AND IN THEIR CORRESPONDING METROPOLITAN AREAS, BY REGION

In Chapter III it has been shown that in all the 29 selected large metropolitan areas taken together there was a relatively larger concentration of old people in selected central cities as compared to that in their corresponding metropolitan areas. Similarly, it is seen in Chapter IV that in metropolitan areas of all the five different size classes selected central cities had a relatively larger proportion of old people in their total population than their corresponding metropolitan areas had. In this section it is shown that this was true in all the eight regions too. That is, in each of the eight regions selected central cities had a relatively larger proportion of aged people in their total population than their corresponding metropolitan areas had. Compared to

that in their corresponding metropolitan areas selected central cities in each of the eight regions, excepting in one, had a smaller proportion of their total population in the age groups under 18 years, and 18 to 44 years. On the other hand, compared to that in their corresponding metropolitan areas, selected central cities in each of the eight regions had a larger proportion of their total population in the age groups 45 to 64 years, and 65 years and over. Thus in each region, compared with that in their corresponding metropolitan areas selected central cities had a smaller proportion of their total population in older age groups, reflecting older age structure of selected central cities population in relation to that in their corresponding metropolitan areas.

Selected central city population by age expressed as percentage of corresponding metropolitan area population by age shows the same result in a different form. Thus out of eight regions in seven, selected central city share of corresponding metropolitan area population for age groups under 18 years and 18 to 44 years were lower than selected central city share of corresponding area total population. On the other hand, in each region, selected central city share of corresponding metropolitan area population for age groups 45 to 64 years, and 65 years and over were higher than selected central city share of corresponding metropolitan area total population.

Table V-6 compares percentage distribution of selected central city population by age with percentage distribution of corresponding metropolitan area population by age, by eight regions. The proportions of total selected central city population in age group under 18 years were 28.7 percent, 29.2 percent, 32.2 percent, 30.7 percent, 31.5 percent, 37.7 percent, 32.8 percent, and 29.9 percent in New England, Mid East, Great Lakes, Plains, South East, South West, Rocky Mountain, and Far West respectively; compared to this the proportions of total population of corresponding metropolitan areas in age group under 18 years were 32.4 percent, 32.0 percent, 34.9 percent, 35.5 percent, 33.7 percent, 37.9 percent, 36.5 percent, and 33.8 percent in New England, Mid East, Great Lakes, Plains, South East, South West, Rocky Mountain, and Far West respectively. Thus, in each region proportion of total population in age group under 18 years was higher for selected metropolitan areas than for corresponding central cities. Column (3) in Appendix Table B-22 and column (3) is appendix Table B-23 show that in each of the eight regions excepting one, namely, New England, the proportion of total population in age group 18 to 44 years was lower in selected central cities than in corresponding metropolitan areas. On the other hand, as Table V-6 shows the proportion of total selected central city population in age group 65 years and over were 12.3 percent, 10.3 percent, 9.7 percent, 12.3 percent, 11.3 percent, 6.7 percent, 10.7 percent, and 10.8 percent in New England, Mid East, Great Lakes, Plains, South East, South West, Rocky Mountain, and Far West respectively; compared to this proportion of total corresponding metropolitan area

TABLE V-6

PERCENTAGE DISTRIBUTION OF POPULATION, BY SMSA AND CORRESPONDING CENTRAL CITIES, BY AGE COMPOSITION, BY REGION, 1960

Region (Data are for 29 Selected Large Central Cities/		Under 18 Years		to 64 ars	65 Years and Over	
	Central City	SMSA	Central City	SMSA	Central City	SMSA
SMSAS)	(1)	(2)	(3)	(4)	(5)	(6)
			(Perc	ent)		
New England	28.7	32.4	59.1	56.9	12.3	10.7
Mid East	29.2	32.0	60.5	59.1	10.3	8.9
Great Lakes	32.2	34.9	58.1	57.0	9.7	8.1
Plains	30.7	35.5	56.9	55.5	12.3	9.1
South East	31.5	33.7	57.2	56.5	11.3	9.8
South West	37.7	37.9	55.6	55.8	6.7	6.3
Rocky Mountain	32.8	36.5	56.5	55.5	10.7	8.2
Far West	29.9	33.8	59.3	57.4	10.8	8.8
Total	30.9	33.7	58.9	57.6	10.2	8.7

Source: See Table B-16 and Table B-15.

population in age group 65 years and over were 10.7 percent, 8.9 percent, 8.1 percent, 9.1 percent, 9.8 percent, 6.3 percent, 8.2 percent, and 8.8 percent in New England, Mid East, Great Lakes, Plains, South East, South West, Rocky Mountain, and Far West respectively. Thus, in each region the proportion of total population in age group 65 years and over was higher for selected central cities as compared to that for corresponding metropolitan areas. Figures in column (4) in appendix Tables B-22 and B-23 show that in each region the proportion of total population in the age group 45 to 64 years was higher for selected central cities than for corresponding metropolitan areas. All the selected metropolitan areas in all the regions taken together had 70.0 percent of their total population in age group up to 44 years; compared to this all the corresponding central cities in all the regions taken together had 66.7 percent of their total population in the age group up to 44 years. On the other hand, all the selected metropolitan areas in all the regions taken together had 30.0 percent of their total population in age group 45 years and over; but compared to this the corresponding central cities together had 33.3 percent of their total population in the age group 45 years and over. This clearly summarizes the fact that selected central cities had a relatively larger concentration of old age people than their corresponding metropolitan areas had.

Table V-5 shows selected central city share of corresponding metropolitan area population by four broad age groups and by eight regions. A comparison of figures in column (1) with figures in column (2) in Table V-5 shows that in each region selected central city share

TABLE V-5

CENTRAL CITY POPULATION AS PERCENTAGE OF CORRESPONDING SMSA POPULATION FOR 29 SELECTED LARGE CENTRAL CITIES AND SMSAS, BY REGION, 1960

Region (Data are for 29 Selected Large Central Cities/	Age Composition							
	Total	Under 18 Years	18 to 44 Years	45 to 64 Years	65 Years and Over			
SMSAS)	(1)	(2)	(3)	(4)	(5)			
			(Percent)					
New England	26.9	23.8	27.9	28.0	31.0			
Mid East	52.4	47.7	51.7	56.8	60.4			
Great Lakes	52.6	48.5	51.7	57.0	62.6			
Plains	44.1	38.1	42.4	50.3	60.0			
South East	51.9	48.4	50.3	56.3	59.8			
South West	71.9	71.5	70.9	73.5	75.9			
Rocky Mountain	53.2	47.8	50.4	62.0	69.7			
Far West	42.7	37.7	42.3	47.6	52.4			
Total	50.2	46.0	49.4	54.5	58.7			

Source: Computed from Table B-15 and Table B-16.

of corresponding metropolitan area population in age group under 18 years was lower than selected central city share of corresponding metropolitan area total population. Selected central city share of corresponding metropolitan area total population were 26.9 percent, 52.4 percent, 52.6 percent, 44.1 percent, 51.9 percent, 71.9 percent, 53.2 percent, and 42.7 percent in New England, Mid East, Great Lakes, Plains, South East, South West, Rocky Mountain, and Far West respectively; compared to this central city share of corresponding metropolitan area population in age group under 18 years were 23.8 percent, 47.7 percent, 48.5 percent, 38.1 percent, 48.4 percent, 71.5 percent, 47.8 percent, and 37.7 percent in New England, Mid East, Great Lakes, Plains, South East, South West, Rocky Mountain, and Far West respectively. Similarly, a comparison of data in column (1) with data in column (3) in Table V-5 shows that in all the regions excepting New England selected central city share in corresponding metropolitan area population in age group 18 to 44 years was lower than selected central city share of corresponding metropolitan area total population. On the other hand, a comparison of figures in column (1) with figures in column (5) in Table V-5 shows that in each region selected central city share of corresponding metropolitan area population in age group 65 years and over were higher than selected central city share of corresponding metropolitan area total population. Selected central city share of corresponding metropolitan area total population by region is quoted above. Selected central city share of corresponding metropolitan area population in age group 65 years and over were 31.0 percent, 60.4 percent, 62.6 percent, 60.0 percent, 59.8 percent, 75.9 percent, 69.7 percent, and 52.4 percent in

New England, Mid East, Great Lakes, Plains, South East, South West, Rocky Mountains, and Far West respectively. Similarly, a comparison of figures in column (1) with figures in column (4) in Table V-5 shows that in each of the eight regions without any exception, selected central city share of corresponding metropolitan area population in age group 45 to 64 years was higher than selected central city share of corresponding metropolitan area total population. A comparison of selected central city share of corresponding metropolitan area population, by age, by region, with selected central city share of corresponding metropolitan area total population by region clearly shows that compared to that in the corresponding metropolitan areas the selected central cities had a relatively larger proportion of their total population in older age groups and a relatively smaller proportion of their population in the younger age groups.

F. DISTRIBUTION OF HOUSEHOLDS, BY INCOME LEVELS, BY REGION

Compared to their corresponding metropolitan areas selected central cities were characterized by relatively larger concentration of poor households, that is, households with income under \$4,000. In Chapter III it has been shown that all the selected central cities taken together had a larger proportion of their total households in poverty income class than their corresponding metropolitan areas had. In Chapter IV it has been shown that in metropolitan areas of all the five different size classes excepting in metropolitan areas of size less than 1 million selected central cities had a larger share of their total households in

poverty income class than their corresponding metropolitan areas had. In this section it is shown that out of eight regions in six, selected central cities had a relatively larger proportion of their total households in poverty income class than their corresponding metropolitan areas had. These six regions taken together accounted for 89.7 percent of total selected metropolitan area households. The two regions in which compared to their corresponding metropolitan areas selected central cities had a smaller proportion of their total households in poverty income class are South East and South West in which the process of suburbanization has hardly begun.

Preoccupation with the phenomenon that compared to their corresponding metropolitan areas selected central cities show a relatively higher concentration of poverty income households often results in overlooking another important aspect of central cities economy, namely, that compared to their corresponding metropolitan areas selected central cities also claim a relatively larger proportion of their total households in the highest income class. In this section it is shown that out of eight regions in six, selected central cities had a relatively larger proportion of their total households in the highest income class, that is, income class \$15,000 and over.

In Table V-7 percentage of selected central city households with income under \$4,000 by region is compared with percentage of corresponding metropolitan area households with income under \$4,000 by region. As Table V-7 shows proportions of total selected central cities households with incomes under \$4,000 were 25.8 percent, 21.4 percent, 22.7 percent,

TABLE V-7

PERCENTAGE DISTRIBUTION OF HOUSEHOLDS, BY INCOME LEVELS, FOR SMSAS AND CORRESPONDING CENTRAL CITIES, BY REGION, 1960

Regions	Income Level Under \$4,000				
(Data are for 29 Selected Large	Central City	SMSA			
Central Cities/ SMSAS)	(1)	(2)			
	(Percent)				
New England	25.8	20.5			
new bigiand					
Mid East	21.4	21.0			
Great Lakes	22.7	19.2			
Plains	25.7	22.5			
South East	33.2	33.7			
South West	24.2	27.9			
Rocky Mountain	23.5	22.7			
Far West	24.1	22.8			
Total	23.4	22.1			

Source: See Table B-28 and Table B-27.

25.7 percent, 33.2 percent, 24.2 percent, 23.5 percent, and 24.1 percent in New England, Mid East, Great Lakes, Plains, South East, South West, Rocky Mountain, and Far West respectively; compared to this the proportions of total corresponding metropolitan area households with incomes below \$4,000 were 20.5 percent, 21.0 percent, 19.2 percent, 22.5 percent, 33.7 percent, 27.9 percent, 22.7 percent, and 22.8 percent in New England, Mid East, Great Lakes, Plains, South East, South West, Rocky Mountain, and Far West respectively. Thus, in all the regions excepting South East and South West selected central cities had a relatively larger proportion of their total households in poverty income class than their corresponding metropolitan areas had. Only in two regions characterized by a very low degree of suburbanization that selected central cities showed a relatively smaller proportion of their total households in poverty income class than their corresponding metropolitan areas did.

Similarly, a comparison of figures in column (4) of appendix
Tables B-27 and B-28 shows that out of eight regions in six selected
central cities had a larger proportion of total households in income
class \$15,000 and over than their corresponding metropolitan areas had.
Proportions of total selected central cities households in income class
\$15,000 and over were 11.6 percent, 16.9 percent, 14.1 percent, 12.4
percent, 11.8 percent, 15.5 percent, 16.3 percent, and 17.4 percent in
New England, Mid East, Great Lakes, Plains, South East, South West,
Rocky Mountain, and Far West respectively; compared to this proportion
of total households of corresponding metropolitan areas in income class

\$15,000 and over were 14.3 percent, 14.4 percent, 15.2 percent, 12.1 percent, 9.8 percent, 11.6 percent, 12.6 percent, and 14.4 percent in New England, Mid East, Great Lakes, Plains, South East, South West, Rocky Mountain, and Far West respectively. Thus only in New England and Great Lakes selected central cities had a smaller proportion of their total households in income class \$15,000 and over than their corresponding metropolitan areas had. In all other regions, compared with their corresponding metropolitan areas, selected central cities claimed a larger proportion of their total households in income class \$15,000 and over. Taking all the selected central cities together they had 15.6 percent of their total households in income class \$15,000 and over; compared to this all the corresponding metropolitan areas taken together had 14.0 percent of their total households in income class \$15,000 and over. The above comparison showed that compared to their corresponding metropolitan areas selected central cities claimed a larger proportion of their total households in income class \$15,000 and over. Taking all the selected central cities together they had 15.6 percent of their total households in income class \$15,000 and over; compared to this all the corresponding metropolitan areas taken together had 14.0 percent of their total households in income class \$15,000 and over. The above comparison show that compared to their corresponding metropolitan areas selected central cities had a larger concentration of both poor households and households in the highest income class.

CENTRAL CITIES ROLE AS PRODUCERS OF GOODS AND SERVICES: COMPARISON OF 29 SELECTED LARGE METROPOLITAN AREAS

When traditional measures alone are used to describe the central city economy, all the selected central cities taken together show (Chapter III) that compared to their corresponding metropolitan areas they had larger concentration of old people and larger proportion of households in poverty income class. Per capita personal income received was lower in central cities than in corresponding metropolitan areas. As a result selected central city share of corresponding metropolitan area receipts of personal income was even lower than selected central city share of corresponding metropolitan area population. Selected central city share of corresponding metropolitan area employment by residence location was only slightly higher than selected central city share of corresponding metropolitan area population.

On the other hand, when new measures are also used to describe the central city economy, all the selected central cities taken together show a higher all industry average of per worker earned personal income than what is shown by their corresponding metropolitan areas. This contrasts with lower per capita personal income received in selected central cities in comparison with that in their corresponding metropolitan areas. Selected central city share of corresponding metropolitan area employment by work location is found to be much higher than selected central city share of corresponding metropolitan area population or employment by residence location. Similarly, selected central city

share of corresponding metropolitan area earned personal income is found to be even higher than selected central city share of corresponding metropolitan area employment by work location. This contrasts sharply with the fact that selected central city share of corresponding metropolitan area receipt of personal income was even lower than selected central city share of corresponding metropolitan area population. The use of new measures to describe the central city economy reveals that central cities' role as contributors to metropolitan production of goods and services is much larger than central cities' role as claimants of metropolitan area receipts of personal income. It has been shown in Chapters IV and V that the same picture of contrasting roles of the selected central cities in their corresponding metropolitan areas emerges when the selected metropolitan areas-central cities production and income structures are analyzed by size class of metropolitan areas or by regional grouping. In this chapter it is shown that analysis of income and production structure of selected individual metropolitan areas and their corresponding central cities also leads to the same conclusion that use of traditional measures of population, income and employment results in serious underestimation of central cities role in their corresponding metropolitan area economy. The new measures treating central cities as production units show that central cities role in their corresponding metropolitan economy is much larger than what can be inferred from the traditional measures of population, income and employment.

It is shown that in most of the selected metropolitan areas central cities provided jobs not only to central city residents, but also to

many living outside central city. In all the 29 selected large central cities taken together, 29 percent of total employees with place of work in central cities were living in areas outside central cities. Boston and Miami central cities provided as many jobs to non-central city residents as to central city residents. In San Bernardino-Riverside-Ontario close to fifty percent of total central city jobs were held by people living outside central city. Out of 29 selected central cities in 13, proportions of total central city jobs held by people residing outside central cities were 29 percent or more. The 13 central cities with above average ratio of workers by place of work in central city to workers by place of residence in central city were Boston, Buffalo, Pittsburgh, Washington, D.C., Cincinnati, Cleveland, Detroit, Kansas City, St. Louis, Atlanta, Miami, Los Angeles-Long Beach, and San Bernardino-Riverside-Ontario. Only in one central city, namely, San Antonio, all the central city jobs were held by central city residents. In all other central cities the ratio of workers by place of work in central city to workers by place of residence in central city was over one.

Proportion of total central city jobs held by people living in suburban areas varied directly with variation in degree of suburbanization of population. Proportion of central city employment represented by non-central city residents was higher, the higher the degree of suburbanization of population.

It is shown that out of 29 selected large metropolitan areas in 20, all industry average of central city labor productivity was higher than

all industry average of corresponding metropolitan area labor productivity. Thus only in 9 selected metropolitan areas central city labor productivity was lower than corresponding metropolitan area labor productivity. As a result, all industry average of per worker earned personal income for all the selected central cities taken together was higher than all industry average of per worker earned personal income for all the corresponding metropolitan areas taken together.

Besides labor productivity, the other important factor influencing level of earned personal income in an area is employment by place of work. It is shown that in each individual selected metropolitan area central city share of corresponding metropolitan area employment by place of work was much larger than central city share of corresponding metropolitan area population or employment by residence location. For industries like construction, manufacturing, and wholesale and retail trade suburban location is now considered to be preferable to central city location. But even for such industries selected central city share of corresponding metropolitan area employment by place of work was much larger than selected central city share of corresponding metropolitan area population or employment by residence location.

Of the 29 selected central cities 17 represented three-fourths or more of corresponding metropolitan area employment by place of work, 23 selected central cities claimed two-thirds or more of corresponding metropolitan area employment by work location. Out of 29 selected central cities only two represented less than fifty percent of corresponding metropolitan area employment by work location. These two central cities are Pittsburgh and San Francisco-Oakland. Both Pittsburgh

and San Francisco metropolitan areas are characterized by a high degree of suburbanization of population. Central cities of Pittsburgh and San Francisco-Oakland represented one-fourth and two-fifths respectively of corresponding metropolitan area population and they claimed 40.6 percent and 43.9 percent respectively of corresponding metropolitan area employment by place of work.

Relatively high central city share in corresponding metropolitan area employment by place of work and relatively larger central city labor productivity as compared to corresponding metropolitan area labor productivity in most of the selected metropolitan areas were reflected in selected central city share of corresponding metropolitan area earned personal income. In most of the individual metropolitan areas central city share of corresponding metropolitan area earned personal income was much higher than central city share of corresponding metropolitan area population or employment by residence location.

Out of 29 selected metropolitan areas in 17, central cities represented three-fourths or more of corresponding metropolitan area earned personal income; and in 23 metropolitan areas central cities accounted for two-thirds or more of corresponding metropolitan area earned personal income. Only in two metropolitan areas, namely, Pittsburgh and San Francisco-Oakland central city share of corresponding metropolitan area earned personal income were less than fifty percent.

Central cities larger role as contributors to corresponding metropolitan area production of goods and services than in sharing corresponding metropolitan area population was widespread among

individual metropolitan areas irrespective of their many structural differences. For example, Boston, an old city located in a highly urbanized and suburbanized area represented 26.9 percent of metropolitan area population, 55.9 percent of metropolitan area employment by place of work, and 59.0 percent of metropolitan area earned personal income. The prime national government center, Washington, D.C. with government services as principal economic base claimed two-thirds of metropolitan area population, and over three-fourths of metropolitan area employment by place of work and earned personal income.

Miami, a recreation center with little less than one-third of metropolitan area population claimed more than two-thirds of metropolitan area employment and earned personal income. Los Angeles-Long Beach characterized by auto-based sprawl represented two-fifths of metropolitan area population and over two-thirds of metropolitan area employment by place of work and earned personal income. The largest city, New York, with a little over three-fifths of metropolitan area population represented over four-fifths of metropolitan area employment by work location and earned personal income.

Most of the selected metropolitan areas in South East and South West are characterized by relatively smaller degree of suburbanization of population and their central cities are still rapidly growing. As a result central cities in these metropolitan areas claimed a relatively high proportion of total metropolitan area population; yet the central cities' role as producers of goods and services was larger than central cities role in sharing corresponding metropolitan area population. For example, New Orleans with 72.4 percent of metropolitan area population

represented over four-fifths of metropolitan area employment by place of work and earned personal income. Dallas, with little over three-fifths of metropolitan area population, claimed over three-fourths of metropolitan area employment by place of work, and over four-fifths of metropolitan area earned personal income. Houston, with three-fourths of metropolitan area population, made up over four-fifths of metropolitan area employment by work location and earned personal income. Phoenix represented two-thirds of metropolitan area population, four-fifths of metropolitan area employment by place of work and over four-fifths of metropolitan area earned personal income. San Antonio with 85.6 percent of metropolitan area population claimed 94.6 percent of metropolitan area employment by work location and 95.4 percent of metropolitan area earned personal income.

Out of 29 selected metropolitan areas in 20, central city share of corresponding metropolitan area earned personal income was higher than central city share of corresponding metropolitan area employment by place of work. This indicated that out of 29 selected metropolitan areas in 20, all industry average of per worker earned personal income was higher in central city than in corresponding metropolitan area. In contrast, out of 29 selected metropolitan areas in 19, per capita personal income received was lower in central city than in corresponding metropolitan area. As a result in these 19 metropolitan areas central city share of corresponding metropolitan area receipt of personal income was even lower than central city share of corresponding metropolitan area population. In 10 metropolitan areas where per capita personal

income received were higher in central cities than in their corresponding metropolitan areas, central city share of corresponding metropolitan area receipt of personal income were higher than central city share of corresponding metropolitan area population. However, even in these 10 metropolitan areas central city share of corresponding metropolitan area receipt of personal income was much lower than central city share of corresponding metropolitan area earned personal income. Thus, in each of the selected individual metropolitan areas central city share of corresponding metropolitan area earned personal income was much higher than central city's share of corresponding metropolitan area population or receipt of personal income. In other words, central cities' role in corresponding metropolitan area production of goods and services was much larger than central cities' role in sharing corresponding metropolitan area population or receipt of personal income.

It is also shown that in most of the individual metropolitan areas age composition of central city population was relatively older as compared to age composition of corresponding metropolitan area population. Out of 29 selected metropolitan areas in 27, central cities had a relatively smaller proportion of their total population in age group under 18 years than their corresponding metropolitan areas had. The two metropolitan areas in which central cities, compared to that in their corresponding metropolitan areas had a relatively larger proportion of their total population in age group under 18 years are San Antonio and San Bernardino-Riverside-Ontario. Similarly, out of 29 selected metropolitan areas in 24, central cities had a relatively smaller proportion of their total

population in age group 18 to 44 years than their corresponding metropolitan areas had. On the other hand, out of 29 metropolitan areas in 27, central cities had a relatively larger proportion of their total population in age group 65 years and over than their corresponding metropolitan areas had. Only in two metropolitan areas, namely, Dallas, and San Bernardino-Riverside-Ontario, central cities, compared to that in their corresponding metropolitan areas, had a relatively smaller proportion of their total population in age group 65 years and over. Similarly, out of 29 selected metropolitan areas in 25, central cities had a relatively larger proportion of their total population in age group 45 to 64 years than their corresponding metropolitan areas had. Thus, in general, compared to that in their corresponding metropolitan areas, selected central cities had a relatively smaller proportion of their total population in age groups under 18 years, and 18 to 44 years and they had a relatively larger proportion of their total population in age groups 45 to 64 years and 65 years and over. This clearly indicated relatively older age composition of selected central city population in comparison with age composition of corresponding metropolitan area population.

That compared to that in their corresponding metropolitan areas, central cities had a relatively larger concentration of old people is also indicated by a comparison of percentage distribution by age of central city household heads with percentage distribution by age of corresponding metropolitan area household heads. Out of 28 selected metropolitan areas for which comparable data were available in 26,

central cities had a relatively smaller proportion of their total household heads in age group 45 to 64 years than their corresponding metropolitan areas had; in contrast, out of 28 selected metropolitan areas in 26, central cities, compared with that in their corresponding metropolitan areas, had a relatively larger proportion of their total household heads in age group 65 years and over.

It is also shown that in most of the selected metropolitan areas central city households included a relatively larger proportion of poor households than did corresponding metropolitan area households. Out of 28 selected metropolitan areas in 20, central cities had a relatively larger proportion of their total households in poverty income class, that is, income under \$4000 than their corresponding metropolitan areas had. Eight metropolitan areas in which central cities had a relatively smaller proportion of their total households in income class under \$4000 than their corresponding metropolitan areas had are New York Standard Consolidated Area, New Orleans, Tampa-St. Petersburg, Dallas, Houston, Phoenix, San Antonio, and San Diego. Out of eight of these metropolitan areas six are located in South East and South West regions and they are characterized by still rapidly growing central cities.

However, compared to that in their corresponding metropolitan areas central cities showed a larger concentration not only of poor households but also of households in the highest income class. Out of 28 selected metropolitan areas in 19, central cities had a relatively larger proportion of their total households in income class \$15,000 and over than their corresponding metropolitan areas had. Nine metropolitan areas in which central cities had a relatively smaller proportion of

their total households in income class \$15,000 and over than their corresponding metropolitan areas had are Boston, Buffalo, Philadelphia, Washington, D.C., Chicago Standard Consolidated Area, Cleveland, Milwaukee, St. Louis, and Miami. Most of these metropolitan areas are characterized by a high degree of suburbanization of population. Four of these 9 metropolitan areas represented less than forty percent of corresponding metropolitan area population; and only 2 made up more than fifty percent of corresponding metropolitan area population.

A. LARGER ROLE OF CENTRAL CITIES AS PLACE OF WORK THAN AS PLACE OF RESIDENCE

The traditional measure of central city employment, that is, employment by central city residence location is a count of employees who reside in central city. This shows the number of central city people employed. This is different from the total number of jobs located in central cities. Most central cities provide jobs not only to central city residents, but also to many of those who reside outside central city. The number of jobs located in central cities is, therefore, in most of the cases larger than the number of central city residents employed. The traditional measure of central city employment, that is, employment by residence location, thus, represents central city residents employment role and in most cases it is an underestimation of central cities employment role. In this section it is shown that in most of the selected individual metropolitan areas central cities employment role was larger than central city residents employment role. In other words, in most of the selected metropolitan areas corresponding

central cities provided jobs both to central city residents and also to many living outside central city. In a few cases central cities provided as many jobs to suburban residents as to central city residents. In general, central city construction and manufacturing provided a relatively larger proportion of jobs to suburban population than did either central city wholesale and retail trade, or central city services. Compared to selected smallest and the largest size central cities, the medium size central cities provided a larger proportion of employment to suburban population. Of the eight regions those with higher degree of suburbanization provided a relatively larger proportion of employment to suburban people. The regions which showed a higher ratio of workers by place of work in central city to workers by place of residence in central city to that shown by all the selected industries in all the eight regions taken together were New England, Far West, and Plains.

Table VI-1 shows ratio of workers by place of work in central city to workers by place of residence in central city for 29 selected large central cities. As Table VI-1 shows, all industry average ratio of workers by place of work in central city to workers by place of residence in central city for all the selected central cities taken together was 1.4. Thus, on the average, 29 percent of the total employees with work location in central cities were living in areas outside central cities. In Boston and Miami, on the average, central cities provided as many jobs to non-central city residents as to central city residents. In San Bernardino-Riverside-Ontario 47 percent of total central city jobs were held by people residing outside central cities. Of the 29 selected central cities 13 showed ratios of workers by place of work in central

RATIO OF WORKERS BY PLACE OF WORK IN CENTRAL CITY TO WORKERS
BY PLACE OF RESIDENCE IN CENTRAL CITY, 1960

29 Selected Large	Industry Groups					
Central Cities	Total	Construc- tion	Manufac- turing	Wholesale & Retail Trade	Public Adminis- tration & Services	
	(1)	(2)	(3)	(4)	(5)	
	, ,		(Ratio		• •	
New England				- ,		
Boston	2.0	1.9	2.1	1.9	2.0	
<u>Mideast</u>						
Baltimore	1.4	1.4	1.5	1.3	1.3	
Buffalo	1.6	1.8	1.7	1.6	1.6	
New York Consolidated	1.3	1.3	1.3	1.2	1.2	
Ph ila de lphi a	1.3	1.3	1.3	1.2	1.3	
Pittsburgh	1.5	1.6	1.7	1.5	1.4	
Washington, D.C.	1.8	1.9	2.2	1.7	1.7	
Great Lakes		-	- 	•	~* ·	
Chicago Consolidated	1.3	1.4	1.3	1.2	1.2	
Cincinnati	1.6	1.5	1.8	1.6	1.5	
Cleveland	1.6	1.7	1.6	1.6	1.6	
Detroit	1.5	1.7	1.6	1.5	1.4	
Milwaukee	1.3	1.4	1.3	1.3	1.3	
Plains	4.	±•'	 .	1.5	1.0	
Kansas City	1.6	1.6	1.9	1.6	1.4	
Minneapolis-St. Paul	1.4	1.6	1.6	1.4	1.4	
St. Louis	1.7	1.9	1.8	1.7	1.6	
Southeast	 • /,	1.00	1.0	1.07	1.0	
Atlanta	1.6	1.7	1.9	1.6	1.5	
Miami	2.0	2.2	2.0	2.0	1.9	
New Orleans	1.2	1.3	1.3	1.2	1.2	
	1.2			_		
Tampa-St. Petersburg	1.6	1.3	1.3	1.2	1.2	
Southwest Dallas	1 2	1 2	1 9	1 2	י ד	
	1.2	1.3	1.3	1.2	1.2	
Houston	1.1	1.2	1.2	1.1	1.1	
Phoenix	1.1	1.1	1.2	1.1	1.1	
San Antonio	1.0	1.1	1.0	1.0	1.0	
Rocky Mountain	1 11	1.6	1 -	3 11	1 2	
Denver	1.4	1.6	1.5	1.4	1.3	
Far West	1 5	1 6	. 0	1.5	7 "	
Los Angeles-Long Beach	1.5	1.6	1.8	1.5	1.4	
San Bernadino-Riverside-						
Ontario	1.9	2.5	1.8	1.9	1.8	
San Diego	1.3	1.5	1.4	1.3	1.3	
San Francisco-Oakland	1.4	1.6	1.7	1.4	1.4	
Seattle-Everett	1.4	1.5	1.6	1.3	1.2	
otal	1.4	1.5	1.5	1.3	1.3	
Source: Computed from jou	rnev to	work data	oub lis hed :	in. Bureau (of the	

Computed 17-om journey to work data published 11, Bureau of the Census, U.S. Department of Commerce, U.S. Census of Population 1960, Subject Reports Journey to Work, Final Report PC (2)-6B, U.S. Government Printing Office, Washington, D.C., 1963.

city to workers by place of residence in central city higher than that shown by all the selected central cities taken together. These central cities were Boston, Buffalo, Pittsburgh, Washington, D.C., Cincinnati, Cleveland, Detroit, Kansas City, St. Louis, Atlanta, Miami, Los Angeles-Long Beach, and San Bernardino-Riverside-Ontario. Only one central city, namely, San Antonio showed ratio of 1.0; this means that in San Antonio all the central city jobs went to San Antonio central city residents. In all other central cities the ratio was more than one; and in most of the central cities the ratio was well over one.

As last row in Table VI-1 shows all central city average ratios of workers by place of work in central city to workers by place of residence in central city were 1.4 for all industries taken together, 1.5 for both manufacturing and construction, and 1.3 for both wholesale and retail trade, and public administration and services. Construction and manufacturing showed ratios higher than the all industry ratio. This means, on the average, central city construction and manufacturing provided a relatively higher proportion of central city jobs to suburban people than did any other industry groups.

Ratios of workers by place of work in central city to workers by place of residence in central city for 29 selected central cities grouped into five different size classes are shown in appendix Table A-1. As appendix Table A-1 shows all industry average ratio of workers by place of work in central city to workers by place of residence in central city for central cities of size over 5 million, 2 to 5 million, 1 to 2 million, and less than 1 million were 1·3, 1·5, 1·4, and 1·3 respectively. This

shows that compared to both selected smallest size and the largest size central cities, the medium size central cities provided a relatively larger proportion of employment to suburban people. Apparently the ratio of workers by place of work in central city to workers by place of residence in central city is largely influenced by the degree of suburbanization in the corresponding metropolitan area. In general the higher the degree of suburbanization the higher is the ratio of workers by place of work in central city to workers by place of residence in central city. Alternatively, the lower the concentration of population in central cities, the higher was the ratio. Concentration of population in central cities measured by the ratio of central city population to corresponding metropolitan area population in metropolitan areas of size over 5 million, 2 to 5 million, 1 to 2 million, and less than 1 million were 55.8 percent, 38.1 percent, 52.1 percent, and 55.1 percent respectively. Thus, central cities of size 2 to 5 million showed the largest ratio (1.5) of workers by place of work in central city to workers by place of residence in central city and the lowest concentration of metropolitan area population in the corresponding central cities. Similarly, central cities of size 1 to 2 million showed the next highest ratio $(1\cdot 4)$ of workers by place of work in central city to workers by place of residence in central city and the next lowest concentration of metropolitan area population in the corresponding central cities.

In each of the eight regions ratio of workers by place of work in central city to workers by place of residence in central city was larger than one. This is shown in appendix Table B-1. Out of eight regions

three, namely, New England, Plains, and Far West showed ratios of workers by place of work in central city to workers by place of residence in central city higher than the ratio shown by all the selected central cities in all the regions taken together. The influence of degree of suburbanization on the ratio of workers by place of work in central city to workers by place of residence in central city is also marked here. Regions with higher degree of suburbanization of population or lower degree of concentration of population in central cities showed relatively higher ratio of workers by place of work in central city to workers by place of residence in central city. The degree of concentration of population in central city measured by the ratio of population in central city to population in corresponding metropolitan areas were 26.9 percent in New England, 42.7 percent in Far West, and 44.1 percent in Plains; compared to this the ratio of workers by place of work in central city to workers by place of residence in central city were 2.0 for New England, 1.5 for Far West, and 1.6 for Plains.

B. PRODUCTIVITY IN 29 SELECTED LARGE CENTRAL CITIES IN COMPARISON WITH THEIR METROPOLITAN AREAS

In Chapter III it has been shown that all industry average of per worker earned personal income in all the selected central cities taken together was higher than all industry average of per worker earned personal income in all the corresponding metropolitan areas taken together. In Chapter IV it has been shown that in metropolitan areas of all the five different size classes all industry average of per worker

earned personal income was higher in selected central cities than in corresponding metropolitan areas. Similarly, in Chapter V it has been seen that in all regions excepting in two, all industry average of per worker earned personal income was higher in selected central cities than in corresponding metropolitan areas. In this section it is shown that in most of the individual metropolitan areas all industry average of per worker earned personal income was higher in selected central cities than in corresponding metropolitan areas. For manufacturing, usually per worker earned personal income is lower in central cities than in corresponding metropolitan areas. But even for manufacturing in little over one-third of the total selected metropolitan areas per worker earned personal income was higher in central cities than in corresponding metropolitan areas. For services industry in all the selected metropolitan areas excepting in six, central city labor productivity was higher than corresponding metropolitan area labor productivity. Similarly, for wholesale and retail trade in all but one selected metropolitan areas central city labor productivity was higher than corresponding metropolitan area labor productivity. This contrasts sharply with central city-metropolitan area per capita personal income relationship. While in most of the selected metropolitan areas per worker earned personal income was higher in central cities than in corresponding metropolitan areas, in most of the selected metropolitan areas per capita personal income received was lower in central cities than in corresponding metropolitan areas.

Table VI-2 shows per worker earned personal income in central cities as percentage of per worker earned personal income in corresponding

TABLE VI-2

PER WORKER EARNED PERSONAL INCOME IN 29 SELECTED LARGE CENTRAL CITIES AS PERCENTAGE OF PER WORKER EARNED PERSONAL INCOME IN CORRESPONDING SMSAS, BY INDUSTRY, 1959

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	Industry Groups				
29 Selected Large Central	Total	Manufac-	Wholesale	Services	
Cities/SMSAS		turing	& Retail		
			Trade		
	(Percent)				
New England					
Boston	105.7	105.2	118.0	106.1	
Mideast					
Baltimore	99.1	97.0	110.2	100.4	
Buffalo	103.7	102.4	116.0	101.6	
New York Consolidated	102.6	91.7	114.4	107.1	
Philadelphia	99.0	93.9	100.7	101.3	
Pittsburgh	97.0	73.8	128.1	106.6	
Washington, D.C.	102.1	106.4	102.1	93.4	
Great Lakes					
Chicago Consolidated	101.2	98.5	109.2	100.6	
Cincinnati	98.9	87.3	118.6	104.1	
Cleveland	101.1	97.9	109.6	101.0	
Detroit	105.7	105.0	116.5	104.2	
Milwaukee	102.6	102.5	107.4	100.9	
Plains					
Kansas City	96.3	79.3	108.3	102.7	
Minneapolis-St. Paul	101.7	100.3	101.1	104.4	
St. Louis	99.7	95.3	106.9	101.4	
Southeast					
Atlanta	102.1	97.1	104.3	104.2	
Miami	100.1	104.5	107.7	94.9	
New Orleans	93.3	87.7	85.4	96.8	
Tampa-St. Petersburg	101.3	96.7	109.3	100.7	
Southwest					
Dallas	103.7	102.0	109.8	100.8	
Houston	95 .7	82.1	105.0	98.0	
Phoenix	108.6	103.8	105.6	107.4	
San Antonio	100.8	97.8	101.3	99.3	
Rocky Mountain					
Denver	101.2	89.0	112.9	101.2	
Far West					
Los Angeles-Long Beach	99.7	95.8	102.6	102.2	
San Bernardino-Riverside					
Ontario	104.2	93.0	108.9	99.5	
San Diego	103.4	101.1	103.2	100.8	
San Francisco-Oakland	101.9	88.3	111.7	106.5	
Seattle-Everett	102.3	97.2	109.1	102.2	
All Central Cities/SMSAS	101.4	95.6	105.5	103.6	

Source: Derived from Tables C-4 and C-3.

metropolitan areas for three broad industry groups and for 29 selected metropolitan areas. Column (1) in Table VI-2 shows that out of 29 selected metropolitan areas in 20, all industry average of per worker earned personal income was higher in central city than in corresponding metropolitan area. For manufacturing out of 29 selected metropolitan areas in 10, central city labor productivity was higher than corresponding metropolitan area labor productivity. These 10 metropolitan areas were Boston, Buffalo, Washington, D.C., Detroit, Milwaukee, Minneapolis-St. Paul, Miami, Dallas, Phoenix and San Diego. For services industry out of 29 selected metropolitan areas in 23, central city labor productivity was higher than corresponding metropolitan area labor productivity. The six metropolitan areas in which central city labor productivity was lower than corresponding metropolitan area labor productivity were Washington, D.C., Miami, New Orleans, Houston, San Antonio, and San Bernardino-Riverside-Ontario. For wholesale and retail trade in all but one metropolitan areas central city labor productivity was higher than corresponding metropolitan area labor productivity. Of all the selected metropolitan areas, in New Orleans for wholesale and retail trade central city labor productivity was lower than corresponding metropolitan area labor productivity. In all the selected metropolitan areas taken together all industry average of central city labor productivity as percentage of all industry average of corresponding metropolitan area labor productivity was 101.4; compared to this per capita personal income received in all the selected central cities taken together as percentage of per capita personal income

received in all the corresponding metropolitan areas taken together was only 95.1.

C. CENTRAL CITY ROLE IN METROPOLITAN AREA EMPLOYMENT; COMPARISON BY INDIVIDUAL METROPOLITAN AREAS

That for all the selected metropolitan areas taken together central cities' employment role was much larger than central cities' residence role or central city residents' employment role has been shown in Chapter In Chapter IV it has been shown that in metropolitan areas of all the five different size classes selected central city share of corresponding metropolitan area employment by work location was much larger than selected central city share of corresponding metropolitan area employment by residence location. Chapter V showed the same contrast between selected central cities' role as source of corresponding metropolitan area employment and selected central cities' role as location of corresponding metropolitan area residences, or selected central city residents' role in corresponding metropolitan area employment by region. In this section it is shown that same picture of selected central city role in corresponding metropolitan area employment and residence location emerges even when individual selected central city employment and population are compared with corresponding metropolitan area employment and population. As compared to selected central city share of corresponding metropolitan area population or employment by residence location, selected central city share of corresponding metropolitan area employment by work location was much higher not only for all industries taken together, but also for all individual groups of

industries. Even for such industry groups as construction, manufacturing, and wholesale and retail trade for which suburban location is considered to be more attractive than central city location, selected central city share of corresponding metropolitan area employment by work location was much higher than selected central city share of corresponding metropolitan area population or employment by residence location.

Table VI-3 shows selected central city share of corresponding metropolitan area employment by work location for 29 selected large metropolitan areas. Column (1) in Table VI-3 shows that out of 29 selected central cities, seventeen selected central cities claimed three-fourths or more of corresponding metropolitan area employment by work location; 23 selected central cities claimed two-thirds or more of corresponding metropolitan area employment by work location. Out of 29 selected central cities only two central cities claimed less than 50 percent of corresponding metropolitan area employment by work location. These two selected central cities are Pittsburgh and San Francisco-Oakland. Both Pittsburgh and San Francisco metropolitan areas are characterized by high degree of suburbanization of population. Central city share of corresponding metropolitan area population was 25.1 percent for Pittsburgh and 39.8 percent for San Francisco-Oakland; compared to this central city share of corresponding metropolitan area employment by work location was 40.6 percent for Pittsburgh and 43.9 percent for San Francisco-Oakland. Thus, even in these two metropolitan areas central city's larger role as location of employment than as location of residence is quite clearly marked.

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CENTRAL CITY SHARE OF EMPLOYMENT IN TOTAL SMSA EMPLOYMENT, 1960
(CENTRAL CITY EMPLOYMENT AS PERCENTAGE OF SMSA EMPLOYMENT)

	Industry Groups				
29 Selected Large	Total	Construc-	Manufac-	Wholesale	Public
Central Cities/		tion	turing	& Retail	Adminis-
				Trade	tration &
					Services
	(1)	(2)	(3)	(4)	(5)
Nov. England			(Percent)		
New England Boston	55.9	45.1	49.7	55.0	61.1
	33.9	43.1	47.7	33.0	01.1
Mideast Baltimore	76.2	64.1	76.8	78.1	76.7
Buffalo	68.3	55.6	66.9	70.6	70.5
New York Consolidated	80.5	6 8. 6	80.3	78.7	82.4
	61.8	50.6	59.5	63.2	64.6
Philadelphia Pittsburgh	40.6	42.9	31.8	45.0	46.7
_	76.3	67.3	76.7	68.1	78.7
Washington, D.C. Great Lakes	70.5	07.3	70.7	00.1	70.7
Chicago Consolidated	76.7	68.2	78.7	73.7	77.2
Cincinnati	75.4	68.2	76.7	72.0	77.1
Cleveland	78.3	70.0	82.8	73.2	77.0
	69.3	61.1	69.5	68.2	70.5
Detroit Milwaukee	83.4	81.0	84.8	83.7	82.1
Plains	03.4	01.0	04.0	05.7	02.1
Kansas City	76.7	71.4	83.0	78.8	72.8
Minneapolis-St. Paul	84.0	75.8	88.7	81.1	83.8
St. Louis	64.7	51.4	66.7	53.5	65.1
Southeast	04.7	31. 4	00.7	33.3	03.1
Atlanta	80.0	73.1	74.7	81.0	82.8
Miami	69.2	66.7	78.0	68.8	67.9
New Orleans	87.1	80.0	81.3	86.6	89.9
Tampa-St. Petersburg	74.2	69.2	76.9	79.0	72.1
Southwest	77.2	07.2	70.7	73.0	,
Dallas	78.3	78.1	80.6	78.4	77.2
Houston	87.9	88.6	83.3	90.2	88.7
Phoenix	79.1	85.7	91.7	83.3	74.6
San Antonio	94.6	100.0	95.7	95.9	93.2
Rocky Mountain	J 14 0	20000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,	
Denver	76.5	72.0	79.1	77.3	75.8
Far West					
Los Angeles-Long Beach	66.5	59.3	67.4	65.3	67.4
San Bernardino-Riverside					
Ontario	54.8	61.9	57.8	60.8	51.0
San Diego	76.3	69.2	86.1	74.6	73.5
San Francisco-Oakland	43.9	36.1	33.5	46.3	45.5
Seattle-Everett	74.5	68.0	76.1	76.5	73.6
Total	71.9	64.2	71.4	71.4	73.2
A Street, all a street		= -	•		

Source: Computed from Table C-2 and Table C-1.

In case of construction industry which is more suburban area oriented than any other industry groups, seven selected central cities claimed three-fourths of corresponding metropolitan area employment by work location and nineteen selected central cities represented twothirds of corresponding metropolitan area employment by work location. In case of manufacturing largest numbers of selected central cities claimed three-fourths or more and two-thirds or more of corresponding metropolitan area employment by work location. Out of 29 selected central cities 19 represented three-fourths or more of corresponding metropolitan area manufacturing employment by place of work, and 24 selected central cities accounted for two-thirds or more of corresponding metropolitan area manufacturing employment by work location. In case of wholesale and retail trade 14 selected central cities claimed threefourths or more of corresponding metropolitan area employment by work location, and 22 selected central cities represented two-thirds or more of corresponding metropolitan area employment by work location. Similarly, in case of public administration and services 14 selected central cities claimed three-fourths or more of corresponding metropolitan area employment by work location, and 23 accounted for two-thirds or more of corresponding metropolitan area employment by work location. In case of each individual industry group only 2 to 3 selected central cities claimed less than 50 percent of corresponding metropolitan area employment by work location. While in case of manufacturing largest numbers of central cities claimed three-fourths or more and two-thirds or more of corresponding metropolitan area employment by work location, it is in case of public administration and services that all the selected central cities

taken together claimed the highest proportion (73.2 percent) of corresponding metropolitan area employment by work location. In case of both manufacturing and wholesale and retail trade, all the selected central cities taken together accounted for 71.4 percent of corresponding metropolitan area employment by work location. This indicates that manufacturing employment was relatively more concentrated in a number of metropolitan areas, whereas wholesale and retail trade, or public administration and services employment was relatively more evenly distributed among different metropolitan areas. However, one characteristic that was common for all the different industry groups is that central cities claimed a high proportion of the total corresponding metropolitan area employment by work location.

D. CENTRAL CITIES ROLE IN METROPOLITAN AREA PRODUCTION OF GOODS AND SERVICES: COMPARISON BY 29 SELECTED INDIVIDUAL METROPOLITAN AREAS

All the selected metropolitan areas grouped into five different size classes, or grouped by eight regions, or all of them taken together equally showed (Chapters III, IV, and V) that central cities role in corresponding metropolitan area production of goods and services was much larger than central cities role in sharing corresponding metropolitan receipt of personal income. Also that selected central city share of corresponding metropolitan area earned personal income was much higher than selected central city share of corresponding metropolitan area population or employment by residence location or even employment by work location. In this section it is shown that the same picture of

central city role in metropolitan area residence location and production of goods and services is brought out by comparison by individual metropolitan areas.

Table VI-4 shows central city share of corresponding metropolitan area earned personal income by four broad industry groups and for 29 selected large metropolitan areas. Column (1) in Table VI-4 shows that out of 29 selected central cities 17 claimed three-fourths or more of corresponding metropolitan area earned personal income and 23 claimed two-thirds or more of corresponding metropolitan area earned personal income. Only two central cities, namely, Pittsburgh and San Francisco-Oakland represented less than 50 percent of corresponding metropolitan area earned personal income. But compared to their share of corresponding metropolitan area population, even these two central cities claimed a higher proportion of corresponding metropolitan area earned personal income indicating larger central cities' role as producers of goods and services than as location of metropolitan area residences. Central city share of corresponding metropolitan area population was 25.1 percent for Pittsburgh and 39.8 percent for San Francisco-Oakland; as compared to this central city share of corresponding metropolitan area earned personal income was 39.4 percent for Pittsburgh, and 44.7 percent for San Francisco-Oakland.

In case of construction, 7 selected central cities claimed three-fourths or more of corresponding metropolitan area earned personal income and 19 selected central cities claimed two-thirds or more of corresponding metropolitan area earned personal income. In case of manufacturing, out of 29 selected central cities 10 represented

TABLE VI-4

TOTAL EARNED PERSONAL INCOME GENERATED IN 29 SELECTED LARGE CENTRAL CITIES AS PERCENTAGE OF TOTAL EARNED PERSONAL INCOME GENERATED IN CORRESPONDING SMSAS, BY INDUSTRY, 1959

			Industry Gr	oups	
20 Coloated Laws	Total	Construc-	Manufac-		Public
29 Selected Large Central Cities/		tion	turing	& Retail	Adminis-
SMSAS				Trade	tration &
SPISAS	`				Services
	(1)	(2)	(3)	(4)	(5)
New England			(Percent)		
Boston	59.0	45.1	52.2	64.9	63.4
Mideast	37.0	.3.1	32.2	0.00	03.
Baltimore	75.5	64.1	74.5	86.0	74.0
Buffalo	70.8	55.5	68.5	81.9	71.9
New York Consolidated	82.6	68.6	73.6	90.0	86.9
Philadelphia	61.2	50.6	55.9	63.7	66.7
Pittsburgh	39.4	42.9	23.5	57.6	50.0
Washington, D.C.	77.8	67.3	81.6	69.5	80.2
Great Lakes	, , , ,	o. 	02.0	03.5	0012
Chicago Consolidated	77.6	68.2	77.5	80.5	77.9
Cincinnati	74.5	68.2	66.6	85.4	79.2
Cleveland	79.2	70.0	81.1	80.2	77.8
Detroit	73.2	61.1	73.0	79.5	72.2
Milwaukee	85.6	81.0	86.9	89.9	82.1
Plains					
Kansas City	74.0	71.4	65.8	85.4	74.3
Minneapolis-St. Paul	85.5	75.8	88.9	82.0	86.6
St. Louis	64.5	51.4	63.5	67.9	66.0
Southeast					
Atlanta	81.7	73.1	72.6	84.4	86.0
Miami	69.3	66.6	81.6	74.0	65.3
New Orleans	81.3	80.0	71.3	73.9	87.4
Tampa-St. Petersburg	75.2	69.2	74.4	86.4	72.0
Southwest					
Dallas	81.2	78.2	82.2	86.0	78.3
Houston	84.1	88.5	68.4	94.7	86.9
Phoenix	85.9	85.8	95.2	88.0	80.5
San Antonio	95.4	100.0	93.5	97.2	94.7
Rocky Mountain					
Denver	77.4	72.0	70.4	87.3	76.7
Far West					
Los Angeles-Long Beach	66.3	59.3	64.5	67.0	68.7
San Bernardino-Riverside-					
Ontario	57.1	61.9	53.7	66.2	54.5
San Diego	78.9	69.2	87. 0	77.0	78.1
San Francisco-Oakland	44.7	36.1	34.8	51.8	46.9
Seattle-Everett	76.3	68.0	73.9	83.4	75. 9
<u>Total</u>	73.2	63.8	68.4	78.0	75.4
Source: Computed from Tab	10 C-7 :	and Table C-	6		

Source: Computed from Table C-7 and Table C-6.

three-fourths or more of corresponding metropolitan area earned personal income and 21 accounted for two-thirds or more of corresponding metropolitan area earned personal income. This points to relatively smaller central cities' role in corresponding metropolitan area manufacturing industry earned personal income as compared to central cities' role in corresponding metropolitan area manufacturing employment by work location. It may be remembered that out of 29 selected central cities 19 claimed three-fourths or more of corresponding metropolitan area manufacturing employment by work location as compared to only 10 central cities claiming three-fourths or more of corresponding metropolitan area earned personal income. Similarly, 24 selected central cities represented two-thirds or more of corresponding metropolitan area manufacturing employment by work location as compared to 21 selected central cities' claiming two-thirds or more of corresponding metropolitan area earned personal income. This difference in selected central city share of corresponding metropolitan area manufacturing employment by work location and selected central city share of corresponding metropolitan area manufacturing industry earned personal income is brought about by lower central city manufacturing labor productivity as compared to corresponding metropolitan area manufacturing labor productivity in about two-thirds of the selected metropolitan areas.

In contrast out of 29 selected metropolitan areas in 28, central city wholesale and retail trade labor productivity was higher than

corresponding metropolitan area wholesale and retail trade labor productivity. As a result more central cities claimed three-fourths or more of corresponding metropolitan area wholesale and retail trade earned personal income than the number of central cities claiming three-fourths or more of corresponding metropolitan area wholesale and retail trade employment by work location. Out of 29 selected central cities 19 claimed three-fourths or more of corresponding metropolitan area wholesale and retail trade earned personal income as compared to 14 central cities claiming three-fourths or more of corresponding metropolitan area wholesale and retail trade employment by work location. Similarly, 25 selected central cities claimed two-thirds or more of corresponding metropolitan area wholesale and retail trade earned personal income as compared to 22 selected central cities' claiming two-thirds or more of corresponding metropolitan area wholesale and retail trade earned personal income as compared to 22 selected central cities' claiming two-thirds or more of corresponding metropolitan area wholesale and retail trade employment by work location.

In case of services industry out of 29 selected metropolitan areas in 23, central city services labor productivity was higher than corresponding metropolitan area services labor productivity. As a result more selected central cities claimed three-fourths or more of corresponding metropolitan area services earned personal income than the number of selected central cities claiming three-fourths or more of corresponding metropolitan area services employment by work location. Out of 29 selected central cities 16 represented three-fourths or more of corresponding metropolitan area services earned personal income as compared to 14 selected central cities claiming three-fourths or more of

corresponding metropolitan area services employment by work location. Similarly, 24 selected central cities accounted for two-thirds or more of corresponding metropolitan area services earned personal income as compared to 23 selected central cities claiming two-thirds or more of corresponding metropolitan area services employment by work location.

Out of 29 selected metropolitan areas in 20, all industry average of per worker earned personal income was higher in central city than in the corresponding metropolitan area. In these 20 metropolitan areas central city share of corresponding metropolitan area earned personal income was higher than central city share of corresponding metropolitan area employment by work location. Similarly, all industry average of per worker earned personal income for all the selected central cities taken together was higher than all industry average of per worker earned personal income in all the corresponding metropolitan areas taken together. As a result for all the 29 selected metropolitan areas taken together central city share of corresponding metropolitan area earned personal income was higher than central city share of corresponding metropolitan area earned personal area employment by work location.

Individual central cities showed a larger role in metropolitan area production of goods and services than in metropolitan area residence location almost irrespective of many structural differences between them. Of all the 29 selected metropolitan areas Pittsburgh showed smallest concentration of metropolitan area population in the corresponding central city. As commented earlier Pittsburgh central city claimed 40.6 percent of metropolitan area employment by work location and 39.4 percent

of metropolitan area earned personal income, though it claimed only onequarter of metropolitan area population. Of the 29 selected metropolitan areas Boston showed the next lowest concentration of metropolitan area population in the central city. With 26.9 percent of metropolitan area population Boston central city claimed 55.9 percent of metropolitan area employment by work location and 59.0 percent of metropolitan area earned personal income.

Miami, a recreation center representing less than one-third (31.2 percent) of metropolitan area population, claimed more than two-thirds of metropolitan area employment and earned personal income. Washington, D.C. with an economy dominated by government service as economic activity represented less than two-thirds of metropolitan area population; but as compared to this it claimed over three-fourths of metropolitan area employment by work location and earned personal income.

The auto-age oriented spread city Los Angeles-Long Beach accounted for 41.8 percent of metropolitan area population and over two-thirds of metropolitan area employment by work location and earned personal income. Detroit, located in a highly suburbanized area, claimed little over two-fifths of metropolitan area population and more than two-thirds of metropolitan area employment by work location and a little less than three-fourths of metropolitan area earned personal income. Besides Miami, the other highly suburbanized metropolitan area in South East included in the study is Atlanta. Atlanta central city with less than half of metropolitan area population represented over four-fifths of metropolitan area employment by work location and earned personal income.

In Mid East, Baltimore, with slightly more than half of metropolitan area population claimed over three-fourths of metropolitan area
employment by work location and earned personal income. Similarly,
central cities within New York Standard Consolidated Area represented
a little over three-fifths of metropolitan area population and more than
four-fifths of metropolitan area employment by work location and earned
personal income.

Central cities of South East and South West are still rapidly growing. Suburbanization of population in these metropolitan areas has hardly begun. In spite of this central cities' larger role as producers of goods and services than as metropolitan area residence location is quite marked. The central cities that may be listed under this category are New Orleans, Dallas, Houston, Phoenix, and San Antonio. New Orleans, with 72.4 percent of metropolitan area population, claimed over four-fifths of metropolitan area employment by work location and earned personal income. Dallas, with 62.7 percent of metropolitan area population, made up 78.3 percent of metropolitan area employment by work location and 81.2 percent of metropolitan area earned personal income. Houston represented three-fourths of metropolitan area population and well over four-fifths of metropolitan area employment by work location and earned personal income. Phoenix, with two-thirds of metropolitan area population, claimed 79.1 percent of metropolitan area employment by work location and 85.9 percent of metropolitan area earned personal income. Finally, San Antonio represented 85.6 percent of metropolitan area population and 94.6 percent of metropolitan area employment by work location and 95.4 percent of metropolitan area earned personal income.

E. CENTRAL CITIES ROLE IN SHARING METROPOLITAN AREA RECEIPT OF PERSONAL INCOME; COMPARISON BY INDIVIDUAL METROPOLITAN AREAS

In Chapter III it has been shown that central cities role as recipients of metropolitan area receipt of personal income was even lower than central cities role as metropolitan area residence location. Per capita personal income received in all the selected central cities taken together was lower than per capita personal income received in all the corresponding metropolitan areas taken together. As a result for all the selected central cities taken together central cities share of corresponding metropolitan area receipt of personal income was lower than central cities share of corresponding metropolitan area population. Also central cities share of corresponding metropolitan area receipt of personal income was much lower than central cities share of corresponding metropolitan area employment by work location and earned personal income. In Chapter IV it has been shown that this was true in metropolitan areas of all the five different size classes. In Chapter V it has been shown that out of eight regions in five, per capita personal income received was lower in selected central cities than in corresponding metropolitan In consequence in these five regions selected central cities share of corresponding metropolitan area receipt of personal income was lower than selected central cities share of corresponding metropolitan area population. However, in each of the eight regions without any exception selected central cities share of corresponding metropolitan area receipt of personal income was much lower than selected central cities share of corresponding metropolitan area employment by work

location and earned personal income. In this section it is shown that out of 29 selected individual metropolitan areas in 19, per capita personal income received was lower in central cities than in corresponding metropolitan areas. As a result in these 19 metropolitan areas central city share of corresponding metropolitan area receipt of personal income was lower than central city share of corresponding metropolitan area population. Also in each individual metropolitan area central city share of corresponding metropolitan area receipt of personal income was much smaller than central city share of corresponding metropolitan area employment by work location and earned personal income.

Table VI-5 shows per capita personal income received in central city as percentage of per capita personal income received in corresponding metropolitan area. Table VI-5 also shows central city share of corresponding metropolitan area receipt of personal income. Both of these ratios are shown for 29 selected metropolitan areas. Column (1) in Table VI-5 shows that out of 29 selected metropolitan areas in 19, per capita personal income received in central city as percentage of per capita personal income received in corresponding metropolitan area was less than one hundred. In consequence in each of these 19 selected metropolitan areas central city share of corresponding metropolitan area receipt of personal income was lower than central city share of corresponding metropolitan area population. This can be seen by comparing figures in Column (2) in Table VI-5 with figures in column (1) in Table VI-6. For example, in Boston central city share of corresponding metropolitan area population was 26.9 percent, but central city share of

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PER CAPITA PERSONAL INCOME IN CENTRAL CITY AS PERCENTAGE OF PER CAPITA INCOME IN SMSA FOR 29 SELECTED LARGE SMSAS AND CORRESPONDING CENTRAL CITIES, 1960

29 Selected Large	Per Capita Personal Income	
SMSAS and Central	Central City as	Income Control City of
Cities	Percentage of	Central City as
CILIES	SMSA	Percentage of SMSA
	(1)	(2)
	(Percentage Di	
New England	(reftentage bi	scribacion)
Boston	86.5	23.3
Mideast		
Baltimore	92.9	50.5
Buffalo	91.4	37.3
New York Consolidated	92.5	57.0
Philadelphia	92.6	42.7
Pittsburgh	94.6	23.8
Washington, D.C.	87.3	33.6
Great Lakes		
Chicago Consolidated	95.3	54.7
Cincinnati	92.6	43.5
Cleveland	85 . 7	41.8
Detroit	93.6	41.5
Milwaukee	97.3	60.4
Plains		
Kansas City	97.7	44.7
Minneapolis-St. Paul	100.9	54.2
St. Louis	88.6	32.2
Southeast		
Atlanta	90.4	43.3
Miami	91.8	28.7
New Orleans	95 . 5	69.1
Tampa-St. Petersburg	100.3	59.3
Southwest		
Dallas	103.7	65.0
Houston	97.8	73.8
Phoenix	108.1	71.5
San Antonio	100.1	85.7
Rocky Mountain		
Denver	101.1	53.8
Far West		
Los Angeles-Long Beach	100.5	42.1
San Bernardino-Riverside-		
Ontario	113.8	31.3
San Diego	101.7	56.4
San Francisco-Oakland	99.3	39.6
Seattle-Everett	104.9	52.8
Total	95.1	47.7
-		

Source: Computed from Table C-9.

corresponding metropolitan area receipt of personal income was 23.3 percent. Similarly, in New York central city share of corresponding metropolitan area population was 61.6 percent, and compared to this central city share of corresponding metropolitan area receipt of personal income was 57.0 percent.

Out of 29 selected metropolitan areas in 11, per capita personal income received in central city was higher than per capita personal income received in corresponding metropolitan area. In these 11 metropolitan areas central city share of corresponding metropolitan area receipt of personal income was higher than central city share of corresponding metropolitan area population. For example, in San Bernardino-Riverside-Ontario central city share in corresponding metropolitan area population was 27.5 percent and central city share in corresponding metropolitan area receipt of personal income was 31.3 percent. Similarly, in Dallas central city share in corresponding metropolitan area population was 62.7 percent, and central city share in corresponding metropolitan area receipt of personal income was 65.0 percent. However, even in the case of these 11 metropolitan areas central city share of corresponding metropolitan area receipt of personal income was much smaller than central city share of corresponding metropolitan area employment by work location and earned personal income. This can be seen by comparing figures in column (2) in Table VI-5 with figures in column (1) in Table VI-3 and figures in column (1) in Table VI-4. For example, in San Bernardino-Riverside-Ontario central city share of corresponding metropolitan area receipt of personal income was 31.3 percent and as compared to this central city share of corresponding

metropolitan area employment by work location was 54.8 percent and central city share of corresponding metropolitan area earned personal income was 57.1 percent. Similarly, in Dallas central city share of corresponding metropolitan area receipt of personal income was 65.0 percent, but as compared to this central city share of corresponding metropolitan area employment by work location and earned personal income were 78.3 percent, and 81.2 percent respectively. These examples clearly indicate that in each individual metropolitan area central city role in metropolitan area production of goods and services was much larger than central city role as location of metropolitan area residences or central city role in sharing metropolitan area receipt of personal income.

F. AGE STRUCTURE OF CENTRAL CITY POPULATION IN RELATION TO THEIR METROPOLITAN AREAS; COMPARISON BY INDIVIDUAL METROPOLITAN AREAS

It has been shown in Chapter III that compared to their corresponding metropolitan areas all the selected central cities taken together had a relatively larger proportion of their total population in older age groups and a relatively smaller proportion of their total population in younger age groups. In Chapter IV it has been shown that in metropolitan areas of all the five different size classes there was relatively larger concentration of old people in the selected central cities than in the corresponding metropolitan areas. Similarly, in Chapter V it has been shown that in all the eight regions age structure of population was older in selected central cities than in their corresponding metropolitan areas. In this section it is shown that in most of the selected individual metropolitan areas age composition of population was older

in central city than in corresponding metropolitan area. In general, compared to that in their corresponding metropolitan areas, central cities had relatively smaller proportions of their population in age groups under 18 years, and 18 to 44 years, and relatively larger proportions of their population in the age groups 45 to 64 years, and 65 years and over. The same information expressed in another form shows that, in general, central city share of corresponding metropolitan area population in age groups under 18 years, and 18 to 44 years were lower than central city share of corresponding metropolitan area total population. On the other hand, in general, central city share of corresponding metropolitan area population in age groups 45 to 64 years and 65 years and over were higher than central city share of corresponding metropolitan area total population.

Relatively older age composition of population in central cities compared to that in their corresponding metropolitan areas is also reflected in age composition of household heads. In most of the selected metropolitan areas central city had a larger proportion of its total household heads in the age group 65 years and over than the corresponding metropolitan area had. In contrast in most of the metropolitan areas central city had a relatively smaller proportion of its total household heads in the age group 45 to 64 years than its corresponding metropolitan area had. Out of 28 selected metropolitan areas in 15, central cities had a relatively smaller proportion of their total household heads in the age group under 45 years than their corresponding metropolitan areas had. On the other hand, in 13 metropolitan areas central cities had a relatively larger proportion of their total household heads in age group under 45

years as compared to the proportion of their total household heads that corresponding metropolitan areas had in age group under 45 years.

Table VI-7 compares percentage distribution of population by age group in central city with percentage distribution of population by age group in corresponding metropolitan area for 29 selected large metropolitan areas. A comparison of figures in column (1) with figures in column (2) in Table VI-7 shows that out of 29 selected metropolitan areas in 27, central cities had a smaller proportion of their total population in age group under 18 years than their corresponding metropolitan areas had. For example, central city of Boston had 28.7 percent of its total population in age group under 18 years; as compared to this Boston metropolitan area had 32.4 percent of its total population in age group under 18 years. Only in two metropolitan areas, namely, San Antonio and San Bernardino-Riverside-Ontario, central cities had a relatively larger proportion of their population in age group under 18 years than their corresponding metropolitan areas had. Similarly, a comparison of figures in column (3), appendix Table C-21 with figures in column (3), appendix Table C-22 shows that out of 29 selected metropolitan areas in 24, central cities had a relatively smaller proportion of their total population in age group 18 to 44 years than their corresponding metropolitan areas had. The five metropolitan areas in which central cities had a relatively larger proportion of their total population in age group 18 to 44 years than their corresponding metropolitan areas had are Boston, Cleveland, Milwaukee, Houston, and San Diego. This shows that as compared to that in their corresponding metropolitan areas selected

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PERCENTAGE DISTRIBUTION OF POPULATION, BY SMSA AND CORRESPONDING CENTRAL CITIES, BY AGE COMPOSITION, 1960

	Unde	er 18	18	to 64	65	Years
	Y	ears	Ye	ars	an d	0ver
	Central	SMSA	Central	SMSA	Central	SMSA
	City		City		City	
	(1)	(2)	(3)	(4)	(5)	(6)
Non-Realand			(Per	cent)		
New England	20 7	22 /	50 1	E	10.0	10 7
Boston	28.7	32.4	59.1	56.9	12.3	10.7
Mideast	22 7	25 1	E7 3	57 /	0 1	-, r
Baltimore Buffalo	33.7	35.1	57 .3	57.4	9.1	7.5
	31.0	34.7	57.6	56.4	11.6	8.9
New York Consolidated	28.2	30.3	61.4	60.2	10.4	9.5
Philadelphia	30.8	33.3	58.8	57.8	10.4	8.9
Pittsburgh	30.5	33.5	58.4	57.2	11.3	9.3
Washington, D.C.	28.8	35.1	62.1	59.0	9.0	5.9
Great Lakes	21 7	01.1	= 0.0			
Chicago Consolidated	31.7	34.1	58.8	57.7	9.5	8.2
Cincinnati	32.0	34.9	56.1	55.6	11.7	9.5
Cleveland	32.6	34.0	57.5	57.3	9.9	8.7
Detroit	32.8	36.8	57.8	56.1	9.5	7.1
Milwaukee	33.2	34.8	57.3	56.5	9.6	8.7
<u>Plains</u>						
Kansas City	30.9	34.8	57.6	56.1	11.6	9.1
Minneapolis-St. Paul	30.3	36.7	56.8	54.4	12.8	8.9
St. Louis	30.9	35.0	56.8	55.9	12.3	9.1
Southeast						
Atlanta	33.1	36.5	59.0	57.0	8.0	6.5
Miami	25.0	31.1	62.4	59.2	12.7	9.8
New Orleans	34.9	37.0	56.4	55.7	8.6	7.3
Tampa-St. Petersburg	29.2	29.7	53.1	53.6	17.5	16.8
Southwest						
Dallas	35.3	36.1	57.7	57.0	6.9	7.0
Houston	37.4	38.1	56.9	56.8	5.7	5.1
Phoenix	37.8	38.6	54.4	54.7	7.7	6.9
San Antonio	40.8	40.0	52.1	53.2	7.1	6.7
Rocky Mountain						
Denver	32.8	36.5	56.5	55.5	10.7	8.2
Far West						
Los Angeles-Long Beach	30.1	33.6	59.3	57.7	10.5	8.8
San Bernardino-Riverside-						
Ontario	36.8	36.2	53.8	54.2	9.4	9.5
San Diego	32.8	35.8	59.7	57.1	7.5	7.2
San Francisco-Oakland	26.0	32.5	61.4	58.8	12.6	8.8
Seattle-Everett	30.2	34.9	57.7	55.7	12.0	9.5
All Central Cities/SMSAS		33.7	58.9	57.6	10.2	8.7
THE CHILLY OFFICE, DIDING	30.7	JJ.,	20.7	31.0	10.2	J. /

Source: Table C-22 and Table C-21.

central cities, in general, had a relatively smaller proportion of their total population in younger age groups, namely, in age groups under 18 years, and 18 to 44 years.

On the other hand, a comparison of figures in column (5) with figures in column (6) in Table VI-7 shows that out of 29 metropolitan areas in 27, central cities had a relatively larger proportion of their total population in age group 65 years and over than their corresponding metropolitan areas had. For example, Boston metropolitan area had 10.7 percent of its total population in age group 65 years and over; compared to this central city of Boston had 12.3 percent of its total population in age group 65 years and over. The two metropolitan areas in which central cities had a relatively slightly smaller proportion of their total population in age group 65 years and over than their corresponding metropolitan areas had were Dallas and San Bernardino-Riverside-Ontario. Similarly, a comparison of figures in column (4), appendix Table C-21 with figures in column (4), appendix Table C-22 shows that out of 29 selected metropolitan areas in 25, central cities had a larger proportion of their total population in age group 45 to 64 years than their corresponding metropolitan areas had. For example, central city of Boston had 23.1 percent of its total population in age group 45 to 64 years and as compared to this metropolitan area of Boston had 22.2 percent of its total population in age group 45 to 64 years. The four metropolitan areas in which central cities had a relatively smaller proportion of their total population in age group 45 to 64 years than their corresponding metropolitan areas had were Cleveland, Tampa-St. Petersburg, Houston, and San Diego. This shows that compared to that in their corresponding

metropolitan areas, central cities, in general, had a larger proportion of their total population in age groups 45 to 64 years, and 65 years and over.

Table VI-6 shows central city share of corresponding metropolitan area population by four age groups and for 29 selected metropolitan areas. A comparison of figures in column (1) with figures in column (2) shows that out of 29 selected metropolitan areas in 27, central city share of corresponding metropolitan area population in age group under 18 years was lower than central city share of corresponding metropolitan area total population. For example, in Boston central city share of corresponding metropolitan area population in age group under 18 years was 23.8 percent, but central city share of corresponding metropolitan area total population was 26.9 percent. The two metropolitan areas in which central city share of corresponding metropolitan area population in age group under 18 years was higher than central city share of corresponding metropolitan area total population were San Antonio and San Bernardino-Riverside-Ontario. Similarly, a comparison of figures in column (3) with figures in column (1) in Table VI-6 shows that out of 29 selected metropolitan areas in 24, central city share of corresponding metropolitan area population in age group 18 to 44 years was lower than central city share of corresponding metropolitan area total population. The five metropolitan areas in which central city share of corresponding metropolitan area population in age group 18 to 44 years was higher than central city share in corresponding metropolitan area total population were Boston, Cleveland, Milwaukee, Houston, and San Diego.

TABLE VI-6

CENTRAL CITY POPULATION AS PERCENTAGE OF CORRESPONDING SMSA POPULATION FOR 29 SELECTED LARGE CENTRAL CITIES AND SMSAS, 1960

		A	ge Composi	tion	
;	Total	Under 18	18 to 44	45 to 64	65 Years
		Years	Years	Years	and Over
	(1)	(2)	(3)	(4)	(5)
New England			(Percent)		
Boston	26.9	23.8	27.9	28.0	31.0
Mideast	20.9	25.0	21.9	20.0	31.0
Baltimore	54.4	52.1	51.4	59.7	65.9
Buffalo	40.8	36.3	39.3	45.5	53.4
New York Consolidated	61.6	57.3	61.6	64.8	67.5
Philadelphia	46.1	42.6	44.8	50.6	53.6
Pittsburgh	25.1	22.8	24.5	27.5	30.5
Washington, D.C.	38.5	31.7	37.9	46.0	59.5
Great Lakes	30.3	31.7	37.9	40.0	37.3
Chicago Consolidated	57.4	53.4	56.7	61.5	65.9
Cincinnati	46.9	43.0	46.0	49.6	57 . 8
Cleveland	48.7	46.8	49.4	48.3	55.4
Detroit	44.4	39.5	41.7	52.8	59.6
Milwaukee	62.1	59.3	62.5	63.3	68.3
Plains	02.1	37.3	02.5	05.5	00.5
Kansas City	45.8	40.6	44.2	51.9	57.9
Minneapolis-St. Paul	53.7	44.3	52.0	63.6	77.3
St. Louis	36.4	32.2	34.5	41.0	48.9
Southeast	30.4	J2. 2	34.3	41.0	40.9
Atlanta	47.9	43.4	46.8	55.7	59.1
Miami	31.2	25.1	30.8	36.3	40.2
New Orleans	72.4	68.2	69.8	79.2	85.7
Tampa-St. Petersburg	59.1	58.1	58.4	58.5	61.5
Southwest	37.1	3011	30.4	30.3	01.3
Dallas	62.7	61.4	62.2	65.9	61.8
Houston	75.5	74.2	75.9	75.1	82.8
Phoenix	66.1	64.8	63.8	70.0	73.9
San Antonio	85.6	87.3	81.7	87.8	91.3
Rocky Mountain		0.00	32		,_,,
Denver	53.2	47.8	50.4	62.0	69.7
Far West		.,,,	200	3273	
	41.8	37.6	41.5	45.9	50.2
San Bernardio-Riverside-				,300	300-
Ontario	27.5	28.0	27.4	27.2	27.3
San Diego	55.5	50.8	58.9	56.1	58.1
San Francisco-Oakland	39.8	31.9	37.7	48.3	56.9
Seattle-Everett	54.1	46.9	52.4	63.0	68.6
All Central Cities/SMSAS		46.0	49.4	54.5	58.7
	• _	, 3.0	•		•

Source: Computed from Table C-16 and Table C-15.

On the other hand, a comparison of figures in column (5) with figures in column (1) shows that out of 29 metropolitan areas in 27, central city share of corresponding metropolitan area population in age group 65 years and over was higher than central city share of corresponding metropolitan area total population. For example, in Boston central city share of corresponding metropolitan area population in age group 65 years and over was 31.0 percent and central city share of corresponding metropolitan area total population was 26.9 percent. two metropolitan areas in which central city share of corresponding metropolitan area population in age group 65 years and over is lower than central city share of corresponding metropolitan area total population are Dallas and San Bernardino-Riverside-Ontario. Similarly, a comparison of figures in column (4) with figures in column (1) in Table VI-6 shows that out of 29 selected metropolitan areas in 25, central city share of corresponding metropolitan area population in age groups 45 to 64 years was higher than central city share of corresponding metropolitan area total population. For example, in Boston central city share of corresponding metropolitan area population in age group 45 to 64 years was 28.0 percent and compared to this central city share of corresponding metropolitan area total population was 26.9 percent. The four metropolitan areas in which central city share of corresponding metropolitan area population in age group 45 to 64 years was lower than central city share of corresponding metropolitan area total population were Cleveland, Tampa-St. Petersburg, Houston, and San Bernardino-Riverside-Ontario. Thus, in general, central city share of corresponding metropolitan area

population in age groups 45 to 64 years, and 65 years and over was higher than central city share of corresponding metropolitan area total population. This, in other words, means that as compared to that in their corresponding metropolitan areas central cities had in them a relatively larger concentration of old people. This is also reflected in distribution of household heads by age.

Appendix Table C-23 shows percentage distribution of households by age of head for 29 selected large central cities and appendix Table C-24 shows percentage distribution of households by age of head in corresponding 29 selected metropolitan areas. A comparison of figures in column (2) in appendix Table C-23 with figures in column (2) in appendix Table C-24 shows that out of 28 metropolitan areas for which comparable data were available in 15, central cities had a smaller proportion of their total household heads in age group under 45 years than their corresponding metropolitan areas had. In 13 metropolitan areas, however, central cities had a larger proportion of their total household heads in age group under 45 years than their corresponding metropolitan areas had. These 13 metropolitan areas include both old cities located in highly urbanized areas and also those central cities in South and South West which are still rapidly growing. These 13 metropolitan areas include Boston, New York Standard Consolidated Area, Philadelphia, Chicago Standard Consolidated Area, Cincinnati, Cleveland, Milwaukee, Tampa-St. Petersburg, Dallas, Houston, Phoenix, San Antonio, and San Diego.

A comparison of figures in column (3) appendix Table C-23 with figures in column (3), appendix Table C-24 shows that out of 28 selected

metropolitan areas in 26, central cities had a relatively smaller proportion of their total household heads in age group 45 to 64 years than their corresponding metropolitan areas had. For example, Boston metropolitan area had 39.0 percent of its total household heads in age group 45 to 64 years; but compared to this central city of Boston had only 34.2 percent of its total household heads in age group 45 to 64 years. Two metropolitan areas in which compared to that in their corresponding metropolitan areas central cities had a larger proportion of their total household heads in age group 45 to 64 years were Detroit and San Francisco-Oakland.

On the other hand, a comparison of figures in column (4), appendix Table C-23 with figures in column (4), appendix Table C-24 shows that out of 28 selected metropolitan areas in 26, central cities had a relatively larger proportion of their total households in age group 65 years and over than their corresponding metropolitan areas had. For example, central city of Boston had 22.2 percent of its total household heads in age group 65 years and over and compared to this metropolitan area of Boston had 19.5 percent of its total household heads in age group 65 years and over. The two metropolitan areas in which central cities had a smaller proportion of their total household heads in age group 65 years and over than their corresponding metropolitan areas had were Tampa-St. Petersburg and Dallas. Thus, a comparison of percentage distribution of household heads by age in central city with percentage distribution of household heads by age in corresponding metropolitan area clearly points to a relatively larger concentration of older

household heads in central cities than in corresponding metropolitan areas.

That compared to their corresponding metropolitan areas selected central cities had a larger concentration of old household heads is also expressed in another form in Table VI-8. Table VI-8 shows central city share of corresponding metropolitan area households by age of household heads and for 28 selected metropolitan areas. A comparison of figures in column (2) with figures in column (1) shows that out of 28 selected metropolitan areas in 15, selected central city share of corresponding metropolitan area households with heads aged under 45 years was smaller than central city share of corresponding metropolitan area total households. For example, in Washington, D.C. central city share of corresponding metropolitan area households with heads aged under 45 years was 40.4 percent; but compared to this central city share of corresponding metropolitan area total households was 42.6 percent. A comparison of figures in column (3) with figures in column (1) in Table VI-8 shows that out of 28 selected metropolitan areas in 26, central city share in corresponding metropolitan area households with heads aged 45 to 64 years was lower than central city share in corresponding metropolitan area total households. For example, in Boston central city share of corresponding metropolitan area households with heads aged 45 to 64 years was 25.7 percent and as compared to this central city share of corresponding metropolitan area total households was 29.2 percent. The two metropolitan areas in which central city share of corresponding metropolitan area households with heads aged 45 to 64 years was higher

TABLE VI-8
HOUSEHOLDS, BY AGE OF HEAD, IN 29 SELECTED LARGE CENTRAL CITIES

HOUSEHOLDS, BY AGE OF HEAD, IN 29 SELECTED LARGE CENTRAL CITIES AS PERCENTAGE OF HOUSEHOLDS, BY AGE OF HEAD, IN CORRESPONDING 29 SELECTED LARGE SMSAS, 1960

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		Age o	f Head	
29 Selected Large	Total	Under 45	45 to 64	65 Years
Central Cities/SMSAS		Years	Years	and Over
	(1)	(2)	(3)	(5)
		(Perc	ent)	
New England	20.0	20. /	05.7	22.2
Boston	29.2	30.4	25.7	33.3
Mideast				
Baltimore	56.9	56.1	53.6	69.2
Buffalo	43.7	42.9	39.9	54.8
New York Consolidated	62.5	63.1	59.7	68.2
Philadelphia	48.6	49.0	45.4	55.4
Pittsburgh	26.5	26.0	24.9	31.1
Washington, D.C.	42.6	40.4	41.2	59.7
Great Lakes				
Chicago Consolidated	60.3	61.5	56.4	67.1
Cincinnati	49.7	50.7	43.4	59.6
Cleveland	50.2	54.2	42.6	56.5
Detroit	47.6	43.2	48.6	61.5
Milwaukee	64.7	68.9	57.5	69.6
Plains				
Kansas City	50.2	49.7	46.2	60.0
Minneapolis-St. Paul	60.1	56.4	56.8	77.3
St. Louis	39.8	38.7	36.8	50.5
Southeast				
Atlanta	50.2	48.1	49.5	61.1
Miami	35.1	33.6	33.9	41.5
New Orleans	75.1	74.8	70.5	88.6
Tampa-St. Petersburg	60.0	66.3	52.7	59.5
Southwest				
Dallas	64.4	68.2	59.6	61.4
Houston	76.9	82.3	67.7	81.1
Phoenix	69.1	72.4	63.6	70.4
San Antonio	88.5	95.7	77.4	88.9
Rocky Mountain		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Denver	58.0	55.1	54.8	71.7
Far West		33.7		, _ ,
Los Angeles-Long Beach	45.2	44.9	42.6	52.1
San Bernardno-Riverside-		CC Data	CC Data	CC Data
Ontario	28.6	N.A.	N.A.	N.A.
San Diego	57.4	60.2	50.5	61.4
San Francisco-Oakland	46.2	41.2	46.5	59.7
Seattle-Everett	55.8	55.0	51.2	66.2
All Central Cities/SMSAS		52.5	49.4	59.4
WIT CHILLY CITTES SURVE	12.7	24.3	77.7	J7.4

Source: Computed from Table C-18 and Table C-17.

Note: CC = Central City; N.A. = Not Available

than central city share of corresponding metropolitan area total households are Detroit and San Francisco-Oakland.

On the other hand, a comparison of figures in column (4) with figures in column (1) shows that out of 28 selected metropolitan areas in 26, central city share of corresponding metropolitan area households with heads aged 65 years and over was higher than central city share of corresponding metropolitan area total households. For example, in Boston central city share of corresponding metropolitan area households with heads aged 65 years and over was 33.3 percent and compared to this Boston central city share of Boston metropolitan area total households was 29.2 percent. Only exceptions to this relationship were in Tampa-St. Petersburg and Dallas. In these two metropolitan areas central city share of corresponding metropolitan area households with heads aged 65 years and over was smaller than central city share of corresponding metropolitan area total households. Central city households by age of household heads expressed as percentage of corresponding metropolitan area households by age of household heads clearly indicates relatively older age structure of central city household heads as compared to the age structure of household heads in their corresponding metropolitan areas.

G. DISTRIBUTION OF HOUSEHOLDS BY INCOME CLASS IN CENTRAL CITIES AND CORRESPONDING METROPOLITAN AREAS: COMPARISON BY INDIVIDUAL METROPOLITAN AREAS

Compared to that in their corresponding metropolitan areas all the 29 selected central cities taken together had a relatively larger

proportion of their total households in poverty income class, that is, in income class under \$4,000. This has been shown in Chapter III. In Chapter IV it has been shown that in metropolitan areas of all the five different size classes excepting in metropolitan areas of size less than 1 million, central cities had a relatively larger proportion of their total households in poverty income class than their corresponding metropolitan areas had. In Chapter V it has been shown that out of eight regions in six, central cities claimed a relatively larger share of their total households in income class under \$4,000 than did corresponding SMSAS. In this section it is shown that in most of the selected individual metropolitan areas central cities, as compared to their corresponding metropolitan areas, showed a larger concentration of poor households. Exceptions were primarily the metropolitan areas of South East and South West where central cities are still rapidly growing. It is also shown that in most metropolitan areas central cities, compared to their corresponding metropolitan areas, claimed a relatively larger proportion of their total households not only in poverty income class, but also in the highest income class, that is, in income class \$15,000 and over.

Table VI-9 compares percentage of total central city households in poverty income class with percentage of total corresponding metropolitan area households in poverty income class for 28 selected individual metropolitan areas. A comparison of figures in column (1) with figures in column (2) in Table VI-9 shows that out of 28 selected metropolitan areas in 20, percentage share of total households in income class under \$4,000 was higher for central cities than for corresponding metropolitan

TABLE VI-9

PERCENTAGE DISTRIBUTION OF HOUSEHOLDS, BY INCOME LEVELS, BY SMSAS AND CORRESPONDING CENTRAL CITIES, 1960

	Income Level Under	r \$4,000
29 Selected Large Central Cities/SMSAS	Central City	SMSA
	(1)	(2)
	(Percei	
New England		
Boston	25.8	20.5
Mideast		
Baltimore	24.3	21.9
Buffalo	25.4	20.2
New York Consolidated	19.8	21.3
Phil a delphia	24.7	21.2
Pittsburgh	26.1	22.4
Washington, D.C.	21.4	17.1
Great Lakes		
Chicago Consolidated	21.7	18.5
Cincinnati	27.8	24.5
Cleveland	23.7	18.6
Detroit	24.9	19.9
Milwaukee	19.0	17.6
Plains		
Kansas City	25.9	23.9
Minneapolis-St. Paul	22.6	19.7
St. Louis	28.9	23.8
Southeast		
Atlanta	29.5	27.5
Miami	36.1	33.1
New Orleans	32.1	34.0
Tampa-St. Petersburg	35.8	40.8
Southwest		
Dallas	22.1	26.7
Houston	23.7	25.9
Phoenix	22.7	27.2
San Antonio	29.2	34.6
Rocky Mountain		
Denver	23.5	22.7
Far West		
Los Angeles-Long Beach	24.1	22.5
San Bernardino-Riverside-		
Ontario	N.A.	27.8
San Diego	20.6	23.3
San Francisco-Oakland	25.4	22.2
Seattle-Everett	24.9	22.5
All Central Cities/SMSAS	23.4	22.1
in the contract of the contrac		: -

Source: Table C-26 and Table C-25.

N.A. = Not Available

areas. For example, in central city of Boston 25.8 percent of total households were in income class under \$4,000; but compared to this in metropolitan area of Boston 20.5 percent of total households were in income class under \$4,000. Eight metropolitan areas in which central cities had a relatively smaller proportion of their total households in income class under \$4,000 than their corresponding metropolitan areas had are New York Standard Consolidated Area, New Orleans, Tampa-St. Petersburg, Dallas, Houston, Phoenix, San Antonio, and San Diego. Out of eight of these metropolitan areas six are located in South East and South West regions.

Similarly, a comparison of figures in column (4), appendix Table C-25 with figures in column (4), appendix Table C-26 shows that out of 28 selected metropolitan areas in 19, central cities had a relatively larger proportion of their total households in income class \$15,000 and over than their corresponding metropolitan areas had. For example, central cities in New York Standard Consolidated Area had 18.9 percent of their total households in income class \$15,000 and over and as compared to this New York Standard Consolidated Area had 15.1 percent of its total households in income class \$15,000 and over. The 9 metropolitan areas in which central cities had a relatively smaller proportion of their total households in income class \$15,000 and over than their corresponding metropolitan areas had are Boston, Buffalo, Philadelphia, Washington, D.C., Chicago Consolidated Area, Cleveland, Milwaukee, St. Louis, and Miami. Most of these metropolitan areas are among the highly suburbanized areas. Out of these 9 metropolitan areas in four, central

cities claimed less than 40 percent of corresponding metropolitan area population and only in two central cities claimed more than 50 percent of corresponding metropolitan area population. A comparison of percentage distribution of central city households by income class with percentage distribution of corresponding metropolitan area households by income class, thus, shows that in general, compared to that in their corresponding metropolitan areas, central cities had a larger proportion of their total households in both poverty income class (under \$4,000), and in the highest income class (\$15,000 and over).

That compared to that in their corresponding metropolitan areas central cities had a relatively larger concentration of poor households is also clearly indicated when central city households by income class are expressed as percentages of corresponding metropolitan area households by income class. This is shown in Table VI-10. A comparison of figures in column (1) with figures in column (5) in Table VI-10 shows that out of 28 selected metropolitan areas in 20, central city share of corresponding metropolitan area households with income under \$4,000 was higher than central city share of corresponding metropolitan area total households. For example, in Boston central city share of corresponding metropolitan area households with income under \$4,000 was 36.7 percent and compared to this central city share of corresponding metropolitan area total households was 29.2 percent. Eight metropolitan areas in which central city share of corresponding metropolitan area households with income under \$4,000 was smaller than central city share of corresponding metropolitan area total households are New York Standard

HOUSEHOLDS, BY INCOME CLASS, IN 29 SELECTED LARGE CENTRAL CITIES AS PERCENTAGE OF HOUSEHOLDS, BY INCOME CLASS, IN CORRESPONDING 29 SELECTED LARGE SMSAS, 1960

		:	Income Clas	s	
29 Selected Large	Under	\$4,000	\$8,000	\$15,000	Total
	\$4,000	to	to	and	
		\$8,000	\$15,000	0ver	
	(1)	(2)	(3)	(4)	(5)
New England			(Percent	:)	
Boston	36.7	26.4	29.8	23.6	29.2
Mideast	30.7	20.4	29.0	23.0	49.4
Baltimore	63.2	50.6	55.8	66.1	56.9
Buffalo	55.1	41.5	41.4	37.8	43.8
New York Consolidated	58.2	51.1	69.4	78.1	62.5
Philadelphia	56.7	46.1	48.0	43.1	48.6
Pittsburgh	30.8	22.8	26.5	31.2	26.5
Washington, D.C.	53.5	47.1	35.9	38.6	42.6
Great Lakes			-		
Chicago Consolidated	70.8	63.0	55.3	55.2	60.3
Cincinnati	56.3	46.2	46.5	53.7	49.7
Cleveland	64.0	49.7	50.8	33.8	50.2
Detroit	59.5	45.0	42.8	49.0	47.7
Milwaukee	69.8	60.7	66.2	63.3	64.7
Plains					
Kansas City	54.4	44.5	50.0	57.9	50.2
Minneapolis-St. Paul	69.0	53.6	58.2	65.5	60.1
St. Louis	48.3	37.4	38.5	32.9	39.8
Southeast					
Atlanta	53.8	46.8	45.1	62.9	50.2
Miami	38.2	34.6	31.5	34.5	35.1
New Orleans	70.9	68.2	83.1	95.8	75.1
Tampa-St. Petersburg	52.8	55.1	82.6	76.2	60.0
Southwest					
Dallas	53.4	54.2	74.2	92.9	64.5
Houston	70.5	67.5	82.6	102.2	77.1
Phoenix	57.7	58.1	81.8	95.2	69.1
San Antonio	74.6	7 8 .8	121.1	106.7	88.5
Rocky Mountain					
Denver	60.0	50.0	58.1	75.0	58.0
Far West					45.0
Los Angeles-Long Beach	48.3	39.8	43.4	54.6	45.2
San Bernardino-Riverside-					00.6
Ontario	N.A.				28.6
San Diego	50.7	47.3	62.4	75.6	57.4
San Francisco-Oakland	52.7	43.9	41.5	50.7	46.2
Seattle-Everett	61.7	51.4	53.3	61.2	55.8
All Central Cities/SMSAS	55.4	47.3	52.8	58.3	52.4

Source: Computed from Table C-20 and Table C-19

N.A. = Not Available

Consolidated Area, New Orleans, Tampa-St. Petersburg, Dallas, Houston, Phoenix, San Antonio, and San Diego. Similarly, a comparison of figures in column (4) with figures in column (5) in Table VI-10 shows that out of 28 selected metropolitan areas in 19, central city share of corresponding metropolitan area households in income class \$15,000 and over was higher than central city share of corresponding metropolitan area total households. For example, in Baltimore, central city share of corresponding metropolitan area households in income class \$15,000 and over was 66.1 percent, but compared to this central city share of corresponding metropolitan area total households was 56.9 percent. The 9 metropolitan areas in which central city share of corresponding metropolitan area households in income class \$15,000 and over was smaller than central city share of corresponding metropolitan area total households are Boston, Buffalo, Philadelphia, Washington, D.C., Chicago Consolidated Area, Cleveland, Milwaukee, St. Louis, and Miami. As mentioned earlier, most of these metropolitan areas are characterized by high degree of suburbanization of their population.

A comparison of figures in column (1) with figures in column (5) in Table VI-10 shows that out of 28 selected metropolitan areas in 20, central city share of corresponding metropolitan area households in income class under \$4,000 was larger than central city share of corresponding metropolitan area total households. But in contrast a comparison of figures in column (2) with figures in column (5) in Table VI-10 shows that out of 28 selected metropolitan areas in 26 central city share of corresponding metropolitan area households in income class \$4,000 to

\$8,000 was lower than central city share of corresponding metropolitan area total households. This contrast clearly points to relative larger concentration of poor households in most central cities than in their corresponding metropolitan areas.

On the other hand, a comparison of figures in column (3) with figures in column (5) shows that out of 28 metropolitan areas in 13, central city share of corresponding metropolitan area households in income class \$8,000 to \$15,000 was higher than central city share of corresponding metropolitan area total households. Moreover, a comparison of figures in column (4) with figures in column (5) shows that out of 28 selected metropolitan areas in 19, central city share of corresponding metropolitan area households in income class \$15,000 and over was higher than central city share of corresponding metropolitan area total households. This clearly indicates, as compared to that in their corresponding metropolitan areas selected central cities had a relatively larger concentration of both poor households and households with income \$15,000 and over. While much attention is paid to the fact that central city households contain large proportion of poor households, it is often overlooked that central city households also contain a relatively large proportion of households in income class \$15,000 and over.

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APPENDIX - D

ANALYSIS OF CENTRAL CITY EMPLOYMENT, BY PLACE OF WORK AND BY PLACE OF RESIDENCE

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APPENDIX - A

METROPOLITAN AREA SIZE CLASS ANALYSIS

TABLE A-1

RATIO OF WORKERS BY PLACE OF WORK IN CENTRAL CITY TO WORKERS
BY PLACE OF RESIDENCE IN CENTRAL CITY, FOR 29

SELECTED LARGE CENTRAL CITIES, 1960

Industry Groups Tota1 Manufac-Wholesale Public SMSA Size Group Construc-(Data are for 29 tion turing & Administration & Retail Selected Large Services Trade Central Cities) (3) (4) (5) (1) (2) (Ratios) 1.3 1.3 1.4 1.4 Over 5 Million 1.3 1.5 1.5 1.5 1.6 1.6 2 to 5 Million 1.5 1.6 1.4 1.4 1 to 2 Million 1.4 1.3 1.3 1.3 1.4 1.4 Less than 1 Million 1.5 1.3 1.3 1 Million & Over 1.4 1.5 1.3 1.5 1.3 1.5 Total 1.4

Source: Computed from journey to work data published in Bureau of the Census, U.S. Department of Commerce, U.S. Census of Population: 1960, Subject Reports Journey to Work, Final Report PC (2) - 6B, U.S. Government Printing Office, Washington, D.C., 1963.

PER WORKER EARNED PERSONAL INCOME, BY INDUSTRY, BY CENTRAL CITY, FOR 29 SELECTED LARGE CENTRAL CITIES, 1959

		Industr	y Groups	
SMSA Size Group (Data are for 29 Selected Large Central Cities)	Total	Manufac- turing	Wholesale & Retail Trade	Services
	(1)	(2)	(3)	(4)
		(Doll	ars)	
Over 5 Million	\$5,947	\$5,888	\$6,892	\$4,738
2 to 5 Million	5,946	6,139	6,534	4,431
1 to 2 Million	5,745	6,137	6,034	4,081
Less than 1 Million	4,830	4,843	4,793	3,594
1 Million and Over	5,887	6,013	6,554	4,484
Total	5,803	5,963	6,384	4,405

Source: Computed from Tables A-3 and A-7.

TABLE A-3

ESTIMATED EMPLOYMENT, BY INDUSTRY, BY CENTRAL CITY WORK LOCATION,
FOR 29 SELECTED LARGE CENTRAL CITIES, 1960

		Industry	Group	
Total	Construc- tion	Manufac- turing	Wholesale & Retail Trade	Public Adminis- tration & Services
(1)	(2)	(3)	(4)	(5)
	(Thousands)		
8,477	355	2,615	1,513	3,994
3,814	157	1,227	701	1,729
5,079	276	1,401	957	2,445
1,500	114	235	338	813
17,370	788	5,243	3,171	8,168
18,870	902	5,478	3,509	8,981
	(1) 8,477 3,814 5,079 1,500	(1) (2) (3) (4) (5) (4) (5) (6) (6) (6) (7) (7) (7) (7) (7) (7) (7) (7) (7) (7	Total Construction Manufaction (1) (2) (3) (Thousands) 8,477 355 2,615 3,814 157 1,227 5,079 276 1,401 1,500 114 235	tion turing & Retail Trade (1) (2) (3) (4) (Thousands) 8,477 355 2,615 1,513 3,814 157 1,227 701 5,079 276 1,401 957 1,500 114 235 338

Source: Computed from Table C-1.

TABLE A-4

EMPLOYMENT BY INDUSTRY, BY SMSA WORK LOCATION, FOR 29 SELECTED LARGE SMSAS, 1960

Industry Groups Public Construc-Manufac-Wholesale Total SMSA Size Group Administuring & tion (29 Selected Large tration & Retail SMSAS) Services Trade (2) (3) (4) (5) (1) (Thousands) 2,036 5,132 3,405 11,111 538 Over 5 Million 1,212 2,921 328 2,209 6,670 2 to 5 Million 3,119 6,498 386 1,757 1,236 1 to 2 Million 1,096 300 433 1,981 152 Less than 1 Million 7,371 4,484 11,172 24,279 1,252 1 Million and Over 4,917 12,268 26,260 1,404 7,671 Total

Source: Computed from Table C-2.

TABLE A-5

EMPLOYMENT, BY INDUSTRY, BY CENTRAL CITY RESIDENCE LOCATION, FOR 29 SELECTED LARGE CENTRAL CITIES, 1960

	Industry Groups					
SMSA Size Group (Data are for 29 Selected Large Central Cities)	Total	Construc- tion	Manufac- turing	Wholesale & Retail Trade	Public Adminis- tration & Services	
	(1)	(2)	(3)	(4)	(5)	
		(Thousands)			
Over 5 Million	6,466	254	1,897	1,191	3,124	
2 to 5 Million	2,536	100	765	479	1,192	
1 to 2 Million	3,527	181	905	682	1,759	
Less than 1 Million	1,126	80	167	256	623	
1 Million and Over	12,529	535	3,567	2,352	6,075	
Total	13,655	615	3,734	2,608	6,698	

Source: Computed from Table C-8.

TABLE A-6

PER WORKER EARNED PERSONAL INCOME, BY INDUSTRY, BY SMSA, FOR 29

SELECTED LARGE SMSAS, 1959

Industry Groups Wholesale Public Total Construc-Manufac-SMSA Size Group Adminis-(29 Selected Large tion turing & **Retail** tration & SMSAS) Trade Services (4) (5) (2) (3) (1) (Dollars) \$6,203 \$5,309 Over 5 Million \$5,841 \$7,058 \$6,233 6,301 5,855 5,304 7,037 5,820 2 to 5 Million 5,245 6,363 3,603 5,692 6,524 1 to 2 Million 5,020 4,638 4,781 4,806 5,045 Less than 1 Million 5,290 6,888 6,285 5,944 1 Million and Over 5,795 5,829 5,244 6,688 6,235 5,721 Total

Source: Computed from Table A-8 and Table A-4.

TABLE A-7

EARNED PERSONAL INCOME, BY INDUSTRY, BY CENTRAL CITY, FOR 29

SELECTED LARGE CENTRAL CITIES, 1959

	Industry Groups				
SMSA Size Group (Data are for 29 Selected Large Central Cities)	Total	Construc- tion	Manufac- turing	Wholesale & Retail Trade	Public Adminis- tration & Services
	(1)	(2)	(3)	(4)	(5)
		(Mill	ion Dollar	rs)	
Over 5 Million	50,410	2,513	15,397	10,428	22,072
2 to 5 Million	22,676	1,107	7,532	4,580	9,458
1 to 2 Million	29,179	1,791	8,598	5,775	13,016
Less than 1 Million	7,245	561	1,138	1,620	3,926
1 Million and Over	102,265	5,411	31,527	20,783	44,545
Total	109,510	5,972	32,665	22,403	48,470

Source: Computed from Table C-6.

TABLE A-8

EARNED PERSONAL INCOME, BY INDUSTRY, BY SMSA, FOR 29 SELECTED LARGE SMSAS, 1959

Industry Groups Construc-Manufac-Wholesale Public SMSA Size Group Total Administion turing & (29 Selected Large **Retail** tration & SMSAS) Services Trade (3) (4) (5) (1) (2) (Million Dollars) 12,629 27,246 64,897 3,797 21,225 Over 5 Million 15,494 7,096 38,818 2,308 13,920 2 to 5 Million 16,360 6,926 2,518 11,180 1 to 2 Million 36,985 2,008 5,241 1,506 9,522 767 Less than 1 Million 46,325 26,651 59,099 140,700 8,624 1 Million and Over 28,659 64,340 9,390 47,831 150,221 Total

Source: Computed from Table C-7.

TABLE A-9

PERCENTAGE COMPOSITION OF EMPLOYMENT, BY INDUSTRY, BY SMSA WORK LOCATION, FOR 29 SELECTED LARGE SMSAS, 1960

Industry Groups Wholesale Public Construc-Manufac-Total SMSA Size Group Administion turing & (29 Selected Large tration & Retail SMSAS) Trade Services (1) (2) (3) (4) (5) (Percentage Distribution) 46.2 100.0 4.8 30.6 18.3 Over 5 Million 43.8 100.0 4.9 33.1 18.2 2 to 5 Million 48.0 5.9 27.0 19.0 100.0 1 to 2 Million 55.3 100.0 7.7 15.1 21.9 Less than 1 Million 46.0 100.0 5.2 30.4 18.5 1 Million and Over 29.2 18.7 46.7 5.3 100.0 Total

Source: Computed from Table A-4.

TABLE A-10

PERCENTAGE COMPOSITION OF ESTIMATED EMPLOYMENT, BY INDUSTRY, BY CENTRAL CITY WORK LOCATION, FOR 29 SELECTED LARGE CENTRAL CITIES, 1960

			Industry	Groups	
SMSA Size Group (Data are for 29 Selected Large Central Cities)	Total	Construc- tion	Manufac- turing	Wholesale & Retail Trade	Public Adminis- tration & Services
	(1)	(2)	(3)	(4)	(5)
		(Percer	ntage Distr	ibution)	
Over 5 Million	100.0	4.2	30.8	17.8	47.1
2 to 5 Million	100.0	4.1	32.2	18.4	45.3
1 to 2 Million	100.0	5.4	27.6	18.8	48.1
Less than 1 Million	100.0	7.6	15.7	22.5	54.2
1 Million and Over	100.0	4.5	30.2	18.3	47.0
Total	100.0	4.8	29.0	18.6	47.6

Source: Computed from Table A-3.

TABLE A-11

PERCENTAGE DISTRIBUTION OF EARNED PERSONAL INCOME, BY INDUSTRY, BY SMSA, FOR 29 SELECTED LARGE SMSAS, 1959

	Industry Groups					
SMSA Size Group (29 Selected Large SMSAS)	Total	Construc- tion	Manufac- turing	Wholesale & Retail Trade	Public Adminis- tration & Services	
	(1)	(2)	(3)	(4)	(5)	
		(Perce	entage Dist	ribution)		
Over 5 Million	100.0	5.9	32.7	19.5	42.0	
2 to 5 Million	100.0	5.9	35.9	18.3	39.9	
1 to 2 Million	100.0	6.8	30.2	18.7	44.2	
Less than 1 Million	100.0	8.1	15.8	21.1	55.0	
1 Million and Over	100.0	6.1	32.9	18.9	42.0	
Total	100.0	6.3	31.8	19.1	42.8	

Source: Computed from Table A-8.

TABLE A-12

PERCENTAGE DISTRIBUTION OF EARNED PERSONAL INCOME, BY INDUSTRY, BY CENTRAL CITY, FOR 29 SELECTED LARGE CENTRAL CITIES, 1959

Industry Groups Total Construc-Manufac-Wholesale Public SMSA Size Group Administion turing (29 Selected Large Retail tration & Central Cities) Trade Services (1) (2) (3) (4) (5) (Percentage Distribution) 43.8 20.7 5.0 30.5 Over 5 Million 100.0 41.7 4.9 33.2 20.2 100.0 2 to 5 Million 44.6 29.5 19.8 6.1 1 to 2 Million 100.0 15.7 22.4 54.2 100.0 7.7 Less than 1 Million 43.6 20.3 100.0 5.3 30.8 1 Million and Over 44.3 29.8 20.5 5.5 100.0 Total

Source: Computed from Table A-7.

TABLE A-13

PERCENTAGE COMPOSITION OF EMPLOYMENT, BY INDUSTRY, BY CENTRAL CITY RESIDENCE LOCATION, FOR 29 SELECTED LARGE CENTRAL CITIES, 1960

Industry Groups Construc- Manufac-Total Wholesale Public SMSA Size Group Administion turing (Data are for 29 tration & Retail Selected Large Central Cities) Trade Services **(**5) (1) (2) (3) (4) (Percentage Distribution) 18.4 48.3 29.3 Over 5 Million 100.0 3.9 100.0 3.9 30.2 18.9 47.0 2 to 5 Million 49.9 5.1 25.7 19.3 100.0 1 to 2 Million 100.0 7.1 14.8 22.7 55.3 Less than 1 Million 48.5 18.8 1 Million and Over 100.0 4.3 28.5 49.1 19.1 4.5 27.3 100.0 Total

Source: Computed from Table A-5.

TABLE A-14

POPULATION BY AGE COMPOSITION FOR 29 SELECTED LARGE CENTRAL CITIES, 1) 1960

SMSA Size Group (Data are for 29 Selected Large	Total	Under 18 Years	18 to 44 Years	45 to 64 Years	65 Years and Over
Central Cities)	(1)	(2)	(3)	(4)	(5)
		('	Thousands)		
Over 5 Million	15,464	4,550	5,582	3,759	1,573
2 to 5 Million	6,832	2,066	2,367	1,646	753
1 to 2 Million	8,905	2,903	3,267	1,891	844
Less than 1 Million	3,120	1,076	1,077	646	321
1 Million and Over	31,201	9,519	11,216	7,296	3,170
Total	34,321	10,595	12,293	7,942	3,491

Source: Computed from Table C-15.

TABLE A-15

POPULATION BY AGE COMPOSITION FOR 29 SELECTED LARGE SMSAS, 1960

	Age Composition						
SMSA Size Group (29 Selected Large SMSAS)	Total	Under 18 Years	18 to 44 Years	45 to 64 Years	65 Years and Over		
,	(1)	(2)	(3)	(4)	(5)		
		Thousands)					
Over 5 Million	27,723	8,875	10,079	6,274	2,495		
2 to 5 Million	17,948	6,102	6,432	3,825	1,589		
1 to 2 Million	17,086	6,053	6,340	3,357	1,336		
Less than 1 Million	5,665	2,003	2,020	1,112	530		
1 Million and Over	62,757	21,030	22,851	13,456	5,420		
Total	68,422	23,033	24,871	14,568	5,950		

Source: Computed from Table C-16.

TABLE A-16

PERCENTAGE COMPOSITION OF POPULATION, BY AGE, FOR 29 SELECTED LARGE CENTRAL CITIES, 1960

Age Composition SMSA Size Group 18 to 44 45 to 64 65 Years Total Under 18 (Data are for 29 and Over Years Years Years Selected Large Central Cities) (4) (2) (3) (5) (1) (Percentage Distribution) 36.1 24.3 10.2 Over 5 Million 100.0 29.4 24.1 30.2 34.6 11.0 2 to 5 Million 100.0 36.7 21.2 9.5 1 to 2 Million 100.0 32.6 20.7 10.3 34.5 34.5 Less than 1 Million 100.0 10.2 35.9 23.4 1 Million and Over 100.0 30.5 23.1 10.2 100.0 30.9 35.8 Total

Source: Computed from Table C-15.

TABLE A-17

PERCENTAGE COMPOSITION OF POPULATION, BY AGE, FOR 29 SELECTED LARGE SMSAS, 1960

	Age Composition						
SMSA Size Group (29 Selected Large SMSAS)	Total	Under 18 Years	18 to 44 Years	45 to 64 Years	65 Years and Over		
	(1)	(2)	(3)	(4)	(5)		
		(Percen	tage Distr	ibution)			
Over 5 Million	100.0	32.0	36.4	22.6	9.0		
2 to 5 Million	100.0	34.0	35.8	21.3	8.9		
1 to 2 Million	100.0	35.4	37.1	19.6	7.8		
Less than 1 Million	100.0	35.4	35.7	19.6	9.4		
1 Million and Over	100.0	33.5	36.4	21.4	8.6		
Total	100.0	33.7	36.3	21.3	8.7		

Source: Computed from Table A-15.

TABLE A-18

CENTRAL CITY POPULATION AS PERCENTAGE OF CORRESPONDING SMSA POPULATION FOR 29 SELECTED LARGE CENTRAL CITIES AND SMSAS, BY SMSA SIZE, 1960

	Age Composition						
SMSA Size Group (Data are for 29 Selected Large Central Cities/ SMSAS)	Total	Under 18 Years	18 to 44 Years	45 to 64 Years	65 Years and Over		
	(1)	(2)	(3)	(4)	(5)		
			(Percent)				
	 .	53 0	F.F. /	FO 0	62.0		
Over 5 Million	55.8	51.3	55.4	59.9	63.0		
2 to 5 Million	38.1	33.9	36.8	43.0	47.4		
1 to 2 Million	52.1	48.0	51.5	56.3	63.2		
Less than 1 Million	55.1	53.7	53.3	58.1	60.6		
1 Million and Over	49.7	45.3	49.1	54.2	58.5		
Total	50.2	46.0	49.4	54.5	58.7		

Source: Computed from Table A-14 and Table A-15.

TABLE A-19

HOUSEHOLDS, BY INCOME CLASS, FOR 29 SELECTED LARGE CENTRAL CITIES, 1960

	Income Class					
SMSA Size Group (Data are for 29 Selected Large Central Cities)	Under \$4,000	\$4,000 to \$8,000	\$8,000 to \$15,000	\$15,000 and Over	Total	
	(1)	(2)	(3)	(4)	(5)	
			(Thousands)			
Over 5 Million	1,070	1,351	1,746	902	5,069	
2 to 5 Million	567	656	704	292	2,219	
1 to 2 Million	663	814	923	409	2,809	
Less than 1 Million	273	276	255	112	916	
1 Million and Over	2,300	2,821	3,373	1,603	10,097	
Total	2,573	3,097	3,628	1,715	11,013	

Source: Computed from Table C-19.

TABLE A-20
HOUSEHOLDS, BY INCOME CLASS FOR 29 SELECTED LARGE SMSAS, 1960

	Income Class						
SMSA Size Group (29 Selected Large SMSAS)	Under \$4,000	\$4,000 to \$8,000	\$8,000 to \$15,000	\$15,000 and Over	Total		
	(1)	(2)	(3)	(4)	(5)		
			(Thousands)			
Over 5 Million	1,841	2,647	2,950	1,354	8,793		
2 to 5 Million	1,154	1,720	1,781	720	5,375		
1 to 2 Million	1,108	1,603	1,700	697	5,108		
Less than 1 Million	544	580	436	170	1,730		
and the second s							
1 Million and Over	4,103	5,971	6,431	2,771	19,276		
Total	4,647	6,551	6,867	2,941	21,006		

Source: Computed from Table C-20.

TABLE A-21

PERCENTAGE DISTRIBUTION OF HOUSEHOLDS, BY INCOME LEVELS, FOR 29

SELECTED LARGE CENTRAL CITIES, 1960

	Income Level						
SMSA Size Group (Data are for 29 Selected Large Central Cities)	Under \$4,000	\$4,000 to \$8,000	\$8,000 to \$15,000	\$15,000 and Over	Total		
	(1)	(2)	(3)	(4)	(5)		
		(Perc	entage Dist	ribution)			
Over 5 Million	21.1	26.7	34.4	17.8	100.0		
2 to 5 Million	25.6	29.6	31.7	13.2	100.0		
1 to 2 Million	23.6	29.0	32.9	14.6	100.0		
Less than 1 Million	29.8	30.1	27.8	12.2	100.0		
1 Million and Over	22.8	27.9	33.4	15.9	100.0		
Total	23.4	28.1	32.9	15.6	100.0		

Source: Computed from Table A-19.

TABLE A-22

PERCENTAGE DISTRIBUTION OF HOUSEHOLDS, BY INCOME LEVELS, FOR 29

SELECTED LARGE SMSAS, 1960

	Income Level						
SMSA Size Group (29 Selected Large SMSAS)	Under \$4,000	\$4,000 to \$8,000	\$8,000 to \$15,000	\$15,000 and Over	Total		
	(1)	(2)	(3)	(4)	(5)		
		(Percen	tage Distri	bution)			
Over 5 Million	20.9	30.1	33.5	15.4	100.0		
2 to 5 Million	21.5	32.1	33.2	13.4	100.0		
1 to 2 Million	21.7	31.4	33.3	13.6	100.0		
Less than 1 Million	31.4	33.5	25.2	9.8	100.0		
1 Million and Over	21.3	31.0	33.4	14.4	100.0		
Total	22.1	31.2	32.7	14.0	100.0		

Source: Computed from Table A-20.

TABLE A-23

PERCENTAGE COMPOSITION OF HOUSEHOLDS BY AGE OF HEAD FOR 29

SELECTED LARGE SMSAS, 1960

	Age of Head					
SMSA Size Group (29 Selected Large SMSAS)	Total	Under 45 Years	45 to 64 Years	65 Years and Over		
	(1)	(2)	(3)	(4)		
		(Percentage I	Distribution)			
Over 5 Million	100.0	45.2	39.0	15.8		
2 to 5 Million	100.0	45.5	38.3	16.2		
1 to 2 Million	100.0	49.6	35.8	14.5		
Less than 1 Million	100.0	47.0	34.9	18.2		
1 Million and Over	100.0	46.5	38.0	15.6		
Total	100.0	46.5	37.7	15.8		

Source: Computed from Table A-25.

TABLE A-24

PERCENTAGE COMPOSITION OF HOUSEHOLDS BY AGE OF HEAD, FOR 29
SELECTED LARGE CENTRAL CITIES, 1960

	Age of Head						
SMSA Size Group (Data are for 29 Selected Large Central Cities)	Total	Under 45 Years	45 to 64 Years	65 Years and Over			
	(1)	(2)	(3)	(4)			
	(Percentage Distribution)						
Over 5 Million	100.0	45.2	37.3	17.5			
2 to 5 Million	100.0	43.9	36.7	19.3			
1 to 2 Million	100.0	50.4	32.6	17.0			
Less than 1 Million	100.0	48.5	32.3	19.2			
			, <u>, , , , , , , , , , , , , , , , , , </u>				
1 Million and Over	100.0	46.4	35.8	17.8			
Total	100.0	46.5	35.6	17.9			

Source: Computed from Table A-26.

TABLE A-25
HOUSEHOLDS BY AGE OF HEAD FOR 29 SELECTED LARGE SMSAS, 1960

		e of Head		
SMSA Size Group (29 Selected Large SMSAS)	Total	Under 45 Years	45 to 64 Years	65 Years and Over
,	(1)	(2)	(3)	(4)
		(Thous a	nds)	
Over 5 Million	8,793	3,972	3,428	1,393
2 to 5 Million	5,376	2,448	2,058	870
1 to 2 Million	5,111	2,537	1,831	743
Less than 1 Million	1,730	813	603	314
1 Million and Over	19,280	8,957	7,317	3,006
Total	21,010	9,770	7,920	3,320

Source: Computed from Table C-18.

TABLE A-26
HOUSEHOLDS, BY AGE OF HEAD FOR 29 SELECTED LARGE CENTRAL CITIES, 1960

	Age of Head					
SMSA Size Group (Data are for 29 Selected Large Central Cities)	Total	Under 45 Years	45 to 64 Years	65 Years and Over		
	(1)	(2)	(3)	(4)		
	(Thousands)					
Over 5 Million	5,068	2,291	1,888	889		
2 to 5 Million	2,219	975	815	429		
1 to 2 Million	2,809	1,416	916	477		
Less than 1 Million	916	444	296	176		
1 Million and Over	10,096	4,682	3,619	1,795		
Total	11,012	5,126	3,915	1,971		

Source: Computed from Table C-17.

APPENDIX - B

REGIONAL ANALYSIS

TABLE B-1

RATIO OF WORKERS BY PLACE OF WORK IN CENTRAL CITY TO WORKERS BY PLACE OF RESIDENCE IN CENTRAL CITY, FOR 29 SELECTED LARGE CENTRAL CITIES, BY REGION, 1960

Region (29 Selected Large Central Cities)	Industry Groups					
	Total	Construc- tion	Manufac- turing	Wholesale & Retail Trade	Public Adminis- tration & Services	
	(1)	(2)	(3)	(4)	(5)	
	(Ratios)					
New England	2.0	1.9	2.1	1.9	2.0	
Mideast	1.3	1.4	1.4	1.3	1.3	
Great Lakes	1.4	1.5	1.5	1.4	1.3	
Plains	1.6	1.7	1.7	1.5	1.4	
South East	1.4	1.5	1.6	1.4	1.4	
South West	1.1	1.2	1.2	1.1	1.1	
Rocky Mountain	1.4	1.6	1.5	1.3	1.3	
Far West	1.5	1.6	1.7	1.4	1.4	
Total	1.4	1.5	1.5	1.3	1.3	

Source: Computed from Tables C-1 and C-8.

TABLE B-2
ESTIMATED EMPLOYMENT, BY INDUSTRY, BY CENTRAL CITY-WORK-LOCATION,
FOR 29 SELECTED LARGE CENTRAL CITIES, BY REGION, 1960

Region (29 Selected Large Central Cities)	Industry Groups						
	Total	Construc- tion	Manufac- turing	Wholesale & Retail Trade	Public Adminis- tration & Services		
	(1)	(2)	(3)	(4)	(5)		
			(Thousands)				
New England	572	23	146	105	298		
Mideast	7,427	314	2,086	1,320	3,707		
Great Lakes	4,243	174	1,619	735	1,715		
Plains	1,290	59	384	253	594		
South East	1,019	69	166	230	554		
South West	1,138	89	219	255	575		
Rocky Mountain	270	18	53	58	141		
Far West	2,911	156	805	553	1,397		
Total	18,870	902	5,478	3,509	8,981		

Source: Computed from Table C-1.

TABLE B-3

EMPLOYMENT, BY INDUSTRY, BY SMSA-WORK-LOCATION, FOR 29 SELECTED

LARGE SMSAS, BY REGION, 1960

Region (29 Selected Large SMSAS)		Industry Groups						
	Total	Construc- tion	Manufac- turing	Wholesale & Retail Trade	Public Adminis- tration & Services			
	(1)	(2)	(3)	(4)	(5)			
			(Thousa	nds)				
New England	1,024	51	294	191	488			
Mideast	10,167	504	2,978	1,824	4,861			
Great Lakes	5,611	256	2,095	1,006	2,254			
Plains	1,747	91	502	344	811			
South East	1,314	96	215	293	710			
South West	1,351	103	259	296	690			
Rocky Mountain	353	25	67	75	186			
Far West	4,693	278	1,260	887	2,268			
Total	26,260	1,404	7,671	4,917	12,268			

Source: Computed from Table C-2.

TABLE B-4

PER WORKER EARNED PERSONAL INCOME, BY INDUSTRY, FOR 29 SELECTED

LARGE CENTRAL CITIES, BY REGION, 1959

Region (29 Selected Large Central Cities)	Industry Groups						
	Total	Construc- tion	Manufac- turing	Wholesale & Retail Trade	Public Adminis- tration & Services		
	(1)	(2)	(3)	(4)	(5)		
			(Dollar	s)			
New England	7,009	7,728	7,752	7,820	6,304		
Mideast	5,811	6,541	5,484	6,618	5,645		
Great Lakes	6,198	8,251	6,674	6,949	5,219		
Plains	5,531	7,497	5,782	5,974	4,985		
South East	4,748	5,077	4,717	5,083	4,577		
South West	5,232	4,324	5,794	5,424	5,073		
Rocky Mountain	5,344	6,333	4,685	6,076	5,164		
Far West	5,729	6,494	5,923	6,008	5,421		
Total	5,803	6,621	5,963	6,384	5,397		

Source: Computed from Tables B-2 and B-6

TABLE B-5

PER WORKER EARNED PERSONAL INCOME, BY INDUSTRY, FOR 29 SELECTED

LARGE SMSAS, BY REGION, 1959

Region (29 Selected Large SMSAS)	Industry Groups							
	Total	Construc- tion	Manufac- turing	Wholesale & Retail Trade	Public Adminis- tration & Services			
	(1)	(2)	(3)	(4)	(5)			
			(Dollar	s)				
New England	6,631	7,728	7,369	6,627	6,074			
Mideast	5,693	6,537	5,949	5,842	5,391			
Great Lakes	6,070	8,221	6,707	6,244	5,156			
Plains	5,554	7,523	6,196	5,714	4,861			
South East	4,775	5,099	4,914	5,022	4,587			
South West	5,189	4,340	6,187	5,139	4,986			
Rocky Mountain	5,282	6,332	5,264	5,381	5,107			
Far West	5,677	6,539	6,170	5,743	5,272			
Total	5,721	6,688	6,235	5,829	5,245			

Source: Computed from Tables B-3 and B-7.

TABLE B-6

EARNED PERSONAL INCOME, BY INDUSTRY, FOR 29 SELECTED LARGE
CENTRAL CITIES, BY REGION, 1959

Region (29 Selected Large Central Cities)		Industry Group						
		Total	Construc- tion	Manufac- turing	Wholesale & Retail Trade	Public Adminis- tration & Services		
		(1)	(2)	(3)	(4)	(5)		
			(Million Do	llars)			
New England	4 ,	,009.2	177.7	1,131.8	821.1	1,878.6		
Mideast	43,	,156.3	2,054.0	11,438.9	8,735.9	20,927.7		
Great Lakes	26	,298.5	1,435.7	10,805.9	5,107.3	8,949.8		
Plains	7 ,	135.0	442.3	2,220.4	1,511.4	2,960.9		
South East	4,	,838.5	350.3	783.1	1,169.2	2,535.7		
South West	5,	,953.7	384.8	1,268.9	1,383.0	2,917.1		
Rocky Mountain	١,	442.8	114.0	248.3	352.4	728.1		
Far West	16,	676.0	1,013.0	4,768.2	3,322.2	7,572.5		
Total	109,	,510.0	5,971.8	32,665.2	22,402.5	48,470.4		

Source: Computed from Table C-6

TABLE B-7

EARNED PERSONAL INCOME, BY INDUSTRY, FOR 29 SELECTED LARGE SMSAS,
BY REGION, 1959.

Regions		Industry Groups						
(29 Selected Large SMSAS)		otal	Construc- tion	Manufac- turing	Wholesale & Retail Trade	Public Adminis- tration & Services		
		(1)	(2)	(3)	(4)	(5)		
				(Million D	ollars)			
New England	6,7	90.5	394.1	2,166.5	1,265.8	2,963.9		
Mideast	57,8	76.1	3,294.4	17,717.3	10,656.4	26,207.9		
Great Lakes	34,0	58.6	2,104.7	14,051.5	6,281.8	11,620.9		
Plains	9,7	03.1	684.6	3,110.5	1,965.6	3,942.6		
South East	6,2	74.5	489.5	1,056.5	1,471.3	3,257.0		
South West	7,0	10.8	447.0	1,602.4	1,521.2	3,440.2		
Rocky Mountain	1,8	64.5	158.3	352.7	403.6	949.9		
Far West	26,6	43.0	1,817.8	7,773.9	5,093.6	11,957.6		
Total	150,2	21.1	9,390.4	47,831.2	28,659.0	64,339.8		

Source: Computed from Table C-7.

TABLE B-8

EMPLOYMENT, BY INDUSTRY, FOR 29 SELECTED LARGE CENTRAL CITIES
BY RESIDENCE LOCATION, BY REGION, 1960

Region (29 Selected Large Central Cities)	Industry Groups						
	Total	Construc- tion	Manufac- turing	Wholesale & Retail Trade	Public Adminis- tration & Services		
	(1)	(2)	(3)	(4)	(5)		
			(Thousa	nds)			
New England	288	12	70	54	152		
Mideast	5,610	226	1,534	1,034	2,815		
Great Lakes	3,071	116	1,116	544	1,295		
Plains	831	34	220	163	413		
South East	703	45	105	161	392		
South West	997	76	178	228	517		
Rocky Mountain	196	11	35	43	107		
Far West	1,959	95	475	382	1,006		
Total	13,655	615	3,734	2,608	6,698		

Source: Computed from Table C-8

TABLE B-9

PERSONAL INCOME, TOTAL AND PER CAPITA, FOR 29 SELECTED LARGE SMSAS AND CORRESPONDING CENTRAL CITIES, BY REGION, 1960

Region	SMS	4	Central City		
(29 Selected Large SMSAS/Central Cities	Total (Million Dollars)	Per Capita (Dollars)	Total (Million Dollars)	Per Capita (Dollars)	
	(1)	(2)	(3)	(4)	
New England	7,118.0	2,748	1,656.4	2,376	
Mideast	73,269.0	2,823	36,084.3	2,656	
Great Lakes	38,892.0	2,660	19,224.9	2,501	
Plains	11,994.0	2,617	5,065.7	2,505	
South East	7,832.0	2,180	3,781.4	2,030	
South West	8,447.0	2,297	6,109.2	2,310	
Rocky Mountain	2,453.0	2,640	1,319.0	2,670	
Far West	35,790.0	2,868	15,349.1	2,882	
Total	185,795.0	2,715	88,590.0	2,581	

Source: Computed from Table C-9.

TABLE B-10

PERCENTAGE COMPOSITION OF ESTIMATED EMPLOYMENT, BY INDUSTRY BY

CENTRAL CITY WORK LOCATION, FOR 29 SELECTED LARGE

CENTRAL CITIES, BY REGION, 1960

Region	Industry Groups						
(29 Selected Large Central Cities)	Total	Construc- tion	Manufac- turing	Wholesale & Retail Trade	Public Adminis- tration & Services		
	(1)	(2)	(3)	(4)	(5)		
		(Per	centage Di	stribution)			
New England	100.0	4.0	25.5	18.4	52.1		
Mideast	100.0	4.2	28.1	17.8	49.9		
Great Lakes	100.0	4.1	38.2	17.3	40.4		
Plains	100.0	4.6	29.8	19.6	46.0		
South East	100.0	6.8	16.3	22.6	54.4		
South West	100.0	7.8	19.2	22.4	50.5		
Rocky Mountain	100.0	6.7	19.6	21.5	52.2		
Far West	100.0	5.4	27.7	19.0	48.0		
Total	100.0	4.8	29.0	18.6	47.6		

Source: Computed from Table B-2

TABLE B-11

PERCENTAGE COMPOSITION OF EMPLOYMENT, BY INDUSTRY, BY SMSA WORK
LOCATION, FOR 29 SELECTED LARGE SMSAS, BY REGION, 1960

Region	Industry Groups						
(29 Selected Large SMSAS)	Tôtal	Construc- tion	Manufac- turing	Wholesale & Retail Trade	Public Adminis- tration & Services		
	(1)	(2)	(3)	(4)	(5)		
		(Pe	rcentage D	istribution)		
New England	100.0	5.0	28.7	18.7	47.7		
Mideast	100.0	5.0	29.3	17.9	47. 8		
Great Lakes	100.0	4.6	37.3	17.9	40.2		
Plains	100.0	5.2	28.7	19.7	46.4		
South East	100.0	7.3	16.4	22.3	54.0		
South West	100.0	7.6	19.2	21.9	51.1		
Rocky Mountain	100.0	7.1	19.0	21.2	52.7		
Far West	100.0	5.9	26.8	18.9	48.3		
Total	100.0	5.3	29.2	18.7	46.7		

Source: Computed from Table B-3

TABLE B-12

PERCENTAGE DISTRIBUTION OF EARNED PERSONAL INCOME, BY INDUSTRY
FOR 29 SELECTED LARGE CENTRAL CITIES, BY REGION, 1959

Region	Industry Groups						
(29 Selected Large Central Cities)	Total	Construc- tion	Manufac- turing	Wholesale & Retail Trade	Public Adminis- tration & Services		
	(1)	(2)	(3)	(4)	(5)		
			(Ratios)			
New England	2.0	1.9	2.1	1.9	2.0		
Mideast	1.3	1.4	1.4	1.3	1.3		
Great Lakes	1.4	1.5	1.5	1.4	1.3		
Plains	1.6	1.7	1.7	1.5	1.4		
South East	1.4	1.5	1.6	1.4	1.4		
South West	1.1	1.2	1.2	1.1	1.1		
Rocky Mountain	1.4	1.6	1.5	1.3	1.3		
Far West	1.5	1.6	1.7	1.4	1.4		
Total	1.4	1.5	1.5	1.3	1.3		

Source: Computed from Tables C-1 and C-8.

TABLE B-13

PERCENTAGE DISTRIBUTION OF EARNED PERSONAL INCOME, BY INDUSTRY,
FOR 29 SELECTED LARGE SMSAS, BY REGION, 1959

Region	Industry Groups						
(29 Selected Large SMSAS)	Total	Construc- tion	Manufac- turing	Wholesale & Retail Trade	Public Adminis- tration & Services		
	(1)	(2)	(3)	(4)	(5)		
		(Pe	rcentage D	istribution)		
New England	100.0	5.8	31.9	18.6	43.6		
Mideast	100.0	5.7	30.6	18.4	45.3		
Great Lakes	100.0	6.2	41.3	18.4	34.1		
Plains	100.0	7.1	32.1	20.3	40.6		
South East	100.0	7.8	16.8	23.4	51.9		
South West	100.0	6.4	22.9	21.7	49.1		
Rocky Mountain	100.0	8.5	18.9	21.6	50.9		
Far West	100.0	6.8	29.2	19.1	44.9		
Total	100.0	6.3	31.8	19.1	42.8		

Source: Computed from Table B-7

TABLE B-14

PERCENTAGE DISTRIBUTION OF EMPLOYMENT, BY RESIDENCE LOCATION, BY INDUSTRY, FOR 29 SELECTED LARGE CENTRAL CITIES, BY REGION, 1960

Region	Industry Groups						
(29 Selected Large Central Cities)	Total	Construc- tion	Manufac- turing	Wholesale & Retail Trade	Public Adminis- tration & Services		
	(1)	(2)	(3)	(4)	(5)		
		(Pe	rcentage D	istribution)		
New England	100.0	4.2	24.3	18.7	52.8		
Mideast	100.0	4.0	27.3	18.4	50.2		
Great Lakes	100.0	3.8	36.3	17.7	42.2		
Plains	100.0	4.1	26.5	19.6	49.7		
South East	100.0	6.4	14.9	22.9	55.8		
South West	100.0	7.6	17.9	22.9	51.9		
Rocky Mountain	100.0	5.6	17.9	21.9	54.6		
Far West	100.0	4.8	24.2	19.5	51.4		
Total	100.0	4.5	27.3	19.1	49.1		

Source: Computed from Table B-8

TABLE B-15

POPULATION BY AGE FOR 29 SELECTED LARGE CENTRAL CITIES,
BY REGION, 1960

Region	Age Composition					
(29 Selected Large Central Cities)	Total	Under 18 Years	18 to 44 Years	45 to 64 Years	65 Years And Over	
	(1)	(2)	(3)	(4)	(5)	
			(Thousand:	s)		
New England	697	200	251	161	86	
Mideast	13,586	3,964	4,868	3,356	1,400	
Great Lakes	7,688	2,476	2,716	1,753	744	
Plains	2,022	620	682	470	249	
South East	1,863	586	646	420	210	
South West	2,645	997	982	489	176	
Rocky Mountain	494	162	176	103	53	
Far West	5,326	1,590	1,973	1,190	573	
Total	34,321	10,595	12,293	7,942	3,491	

Source: Computed from Table C-15.

TABLE B-16
POPULATION BY AGE FOR 29 SELECTED LARGE SMSAS, BY REGION, 1960

Region	Age Composition					
(29 Selected Large SMSAS)	Total	Under 18 Years	18 to 44 Years	45 to 64 Years	65 Years And Over	
	(1)	(2)	(3)	(4)	(5)	
			(Thousands	s)		
New England	2,590	840	899	574	277	
Mideast	25,950	8,305	9,422	5,906	2,317	
Great Lakes	14,621	5,100	5,258	3,075	1,188	
Plains	4,583	1,627	1,607	935	415	
South East	3,592	1,211	1,284	746	351	
South West	3,678	1,394	1,387	665	232	
Rocky Mountain	929	339	349	166	76	
Far West	12,479	4,217	4,666	2,502	1,094	
Total	68,422	23,033	24,871	14,568	5,950	

Source: Computed from Table C-16

TABLE B-17
HOUSEHOLDS, BY AGE OF HEAD, FOR 29 SELECTED LARGE CENTRAL CITIES
BY REGION, 1960

Region	Age of Head					
(29 Selected Central Cities)	Total	Under 45 Years	45 to 64 Years	65 Years And Over		
	(1)	(2)	(3)	(4)		
		(1	Thousands)			
New England	225	97	77	50		
Mideast	4,326	1,910	1,648	767		
Great Lakes	2,419	1,145	861	413		
Plains	680	307	230	143		
South East	603	277	203	122		
South West	789	445	244	100		
Rocky Mountain	166	81	51	33		
Far West	1,804	861	599	343		
Total	11,012	5,126	3,915	1,971		

Source: Computed from Table C-17.

TABLE B-18 HOUSEHOLDS, BY AGE OF HEAD, FOR 29 SELECTED LARGE SMSAS, BY REGION, 1960

Region	Age of Head						
(29 Selected Large SMSAS)	Total	Under 45 Years	45 to 64 Years	65 Years And Over			
	(1)	(2)	(3)	(4)			
New England	770	319	300	150			
Mideast	7,959	3,534	3,172	1,248			
Great Lakes	4,360	2,056	1,658	645			
Plains	1,397	652	511	233			
South East	1,117	514	400	203			
South West	1,072	567	369	135			
Rocky Mountain	286	147	93	46			
Far West	4,049	1,976	1,413	658			
Total	21,010	9,770	7,920	3,320			

Source: Computed from Table C-18.

TABLE B-19
HOUSEHOLDS, BY INCOME CLASS, FOR 29 SELECTED LARGE
CENTRAL CITIES, BY REGION, 1960

Region	Income Class				
(29 Selected Large Central Cities)	Under \$4,000	\$4,000 to \$8,000	\$ 8,000 to \$15,000	\$15,000 and Over	Total
	(1)	(2)	(3)	(4)	(5)
			(Thousand	s)	
New England	58	66	75	26	225
Mideast	925	1,205	1,466	7 30	4,326
Great Lakes	550	702	828	342	2,420
Plains	175	199	221	84	680
South East	200	187	147	71	603
South West	191	225	250	122	789
Rocky Mountain	39	46	54	27	166
Far West	435	468	585	313	1,804
Total	2,573	3,097	3,628	1,715	11,013

Source: Computed from Table C-19.

TABLE B-20
HOUSEHOLDS, BY INCOME CLASS, FOR 29 SELECTED LARGE SMSAS,
BY REGION, 1960

Region	Income Class					
(29 Selected Large SMSAS)	Under \$4,000	\$4,000 to \$8,000	\$ 8,000 to \$15,000	\$15,000 AND Over	Total	
	(1)	(2)	(3)	(4)	(5)	
			(Thousand	s)		
New England	158	25 0	252	110	770	
Mideast	1,674	2,583	2,554	1,146	7,958	
Great Lakes	838	1,271	1,590	662	4,359	
Plains	315	451	462	169	1,397	
South East	376	372	260	109	1,117	
South West	298	352	295	124	1,070	
Rocky Mountain	65	92	93	36	286	
Far West	924	1,181	1,362	585	4,049	
Total	4,647	6,551	6,867	2,941	21,006	

Source: Computed from Table C-20.

TABLE B-21

HOUSEHOLDS, BY INCOME CLASS, IN 29 SELECTED LARGE CENTRAL CITIES

AS PERCENTAGE OF HOUSEHOLDS, BY INCOME CLASS IN CORRESPONDING

29 SELECTED LARGE SMSAS, BY REGION, 1960

Region	Income Class					
(Data are for 29 Selected Large Central Cities/ SMSAS)	Under \$4,000	\$4,000 to \$8,000	\$ 8,000 to \$15,000	\$15,000 and over	TOTAL	
	(1)	(2)	(3)	(4)	(5)	
			(Percent)			
New England	36.7	26.4	29.8	23.6	29.2	
Mideast	55.3	46.7	57.4	63.7	54.4	
Great Lakes	65.6	55.2	52.1	51.7	55.5	
Plains	55.6	44.1	47.8	49.7	48.7	
South East	53.2	50.3	56.5	65.1	54.0	
South West	64.1	63.9	84.7	98.4	73.7	
Rocky Mountain	60.0	50.0	58.1	75.0	58.0	
Far West	47.1	39.6	43.0	53.5	44.6	
Total	55.4	47.4	52.8	58.3	52.4	

Source: Computed from Table B-20 and Table B-19.

TABLE B-22

PERCENTAGE COMPOSITION OF POPULATION BY AGE FOR 29 SELECTED

LARGE SMSAS, BY REGION, 1960

Region	Age Composition					
(29 Selected Large SMSAS)	Total	Under 18 Years	18 to 44 Years	45 to 64 Years	65 Years And Over	
	(1)	(2)	(3)	(4)	(5)	
			(Percent)			
New England	100.0	32.4	34.7	22.2	10.7	
Mideast	100.0	32.0	36.3	22.8	8.9	
Great Lakes	100.0	34.9	36.0	21.0	8.1	
Plains	100.0	35.5	35.1	20.4	9.1	
South East	100.0	33.7	35.7	20.8	9.8	
South West	100.0	37.9	37.7	18.1	6.3	
Rocky Mountain	100.0	36.5	37.6	17.9	8.2	
Far West	100.0	33.8	37.4	20.0	8.8	
Total	100.0	33.7	36.3	21.3	8.7	

Source: Computed from Table B-16.

PERCENTAGE COMPOSITION OF POPULATION BY AGE FOR 29 SELECTED LARGE CENTRAL CITIES, BY REGION, 1960

Region	Age Composition						
(29 Selected Large Central Cities)	Total	Under 18 Years	18 to 44 Years	45 to 64 Years	65 Years And Over		
	(1)	(2)	(3)	(4)	(5)		
			(Percent)				
New England	100.0	28.7	36.0	23.1	12.3		
Mideast	100.0	29.2	35.8	24.7	10.3		
Great Lakes	100.0	32.2	35.3	22.8	9.7		
Plains	100.0	30.7	33.7	23.2	12.3		
South East	100.0	31.5	34.7	22.5	11.3		
South West	100.0	37.7	37.1	18.5	6.7		
Rocky Mountain	100.0	32.8	35.6	20.9	10.7		
Far West	100.0	29.9	37.0	22.3	10.8		
Total	100.0	30.9	35.8	23.1	10.2		

Source: Computed from Table B-15.

TABLE B-24

PERCENTAGE COMPOSITION OF HOUSEHOLDS, BY AGE OF HEAD, FOR 29

SELECTED LARGE SMSAS, BY REGION, 1960

Region	Age of Head				
(29 Selected Large SMSAS)	Total	Under 45 Years	45 to 64 Years	65 Years And Over	
	(1)	(2)	(3)	(4)	
		(Pe	ercent)		
New England	100.0	41.4	39.0	19.5	
Mideast	100.0	44.4	39.9	15.7	
Great Lakes	100.0	47.2	38.0	14.8	
Plains	100.0	46.7	36.6	16.7	
South East	100.0	46.0	35.8	18.2	
South West	100.0	52.9	34.4	12.6	
Rocky Mountain	100.0	51.4	32.5	16.1	
Far West	100.0	48.8	34.9	16.3	
Total	100.0	46.5	37.7	15.8	

Source: Computed from Table B-18.

TABLE B-25

PERCENTAGE COMPOSITION OF HOUSEHOLDS, BY AGE OF HEAD, FOR 29

SELECTED LARGE CENTRAL CITIES BY REGION, 1960

Region	Age of Head					
(29 Selected Large Central Cities)	Total	Under 45 Years	45 to 64 Years	64 Years And Over		
	(1)	(2)	(3)	(4)		
		(Perce	nt)			
New England	100.0	43.1	34.2	22.2		
Mideast	100.0	44.2	38.1	17.7		
Great Lakes	100.0	47.3	35.6	17.1		
Plains	100.0	45.1	33.8	21.0		
South East	100.0	45.9	33.7	20.2		
South West	100.0	56.4	30.9	12.7		
Rocky Mountain	100.0	48.8	30.7	19.9		
Far West	100.0	47.7	33.2	19.0		
Total	100.0	46.5	35.6	17.9		

Source: Computed from Table B-17.

TABLE B-26

HOUSEHOLDS, BY AGE OF HEAD IN 29 SELECTED LARGE CENTRAL CITIES

AS PERCENTAGE OF HOUSEHOLDS, BY AGE OF HEAD, IN CORRESPONDING

29 SELECTED LARGE SMSAS, BY REGION, 1960

Region	Age of Head					
(Data are for 29 Selected Large Central Cities/	Total	Under 45 Years	45 to 64 Years	65 Years And Over		
SMSAS)	(1)	(2)	(3)	(4)		
		(Perce	ent)			
New England	29.2	30.4	25.7	33.3		
Mideast	54.4	54.0	52.0	61.5		
Great Lakes	55.5	55.7	51.9	64.0		
Plains	48.7	47.1	45.0	61.4		
South East	54.0	53.9	50.8	60.1		
South West	73.6	78.5	66.1	74.1		
Rocky Mountain	58.0	55.1	54.8	71.7		
Far West	44.6	43.6	42.4	52.1		
Total	52.4	52.5	49.4	59.4		

Source: Computed from Table B-18 and Table B-17.

TABLE B-27

PERCENTAGE DISTRIBUTION OF HOUSEHOLDS, BY INCOME LEVELS, FOR 29

SELECTED LARGE CENTRAL CITIES, BY REGION, 1960

Region			Income Leve	1	
(29 Selected Large Central Cities)	Under \$4,000	\$4,000 to \$8,000	\$ 8,000 to \$15,000	\$15,000 and Over	Total
	(1)	(2)	(3)	(4)	(5)
			(Percent)		
New England	25.8	29.3	33.3	11.6	100.0
Mideast	21.4	27.9	33.9	16.9	100.0
Great Lakes	22.7	29.0	34.2	14.1	100.0
Plains	25.7	29.3	32.5	12.4	100.0
South East	33.2	31.0	24.4	11.8	100.0
South West	24.2	28.5	31.7	15.5	100.0
Rocky Mountain	23.5	27.7	32.5	16.3	100.0
Far West	24.1	25.9	32.4	17.4	100.0
Total	23.4	28.1	32.9	15.6	100.0

Source: Computed from Table B-19.

TABLE B-28

PERCENTAGE DISTRIBUTION OF HOUSEHOLDS, BY INCOME LEVELS, FOR 29

SELECTED LARGE SMSAS, BY REGION, 1960

Region			Income Leve]	
(29 Selected Large SMSAS)	Under \$4,000	\$4,000 to \$8,000	\$ 8,000 to \$15,000	\$15,000 and Over	Total
	(1)	(2)	(3)	(4)	(5)
			(Percent)		
New England	20.5	32.5	32.7	14.3	100.0
Mideast	21.0	32.5	32.1	14.4	100.0
Great Lakes	19.2	29.2	36.5	15.2	100.0
Plains	22.5	32.3	33.1	12.1	100.0
South East	33.7	33.3	23.3	9.8	100.0
South West	27.9	32.9	27.6	11.6	100.0
Rocky Mountain	22.7	32.2	32.5	12.6	100.0
Far West	22.8	29.2	33.6	14.4	100.0
Total	22.1	31.2	32.7	14.0	100.0

Source: Computed from Table B-20.

APPENDIX - C

ANALYSIS OF 29 SELECTED LARGE METROPOLITAN AREAS

TABLE C-1 ESTIMATED EMPLOYMENT, BY INDUSTRY, BY CENTRAL CITY WORK LOCATION, FOR 29 SELECTED LARGE CENTRAL CITIES, 1960

29 Selected Large	Industry Groups					
Central Cities	Total	Construc- tion	Manufac- turing	Wholesale & Retail Trade	Public Adminis- tration	
•			1	Trade	& Services	
	(1)	(2)	(3)	(4)	(5)	
	(+)	(-)	7 -		(5)	
			(Th o usan	ds)		
New England				ì		
Boston	572	23	1 46	105	298	
Mideast						
Baltimore	490	25	149	89	227	
Buffalo	325	15	121	6 0	129	
New York Consolidated	4,653	181	1,322	839	2,311	
Philadelphia	1,017	42	350	184	441	
P itts bu r gh	338	18	98	67	155	
Washington, D.C.	6 0 4	33	46	81	444	
Great Lakes						
Chicago Consolidated	2,084	88	754	356	886	
Cincinnati	300	15	100	54	131	
Cleveland	545	21	227	90	207	
Detroit	921	33	376	163	349	
M ilwa ukee	393	17	162	¹ 72	142	
<u>Plains</u>						
Kansas City	312	1 5	83	67	147	
Minneapolis-St. Paul	484	25	133	.99	227 ·	
St. Louis	494	19	168	87	220	
Southeast						
Atlanta	3 1 6	19	65	68	1 64	
Miami	249	1 6	32	55	146	
New Orleans	264	1 6	39	58	151	
Tampa-St. Petersburg	190	18	30	49	93	
Southwest						
Dallas	346	25	79	76	1 66	
H ousto n	4 1 .3	31	85	92	205	
Ph o en ix	185	18	33	40	94	
San An to nio	194	1 5	22	47	110	
Rocky Mountain						
Denver	270	18	53	58	141	
Far West						
Los Angeles-Long Beach	1,740	86	539	3 1 .8	797	
San Bernardino-Riverside-	•				•	
On tario	148	13	26	31.	78	
San Diego	238	18	62	μц	114	
San Francisco-Oakland	472	22	89	95	266	
Seattle-Everett	31.3	17	89	. 65	8,98 I	
Total	18,870	2902	5,478	3,509	8 48T	
Source: Computed on the h)dS1S 01	uata pres e	nceu in Tal	ores a-r a	nd C-8.	
Employment by Cer						
employment by res						
place of work in	central	City to wo	rke rs by p .	tace or res	iuence in	

Central City.

TABLE C-2
EMPLOYMENT, BY INDUSTRY, BY SMSA WORK LOCATION, FOR
29 SELECTED LARGE SMSAS, 1960

29 Selected Large	Industry Group						
SMSAS	Total	Construc-	Manufac-	Wh ol e sal e	Public		
		tio n	turing	&	Adminis-		
				Retail	tratio n		
				Trade	& _		
					Se rvices		
	(1)	(2)	(3)	(4)	(5)		
Note Prolond			(Thousan	d s)			
New England Boston	1 020	6.1	2011	7.03	4400		
Mideast	1,024	51	294	191	488		
Baltimore	643	39	100	770	200		
Buffa lo	476	39 27	194	114	296		
New York Consolidated		264	181	85	183		
Philadelphia	5,779		1,647	1,066	2,803		
Pittsburgh	1,645	83	588	291	683		
Washington, D.C.	832 792	42 49	308 60	149	332		
Great Lakes	/92	49	60	119	564		
Chicago Consolidated	2,717	129	958	1100	7 747		
Cincinnati	398	22	131	483	1,147		
Cleveland	6 9 6	30	274	75 123	170		
Detroit	1,329	50 54	274 541	239	269 495		
Milwaukee	471	21	191	239 86	173		
Plains	4/1	21	Tar	;	1/3		
Kansas City	407	21	100	85	202		
Minneapolis-St. Paul	576	33	150	122	202 271 ·		
St. Louis	764	33 37	252	137	338		
Southeast	704	37	272	737	230		
Atlanta	395	26	87	84	198		
Miami	360	24	4 1	80	215		
New Orleans	303	20	48	67	168		
Tampa-St. Petersburg	256	26	39	6 2	129		
Southwest	230	20	23	U E	TEJ		
Dallas	442	32	98	97	215		
Houston	470	35	102	102	231		
Phoenix	234	21	36	48	126		
San Antonio	205	15	23	49	118		
Rocky Mountain	203	4.9	23	1.5			
Denver	353	25	67	75	186		
Far We st			٠,				
Los Angeles-Long Beach	2,615	145	800	487	1,183		
San Bernardin o-Riverside		7.7	-		7		
Ontario	270	21	45	51	153		
San Diego	312	26	72	59	155		
San Francisco-Oakland	1,076	6 1	226	205	584		
Seattle-Everett	420	25	117	85	193		
<u>Total</u>	26,260	1,404	7,67 i	4,917	12,268		
Sources Runeau of the Con-	e II C	Donantmon	t of Commo	noo II S (onene		

Source: Bureau of the Census, U.S. Department of Commerce, <u>U.S. Census</u> of Population: 1960, Volume I, Charcteristics of the Population, U.S. Government Printing Office, Washington, D.C., 1963.

TABLE C-3

PER WORKER EARNED PERSONAL INCOME, BY INDUSTRY, FOR 29 SELECTED LARGE CENTRAL CITIES, 1959

	Industry Groups						
29 Selected Large SMSAS	Total	Manufac- turing	Wholesale & Retail Trade	Services			
	(1)	(2) (Dollars)	(3)	(4)			
New England							
Boston	\$7,009	\$7,752	\$7,820	\$5,075			
<u>Mideast</u>	•		1.,525	13,013			
Baltimore	5,311	5,737	5,497	3,649			
Buffalo	5,734	6,510	5,748	3,758			
New York Consolidated	6,007	5,568	7,142	5,031			
Philadelphia .	5,320	5,136	5,533	4,060			
Pittsburgh	5,400	4,779	6,513	4,493			
Washington, D. C.	5,801	3,686	5,620	3,473			
Great Lakes		•	-,	•			
Chicago Consolidated	6,112	6,275	7,266	4,477			
Cincinnati	6,239	6,859	7,297	4,483			
Cleveland	6,284	6,966	6,938	4,452			
Detroit	6,356	7,128	6,587	4,355			
Milwaukee	6,136	6,958	5,952	4,215			
<u>Plains</u>	• •	•,•••	3,332	1,52 2.5			
Kansas City	5,194	4,898	5,751	4,149			
Minneapolis-St. Paul	5,635	6,058	5,752	4,272			
St. Louis	5,642	6,001	6,399	4,211			
Southeast	•		0,000	,,			
Atlanta	5,142	5,234	6,145	3,987			
Miami	4,718	4,740	5,299	3,594			
New Orleans	4,685	4,407	4,452	4,115			
Tampa-St. Petersburg	4,223	3,978	4,117	3,338			
Southwest	,	-,	.,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
Dallas	5,432	6,091	6,465	4,105			
Houston	5,511	5,381	5,859	4,887			
Phoenix	4,807	7,490	4,195	3,248			
San Antonio	4,684	3,779	3,933	2,827			
Rocky Mountain	•	•		-, -			
Denver	5,344	4,685	6,076	4,026			
Far West	•	•	•	•			
Los Angeles-Long Beach	5,587	6,132	5,815	4,178			
San Bernardino-Riverside-	. -	-	-	•			
Ontari o	5,340	4,484	5,275	3,403			
San Diego	6,326	5,107	4,933	3,515			
San Francisco-Oakland	5,911	5,013	7,096	4,563			
Seattle-Everett	5,970	6,558	6,436	4,084			
<u>Total</u>	5,803	5,963	6,384	4,405			

Source: Earned personal income per worker, by industry, in metropolitan areas, (unpublished tabulation of the U. S. Department of Commerce, Office of Business, Economics, Regional Economics Division, described in <u>Survey of Current Business</u>, <u>August. 1968</u>, in an article entitled, "Metropolitan Area Incomes, 1929-66", Robert E. Graham, Jr. and Edwin J. Coleman, Washington, D. C.) multiplied by ratio of central city-metropolitan area value added per worker, trade sales per worker, and selected services receipts per worker, in 1958 and 1963, interpolated for 1959.

TABLE C-4

PER WORKER EARNED PERSONAL INCOME, BY INDUSTRY, FOR 29
SELECTED LARGE SMSAS, 1960

	Industry Groups						
29 Selected Large SMSAS	Total	Manufac- turing	Wholesale & Retail Trade	Services			
	(1)	(2) (Dollars)	(3)	(4)			
New England Boston	¢c c21	67 260	00.007	ću 701			
Mideast	\$6,631	\$7, 369	\$6,627	\$4,781			
Baltimore	E 250	r 014	: 11 000	2 (2)			
Buffalo	5,359	5,914	4,988	3,634			
New York Consolidated	5,529	6,357 6,072	4,955	3,679 4,696			
Philadelphia	5,854		6,243				
Pittsburgh	5,372 5,568	5,470 6,476	5,495 5,080	4,006 4,214			
Washington, D. C.	5,683	6,476 3,464	5,084 5,504	3,717			
Great Lakes	3,003	3,404	3,304	3,717			
Chicago Consolidated	6,040	6,371	6,654	4,449			
Cincinnati	6,311	7,857	6,153	4,305			
Cleveland	6,214	7,037 7,115	6,330	4,408			
Detroit	6,016	6,789	5,654	4,180			
Mi lwaukee	5,982	6,788	5,542	4,179			
Plains	3,302	0,700	3,342	4,173			
Kansas City	5,382	6,178	5,310	4,038			
Minneapolis-St. Paul	5,540	6,040	5,689	4,093			
St. Louis	5,657	6,297	5,986	4,151			
Southeast	J, UJ/	0,237	3,000	T, 131			
Atlanta	5,037	5,390	5,892	3,827			
Miami	4,711	4,536	4,920	3,787			
New Orleans	5,022	5,025	5,213	4,250			
Tampa-St. Petersburg	4,169	4,114	3,767	3,315			
Southwest	4, 103	7,117	3,707	3,313			
Dallas	5,239	5,972	5,888	4,072			
Houston	5,759	6,554	5,580	4,989			
Phoenix	4,425	7,216	3,973	3,025			
San Antonio	4,649	3,864	3,883	2,847			
Rocky Mountain	1,013	3,001	3,003	2,017			
Denver	5,282	5,264	5,382	3,979			
Far West	-,	-,	-,	• • • • • • • • • • • • • • • • • • • •			
Los Angeles-Long Beach	5,606	6,401	5,668	4,090			
San Bernar ino Riverside-	=		-				
	5,125	4,822	4,844	3,419			
San Diego	6,119	5,051	4,780	3,488			
San Francisco-Oakland	5,801	5,677	6,353	4,286			
Seattle-Everett	5,833	6,747	5,899	3,998			
<u>Total</u>	5,721	6,235	. 5 ,82 9	4,252			

Source: Per worker earned personal income is obtained by dividing total earned personal income by the total number of workers. Total earned personal income is obtained from unpublished tabulation of the U.S. Department of Commerce, Office of Business Economics, Regional Economics Division, described in Survey of Current Business, August, 1968, in an article entitled, "Metropolitan Area Incomes, 1929-66", Robert E. Graham, Jr. and Edwin J. Coleman, Washington, D.C.

TABLE C-5

ESTIMATED TOTAL EARNED PERSONAL INCOME IN 29 SELECTED LARGE CENTRAL CITIES

			In	dustry Group			
29 Selected Large Central Cities	Total	Construc- tion	Manufac- turing	Wholesale & Retail Trade	Public Adminis- tration	Services	
	(1)	(2)	(3)	(4)	(5)	(6)	
			(Millions o	f Dollars)			
New England	٠						
Boston	2,033.6	92.7	542.6	422.3	301.0	675.0	
Mideast							
Baltimore	1,924.4	103.7	585.2	368.3	316.2	551.0	
Buffalo	1,136.4	56.9	462.2	212.7	130.3	274.3	
New York Consolidated	22,294.5	930.0	5,679.4	4,913.7	2,359.6	8,411.8	
Philadelphia	4,225.3	213.8	1,345.6	824.4	635.7	1,205.8	1
Pittsburgh	1,203.0	70.9	277.2	293.1	135.0	426.8	-320-
Washington, D.C.	1,898.8	105.1	77.4	269.8	876.9	569.6	Y
Great Lakes							
Chicago Consolidated	9,979.1	524.6	3,576.8	2,085.3	936.1	2,856.3	
Cincinnati	1,180.4	68.1	384.1	248.1	117.0	363.1	
Cleveland	2,112.6	116.7	961.3	381.6	127.7	525.3	
Detroit	3,888.5	145.7	1,632.3	737.7	401.6	971.2	
Milwaukee	1,856.5	101.7	855.8	333.3	152.6	413.1	
Plains	-						
Kansas City	1,279.2	82.2	279.2	293.3	155.7	468.8	
Minneapolis-St. Paul	1,892.8	110.3	508.9	402.6	225.9	645.1	
St. Louis	1,649.0	77.0	552.1	326.3	167.2	526.4	
Southeast	•						
Atlanta	1,001.2	49.5	183.2	264.2	117.6	386.7	
Miami	586.1	43.3	75.8	148.4	67.0	251.6	
New Orleans	1,050.4	65.3	136.6	222.6	144.4	481.5	
Tampa-St. Petersburg	659.6	66.6	91.5	164.7	93.1	243.7	

TABLE C-5 (CONTD.)

29 Selected Large Central Cities	Total	Construc- tion	Manufac- turing	Wholesale & Retail Trade	Public Adminis- tration	Services
	(1)	(2)	(3) (Millions	(4) of Dollars)	(5)	(6)
Southwest						
Dallas	1,558.7	91.6	359.4	426.7	139.1	541.9
Houston	2,003.9	134.2	382.1	480.4	161.7	845.5
Phoenix	770.1	51.0	202.2	146.8	129.8	240.3
San Antonio	876.2	49.3	79.4	177.0	352.8	217.7
Rocky Mountain						
Denver	1,046.1	69.7	164.0	261.3	180.7	ىل 370.4
Far West	•					2 143 3
Los Angeles-Long Beach	6,288.8	343.2	1,882.5	1,256.0	663.8	2,143.3
San Bernardino-Riverside-	•			•		
Ontario	418.4	27.7	62.8	84.4	127.8	155.7
San Diego	1,122.5	78.3	229.8	162.8	395.0	256.6
San Francisco-Oakland	1,951.4	98.1	270.7	482.5	315.3	784.8
Seattle-Everett	1,353.8	72.8	360.7	315.4	188.3	416.6

Source: Derived from Tables C-3 and C-8.

TABLE C-6

EARNED PERSONAL INCOME, BY INDUSTRY, FOR 29 SELECTED LARGE CENTRAL CITIES, 1959

29 Selected Large	Industry Group				
Central Cities	Total	Construc- tion	Manufac- turing	Wholesale & Retail	Public Adminis- tration
				Trade	& Services
	(1)	(2)	(3)	(4)	(5)
		(Mi	llion Doll	ars)	
New England				ŕ	-
Boston	\$ 4,009.2	\$ 1 77.7	\$1,131.8	\$ 821.1	\$ 1,878.6
Mideast					
Baltimore	2,602.2	144.1	854.8	489.2	1,114.1
Buffalo	1,863.5	10 6.7	787.7	344.9	624.2
New York Consolidated		1,211.1	7,360.9	5,992.1	13,386.7
Philadelphia	5,410.9	272.1	1,797.6	1,018.1	2,323.2
Pittsburgh	1,825.2	116.0	468.3	436.4	804.5
Washington, D.C.	3,503.7	204.0	169.6	455.2	2,675. 0
Great Lakes Chicago Consolidated	12,737.1	744.7	4,731.4	2 506 7	li 67li li
Cincinnati	1,871.6	102.2	685.9	2,586.7	4,674.4
Cleveland	3,424.8	204.2	1.581.3	394.0 624.4	689.5 1,015.0
Detroit	5,853.7	240.5	2,680.1	1,073.7	1,859.5
M ilw aukee	2,411.3	144.1	1,127.2	428.5	
Plains	2,411.3	144.1	1,12/.2	420.3	711.4
Kansas City	1,620.4	112.1	406.5	385.3	716.5
Minneapolis-St. Paul	2,727.2	183.9	805.7	569.4	1,168.2
St. Louis	2,787.4	146.3	1,008.2	556.7	1,076.2
Southeast	·				, -
Atlanta	1,624.8	85.4	340.2	41 7.9	781.2
Miami	1,174.7	98.9	151.7	291.4	632.6
New Orleans	1,236.7	80.4	171.9	258.2	726.2
Tampa-St. Petersburg	802.3	85.6	119.3	201.7	395.7
Southwest					
Dallas	1,879.5	114.6	481.2	491.3	792.5
Houston	2,276.1	160.0	457.4	539.0	1,119.6
Phoenix	889.4	57.4	247.2	167.8	417.1
San Antonio	908.7	52.8	83.1	184.9	587.9
Rocky Mountain	1 002 0	114.0	200 2	252 h	720 1
Denver Far West	1,442.8	114.0	248.3	352.4	728.1
Los Angeles-Long Beac	h 9,721. 6	556.9	3,305.1	1,849.2	4,010.4
San Bernardmo-Riversi		220.5	3,303.1	1,043.2	T,010.T
Ontarió	790.3	72.0	116.6	163.5	438.1
San Diego	1,505.6	117.5	316.6	217.1	854.3
San Francisco-Oakland		154.1	446.2	674.1	1.515.6
Seattle-Everett	1,868.5	112.5	583.7	418.3	754.1
Total	109,510.0	5,971.8	32,665.2	22,402.5	48,470.4
· · · · · · · · · · · · · · · · · · ·	•	-	•	•	, · · - · ·

Source: Total earned personal income was obtained by multiplying per worker earned personal income by total number of workers by place of work in Central City. For sources of per worker earned personal income, and total number of workers by place of work in Central City see Tables C-3 and C-1.

TABLE C-7

EARNED PERSONAL INCOME BY INDUSTRY, FOR 29 SELECTED LARGE SMSAS, 1959

	Industry Groups				
	Total	Construc	- Manufac-	Wholesale	Public
29 Selected Large		tion	turing	&	Adminis-
SMSAS			•	Retail	tration &
				Trade	Services
	(1)	(2)	(3)	(4)	(5)
		(1	Million Doll	ars)	
New England					
Boston	\$ 6,790.5	\$ 394.1	\$ 2,166.5	\$1,265.8	\$ 2,963.9
<u>Mideast</u>				1	•
Baltimore	3,445.8	224.8	1,147.3	568.7	1,505.0
Buffalo	2,631.6	192.1	1,150.6	421.2	867.7
New York Consolidated	33,828.1	1,766.4	10,000.8	6,655.0	15,405.9
Philadelphia	8,837.1	537.6	3,216.3	1,599.0	3,484.1
Pittsburgh	4,632.8	270.6	1,994.5	757.5	1,610.2
Washington, D. C.	4,500.7	302.9	207.8	655.0	3,335.0
<u>Great Lakes</u>					•
Chicago Consolidated	16,409.9	1,091.6	6,103.3	3,213.7	6,001.4
Cincinnati	2,511.6	149.9	1,029.3	461.5	870.9
${\tt Cleveland}$	4,324.7	291.7	1,949.6	778.6	1,304.9
Detroit	7,994.7	393.5	3,672.8	1,351.3	2,577.1
Milwaukee	2,817.7	178.0	1,296.5	476.7	866.6
<u>Plains</u>	•	·	•		
Kansas City	2,190.3	157.0	617.6	451.4	964.4
Minneapolis-St. Paul	3,191.1	242.7	906.0	694.1	1,348.4
St. Louis	4,321.7	284.9	1,586.9	820.1	1,629.8
<u>Southeast</u>	•				
Atlanta	1,989.6	116.9	468.9	494.9	908.8
Miami	1,696.1	148.4	186.0	393.6	968.1
New Orleans	1,521.5	100.5	241.2	349.3	830.5
Tampa-St. Petersburg	1,067.3	123.7	160.4	233.5	549.6
Southwest	•				
Dallas	2,315.6	146.6	585.2	571.1	1,012.6
Houston	2,706.8	180.7	668.5	569.1	1,288.5
Phoenix	1,035.4	66.9	259.8	190.7	518.0
San Antonio	953.0	52.8	88.9	190.3	621.1
Rocky Mountain	-				
Denver	1,864.5	158.3	352.7	403.6	949.9
Far West	,				
Los Angeles-Long Beach	h 14.658.7	939.1	5,120.8	2,760.6	5,838.2
San Bernardino-Riversi			-,	-,	•,••••
Ontario	1,383.7	116.3	217.0	247.1	803.3
San Diego	1,909.0	169.7	363.7	282.0	1,093.6
San Francisco-Oakland		427.3	1,283.0	1,302.5	3,228.7
Seattle-Everett	2,450.0	165.4	789.4	501.4	993.8
<u>Total</u>	150,221.1	9,390.4	47,831.2	28,659.0	64,339.8
	,	-,	, , , , , , ,	,	- ,

Source: Unpublished tabulation of the U. S. Department of Commerce, Office of Bussiness Economics, Regional Economics Division, described in <u>Survey of Current Business</u>, <u>August</u>, <u>1968</u>, in an article entitled, "Metropolitan Area Incomes, 1929-66", Robert E. Graham, Jr. and Edwin J. Coleman, Washington, D.C.

TABLE C-8

EMPLOYMENT, BY INDUSTRY, BY CENTRAL CITY RESIDENCE LOCATION,
FOR 29 SELECTED LARGE CENTRAL CITIES, 1960

29 Selected Large	Industry Group						
Central Cities	Total	Construc- tion	turing	Wholesale & Retail Trade	Public Adminis- tration & Services		
	(1)	(2)	(3)	(4)	(5)		
			(Thousa	nds)			
New England		_					
Boston	288	12	70	54	152		
Mideast	260	• •	3.00				
Baltimore	362	18	102	67 	175		
Buffalo	198	8	71	37	82		
New York Consolidated	3,697	139	1,020	688	1,850		
Philadelphia	789	33	262	149	345		
Pittsburgh	222	11	58	45	107		
Washington, D.C.	342	1 7	21	48	256		
Great Lakes							
Chicago Consolidated	1,629	62	570	287	710		
Cincinnati	190	10	56	34	90		
Cleveland	338	12	138	: 55	133		
Detroit	612	20	229	112	251		
Milwaukee	302	12	123	56	111		
Plains	_						
Kan sas Cit y	199	9	44	42	104		
Minne apolis- St. Paul	338	1 5	84	70	1 68		
St. Louis	294	10	92	5 1	141		
Southeast							
Atl a nta	197	11	35	43	108		
Miami	12 6	7	1 6	2 8	75		
New Orleans	224	13	31	50	130		
Tampa⊸St. Petersburg	1 56	14	23	40	79		
Southwest							
Dallas	287	20	59	66	143		
Houston	364	2 6	7 1	82	184		
Phoenix	160	1 6	27	35	83		
San Antonio	1 86	14	21	45	107		
Rocky Mountain							
Denver	1 96	11	35	43	107		
Far West							
Los Angeles-Long Beach	1,140	53	307	21 6	564		
San Bernardmo-Riversio	ie-	,		•			
Ontario	78	5	14	16	43		
San Diego	180	12	45	33	90		
San Francisco-Oakland	331	14	54	68	1 95		
Seattle-Everett	230	11	55	49	114		
<u>Total</u>	13,655	615	3,734	2,608	6,698		
Source IIS Rureau of t					•		

Source: U.S. Bureau of the Census, U.S. Department of Commerce, U.S. Census of Population: 1960, Vol. I., Characteristics of the Population, Table 75, U.S. Government Printing Office, Washington, D.C., 1963.

TABLE C-9 PERSONAL INCOME, TOTAL AND PER CAPITA, FOR 29 SELECTED LARGE SMSAS AND FOR CORRESPONDING 29 SELECTED LARGE CENTRAL CITIES, 1960.

29 Selected Large	S	MSA	Central City		
SMSAS and Central Cities	Total	Per Capita	Total	Per Capita	
	(million dollars)	(dollars)	(million dollars)		
	(1)			(dollars)	
	(1)	(2)	(3)	(4)	
New England					
Boston	7,118.0	2,748	1,656.4	2,376	
<u>Mideast</u>			•	•	
Baltimore	4,072.0	2,358	2,057.6	2,191	
Buffalo	3,294.0	2,520	1,228.1	2,304	
New York Consolidated	43,782.0	3,087	24,966.4	2,856	
Philadelphia	10,515.0	2,421	4,488.9	2,241	
Pittsburgh	5,670.0	2,357	1,347.2	2,230	
Washington, D. C.	5,936.0	2,993	1,996.1	2,613	
<u> Great Lakes</u>	•	-,	-,55011	2,013	
Chicago Consolidated	18,344.0	2,700	10,027.4	2,572	
Cincinnati	2,690.0	2,509	1,169.0	2,324	
Cleveland	5,007.0	2,786	2,090.6	2,387	
Detroit	9,666.0	2,568	4,015.2	2,404	
Milwaukee	3,185.0	2,668	1,922.7	2,595	
Plains	3,103.0	2,000	1, 322.7	2,353	
Kansas City	2,751.0	2,645	1,229.7	2,583	
Minneapolis-St. Paul	3,897.0	2,630	2,113.1	2,365 2,655	
St. Louis	5,346.0	2,594	1,722.9		
Southeast	3,340.0	2,554	1,722.9	2,297	
Atlanta	2,322.0	2,283	1,004.4	2 062	
Miami	2,166.0	2,317	•	2,063	
New Orleans	1,776.0		620.7	2,126	
Tampa-St. Petersburg	1,568.0	2,046	1,227.1	1,954	
Southwest	1,300.0	2,031	929.2	2,038	
Dallas	2 720 0	2 517	1 774 5	2 (00	
Houston	2,728.0	2,517	1,774.5	2,609	
Phoenix	2,993.0	2,408	2,209.3	2,355	
San Antonio	1,480.0	2,229	1,057.6	2,409	
	1,246.0	1,814	1,067.8	1,816	
Rocky Moutain Denver	2 1152 0	2 (1)0	1 210 0	0.670	
<u>Far West</u>	2,453.0	2,640	1,319.0	2,670	
	20 010 0	2 060	0 /10 2		
Los Angeles-Long Beach	20,019.0	2,968	8,419.3	2,982	
San Bernardino-Riverside-	1 010 0	5.01.6			
Ontario	1,819.0	2,246	569.8	2,555	
San Diego	2,690.0	2,604	1,517.5	2,648	
San Francisco-Oakland	8,332.0	2,994	3,295.4	2,974	
Seattle-Everett	2,930.0	2,647	1,547.1	2,777	
<u>Total</u>	185,795.0	2,715	88,590.0	2,581	
Source:	of Population	1060 Manage		h d h- 1000	

Columns 1: U. S. Census of Population, 1960. Money income adjusted to 1960. See Irving Silver, op. cit.
2: Obtained by dividing total personal income by total number of persons.

^{3:} Mean household income was obtained from source of Column 1 from which total income was computed by multiplying by the number of households.
4: Obtained by dividing total personal income by total number of persons.

-326TABLE C-10

PERCENTAGE COMPOSITION OF ESTIMATED EMPLOYMENT BY INDUSTRY, BY CENTRAL CITY WORK LOCATION, FOR 29 SELECTED LARGE CENTRAL CITIES, 1960

	Industry Groups					
29 Selected Large	Total	Construc-		Wholesale	Public	
Central Cities		tion	turing	&	Adminis-	
				Retail	tration &	
				Trade	Services	
	(1)	(2)	(3)	(4)	(5)	
New England		(Perce	entage Dist	ribution)		
Boston	100.0	4.0	25.5	18.4	52.1	
Mideast	100.0	4.0	23.3	10.4	32.1	
Baltimore	100.0	5.1	30.4	18.2	46.3	
Buffalo	100.0	4.6	37.2	18.5	39.7	
New York Consolidated	100.0	3.9	28.4	18.0	49.7	
Philadelphia	100.0	4.1	34.4	18.1	43.4	
Pittsburgh	100.0	5.3	29.0	19.8	45.9	
Washington, D.C.	100.0	5.5	7.6	13.4	73.5	
Great Lakes	100.0	3.3		23.4	, 3, 3	
Chicago Consolidated	100.0	4.2	36.2	17.1	42.5	
Cincinnati	100.0	5.0	33.3	18.0	43.7	
Cleveland	100.0	3.9	41.7	16.5	38.0	
Detroit	100.0	3.6	40.8	17.7	37.9	
Mi lwaukee	100.0	4.3	41.2	18.3	36.1	
Plains	100.0	,,,,		2010	3012	
Kansas City	100.0	4.8	26.6	21.5	47.1	
Minneapolis-St. Paul	100.0	5.2	27.5	20.5	46.9	
St. Louis	100.0	3.8	34.0	17.6	44.5	
Southeast						
Atlanta	100.0	6.0	20.6	21.5	51.9	
Miami	100.0	6.4	12.9	22.1	58.6	
New Orleans	100.0	6.1	14.8	22.0	57.2	
Tampa-St. Petersburg	100.0	9.5	15.8	25.8	48.9	
Southwest						
Dallas	100.0	7.2	22.8	22.0	48.0	
Houston	100.0	7.5	20.6	22.3	49.6	
Phoenix	100.0	9.7	17.8	21.6	50.8	
San Antonio	100.0	7.7	11.3	24.2	56.7	
Rocky Mountain						
Denver	100.0	6.7	19.6	21.5	52.2	
Far West						
Los Angeles-Long Beach	100.0	4.9	31.0	18.3	45.8	
San Bernardino-Riverside-						
Ontario	100.0	8.8	17.6	20.9	52.7	
San Diego	100.0	7.6	26.1	18.5	47.9	
San Francisco-Oakland	100.0	4.7	18.9	20.1	56.4	
Seattle-Everett	100.0	5.4	28.4	20.8	45.4	
Total	100.0	4.8	29.0	18.6	47.6	
		-				

Source: Computed from Table C-1.

-327TABLE C-11

PERCENTAGE COMPOSITION OF EMPLOYMENT BY INDUSTRY BY SMSA WORK LOCATION, FOR 29 SELECTED LARGE SMSAS, 1960

	Industry Groups					
29 Selected Large	Total	Construc-	Manufac-	Wholesale	Public	
SMSAS		tion	turing	&	Adminis-	
				Retail	tration &	
				Trade	Services	
	(1)	(2)	(3)	(4)	(5)	
New England		(Per	centage Di	stribution)		
Boston	100.0	5.0	28.7	18.7	47.7	
Mideast						
Baltimore	100.0	6.1	30.2	17.7	46.0	
Buffalo	100.0	5.7	38.0	17.9	38.4	
New York Consolidated	100.0	4.6	28.5	18.4	48.5	
Philadelphia	100.0	5.0	35.7	17.7	41.5	
Pittsburgh	100.0	5.0	37.0	17.9	39.9	
Washington, D.C.	100.0	6.2	7.6	15.0	71.2	
Great Lakes						
Chicago Consolidated	100.0	4.7	35.3	17.8	42.2	
Cincinnati	100.0	5.5	32.9	18.8	42.7	
Cleveland	100.0	4.3	39.4	17.7	38.6	
Detroit	100.0	4.1	40.7	18.0	37.2	
Mi lwaukee	100.0	4.5	40.6	18.3	36.7	
Plains						
Kansas City	100.0	5.2	24.6	20.9	49.6	
Minneapolis-St. Paul	100.0	5.7	26.0	21.2	47.0	
St. Louis	100.0	4.8	33.0	17.9	44.2	
Southeast						
Atlanta	100.0	6.6	22.0	21.3	50.1	
Miami	100.0	6.7	11.4	22.2	59.7	
New Orleans	100.0	6.6	15.8	22.1	55.4	
Tampa-St. Petersburg	100.0	10.2	15.2	24.2	50.4	
Southwest						
Dallas	100.0	7.2	22.2	21.9	48.6	
Houston	100.0	7.4	21.7	21.7	49.1	
Phoenix	100.0	9.0	15.4	20.5	53.8	
San Antonio	100.0	7.3	11.2	23.9	57.6	
Rocky Mountain						
Denver	100.0	7.1	19.0	21.2	52.7	
Far West						
Los Angeles-Long Beach	100.0	5.5	30.6	18.6	45.2	
San Bernardino-Riverside						
Ontario	100.0	7.8	16.7	18.9	56.7	
San Diego	100.0	8.3	23.1	18.9	49.7	
San Francisco-Oakland	100.0	5.7	21.0	19.1	54.3	
Seattle-Everett	100.0	6.0	27.9	20.2	46.0	
<u>Total</u>	100.0	5.3	29.2	18.7	46.7	

Source: Computed from Table C-2.

-328
TABLE C-12

PERCENTAGE DISTRIBUTION OF EARNED PERSONAL INCOME, BY INDUSTRY,
BY CENTRAL CITY, FOR 29 SELECTED LARGE CENTRAL CITIES, 1959

	Industry Groups					
29 Selected Large	Total	Construc-	Manufac-	Wholesale	Public	
Central Cities		tion	turing	&	Adminis-	
				Retail	tration &	
				Trade	<u>Services</u>	
	(1)	(2)	(3)	(4)	(5)	
New England		(Percen	tage Distr	ibution)		
Boston	100.0	4.4	28.2	20.5	46.9	
Mideast						
Baltimore	100.0	5.5	32.8	18.8	42.8	
Buffalo	100.0	5.7	42.3	18.5	33.5	
New York Consolidated	100.0	4.3	26.3	21.4	47.9	
Philadelphia	100.0	5.0	33.2	18.8	42.9	
Pittsburgh	100.0	6.4	25.7	23.9	44.1	
Washington, D.C.	100.0	5.8	4.8	13.0	76.3	
Great Lakes						
Chicago Consolidated	100.0	5.8	37.1	20.3	36.7	
Cincinnati	100.0	5.5	36.6	21.1	36.8	
Cleveland	100.0	6.0	46.2	18.2	29.6	
Detroit	100.0	4.1	45.8	18.3	31.8	
Milwaukee	100.0	6.0	46.7	17.8	29.5	
Plains						
Kansas City	100.0	6.9	25.1	23.8	44.2	
Minneapolis-St. Paul	100.0	6.7	29.5	20.9	42.8	
St. Louis	100.0	5.2	36.2	20.0	38.6	
Southeast						
Atlanta	100.0	5.3	20.9	25.7	48.1	
Miami	100.0	8.4	12.9	24.8	53.9	
New Orleans	100.0	6.5	13.9	20.9	58.7	
Tampa-St. Petersburg	100.0	10.7	14.9	25.1	49.3	
Southwest						
Dallas	100.0	6.1	25.6	26.1	42.2	
Houston	100.0	7.0	20.1	23.7	49.2	
Phoenix	100.0	6.5	27.8	18.9	46.9	
San Antonio	100.0	5.8	9.1	20.3	64.7	
Rocky Mountain						
Denver	100.0	7.9	17.2	24.4	50.5	
Far West						
Los Angeles-Long Beach	100.0	5.7	34.0	19.0	41.3	
San Bernardino-Riverside-						
Ontario	100.0	9.1	14.8	20.7	55.4	
San Diego	100.0	7.8	21.0	14.4	56.7	
San Francisco-Oakland	100.0	5.5	16.0	24.2	54.3	
Seattle-Everett	100.0	6.0	31.2	22.4	40.4	
<u>Total</u>	100.0	5.5	29.8	20.5	44.3	

Source: Computed from Table C-6.

-329TABLE C-13

PERCENTAGE DISTRIBUTION OF EARNED PERSONAL INCOME BY INDUSTRY,
BY SMSA, FOR 29 SELECTED LARGE SMSAS, 1959

	Industry Groups						
29 Selected Large	Total	Construc-	Manufac-	Wholesale	Public		
SMSAS		tion	turing	&	Adminis-		
			J	Retail	tration &		
				Trade	Service		
	(1)	(2)	(3)	(4)	(5)		
New Persit and		(Percen	tage Distr	ibution)			
New England	100.0	E 0	21 0	10 6	43 6		
Boston	100.0	5.8	31.9	18.6	43.6		
Mideast	100 0	<i>6</i> E	33.3	16 5	42 7		
Baltimore Buffalo	100.0 100.0	6.5 7.3	43.7	16.5 16.0	43.7		
					33.0		
New York Consolidated	100.0	5.2	29.6	19.7	45.5		
Philadelphia	100.0	6.1	36.4	18.1	39.4		
Pittsburgh	100.0	5.8	43.1	16.4	34.8		
Washington, D.C.	100.0	6.7	4.6	14.6	74.1		
Great Lakes	100.0	6.7	37.2	19.6	36.6		
Chicago Consolidated		6.0		18.4	34.7		
Cincinnati	100.0	6.7	41.0				
Cleveland	100.0 100.0		45.1 45.9	18.0	30.2 32.2		
Detroit		4.9 6.3		16.9 16.9	30.8		
Milwaukee	100.0	0.3	46.0	10.9	30.0		
Plains City	100.0	7.2	28.2	20.6	44.0		
Kansas City		7.2 7.6	28.4	21.8			
Minneapolis-St. Paul St. Louis	100.0 100.0	7.6 6.6	36.7	19.0	42.3 37.7		
	100.0	0.0	30.7	19.0	37.7		
Southeast	100.0	5.9	23.6	24.9	45.7		
Atlanta Miami	100.0	8.7	11.0	23.2	57.1		
New Orleans	100.0	6.6	15.9	23.0	54.6		
Tampa-St. Petersburg	100.0	11.6	15.0	21.9	51.5		
Southwest	100.0	11.0	13.0	21.9	21.2		
Dallas	100.0	6.3	25.3	24.7	43.7		
Houston	100.0	6.7	24.7	21.0	47.6		
Phoenix	100.0	6.5	25.1	18.4	50.0		
San Antonio	100.0	5.5	9.3	20.1	65.2		
Rocky Mountain	100.0	J. J	7.3	20.1	05.2		
Denver	100.0	8.5	18.9	21.6	50.9		
Far West	100.0	0.5	10.7	21.0	30.7		
Los Angeles-Long Beach	100.0	6.4	34.9	18.8	39.8		
San Bernardino-Riverside-		0.4	34.7	10.0	33.0		
Ontario	100.0	8.4	15.7	17.9	58.1		
San Diego	100.0	8.9	19.1	14.8	57.3		
San Francisco-Oakland	100.0	6.8	20.6	20.9	51.7		
Seattle-Everett	100.0	6.8	32.2	20.5	40.6		
Total	100.0	6.3	31.8	19.1	42.8		
TOCAL	100.0	0.5	J U	#7 • #	72.0		

Source: Computed from Table C-7.

-330TABLE C-14

PERCENTAGE DISTRIBUTION OF EMPLOYMENT, BY INDUSTRY, BY CENTRAL CITY RESIDENCE LOCATION, FOR 29 SELECTED LARGE CENTRAL CITIES, 1960

			Industry	Groups	
29 Selected Large	Total	Construc-	Manufac-	Wholesale	Public
Central Cities		tion	turing	&	Adminis-
				Retail	tration &
				Trade	Services
	(1)	(2)	(3)	(4)	(5)
New England		(Percer	ntage Distr	ibution)	
Boston	100.0	4.2	24.3	18.7	52.8
Mideast	20010		2.00	200,	3200
Baltimore	100.0	5.0	28.2	18.5	48.3
Buffalo	100.0	4.0	35.9	18.7	41.4
New York Consolidated	100.0	3.8	27.6	18.6	50.0
Philadelphia	100.0	4.2	33.2	18.9	43.7
Pittsburgh	100.0	5.0	26.1	20.3	48.2
Washington, D.C.	100.0	5.0	6.1	14.0	74.9
Great Lakes				_,,,,	
Chicago Consolidated	100.0	3.8	35.0	17.6	43.6
Cincinnati	100.0	5.3	29.5	17.9	47.4
Cleveland	100.0	3.6	40.8	16.3	39.3
Detroit	100.0	3.3	37.4	18.3	41.0
Milwaukee	100.0	4.0	40.7	18.5	36.8
Plains					
Kansas City	100.0	4.5	22.1	21.1	52.3
Minneapolis-St. Paul	100.0	4.4	24.9	20.7	49.7
St. Louis	100.0	3.4	31.3	17.3	48.0
Southeast					
Atlanta	100.0	5.6	17.8	21.8	54.8
Miami	100.0	5.6	12.7	22.2	59.5
New Orleans	100.0	5.8	13.8	22.3	58.0
Tampa-St. Petersburg	100.0	9.0	14.7	25.6	50.6
Southwest					
Dallas	100.0	7.0	20.6	23.0	49.8
Houston	100.0	7.1	19.5	22.5	50.5
Phoenix	100.0	10.0	16.9	21.9	51.9
San Antonio	100.0	7.5	11.3	24.2	57.5
Rocky Mountain					
Denver	100.0	5.6	17.9	21.9	54.6
Far West					
Los Angeles-Long Beach	100.0	4.6	26.9	18.9	49.5
San Bernardino-Riverside-					
Ontario	100.0	6.4	17.9	20.5	55.1
San Diego	100.0	6.7	25.0	18.3	50.0
San Francisco-Oakland	100.0	4.2	16.3	20.5	58.9
Seattle-Everett	100.0	4.8	23.9	21.3	49.6
Total	100.0	4.5	27.3	19.1	49.1

Source: Computed from Table C-8.

-331-TABLE C-15 POPULATION BY AGE COMPOSITION, FOR 29 SELECTED LARGE CENTRAL CITIES, 1960

			Age Compos	ition	
29 Selected Large	Total	Under	18 to 44		65 Years
Central Cities		18 Years	Years	Years	and Over
	(1)	(2)	(3)	(4)	(5)
New England			(Thousand	s)	
Boston	697	200	251	161	86
Mideast	0,,	200	231	101	00
Baltimore	939	316	332	206	85
Buffalo	533	165	182	125	62
New York Consolidated	8,743	2,463	3,140	2,233	907
Philadelphia	2,003	616	706	472	209
Pittsburgh	604	184	209	144	68
Washington, D.C.	764	220	299	176	69
Great Lakes					
Chicago Consolidated	3,898	1,236	1,393	901	369
Cincinnati	503	161	171	111	59
Cleveland	876	286	320	184	87
Detroit	1,670	547	567	398	158
Milwaukee	741	246	265	159	71
Plains					
Kansas City	476	147	165	109	55
Minneapolis-St. Paul	796	241	272	180	102
St. Louis	750	232	245	181	92
Southeast					
Atlanta	487	161	185	103	39
Miami	292	73	105	77	37
New Orleans	628	219	217	137	54
Tampa-St. Petersburg	456	133	139	103	80
Southwest					
Dallas	680	240	257	135	47
Houston	938	351	365	169	53
Phoenix	439	166	155	84	34
San Antonio	588	240	205	101	42
Rocky Mountain					
Denver	494	162	176	103	53
Far West					
Los Angeles-Long Beach	2,823	851	1,050	625	297
San Bernardino-Riverside					
Ontario	223	82	7 9	41	21
S an D iego	573	188	246	96	43
San Francisco-Oakland	1,108	288	390	290	140
Seattle-Everett	599	181	208	138	72
Total	34,321	10,595	12,293	7,942	3,491
Source: Bureau of the Cer	nsus, U.S	. Departme	nt of Comm	erce, 1960:	Census

Bureau of the Census, U.S. Department of Commerce, 1960: Census of Population, Volume I, Characteristics of the Population,

Table 20. U.S. Government Printing Office, Washington, D.C.,
1963.

-332TABLE C-16
POPULATION BY AGE COMPOSITION, FOR 29 SELECTED LARGE SMSAS, 1960

	Age Composition					
29 Selected Large	Total	Under	18 to 44	45 to 64	65 Years	
SMSAS		18 Years	Years	Years	and Over	
	(1)	(2)	(3)	(4)	(5)	
Nov. England			(Thousand	ls)		
New England Boston	2,590	840	899	574	277	
Mideast	2,390	040	099	374	211	
Baltimore	1,727	607	646	345	129	
Buffalo	1,727	454	463	275	116	
New York Consolidated	14,183	4,297	5,095	3,448		
	4,344			932	1,343 390	
Philadelphia	2,406	1,445 807	1,576 854	523	223	
Pittsburgh	•	695	788	383		
Washington, D.C.	1,983	093	700	303	116	
Great Lakes	6 704	2 214	2 /55	1 //65	560	
Chicago Consolidated	6,794	2,314	2,455	1,465 224	560	
Cincinnati	1,072	374	372	381	102	
Cleveland	1,797	611	648		157	
Detroit	3,765	1,386	1,359	754 251	265	
Milwaukee	1,194	415	424	251	104	
Plains	1 0/0	260	272	010	0.5	
Kansas City	1,040	362	373	210	95	
Minneapolis-St. Paul	1,482	544	523	283	132	
St. Louis	2,061	721	711	442	188	
Southeast				4.0=		
Atlanta	1,017	371	395	185	66	
Miami	935	291	341	212	92	
New Orleans	868	321	311	173	63	
Tampa-St. Petersburg	772	229	238	176	130	
Southwest						
Dallas	1,084	391	413	205	76	
Houston	1,243	473	481	225	64	
Phoenix	664	256	243	120	46	
San Antonio	687	275	251	115	46	
Rocky Mountain						
Denver	929	339	349	166	76	
Far West						
Los Angeles-Long Beach	6,746	2,264	2,529	1,361	592	
San Bernardino-Riverside-						
Ontario	810	293	288	151	77	
San Diego	1,033	370	418	171	74	
San Francisco-Oakland	2,783	904	1,034	600	246	
Seattle-Everett	1,107	386	397	219	105	
<u>Total</u>	68,422	23,033	24,871	14,568	5,950	
Source: Bureau of the Cens	us, U.S.	Department	of Comme	rce, <u>1960</u> :	Census	

Source: Bureau of the Census, U.S. Department of Commerce, 1960: Census of Population, Volume I, Characteristics of the Population, Part 1, U.S. Summary, Table 96, U.S. Government Printing Office, Washington, D.C., 1964.

TABLE C-17 HOUSEHOLDS, BY AGE OF HEAD, FOR 29 SELECTED LARGE CENTRAL CITIES, 1960

29 Selected Large	Age of Head					
Central Cities	Total	Under 45 Years	45 To 64 Years	65 Years And Over		
	(1)	(2)	(3)	(4)		
		(Thous	sands)			
New England						
Boston	225	97	77	50		
<u>Mideast</u>						
Baltimore	276	134	97	45		
Buffalo	169	76	59	34		
New York Consolidated 1)	2,825	1,211	1,113	5 01		
Ph ila de lp hia	6 1 6	280	223	11 2		
P itts bu r gh	188	81	69	38		
Wa shi ng to n, D.C.	252	128	87	37		
<u> Great Lakes</u>						
Chicago Consolidated 2)	1,241	590	447	204		
Cincinnati	162	75	53	34		
Cleveland	270	136	86	48		
Detroit	515	229	198	88		
M ilw aukee	23 1	115	77	39		
Plains						
Kansas City	166	79	54	33		
Minneapolis-St. Paul	265	119	88	58		
St. Louis	249	109	88	52		
Southeast						
Atlanta	146	75	49	22		
Miami	108	47	39	22		
New Orleans	190	92	67	31		
Tampa-St. Petersburg	159	63	48	47		
Southwest						
Dallas	213	118	68	27		
Houston	283	167	86	30		
Phoenix	132	71	42	19		
San Antonio	161	89	48	24		
Rocky Mountain						
Denver	166	81	5 1	33		
Far West						
Los Angeles-Long Beach	1,002	490	328	184		
San Bernardino-Riverside-	-					
Ontario	70					
San Diego	175	100	48	27		
San Francisco-Oakland	426	178	159 .	89		
Seattle-Everett	201	93	64	43		
Total N The figures refer to tet	11,012	5,126	3,915	1,971		

¹⁾ The figures refer to total of New York, Jersey City, Newark and Patterson only. Total including Cliffton and Passaic is 2867.

²⁾ The figures refer to Chicago, Gary and Hammond only. The total including

East Chicago is 1257.

Source: 1960: Census of Housing, Volume II, "Metropolitan Housing," SMSA
Tables, B7, C7, D7, U. S. Government Printing Office, Washington, D.C., 1963.

TABLE C-18 HOUSEHOLDS BY AGE OF HEAD, FOR 29 SELECTED LARGE SMSAS, 1960.

Selected 29 Large SMSAS	Age of Head					
Urano .	Total	Under 45 Yea rs	45 To 64 Years	65 Years And Over		
	(1)	(2)	(3)	(4)		
		(Th	ousands)			
New England						
Boston	770	319	300	150		
<u>Mideast</u>			300	130		
Baltimore	485	239	181	65		
Buff al o	387	177	148	62		
New York Consolidated	4,519	1,918	1,864	735		
Philadelphia	1,267	57 2	491	202		
Pittsburgh	710	311	277	122		
Washington, D.C.	591	317	211	62		
Great Lakes				02		
Chicago Consolidated	2,058	960	793	304		
Cincinnati	326	148	122	57		
Cleveland	538	251	202	85		
De troit	1,081	530	407	143		
Milwaukee	357	167	:134	56		
Plains		207		50		
Kansas City	331	159	117	55		
Minneapolis-St. Paul	441	211	155	75		
St. Louis	625	282	239	103		
Southeast	,	202		103		
Atlanta	291	156	99	36		
Miami	308	140	115	53		
New Orleans	253	123	95	35		
Tampa-St. Petersburg	265	95	91	79		
Southwest	203		31	7.5		
Dallas	331	173	114	44		
Houston	368	203	127	37		
Phoenix	1 9 1	98	66	27		
San Antonio	182	93	62	27		
Rocky Mountain	102	33	02	27		
Denver	286	147	93	46		
Far West	200	 /	33	40		
Los Angeles-Long Beach	2,216	1,092	770	353		
San Bernardino-Riverside-	-	-				
Ontario	245	117	81	47		
San Diego	305	166	95	44		
San Francisco-Oakland	923	432	342	149		
Seattle-Everett	360	169	125	65		
<u>Total</u>	21,010	9,770	7,920	3,320		

Source: (1) Bureau of the Census, U.S. Department of Commerce, 1960: Census of Population, Volume I, "Characteristics of the Population,"

Part 1, U.S. Summary, Table 106, U.S. Government Printing Office, Washington, D.C., 1963.

(2) Bureau of the Census, U.S. Department of Commerce, 1960: Census of Housing, Volume II, "Metropolitan Housing",

SMSA Table 7, U.S. Government Printing Office, Washington, D.C., 1963.

D.C., 1963.

TABLE C-19
HOUSEHOLDS, BY INCOME CLASS, FOR 29 SELECTED
LARGE CENTRAL CITIES, 1960

29 Selected Large	Income Class					
Central Cities	Under \$4,000	\$4,000 To \$8,000	\$8,000 To \$15,000	\$15,000 And Over	Total	
_	(1)	(2)	(3)	(4)	(5)	
			(Thousands	s)		
New England				,		
Boston	58	66	75	26	225	
<u>Mideast</u>				. 1		
Baltimore	67	84	86	39	276	
Buffalo	43	54	55	17	169	
New York Consolidated 1)	56 0	734	997	534	2,825	
Ph ila del p hia	152	194	197	72	616	
P itts burgh	49	59	57	24	188	
Washington, D.C.	54	80	74	44	252	
Great Lakes						
Chicago Consolidated 2)	269	367	421	185	1,242	
Cincinnati	45	48	47	22	162	
Cleveland	64	79	101	27	270	
Detroit	128	143	167	77	515	
Milwa ukee	44	65	92	31	231	
Plains						
Kansas City	43	49	52	: 22	166	
Minneapolis-St. Paul	60	74	92	38	265	
St. Louis	72	76	77	24	249	
Southeast						
Atlanta	43	44	37	22	146	
Miami	39	36	23	10	108	
New Orleans	61	58	49	23	190	
Tampa-St. Petersburg	57	49	38	16	159	
Southwest						
Dallas	47	58	69	39	213	
Houston	67	79	90	47	283	
Phoenix	30	36	45	20	132	
San Antonio	47	52	46	16	161	
Rocky Mountain						
Denver	39	46	54	27	1 66	
Far West						
Los Angeles-Long Beach	241	250	327	183	1,002	
San Bernardho-Riverside-	- · -				-,	
Ontario					70	
San Diego	36	44	63	- 31	175	
San Francisco-Oakland	108	118	130	69	426	
Seattle-Everett 3)	50	56	65	30	201	
	2,573	3,097	3,628	1,715	11,013	
figures refer to New York Ja	-		-	-	•	

¹⁾ The figures refer to New York, Jersey City, Newark, and Patterson only. The total including Cliffton and Passaic is 2867. 2) The figures refer to Chicago, Gary and Hammond only. The total including East Chicago is 1257. 3) The figures refer to only Seattle.

Source: Special tabulation of the MIT Lab. for Environmental Studies, based on U.S. Census of Population, 1960. Money income adjusted to U.S. Office of Business Economics personal income concept. See Irving Silver, <u>Urban Population</u>, <u>Households and Housing: Postwar Characteristics and Growth; Perspectives to 1985</u>, MIT, Dept. of City & Regional Planning, Cambridge, Mass., 1968.

-336-TABLE C-20 HOUSEHOLDS, BY INCOME CLASS, FOR 29 SELECTED LARGE SMSAS, 1960

			Income Cla	ass	
29 Selected Large	Under	\$4,000	\$8,000	\$15,000	Total
SMSAS	\$4,000	to	to	and	
		\$8,000	\$15,000	Over	
	(1)	(2)	(3)	(4)	(5)
New England			(Thous and	3)	
Boston	158	250	252	110	770
Mideast					•••
Baltimore	106	166	154	59	485
Buffalo	78	130	133	45	386
New York Consolidated	962	1,437	1,436	684	4,519
Philadelphia	268	421	410	167	1,267
Pittsburgh	159	259	215	77	710
Washington, D.C.	101	170	206	114	591
Great Lakes					
Chicago Consolidated	380	583	761	335	2,058
Cincinnati	80	104	101	41	326
Cleveland	100	159	199	80	538
Detroit	215	318	390	157	1,080
Milwaukee	63	107	139	49	357
Plains					
Kansas City	79	110	104	38	331
Minneapolis-St. Paul	87	138	158	58	441
St. Louis	149	203	200	73	625
Southeast					
Atlanta	80	94	82	35	291
Miami	102	104	73	29	308
New Orleans	86	85	59	24	253
Tampa-St. Petersburg	108	89	46	21	265
Southwest					
Dallas	88	107	93	42	330
Houston	95	117	109	46	367
Phoenix	52	62	55	21	191
San Antonio	63	66	38	15	182
Rocky Mountain					
Denver	65	92	93	36	286
Far West					
Los Angeles-Long Beach	499	628	754	335	2,216
San Bernardino-Riverside-					-
Ontario Riverside	68	82	72	24	245
San Diego	71	93	101	41	305
San Francisco-Oakland	205	269	313	136	923
Seattle-Everett	81	109	122	49	360
Total	4,647	6,551	6,867	2,941	21,006
	4,04/	0,001	•	-	

-337TABLE C-21

PERCENTAGE COMPOSITION OF POPULATION, BY AGE FOR 29
SELECTED LARGE CENTRAL CITIES, 1960

		Age	Composition	a	
29 Selected Large	Total	Under 18	18 to 44	45 to 64	65 Years
Central Cities		Years	Years	Years	and Over
	(1)	(2)	(3)	(4)	(5)
New England		(Perce	entage Dist	ribution)	
Boston	100.0	28.7	36.0	23.1	12.3
Mideast	100.0	20.7	30.0	23.1	12.5
Baltimore	100.0	33.7	35.4	21.9	9.1
Buffalo	100.0	31.0	34.1	23.5	11.6
New York Consolidated	100.0	28.2	35.9	25.5	10.4
Philadelphia	100.0	30.8	35.2	23.6	10.4
Pittsburgh	100.0	30.5	34.6	23.8	11.3
Washington, D.C.	100.0	28.8	39.1	23.0	9.0
Great Lakes					
Chicago Consolidated	100.0	31.7	35.7	23.1	9.5
Cincinnati	100.0	32.0	34.0	22.1	11.7
Cleveland	100.0	32.6	36.5	21.0	9.9
Detroit	100.0	32.8	34.0	23.8	9.5
Milwaukee	100.0	33.2	35.8	21.5	9.6
Plains					
Kansas City	100.0	30.9	34.7	22.9	11.6
Minneapolis-St. Paul	100.0	30.3	34.2	22.6	12.8
St. Louis	100.0	30.9	32.7	24.1	12.3
Southeast					
Atlanta	100.0	33.1	38.0	21.0	8.0
Miami	100.0	25.0	36.0	26.4	12.7
New Orleans	100.0	34.9	34.6	21.8	8.6
Tampa-St. Petersburg	100.0	29.2	30.5	22.6	17.5
Southwest					
Dallas	100.0	35.3	37.8	19.9	6.9
Houston	100.0	37.4	38.9	18.0	5.7
Phoenix	100.0	37.8	35.3	19.1	7.7
San Antonio	100.0	40.8	34.9	17.2	7.1
Rocky Mountain					
Denver	100.0	32.8	35.6	20.9	10.7
Far West					
Los Angeles-Long Beach	100.0	30.1	37.2	22.1	10.5
San Bernardino-Riverside					
Ontario	100.0	36.8	35.4	18.4	9.4
San Diego	100.0	32.8	42.9	16.8	7.5
San Francisco-Oakland	100.0	26.0	35.2	26.2	12.6
Seattle-Everett	100.0	30.2	34.7	23.0	12.0
<u>Total</u>	100.0	30.9	35.8	23.1	10.2

Source: Computed from Table C-15.

-338TABLE C-22

PERCENTAGE COMPOSITION OF POPULATION, BY AGE,
FOR 29 SELECTED LARGE SMSAS, 1960

			Age Composi	ition	
29 Selected Large	Total	Under 18	18 to 44	45 to 64	65 Years
SMSAS		Years	Years	Years	and Over
	(1)	(2)	(3)	(4)	(5)
New England		(Per	centage Dist	ribution)	
Boston	100.0	32.4	34.7	22.2	10.7
Mideast	100.0	32.4	34.7	22.2	10.7
Baltimore	100.0	35.1	37.4	20.0	7.5
Buffalo	100.0	34.7	35.4	21.0	7. <i>5</i> 8.9
New York Consolidated	100.0	30.3	35.9	24.3	9.5
Philadelphia	100.0	33.3	36.3	21.5	8.9
Pittsburgh	100.0	33.5	35.5	21.7	9.3
Washington, D.C.	100.0	35.1	39.7	19.3	5.9
Great Lakes	100.0	33.1	37.7	19.3	J. 9
Chicago Consolidated	100.0	34.1	36.1	21.6	8.2
Cincinnati	100.0	34.9	34.7	20.9	9.5
Cleveland	100.0	34.0	36.1	21.2	8.7
Detroit	100.0	36.8	36.1	20.0	7.1
Milwaukee	100.0	34.8	35.5	21.0	8.7
Plains	100.0	34.0	22.5	21.0	0.7
Kansas City	100.0	34.8	35.9	20.2	9.1
Minneapolis-St. Paul	100.0	36.7	35.3	19.1	8.9
St. Louis	100.0	35.0	34.5	21.4	9.1
Southeast	100.0	33.0	34.3	21.4	9.1
Atlanta	100.0	36.5	38.8	18.2	6.5
Miami	100.0	31.1	36.5	22.7	9.8
New Orleans	100.0	37.0	35.8	19.9	7.3
Tampa-St. Petersburg	100.0	29.7	30.8	22.8	16.8
Southwest	100.0	23.1	30.0	22.0	10.0
Dallas	100.0	36.1	38.1	18.9	7.0
Houston	100.0	38.1	38.7	18.1	5.1
Phoenix	100.0	38.6	36.6	18.1	6.9
San Antonio	100.0	40.0	36.5	16.7	6.7
Rocky Mountain	100.0	40.0	30.3	10.7	0.7
Denver	100.0	36.5	37.6	17.9	8.2
Far West	100.0	30.3	37.0	17.5	0.2
Los Angeles-Long Beach	100.0	33.6	37.5	20.2	8.8
San Bernadino-Riverside-		33.0	37.13	20.2	0.0
Ontario	100.0	36.2	35.6	18.6	9.5
San Diego	100.0	35.8	40.5	16.6	7.2
San Francisco-Oakland	100.0	32.5	37.2	21.6	8.8
Seattle-Everett	100.0	34.9	35.9	19.8	9.5
Total	100.0	33.7	36.3	21.3	8.7
AU LAL	100.0	33.1	30.3	~	U. /

Source: Computed from Table C-16.

-339TABLE C-23

PERCENTAGE COMPOSITION OF HOUSEHOLDS BY AGE OF HEAD, FOR 29 SELECTED LARGE CENTRAL CITIES, 1960

		Age o	of Head	
29 Selected Large	Total	Under 45	45 to 64	65 Years
Central Cities		Years	Years	and Over
	(1)	(2)	(3)	(4)
Nov. England		(Percenta	ige Distribut	ion)
New England Boston	100.0	43.1	34.2	22.2
Mideast	100.0	43.1	34.2	22.2
Baltimore	100.0	48.6	35.1	16.3
Buffalo	100.0	45.0	35.0	20.1
New York Consolidated 1)	100.0	42.9	39.4	17.7
Philadelphia	100.0	45.5	36.2	18.2
Pittsburgh	100.0	43.1	36.7	20.2
Washington, D.C.	100.0	50.8	34.5	14.7
Great Lakes	100.0	20.0	34.3	14.7
Chicago Consolidated 2)	100.0	47.5	36. 0	16.4
Cincinnati	100.0	46.3	32.7	21.0
Cleveland	100.0	50.4	31.9	17.8
Detroit	100.0	44.5	38.4	17.1
Milwaukee	100.0	49.8	33.3	
Plains	100.0	49.0	33.3	16.9
Kansas City	100.0	47.6	32.5	19.9
	100.0	44.9	33.2	21.9
Minneapolis-St. Paul St. Louis	100.0	43.8	35.2 35.3	20.9
	100.0	43.0	22.3	20.9
Southeast Atlanta	100.0	51.4	33.6	15.1
Miami	100.0	43.5	36.1	20.4
New Orleans	100.0	48.4	35.3	16.3
	100.0	39.6	30.2	29.6
Tampa-St. Petersburg Southwest	100.0	39.0	30.2	29.0
Dallas	100.0	55.4	31.9	12.7
Houston	100.0	59.0	30.4	10.6
Phoenix	100.0	53.8	31.8	14.4
San Antonio	100.0	55.3	29.8	14.9
Rocky Mountain	100.0	JJ.J	29.0	14.7
Denver	100.0	48.8	30.7	19.9
Far West	100.0	40.0	50.7	17.7
Los Angeles-Long Beach	100.0	48.9	32.7	18.4
San Bernardino-Riverside-	100.0	40.9	32.7	10.4
Ontario				
San Diego	100.0	57.2	27.4	15.4
San Diego San Francisco-Oakland	100.0	41.8	37.3	20.9
Seattle-Everett	100.0	46.3	31.8	21.4
	100.0	46.5	35.6	17.9
Total	100.0	40.3	33.0	1/.9

¹⁾ Refer to total of New York, Jersey City, Newark, and Patterson only.

Source: Computed from Table C-17.

²⁾ Refer to total of Chicago, Gary and Hammond only.

-340TABLE C-24

PERCENTAGE COMPOSITION OF HOUSEHOLDS BY AGE OF HEAD,
FOR 29 SELECTED LARGE SMSAS, 1960

		Age c	f Head	
29 Selected Large	Total	Under 45	45 to 64	65 Years
SMSAS		Years	Years	and Over
	(1)	(2)	(3)	(4)
Nov. England		(Percentage	Distribution)	
New England Boston	100.0	41.4	39.0	10 5
Mideast	100.0	41.4	39.0	19.5
Baltimore	100.0	49.3	37.3	13.4
Buffalo	100.0	45.7	38.2	16.0
New York Consolidated	100.0	42.4	41.2	16.3
	100.0	45.1		
Philadelphia			38.8	15.9
Pittsburgh	100.0	43.8	39.0	17.2
Washington, D.C.	100.0	53.6	35.7	10.5
Great Lakes	100 0	16.6	20 5	1/ 0
Chicago Consolidated	100.0	46.6	38.5	14.8
Cincinnati	100.0	45.4	37.4	17.5
Cleveland	100.0	46.7	37.5	15.8
Detroit	100.0	49.0	37.7	13.2
Mi lwaukee	100.0	46.8	37.5	15.7
<u>Plains</u>				
Kansas City	100.0	48.0	35.3	16.6
Minneapolis-St. Paul	100.0	47.8	35.2	17.0
St. Louis	100.0	45.1	38.2	16.5
Southeast				
Atlanta	100.0	53.6	34.0	12.4
Miami	100.0	45.5	37.3	17.2
New Orleans	100.0	48.6	37.5	13.8
Tampa-St. Petersburg	100.0	35.8	34.3	29.8
Southwest				
Dallas	100.0	52.3	34.4	13.3
Houston	100.0	55.2	34.5	10.1
Phoenix	100.0	51.3	34.6	14.1
San Antonio	100.0	51.1	34.1	14.8
Rocky Mountain				
Denver	100.0	51.4	32.5	16.1
Far West				
Los Angeles-Long Beach	100.0	49.3	34.7	15.9
San Bernardino-Riverside-				
Ontario	100.0	47.8	33.1	19.2
San Diego	100.0	54.4	31.2	14.4
San Francisco-Oakland	100.0	46.8	37.1	16.1
Seattle-Everett	100.0	46.9	34.7	18.1
Total	100.0	46.5	37.7	15.8

Source: Computed from Table C-18.

-341-TABLE C-25 PERCENTAGE DISTRIBUTION OF HOUSEHOLDS BY INCOME LEVELS FOR 29 SELECTED LARGE CENTRAL CITIES, 1960

			Income L	eve1	
29 Selected Large	Under	\$4,000	\$8,000	\$15,000	Total
Central Cities	\$4,000	to	to	and	
		\$8,000	\$15,000	0ver	
	(1)	(2)	(3)	(4)	(5)
Nov. England		(Perc	entage Dis	tribution)	
New England Boston	25.8	29.3	33.3	11.6	100 0
Mideast	23.0	29.3	33.3	11.0	100.0
Baltimore	0/ 2	20 /	21.0	1/ 1	100 0
	24.3	30.4 32.0	31.2	14.1	100.0
Buffalo	25.4	· · · ·	32.5	10.1	100.0
New York Consolidated 1)		26.0	35.3	18.9	100.0
Philadelphia	24.7	31.5	32.0	11.7	100.0
Pittsburgh	26.1	31.4	30.3	12.8	100.0
Washington, D.C.	21.4	31.7	29.4	17.5	100.0
Great Lakes	01 7	00.5	00.0	11.0	100.0
Chicago Consolidated 2)	21.7	29.5	33.9	14.9	100.0
Cincinnati	27.8	29.6	29.0	13.6	100.0
Cleveland	23.7	29.3	37.4	10.0	100.0
Detroit	24.9	27.8	32.4	15.0	100.0
Mi lwaukee	19.0	28.1	39.8	13.4	100.0
<u>Plains</u>					
Kansas City	25.9	29.5	31.3	13.3	100.0
Minneapolis-St. Paul	22.6	27.9	34.7	14.3	100.0
St. Louis	28.9	30.5	30.9	9.6	100.0
Southeast					
Atlanta	29.5	30.1	25.3	15.1	100.0
Miami	36.1	33.3	21.3	9.3	100.0
New Orleans	32.1	30.5	25.8	12.1	100.0
Tampa-St. Petersburg	35,7	30.8	23.9	10.1	100.0
Southwest					
Dallas	22.1	27.2	32.4	18.3	100.0
Houston	23.7	27.9	31.8	16.6	100.0
Phoenix	22.7	27.3	34.1	15.2	100.0
San Antonio	29.2	32.3	28.6	9.9	100.0
Rocky Mountain					
Denver	23.5	27.7	32.5	16.3	100.0
Far West					
Los Angeles-Long Beach	24.1	25.0	32.6	18.3	100.0
San Bernadino-Riverside-					
Ontario	N.A.	N.A.	N.A.	N.A.	
San Diego	20.6	25.1	36.0	17.7	100.0
San Francisco-Oakland	25.4	27.7	30.5	16.2	100.0
Seattle-Everett 3)	24.9	27.9	32.3	14.9	100.0
Total	23.4	28.1	32.9	15.6	100.0
1) Include New York I				taraan an lu	

^{1).} Include New York, Jersey City, Newark, and Patterson only.
2). Include Chicago, Garry and Hammond only.

Source: Computed from Table C-19.

^{3).} Include only Seattle.

TABLE C-26

PERCENTAGE DISTRIBUTION OF HOUSEHOLDS BY INCOME LEVELS, FOR 29 SELECTED LARGE SMSAS, 1960

		1	ncome Level	L	
29 Selected Large	Under	\$4,000	\$8,000	\$15,000	Total
SMSAS	\$4,000	to	to	and	
	-	\$8,000	\$15,000	0ver	
	(1)	(2)	(3)	(4)	(5)
Non-England		(Percen	tage Distri	lbution)	
New England Boston	20.5	32.5	32.7	14.3	100.0
Mideast	20.5	32.3	32.7	14.5	100.0
Baltimore	21.9	34.2	31.8	12.2	100.0
Buffalo	20.2	33.7	34.5	11.7	100.0
New York Consolidated	21.3	31.8	31.8	15.1	100.0
Philadelphia	21.2	33.2	32.4	13.2	100.0
Pittsburgh	22.4	36.5	30.3	10.8	100.0
	17.1	28.8	34.9	19.3	100.0
Washington, D.C. Great Lakes	17.1	20.0	34.7	19.3	100.0
Chicago Consolidated	18.5	28.3	37.0	16.3	100.0
Cincinnati	24.5	31.9	31.0	12.6	100.0
Cleveland	18.6	29.6	37.0	14.9	100.0
	19.9	29.4	36.1	14.5	100.0
Detroit Milwaukee	17.6	30.0	38.9	13.7	100.0
	17.0	30.0	30.9	13.7	100.0
Plains	22.0	33.2	31.4	11 5	100.0
Kansas City	23.9	31.3		11.5 13.2	100.0
Minneapolis-St. Paul	19.7		35.8		
St. Louis	23.8	32.5	32.0	11.7	100.0
Southeast	27 5	22.2	20.2	12.0	100 0
Atlanta	27.5	32.3	28.2	12.0	100.0
Miami	33.1	33.8	23.7	9.4	100.0
New Orleans	34.0	33.6	23.3	9.5	100.0
Tampa-St. Petersburg	40.8	33.6	17.4	7.9	100.0
Southwest	26.7	22 4	20.2	10 7	100 0
Dallas	26.7	32.4	28.2	12.7 12.5	100.0
Houston	25.9	31.9	29.7		100.0
Phoenix	27.2	32.5	28.8	11.0	100.0
San Antonio	34.6	36.3	20.9	8.2	100.0
Rocky Mountain	20.7	20.0	20 5	10 6	100 0
Denver	22.7	32.2	32.5	12.6	100.0
Far West	22 5	20.2	24.0	15 1	100.0
Los Angeles-Long Beach	22.5	28.3	34.0	15.1	100.0
San Bernacino-Riverside-	07.0	22.5	20. /	0.0	100 0
Ontario	27.8	33.5	29.4	9.8	100.0
San Diego	23.3	30.5	33.1	13.4	100.0
San Francisco-Oakland	22.2	29.1	33.9	14.7	100.0
Seattle-Everett	22.5	30.3	33.9	13.6	100.0
<u>Total</u>	22.1	31.2	32.7	14.0	100.0

Source: Computed from Table C-20.

APPENDIX - D

ANALYSIS OF CENTRAL CITY EMPLOYMENT, BY PLACE OF WORK AND BY PLACE OF RESIDENCE

TABLE D-1

WORKERS BY WORK PLACE IN CENTRAL CITY AND WORKERS BY RESIDENCE IN CENTRAL CITY AND THEIR RATIO,
BY INDUSTRY, FOR BOSTON CENTRAL CITY IN BOSTON SMSA, 1960

Industry Group	Ratio of Workers		Work Pl	ace in Ce	Worker	Workers by Residence in Central City			
	by Place of Work to Workers by Place of Residence		Live & Work in Central City		Ring, Work Itral City Differ- ent County	Live Outside SMSA Work in Central City	Total	Live & Work in Central City	Live in Central City Work Outside SMSA
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	(Ratio)		(Work	ers in Nu	(Worl	(Workers in Numbers)			
Total Agric., For., Fisheries, &	2.000	425,492	209,060	14,063	178,204	24,165	212,731	209,060	3,671
Mining	1.658	1,149	619	52	416	62	693	619	74
Construction	1.911	16,622	8,235	524	6,529	1,334	8,699	8,235	464
Manufacturing	2.085	100,480	47,342	4,014	42,697	6,427	48,193	47,,342	851
Transportation &		100, 100	.,,5 .2	1,014	72,007	0,427	40,133	71,,572	051
Communication	2.213	43,012	19,115	1,620	18,776	3,501	19,436	19,115	321
Wholesale &									
Retail Trade	1.941	85,672	43,557	3,286	35,278	3,551	44,138	43,557	581
Finance, Insuran & Real Estate Public Adminis-	ce 2.717	45,461	16,625	1,552	24,716	2,568	16,735	16,625	110
tration Services, Total Services Total	1.781 1.789	30,528 97,803	16,877 53,744	967 1,904	10,701 37,626	1,983 4,529	17,142 54,665	16,877 53,744	265 921
& Industry Not Reported	1.778	102,568	56,690	2,048	39,091	4,739	57,694	56,690	1,005

(Continued)

Columns 2, 7: Computed.

Column 1: Computed from Column 2 and Column 7.

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TABLE D-2

WORKERS BY WORK PLACE IN CENTRAL CITY AND WORKERS BY RESIDENCE IN CENTRAL CITY AND THEIR RATIO
BY INDUSTRY, FOR BALTIMORE CENTRAL CITY IN BALTIMORE SMSA, 1960

Industry Group	Ratio of Workers	Work Place in Central City						Workers by Residence in Central City			
	by Place of Work to Workers by Place of Residence	Total	Live & Work in Central City		Ring, Work ral City Differ- ent County	Live Outside SMSA Work in Central City	Total	Live & Work in Central City	Live in Central City Work Outside SMSA		
	(1)	(2)	(3)		(4)	(5)	(6)	(7)	(8)		
	(Ratio)	((Workers in	Numbers)		(Worker	s in Numbe	ers)			
Total Agric., For., Fisheries &	1.355	394,204	285,089		102,882	6,233	290,924	285,089	5,835		
Mining	1.184	728	546		130	52	615	546	69		
Construction	1.372	20,962	14,600		5,858	504	15,276	14,600	676		
Manufacturing	1.457	111,796	75,587		34,323	1,886	76,709	75,587	1,122		
Transportation &		•	•		•	•	-	•	•		
Communication	1.511	40,371	26,074		13,357	940	26,718	26,074	644		
Wholesale &											
Retail Trade	1.330	81,386	60,635		19,685	1,066	61,179	60,635	544		
Finance, Insuran											
& Real Estate	1.511	24,064	15,813		7,955	296	15,931	15,813	118		
Public Adminis-											
tration	1.235	25,390	18,925		6,042	423	20,554	18,925	1,629		
Services, Total	1.215	84,610	68,752		14,864	994	69,654	68,752	902		
Services Total &	:										
Industry Not		00 505	70 000		15 500		70.040	70 000	1 000		
Reported	1.211	89,507	72,909		15,532	1,066	73,942	72,909	1,033		

TABLE D-3

WORKERS BY WORK PLACE IN CENTRAL CITY AND WORKERS BY RESIDENCE IN CENTRAL CITY AND THEIR RATIO,
BY INDUSTRY, FOR BUFFALO CENTRAL CITY IN BUFFALO SMSA, 1960

Industry Group	Ratio of Workers		Work P	Workers by Residence in Central City					
	by Place Tota of Work to Workers by Place of Residence		Live & Work in Central City		Ring, Work tral City Differ- ent County	Live Outside SMSA Work in Central City		Liwe & Work in Central City	Live in Central City Work Outside SMSA
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	(Ratio)			(Workers	in Numbers)		(Worl	kers in Num	bers)
Total Agric., For., Fisheries,	1.637	249,254	151,327	92,956	2,435	2,536	152,225	151,327	898
Mining	3.050	732	229	480	9	14	240	229	11
Construction	1.833	10,251	5,536	4,366	189	160	5,593	5,536	57
Manufacturing	1.698	82,754	48,499	32,245	1,018	992	48,749	48,499	250
Transportation &							-	·	
Communication	1.741	23,802	13,533	9,461	316	492	13,675	13,533	142
Wholesale &									
Retail Trade	1.620	52,732	32,439	19,525	337	431	32,555	32,439	116
Finance, Insuran									
& Real Estate	1.775	12,173	6,839	5,194	61	79	6,859	6,839	20
Public Adminis-	1 /02	10 170	0.140	2 01/	4.0		0 010		
tration	1.483	12,179	8,140	3,914	48	77	8,215	8,140	75
Services, Total	1.500	52,026	34,478	16,837	441	270	34,689	34,478	211
Services Total									
& Industry Not Reported	1.503	54,631	36,112	17,771	457	291	26 220	26 112	227
Reported	1.000	74,03T	20,112	1/,//1	437	771	36,339	36,112	227

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TABLE D-4

WORKERS BY WORK PLACE IN CENTRAL CITY AND WORKERS BY RESIDENCE IN CENTRAL CITY AND THEIR RATIO,
BY INDUSTRY, FOR NEW YORK CENTRAL CITY IN NEW YORK SMSA, 1960

Industry Group	Ratio of Workers		Work Place in Central City					Workers by Residence in Central City		
	by Place of Work t Workers b Place of Residence	у	Live & Work in Central City		Ring, Work ral City Differ- ent County	Outside SMSA Work in Central City	Total	Live & Work in Central City	Live in Central City Work Outside SMSA	
	(1)	(2)	(3)		(4)	(5)	(6)	(7)	(8)	
	(Ratio)	(W	orkers in	Numbers)			(Work	ers in Nu	mbers)	
Total Agric., For., Fisheries,	1.210	2,139,452	1,724,051		306,988	108,413	1,768,697	1,724,05	1 44,646	
Mining	1.416	5,063	3,383		901	779	3,575	3,38	3 192	
Construction	1.270	88,920	68,001		15,930	4,989	70,002	68,00		
Manufacturing	1.220	550,353	434,094		83,035	33,224	451,127	•	4 17,033	
Transportation &		330,030	101,057		00,000	33,22	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	131,05	. 17,033	
Communication	1.316	207,263	150,948		41,010	15,305	157,469	150,94	8 6,521	
Wholesale &			,		•	, , , , ,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	
Retail Trade	1,178	433,339	360,677		57,649	15,013	367,717	360,67	7 7,040	
Finance, Insuran	ce	•	•		-	•	-	•	•	
& Real Estate	1.385	168,392	120,608		32,954	14,830	121,562	120,60	8 954	
Public Adminis-										
tration	1.182	101,591	84,394		14,091	3,106	85,972	84,39	•	
Services, Total Services Total & Industry	1.146	553,703	474,784		59,061	19,858	483,332	474,78	4 8,548	
Not Reported	1.143	584,531	501,946		61,418	21,167	511,273	501,94	6 9,327	

TABLE D-5

WORKERS BY WORK PLACE IN CENTRAL CITY AND WORKERS BY RESIDENCE IN CENTRAL CITY AND THEIR RATIO,
BY INDUSTRY, FOR PHILADELPHIA CENTRAL CITY IN PHILADELPHIA SMSA, 1960

Industry Group	Ratio of Workers	Work Place in Central City							Workers by Residence in Central City			
	by Place of Work to Workers by Place of Residence	Total	Live & Work in Central City		Ring, Work ral City Differ- ent County	Live Outside SMSA Work in Central City	Total	Live & Work in Central City	Live in Central City Work Outside SMSA			
	(1)	(2)	(3)		(4)	(5)	(6)	(7)	(8)			
	(Ratio)		(Workers in Numbers)				(Worl	bers)				
Total Agric., For., Fisheries,	1.295	870,831	664,568		197,715	8,548	672,315	664,568	7,747			
Mining	1.222	1,520	1,147		315	58	1,244	1,147	97			
Construction	1.288	35,733	26,831		8,444	458	27,752	26,831	921			
Manufacturing	1.337	308,343	228,539		76,868	2,936	230,690	228,539	2,151			
Transportation &			,		,	,	,	,	-,			
Communication Wholesale &	1.421	70,744	48,939		20,592	1,213	49,784	48,939	845			
Retail Trade Finance, Insuran	1.236	167,777	134,191		32,242	1,344	135,702	134,191	1,511			
& Real Estate Public Adminis-	1.551	52,273	33,511		18,321	441	33,708	33,511	197			
tration Services, Total Services Total	1.212 1,214	55,414 170,950	45,287 139,337		9,490 30,251	637 1,362	45,729 140,765	45,287 139,337	442 1,428			
& Industry Not Reported	1.212	179,027	146,123		31,443	1,461	147,706	146,123	1,583			

TABLE D-6

WORKERS BY WORK PLACE IN CENTRAL CITY AND WORKERS BY RESIDENCE IN CENTRAL CITY AND THEIR RATIO,
BY INDUSTRY, FOR PITTSBURGH CENTRAL CITY IN PITTSBURGH, PA. SMSA, 1960

Industry Group	Ratio of Workers		Work P1	Workers by Residence in Central City						
	by Place of Work to	Total	Live & Work in	<u>in Cent</u>	Ring, Work ral City	Live Outside	Total	Live & Work in	Live in Central	_
	Workers by Place of		Central	Same	Differ-	SMSA		Central	City	
	Residence		City	County	ent County	Work in Central		City	Work Outside	
	(1)	(2)	(2)	(4)	<u> </u>	City	(7)	(0)	SMSA	
	(1) (Ratio)	(2)	(3)	(4) ers in Num	(5)	(6)	(7)	(8) ers in Num	(9)	
	(Mac10)		(WOLK)	ers in Nun	(WDLK)	ers in Nun	bers)			
Total	1.538	277,712	179,105	85,874	8,227	4,506	180,575	179,105	1,470	
Agric., For., Fisheries,		·	•	•	•	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,	-,	-350-
Mining	1.687	1,213	707	403	48	55	719	707	12	9
Construction	1.592	13,838	8,448	4,361	654	375	8,694	8,448	246	
Manufacturing	1.690	77,017	45,221	27,566	2,717	1,513	45,566	45,221	345	
Transportation &	t	-		-	•	•	•	•		
Communication	1,727	26,652	15,279	9,345	1,332	696	15,431	15,279	152	
Wholesale &										
Retail Trade	1.478	58,795	39,494	17,325	1,202	774	39,785	39,494	291	
Finance, Insuran										
& Real Estate	1.860	17,602	9,404	7,420	621	157	9,463	9,404	59	
Public Adminis-										
tration	1.365	15,348	11,166	3,645	258	279	11,242	11,166	76	
Services, Total	1,353	65,231	47,940	15,393	1,322	576	48,197	47,940	257	
Services Total										
& Industry Not Reported	1.354	67,247	49,386	15,809	1,395	657	49,675	49,386	289	

TABLE D-7

WORKERS BY WORK PLACE IN CENTRAL CITY AND WORKERS BY RESIDENCE IN CENTRAL CITY AND THEIR RATIO,
BY INDUSTRY, FOR WASHINGTON, D.C. CENTRAL CITY IN WASHINGTON D.C. SMSA, 1960

Industry Group	Ratio of Workers		Work P1	ace in Cen	Workers by Residence in Central City				
	by Place Total of Work to Workers by Place of Residence		Live & Work in Central City				Total	Live & Work in Central City	Live in Central City Work Outside SMSA
	(1)	(2)	(3)		(4)	City (5)	(6)	(7)	(8)
	(Ratio)		(Workers	in Number	s)		(Wor	kers in Num	abers)
Total Agric., For., Fisheries,	1.796	478,366	261,951		198,742	17,673	266,368	261,951	4,417
Mining	2.072	1,069	508		468	93	516	508	8
Construction	1.941	22,957	11,546		8,988	2,423	11,828	11,546	282
Manufacturing	2.174	40,087	18,014		19,268	2,805	18,439	18,014	425
Transportation &		,	,			-,005	20, 10)	20,024	723
Communication	2.114	34,763	16,167		16,634	1,962	16,441	16,167	274
Wholesale &		•	•		, , , , , ,	- •	,	,	
Retail Trade	1.690	67,997	39,827		26,281	1,889	40,224	39,827	397
Finance, Insuran	.ce	•	•		•	,		,	
& Real Estate	1.848	25,474	13,654		11,198	622	13,788	13,654	134
Public Adminis-							-	•	
tration	2.033	163,644	78,777		80,023	4,844	80,476	78,777	1,699
Services, Total	1.450	116,542	79,293		34,483	2,766	80,400	79,293	1,107
Services Total									
& Industry									
Not Reported	1.446	122,375	83,458		35,882	3,035	84,656	83,458	1,198

TABLE D-8

WORKERS BY WORK PLACE IN CENTRAL CITY AND WORKERS BY RESIDENCE IN CENTRAL CITY AND THEIR RATIO,
BY INDUSTRY, FOR CHICAGO CENTRAL CITY IN CHICAGO SMSA, 1960

Industry Group	Ratio of Workers		Work Pla	ce in Cen	tral City			s by Reside Central Ci	
	by Place of Work Workers	to	Live & Work in Central		Ring, Work ral City Differ-	Live Outside SMSA	Total	Live & Work in Central	Live in Central City
	Place of Residence	2	City	County	ent County	Work in Central City		City	Work Outside SMSA
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	(Ratio)		(Worke	ers in Numl	bers)		(Work	ers in Num	bers)
Total Agric., For.,	1.270	1,592,200	1,248,776	263,100	63,,288	17,036	1,253,544	1,248,776	4,768
Fisheries &									
Mining	1.233	2,962	2,299	448	97	118	2,402	2,299	103
Construction	1.377	66,369	47,969	14,065	3,292	1,043	48,204	47,969	235
Manufacturing	1.298	573,206	440,050	103,495	24,364	5,297	441,702	440,050	1,652
Transportation &									
Communication	1.347	160,510	118,642	29,464	8,798	3,606	119,188	118,642	546
Wholesale &									
Retail Trade	1.237	305,209	245,884	47,068	9,648	2,609	246,635	245,884	751
Finance, Insuran									
& Real Estate	1,366	101,506	74,101	20,599	6,010	796	74,293	74,101	192
Public Adminis-	1 157	70 500	62 171	7 /00	1 700	046	60 677	60:171	000
tration	1.156	73,592	63,474	7,483	1,789	846	63,677		
Services, Total Services Total	1.206	289,137	238,833	38,956	8,828	2,520	239,820	238,833	967
& Industry Not									
Reported	1.200	308,846	256,357	40,478	9,290	2,721	257,443	256,357	1,086

TABLE D-9

WORKERS BY WORK PLACE IN CENTRAL CITY AND WORKERS BY RESIDENCE IN CENTRAL CITY AND THEIR RATIO,
BY INDUSTRY, FOR CINCINNATI CENTRAL CITY IN CINCINNATI SMSA, 1960

Industry Group	Ratio of Workers		Work Pla	ace in Cen	Workers by Residence in Central City				
	by Place of Work to Workers by Place of Residence	Total	Live & Work in Central City		Ring, Work ral City Differ- ent County	Live Outside SMSA Work in Central City	Total	Live & Work in Central City	Live in Central City Work Outside SMSA
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	(Ratio)		(Wo	rkers in N	umbers)		(Worl	kers in Num	bers)
Total Agric., For., Fisheries, &	1.587	240,086	149,437	53,388	31,472	5,789	151,268	149,437	1,831
Mining	1.371	875	628	161	42	44	638	628	10
Construction	1.548	12,099	7,667	2,816	1,104	512	7,814	7,667	147
Manufacturing	1.780	75,430	41,749	19,362	11,769	2,550	42,384	41,749	635
Transportation &		.5, .50	,,,,	17,302	11,705	2,550	42,504	71,77	033
Communication	1.844	21,984	11,737	4,843	4,717	687	11,924	11,737	187
Wholesale &									
Retail Trade	1.593	48,020	29,781	11,320	6,149	770	30,138	29,781	357
Finance, Insurance									
& Real Estate	1.850	14,598	7,818	3,594	2,937	249	7,889	7,818	71
Public Adminis-									
tration	1.358	11,399	8,303	1,984	875	237	8,392	8,303	89
Services, Total	1.323	51,767	38,829	8,709	3,610	619	39,128	38,829	299
Services Total									
& Industry	1 200	FF (0)	/1 75/	0.000	0.070	=			
Not Reported	1.323	55,681	41,754	9,308	3,879	740	42,089	41,754	335

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TABLE D-10

WORKERS BY WORK PLACE IN CENTRAL CITY AND WORKERS BY RESIDENCE IN CENTRAL CITY AND THEIR RATIO,
BY INDUSTRY, FOR CLEVELAND CENTRAL CITY IN CLEVELAND SMSA, 1960

Industry Group	Ratio of Workers		Work P1	ace in Cent	tral City		Worke	rs by Resid Central Ci	
	by Place of Work to		Work in	in Central City		Live Outside	Total	Live & Work in	Live in Central
	Workers by		Central	Same	Differ-	SMSA		Central	City
	Place of		City	County	ent	Work in		City	Work
	Residence				County	Central			Outside
	/1\	(2)	(2)		<u> </u>	City	(3)		SMSA
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	(Ratio)			(Workers in	n Numbers)		(Wor	kers in Num	mbers)
Total	1.619	469,083	288,513	160,348	13,666	6,556	289,782	288,513	1,269
Agric., For., Fisheries, &									
Mining	1.593	1,274	769	416	42	47	800	769	31
Construction	1.728	17,551	10,034	6,526	646	345	10,159	10,034	125
Manufacturing	1.644	201,418	122,169	68,234	8,107	2,908	122,522	122,169	353
Transportation &		-	-	•	•			•	
Communication	1.726	39,643	22,756	14,518	1,204	1,165	22,970	22,756	214
Wholesale &		•	•	•	•	•	•	•	
Retail Trade	1.638	81,242	49,441	29,352	1,572	877	49,595	49,441	154
Finance, Insurance	ce	•	•	•	·		•	•	
& Real Estate	1.990	19,472	9,729	9,120	462	161	9,786	9,729	57
Public Adminis-		•	•	•			•	•	
tration	1.561	21,144	13,481	7,190	283	190	13,549	13,481	68
Services, Total	1.447	81,357	55,992	23,375	1,239	751	56,231	55,992	239
Services Total &		•	•	•	•		•	•	
Industry Not									
Reported	1.446	87,339	60,134	24,992	1,350	863	60,401	60,134	267
•		-	•	•	-		-	•	

TABLE D-11

WORKERS BY WORK PLACE IN CENTRAL CITY AND WORKERS BY RESIDENCE IN CENTRAL CITY AND THEIR RATIO,
BY INDUSTRY, FOR DETROIT CENTRAL CITY IN DETROIT SMSA, 1960

Industry Group	Ratio of Workers		Work Place in Central City					Workers by Residence in Central City		
	by Place of Work t		Live & Work in	in Cen	Ring, Work tral City Differ-	Live Outside	Total	Live & Work in	Live in Central	
	Workers b	У	Central City	Same County	ent	SMSA Work in		Central City	City Work	
	Residence		City	Country	County	Central		CILY	Outside	
	ozuccc	•			oddirey	City			SMSA	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
	(Ratio)		(Workers in Numbers)				(Worl	kers in Num	bers)	
Total	1.504	698,758	461,104	123,683	106,814	7,157	464,454	461,104	3,350	
Agric., For., Fisheries, &		·	•	ŕ	·	·	ŕ	•		
Mining	1.541	1,524	949	352	168	55	989	949	40	
Construction	1.671	26,060	15,228	5,446	5,082	304	15,594	15,228	366	
Manufacturing	1.643	264,231	159,454	51,836	49,868	3,073	160,827	159,454	1,373	
Transportation &							-	•	-	
Communication	1.655	53,095	31,779	12,795	7,349	1,172	32,079	31,779	300	
Wholesale &										
Retail Trade	1.459	139,130	94,888	23,072	20,000	1,170	95,342	94,888	454	
Finance, Insuran										
& Real Estate	1.601	36,153	22,499	7,416	6,030	208	22,582	22,499	83	
Public Adminis-		00.464								
tration	1.212	30,461	25,021	3,485	1,765	190	25,134	25,021	113	
Services, Total	1.329	142,215	106,474	18,743	16,091	907	107,045	106,474	571	
Services Total										
& Industry Not Reported	1.323	148,104	111 204	10 201	16 550	0.05	111 007	111 206	621	
not keported	1.343	140,104	111,286	19,281	16,552	985	111,907	111,286	621	

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TABLE D-12

WORKERS BY WORK PLACE IN CENTRAL CITY AND WORKERS BY RESIDENCE IN CENTRAL CITY AND THEIR RATIO BY INDUSTRY, FOR MILWAUKEE CENTRAL CITY IN MILWAUKEE SMSA, 1960

Industry Group	Ratio of Workers	Work Place in Central City						Workers by Residence in Central City		
	by Place of Work to Workers by Place of	Total	Live & Work in Central City		Ring, Work tral City Differ- ent	Live Outside SMSA Work in	Total	Live & Work in Central City	Live in Central City Work	
	Residence		• •	,	County	Central		,	Outside SMSA	
	(1)	(2)	(3)	(4)	(5)	City (6)	(7)	(8)	(9)	
	(Ratio)	(2)		ers in Numb	• •	(0)		kers in Num		
	(11.0220)		(1102110	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,010,		(02.	icers in wan	100107	
Total	1.302	332,954	253,621	58,222	16,824	4,287	255,677	253,621	2,056	
Agric., For., Fisheries, &		•	•	•	·	·	•	·	·	
Mining	1.244	1,142	890	177	51	24	918	890	28	
Construction	1.445	14,493	9,785	2,925	1,470	313	10,029	9,785	244	
Manufacturing	1.318	137,224	103,416	23,753	8,176	1,879	104,109	103,416	693	
Transportation &										
Communication	1.326	24,452	18,241	4,379	1,377	455	18,439	18,241	198	
Wholesale &										
Retail Trade	1.278	64,869	50,357	11,044	2,743	725	50,743	50,357	386	
Finance, Insurance		17 010	11 770		222	. 7.	11 010	11 770		
& Real Estate	1.440	17,012	11,773	4,263	800	176	11,813	11,773	40	
Public Adminis-	1 165	1/ 2/6	10 0/2	1 (0)	207	100	10 010	10 0/0	77.5	
tration	1.165	14,346	12,243	1,696	287	120	12,318	12,243	75 262	
Services, Total	1.259	57,034	44,940	9,753	1,811	530	45,302	44,940	362	
Services Total & Industry										
Not Reported	1.256	59,416	46,916	9,985	1,920	595	47,308	46,916	392	
were reported	1.230	37,410	70,710	,,,,,,,	1,720	273	77,500	70,710	372	

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TABLE D-13

WORKERS BY WORK PLACE IN CENTRAL CITY AND WORKERS BY RESIDENCE IN CENTRAL CITY AND THEIR RATIO,
BY INDUSTRY, FOR KANSAS CITY CENTRAL CITY IN KANSAS CITY SMSA, 1960

Industry Group	Ratio of Workers		Work Pla	ace in Cen	Workers by Residence in Central City				
	by Place of Work to Workers by Place of Residence		Live & Work in Central City		Ring, Work ral City Differ- ent County	Live Outside SMSA Work in Central City	Total	Live & Work in Central City	Live in Central City Work Outside SMSA
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	(Ratio)		(Work	ers in Num	bers)		(Worke	rs in Num	bers)
Total Agric., For., Fisheries &	1.570	236,963	148,333	35,811	46,317	6,502	150,914	148,333	2,581
	1.385	1,234	818	197	171	48	891	818	72
Mining	1.627	•							73
Construction		10,677	6,282	2,030	2,001	364	6,564	6,282	282
Manufacturing	1.851	60,228	31,971	13,016	13,004	2,237	32,546	31, 971	575
Transportation & Communication Wholesale &	1.729	26,583	14,773	4,296	6,341	1,173	15,373	14,773	600
Retail Trade	1.562	54,571	34,487	7,726	11,182	1,176	34,939	34,487	452
Finance, Insuran		.,	.,	,,	,	,	, ,,,,,	.,	
& Real Estate	1.552	17,528	11,203	2,027	3,958	340	11,296	11,203	93
Public Adminis-		•	•	•	•		•	,	
tration	1.389	14,716	10,471	1,813	2,066	366	10,591	10,471	120
Services, Total	1.332	48,178	35,833	4,363	7,241	741	36,157	35,833	324
Services Total & Industry	1 220	E1 /26	20 220	h 706	7 50%	798	20 71/	20 220	206
Not Reported	1.328	51,426	38,328	4,706	7,594	798	38,714	38,328	386

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TABLE D-14

WORKERS BY WORK PLACE IN CENTRAL CITY AND WORKERS BY RESIDENCE IN CENTRAL CITY AND THEIR RATIO,
BY INDUSTRY, FOR MINNEAPOLIS-ST. PAUL CENTRAL CITY IN MINNEAPOLIS-ST. PAUL SMSA, 1960

Industry Group	Ratio of Workers		Work Pla	ace in Cer	Worke	Workers by Residence in Central City			
	by Place of Work to Workers by Place of Residence		Live & Work in Central City	in Cent Same County	Ring, Work tral City Differ- ent County	Live Outside SMSA Work in Central City	Total	Live& Work in Central City	Live in Central City Work Outside SMSA
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	(Ratio)		(Worke	ers in Nur	mbers)		(Worl	cers in Num	bers)
Total Agric., For., Fisheries &	1.438	396,339	272,574	73,361	42,613	7,791	275,530	272,574	2,956
Mining	1.322	1,255	847	222	136	50	949	847	102
Construction	1.639	19,389	11,553	4,328	2,643	865	11,832	11,553	279
Manufacturing	1.586	107,449	67,102	21,390	15,954	3,003	67,750	67,102	648
Transportation &		,	o,,	,_,	23,55	3,003	07,750	07,102	040
Communication	1.553	38,930	24,719	7,721	5,550	940	25,072	24,719	3 53
Wholesale &		•	•	. ,	-,	- , -	,	,	333
Retail Trade	1.416	86,704	60,550	17,483	7,531	1,140	61,231	60,550	681
Finance, Insuran	ce		-	ŕ	•	•	•	,	
& Real Estate	1.485	29,061	19,461	6,663	2,416	521	19,574	19,461	113
Public Adminis-									
tration	1.305	19,020	14,388	2,654	1,706	272	14,571	14,388	183
Services, Total	1.268	90,810	71,109	12,561	6,223	917	71,642	71,109	533
Services Total									
& Industry	1 060	04 50-	70.07						
Not Reported	1.268	94,531	73,954	12,900	6,677	1,000	74,551	73,954	597

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TABLE D-15

WORKERS BY WORK PLACE IN CENTRAL CITY AND WORKERS BY RESIDENCE IN CENTRAL CITY AND THEIR RATIO,
BY INDUSTRY, FOR ST. LOUIS CENTRAL CITY IN ST. LOUIS SMSA, 1960

Industry Group	Ratio of Workers			ace in Cer	Workers by Residence in Central City				
	by Place of Work to Workers by Place of Residence	Total	Live & Work in Central City		Ring, Work ral City Differ- ent County	Live Outside SMSA Work in Central City	Total	Live & Work in Central City	Live in Central City Work Outside SMSA
	(1)	(2)	(3)		(4)	(5)	(6)	(7)	(8)
	(Ratio)		(Work	ers in Num	mbers)	, ,	• •	ers in Num	
Total Agric., For.,	1.691	409,603	240,733		159,378	9,492	242,178	240,733	1,445
Fisheries &									
Mining	1.575	1,079	655		344	80	685	655	30
Construction	1.883	15,876	8,304		6,934	638	8,433	8,304	129
Manufacturing	1.825	146,752	79,976		62,562	4,214	80,412	79,976	436
Transportation &		•	•		•		,	,	
Communication	1.871	42,204	22,369		18,266	1,569	22,552	22,369	183
Wholesale &					•	•	,	,	
Retail Trade	1.697	76,087	44,579		30,343	1,165	44,846	44,579	267
Finance, Insuran							-	•	
& Real Estate	1.923	22,571	11,683		10,475	413	11,733	11,683	50
Public Adminis-									
tration	1.476	21,718	14,627		6,732	359	14,710	14,627	83
Services, Total	1.414	76,658	53,970		21,724	964	54,221	53,970	251
Services Total									
& Industry									
Not Reported	1.417	83,314	58,538		23,722	1,054	58,805	58,538	267

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TABLE D-16

WORKERS BY WORK PLACE IN CENTRAL CITY AND WORKERS BY RESIDENCE IN CENTRAL CITY AND THEIR RATIO,
BY INDUSTRY, FOR ATLANTA CENTRAL CITY IN ATLANTA SMSA, 1960

Industry Group	Ratio of Workers		Work Pla	ace in Cen	Workers by Residence in Central City				
	by Place of Work to Workers by Place of Residence	Total	Live & Work in Central City		Ring, Work ral City Differ- ent County	Live Outside SMSA Work in Central City	Total	Liw & Work in Central City	Live in Central City Work Outside SMSA
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	(Ratio)		(Worl	kers in Nu	mbers)		(Worl	kers in Num	bers)
Total Agric., For., Fisheries &	1.619	251,341	152,465	24,162	64,157	10,557	155,273	152,465	2,808
Mining	1.615	1 049	614	141	240	5 2	640	(1/	2.5
Construction	1.732	1,048				53	649	614	35
Manufacturing		15,933	8,928	1,468	3,965	1,572	9,200	8,928	272
Transportation &	1.859	51,885	27,123	5,717	15,856	3,189	27,905	27,123	782
Communication Wholesale &	2.025	28,486	13,798	4,061	8,966	1,661	14,065	13,798	267
Retail Trade	1.589	57,585	35,587	5,524	14,821	1,653	36,234	35,587	647
Finance, Insuran		37,303	33,30.	3,32,	1,021	1,033	30,234	33,307	047
& Real Estate Public Adminis-	1.834	19,687	10,551	1,674	6,782	680	10,732	10,551	181
tration	1.687	14,012	8,139	1,548	3,752	573	8,306	8,139	167
Services, Total Services, Total	1.303	60,087	45,696	3,918	9,333	1,140	46,119	45,696	423
& Industry Not Reported	1.301	62,705	47,725	4,029	9,775	1,176	48,182	47,725	457

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TABLE D-17

WORKERS BY WORK PLACE IN CENTRAL CITY AND WORKERS BY RESIDENCE IN CENTRAL CITY AND THEIR RATIO BY INDUSTRY, FOR MIAMI CENTRAL CITY IN MIAMI SMSA, 1960

Industry Group	Ratio of Workers		Work P	lace in Cent		Workers by Residence in Central City			
	by Place of Work to Workers by Place of Residence		Live & Work in Central City	in Centr	ing, Work al City Differ- ent County	Live Outside SMSA Work in Central City	Total	Live & Work in Central City	Live in Central City Work Outside SMSA
	(1)	(2)	(3)	(4)		(5)	(6)	(7)	(8)
	(Ratio)		(Workers	in Numbers)			(Work	ers in Num	bers)
Total Agric., For., Fisheries &	1.995	174,833	86,574	85,049		3,210	87,623	86,574	1,049
Mining	2.268	2,327	992	1,307		28	1,026	992	34
Construction	2.233	12,139	5,339	6,634		166	5,435	5,339	96
Manufacturing	1.995	25,420	12,595	12,067		758	12,744	12,595	149
Transportation &		,	,	,		,30	±2,744	12,575	±47
Communication	2.447	20,683	8,228	11,947		508	8,453	8,228	225
Wholesale &				•			,	,	
Retail Trade	1.965	44,842	22,615	21,444		783	22,820	22,615	205
Finance, Insurance									
& Real Estate	2.291	12,225	5,288	6,716		221	5,336	5,288	48
Public Adminis-									
tration	2.107	8,823	4,163	4,607		53	4,188	4,163	25
Services, Total Services Total	1.758	46,646	26,280	19,734		632	26,537	26,280	257
& Industry Not									
Reported	1.751	48,374	27,354	20,327		693	27,621	27,354	267

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TABLE D-18

WORKERS BY WORK PLACE IN CENTRAL CITY AND WORKERS BY RESIDENCE IN CENTRAL CITY AND THEIR RATIO,
BY INDUSTRY, FOR NEW ORLEANS CENTRAL CITY IN NEW ORLEANS SMSA, 1960

	Ratio of Workers	Work Place in Central City							Workers by Residence in Central City			
	by Place of Work to Workers by Place of Residence	Total	Live & Work in Central City		Ring, Work ral City Differ- ent County	Live Outside SMSA Work in Central City	Total	Live & Work in Central City	Live in Central City Work Outside SMSA			
	(1)	(2)	(3)		(4)	(5)	(6)	(7)	(8)			
	(Ratio)		(Work	ers in Num	bers)		(Work	ers in Num	ıbers)			
Total Agric., For., Fisheries, &	1.180	227,635	190,048		32,002	5,585	192,922	190,048	2,874			
Mining	1.419	3,872	2,564		993	315	2,728	2,564	164			
Construction	1.254	14,884	11,595		2,399	890	11,871	11,595	276			
Manufacturing	1.252	32,982	25,800		6,020	1,162	26,337	25,800	537			
Transportation &		,	,,		0,020	2,202	20,337	23,000	557			
Communication Wholesale &	1.214	29,695	23,696		4,943	1,056	24,456	23,696	760			
Retail Trade Finance, Insuranc	1.167	54,495	46,265		7,281	949	46,682	46,265	417			
& Real Estate Public Adminis-	1.254	14,689	11,638		2,830	221	11,710	11,638	72			
tration	1.147	14,278	12,294		1,812	172	12,444	12,294	150			
Services, Total	1.108	59,970	53,660		5,556	754	54,123	53,660	463			
Services Total & Industry		- : , - : •	, •		3,220	,,,	37,123	33,000	403			
Not Reported	1.107	62,740	56,196		5,724	820	56,694	56,196	498			

WORKERS BY WORK PLACE IN CENTRAL CITY AND WORKERS BY RESIDENCE IN CENTRAL CITY AND THEIR RATIO, BY INDUSTRY, FOR TAMPA-ST. PETERSBURG CENTRAL CITY IN TAMPA-ST. PETERSBURG SMSA, 1960

TABLE D-19

Industry Group	Ratio of Workers			Workers by Residence in Central City							
· 1	by Place of Work to Workers by Place of Residence	Total	Live & Work in Central City		Ring, Work ral City Differ- ent County	Live Outside SMSA Work in Central City	Total	Live & Work in Central City	Live in Central City Work Outside SMSA		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		
	(Ratio)		(Work	ers in Num	bers)		(Workers in Numbers)				
Total Agric., For., Fisheries &	1.224	159,597	128,420	28,199	1,178	1,800	130,418	128,420	1,998		
Mining	1.294	2,045	1,501	484	16	44	1,580	1 501	70		
Construction	1.311	14,931	11,017	3,523	176	215		1,501	79 260		
Manufacturing	1.319	26,116	19,486	5,907	273	450	11,385 19,806	11,017	368		
Transportation &		20,110	17,400	3,507	213	430	19,000	19,486	320		
Communication Wholesale &	1.259	12,839	9,842	2,730	93	174	10,197	9,842	355		
Retail Trade Finance, Insuran	1.216 ce	44,009	35,812	7,501	268	428	36,182	35,812	370		
& Real Estate Public Adminis-	1.231	10,265	8,273	1,852	72	68	8,338	8,273	65		
tration	1.180	6,436	5,362	991	30	53	5,454	5,362	92		
Services, Total	1.144	41,443	35,897	4,976	234	336	36,220	35,897	323		
Services Total & Industry		,	,-,-	.,,,,,	234	330	30,220	33,037	323		
Not Reported	1.146	42,956	37,127	5,211	250	368	37,476	37,127	349		

TABLE D-20

WORKERS BY WORK PLACE IN CENTRAL CITY AND WORKERS BY RESIDENCE IN CENTRAL CITY AND THEIR RATIO,
BY INDUSTRY, FOR DALLAS CENTRAL CITY IN DALLAS SMSA, 1960

Industry Group	Ratio of Workers Work Place in Central City						Workers by Residence in Central City			
	by Place of Work to Workers by Place of Residence	Total	Live & Work in Central City		Ring, Work ral City Differ- ent County	Live Outside SMSA Work in Central City	Total	Live & Work in Central City	Live in Central City Work Outside SMSA	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
	(Ratio)		(Worl	cers in Nu	mbers)			ers in Num		
Total Agric., For., Fisheries, &	1.206	307,363	250,286	45,183	6,741	5,153	254,888	250,286	4,602	
Mining	1.164	6,000	4,921	775	113	191	5 156	4 001	225	
Construction	1.269	22,337	17,172	3,776	742	647	5,156	4,921	235	
Manufacturing	1.336	70,284	51,211	15,278	2,238	1,557	17,607	17,172	435	
Transportation &		70,204	31,211	13,270	2,230	1,337	52,616	51,211	1,405	
Communication Wholesale &	1.288	28,087	21,439	5,334	665	649	21,808	21,439	369	
Retail Trade	1.159	72,362	61,152	9,068	1,253	889	62,408	61,152	1,256	
Finance, Insuran	ce	•	,	, , , , ,	-,		,	·-,	_,	
& Real Estate	1.191	25,597	21,285	3,413	632	267	21,490	21,285	205	
Public Adminis- tration	1.205	12 021	0 025	1 050	201	120	0.070	0.005	107	
Services, Total	1.104	12,021	9,835	1,850	204	132	9,972	9,835	137	
Services, Total Services Total & Industry Not		67,751	60,890	5,288	826	747	61,393	60,890	503	
Reported	1.107	70,675	63,271	5,689	894	821	63,831	63,271	560	

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TABLE D-21

WORKERS BY WORK PLACE IN CENTRAL CITY AND WORKERS BY RESIDENCE IN CENTRAL CITY AND THEIR RATIO,
BY INDUSTRY, FOR HOUSTON CENTRAL CITY IN HOUSTON SMSA, 1960

Industry Group	Ratio of Workers		Work Pla		Workers by Residence in Central City				
	by Place of Work to Workers by Place of Residence	Total	Live & Work in Central City	Live in R in Centr Same County	ing, Work al City Differ- ent County	Live Outside SMSA Work in Central City	Total	Live & Work in Central City	Live in Central City Work Outside SMSA
	(1) (Ratio)	(2)	(3) (Workers	(4) in Numbers		(5)	(6) (Wor	(7) kers in Nu	(8) mbers)
Total Agric., For., Fisheries, &	1.141	363,547	314,306	44,790		4,451	318,519	314,306	4,213
Mining	1.101	12,181	10,623	1,288		270	11,063	10,623	440
Construction	1.186	27,190	22,360	4,338		492	22,928	22,360	568
Manufacturing	1.201	76,262	62,676	12,459		1,127	63,512	62,676	836
Transportation &									
Communication	1.161	36,593	30,907	4,887		799	31,528	30,907	621
Wholesale &									
Retail Trade	1.120	86,631	76,533	9,213		885	77,352	76,533	819
Finance, Insuran & Real Estate Public Adminis-	ce 1.130	20,975	18,413	2,385		177	18,570	18,413	157
tration Services, Total Services Total	1.124 1.105	10,904 88,288	9,603 79,351	1,212 8,408		89 529	9,698 79,897	9,603 79,351	95 546
& Industry Not Reported	1.107	92,811	83,191	9,008		612	83,868	83,191	677

TABLE D-22

WORKERS BY WORK PLACE IN CENTRAL CITY AND WORKERS BY RESIDENCE IN CENTRAL CITY AND THEIR RATIO,
BY INDUSTRY, FOR PHOENIX CENTRAL CITY IN PHOENIX SMSA, 1960

Industry Group	Ratio of Workers			ce in Cen		Workers by Residence in Central City			
	by Place of Work to Workers by Place of Residence		Live & Work in Central City		Ring, Work ral City Differ- ent County	Live Outside SMSA Work in Central City	Total	Live & Work in Central City	
	(1)	(2)	(3)	(4)		(5)	(6)	(7)	(8)
	(Ratio)		(Workers	in Numbe	rs)		(Work	ers in Num	
Total Agric., For., Fisheries &	1.148	148,099	127,827	18,863		1,409	129,058	127,827	1,231
Mining	1.192	2,604	2,127	420		57	2,185	2,127	58
Construction	1.142	14,150	12,084	1,952		114	12,391	12,084	307
Manufacturing	1.213	25,488	20,820	4,330		338	21,007	20,820	187
Transportation &	•	-	·	•			- -,	,	20.
Communication Wholesale &	1.143	10,626	9,160	1,356		110	9,293	9,160	133
Retail Trade Finance, Insuran	1.137	36,123	31,564	4,238		321	31,781	31,564	217
& Real Estate Public Adminis-	1.175	11,531	9,744	1,663		124	9,814	9,744	70
tration	1.136	7,659	6,681	920		58	6,745	6,681	64
Services, Total Services Total & Industry	1.114	38,356	34,274	3,827		255	34,423	34,274	149
Not Reported	1.114	39,918	35,647	3,984		287	35,842	35,647	195

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TABLE D-23

WORKERS BY WORK PLACE IN CENTRAL CITY AND WORKERS BY RESIDENCE IN CENTRAL CITY AND THEIR RATIO,
BY INDUSTRY, FOR SAN ANTONIO CENTRAL CITY IN SAN ANTONIO SMSA, 1960

Industry Group	Ratio of Workers		Work Pla	ace in Cen	tral City			s by Resi Central C	
	by Place of Work to Workers by Place of Residence	Total	Live & Work in Central City		Ring, Work ral City Differ- ent County	Live Outside SMSA Work in Central City	Total	Live & Work in Central City	Live in Central City Work Outside SMSA
	(1)	(2)	(3)	(4)		(5)	(6)	(7)	(8)
	(Ratiò)		(Worke	ers in Num	bers)		(Work	ers in Nu	mbers)
Total Agric., For., Fisheries &	1.039	157,838	149,883	5,922		2,033	151,936	149,883	2,053
Mining	.976	2,205	2,078	106		21	2,259	2,078	181
Construction	1.055	12,975	11,957	780		238	12,293	11,957	336
Manufacturing	1.048	20,636	19,378	771		487	19,682	19,378	304
Transportation &		•	•				_,,	_,,,,,	33,
Communication	1.040	11,546	10,850	493		203	11,105	10,850	255
Wholesale &							•	•	
Retail Trade	1.035	43,629	41,749	1,437		443	42,139	41,749	390
Finance, Insuran									
& Real Estate	1.044	9,596	9,076	434		86	9,193	9,076	117
Public Adminis-									
tration	1.044	14,281	13,514	576		191	13,674	13,514	160
Services, Total Services Total & Industry	1.032	41,338	39,785	1,244		309	40,045	39,785	260
Not Reported	1.033	42,970	41,281	1,325		364	41,591	41,281	310

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TABLE D-24

WORKERS BY WORK PLACE IN CENTRAL CITY AND WORKERS BY RESIDENCE IN CENTRAL CITY AND THEIR RATIO,
BY INDUSTRY, FOR DENVER CENTRAL CITY IN DENVER SMSA, 1960

Industry Group	Ratio of Workers		Work Pla		Workers by Residence in Central City				
	by Place of Work to Workers by Place of Residence	Total	Live & Work in Central City		Ring, Work ral City Differ- ent County	Live Outside SMSA Work in Central City	Total	Live & Work in Central City	Live in Central City Work Outside SMSA
	(1)	(2)	(3)		(4)	(5)	(6)	(7)	(8)
	(Ratio)		(Work	ers in Num	bers)		(Worke	ers in Num	bers)
Total Agric., For., Fisheries &	1.383	225,596	160,630		61,414	3,552	163,065	160,630	2,435
Mining	1.345	3,719	2,563		1,066	90	2,765	2,563	202
Construction	1.593	12,868	7,716		4,779	373	8,076	7,716	360
Manufacturing	1.517	43,386	28,135		14,341	910	28,602	28,135	467
Transportation &		.0,000			,				
Communication	1.649	24,801	14,810		9,332	659	15,036	14,810	226
Wholesale &		•	•		•		ŕ	•	
Retail Trade	1.350	52,060	38,169		13,279	612	38,560	38,169	391
Finance, Insuran	ce	·	-		•		-	-	
& Real Estate	1.361	16,075	11,664		4,210	201	11,812	11,664	148
Public Adminis-									
tration	1.313	16,829	12,654		3,922	253	12,817	12,654	163
Services, Total	1.230	54,068	43,497		10,157	414	43,946	43,497	449
Services Total									
& Industry									
Not Reported	1.230	55,858	44,919		10,485	454	45,397	44,919	478

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TABLE D-25

WORKERS BY WORK PLACE IN CENTRAL CITY AND WORKERS BY RESIDENCE IN CENTRAL CITY AND THEIR RATIO,
BY INDUSTRY, FOR LOS ANGELES-LONG BEACH CENTRAL CITY IN LOS ANGELES-LONG BEACH SMSA, 1960

Industry Group	Ratio of Workers by Place Total			ice in Cen	tral City	Workers by Residence in Central City			
	by Place of Work t Workers b Place of Residence	У	Live & Work in Central City		Ring, Work tral City Differ- ent County	Live Outside SMSA Work in Central City	Total	Live & Work in Central City	Live in Central City Work Outside SMSA
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	(Ratio)		(Workers in Numbers)					kers in Num	
Total Agric., For., Fisheries, &	1.523	1,235,490	804,698	395,044	29,544	6,204	811,102	804,698	6,404
Mining	1.310	14,526	10,714	3,333	428	51	11,090	10,714	376
Construction	1.615	64,235	39,330	22,905	1,655	345	39,779	39,330	449
Manufacturing	1.757	346,008	195,501	135,449	13,299	1,759	196,944	195,501	1,443
Transportation &		•	-	-	•	,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		_,
Communication	1.802	95,420	52,107	39,827	2,573	913	52,940	52,107	833
Wholesale &							•	•	
Retail Trade	1.471	250,935	169,478	75,556	4,983	918	170,575	169,478	1,097
Finance, Insurance									•
& Real Estate	1.450	86,255	59,238	25,072	1,562	383	59,496	59,238	258
Public Adminis-	1 500								
tration	1.509	63,345	41,736	20,023	1,135	451	41,983	41,736	247
Services, Total Services Total	1.319	303,284	228,398	69,895	3,692	1,299	229,980	228,398	1,582
& Industry									
Not Reported	1.321	314,766	224 504	72 070	2 000	1 20/	020 005	006 50:	
not reported	1.741	314,700	236,594	72,879	3,909	1,384	238,295	236,594	1,701

TABLE D-26

WORKERS BY WORK PLACE IN CENTRAL CITY AND WORKERS BY RESIDENCE IN CENTRAL CITY AND THEIR RATIO, BY INDUSTRY, FOR SAN BERNARDINO-RIVERSIDE-ONTARIO CENTRAL CITY IN SAN BERNARDINO-RIVERSIDE-ONTARIO SMSA, 1960

Industry Group	Ratio of Workers by		Work P1	ace in Cen		Workers by Residence in Central City				
	Place of Work to	Total	Live & Work in		Ring, Work ral City	Live Outside	Total	Live & Work in	Live in Central	
	Workers by Place of		Central	Same	Differ-	SMSA		Central	City	
	Residence		City	County	ent County	Work in Central		City	Work	
	nebraence				County	City			Outside SMSA	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
	(Ratio)		(Work	ers in Num	bers)			kers in Nu		
Total	1.886	92,961	48,451	41,407	2,443	660	49,297	48,451	846	
Agric., For., Fisheries &							·	·		i.
Mining	1.977	3,428	1,710	1,667	23	28	1,734	1,710	24	370-
Construction	2.517	6,678	2,574	3,575	416	113	2,653	2,574	79	Ť
Manufacturing	1.842	11,715	6,083	4,935	594	103	6,360	6,083	277	
Transportation &								•		
Communication	2.044	9,223	4,449	4,468	242	64	4,513	4,449	64	
Wholesale &										
Retail Trade	1.927	22,436	11,493	10,294	510	139	11,643	11,493	150	
Finance, Insuran										
& Real Estate	1.711	5,640	3,259	2,250	108	23	3,296	3,259	37	
Public Adminis-	1 00"									
tration	1.825	8,002	4,265	3,503	187	47	4,384	4,265	119	
Services, Total	1.751	25,353	14,384	10,480	350	139	14,476	14,384	92	
Services total										
& Industry	1 756	25 020	1/ (10	10 715	262	1.0				
Not Reported	1.756	25,839	14,618	10,715	363	143	14,714	14,618	96	

TABLE D-27

WORKERS BY WORK PLACE IN CENTRAL CITY AND WORKERS BY RESIDENCE IN CENTRAL CITY AND THEIR RATIO,
BY INDUSTRY, FOR SAN DIEGO CENTRAL CITY IN SAN DIEGO SMSA, 1960

Industry Group	Ratio of Workers	Work Place in Central City						Workers by Residence in Central City			
	by Place of Work to Workers by Place of Residence	Total	Live & Work in Central City		Ring, Work ral City Differ- ent County	Live Outside SMSA Work in Central City		Live & Work in Central City	Live in Central City Work Outside SMSA		
	(1)	(2)	(3)	(4)		(5)	(6)	(7)	(8)		
	(Ratio)		(Worke	rs in Numb	ers)		(Worl	kers in Num	bers0		
Total Agric., For., Fisheries &	1.321	203,125	152,341	49,072		1,712	153,802	152,341	1,461		
Mining	1.271	2,776	1,941	808		27	2,184	1,941	243		
Construction	1.504	14,898	9,839	4,784		275	9,904	9,839	65		
Manufacturing	1.378	55,653	39,950	15,256		447	40,389	39,950	439		
Transportation &	Ī	-	-				•	•			
Communication	1.368	11,023	7,985	2,994		44	8,060	7,985	75		
Wholesale &											
Retail Trade	1.322	38,913	29,290	9,207		416	29,432	29,290	142		
Finance, Insuran											
& Real Estate	1.276	11,798	9,195	2,541		62	9,245	9,195	50		
Public Adminis-											
tration	1.338	19,974	14,824	4,988		162	14,927	14,824	103		
Services, Total Services Total & Industry	1.212	46,744	38,272	8,271		201	38,580	38,272	308		
Not Reported	1.213	48,090	39,317	8,494		279	39,661	39,317	344		

WORKERS BY WORK PLACE IN CENTRAL CITY AND WORKERS BY RESIDENCE IN CENTRAL CITY AND THEIR RATIO, BY INDUSTRY, FOR SAN FRANCISCO CENTRAL CITY IN SAN FRANCISCO-OAKLAND SMSA, 1960

TABLE D-28

Industry Group	Ratio of Workers		Work Pl	ace in Ce		Workers by Residence in Central City			
	by Place of Work to Workers by Place of Residence		Live & Work in Central City		Ring, Work tral City Differ- ent County	Live Outside SMSA Work in Central City	Total	Live & Work in Central City	Live in Central City Work Outside SMSA
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	(Ratio)		(Work	ers in Nu	mbers)		(Worl	kers in Num	bers)
Total Agric., For., Fisheries &	1.437	535,735	367,963	45,507	109,745	12,520	372,757	367,963	4,794
Mining	1.378	2,720	1,827	315	480	98	1,974	1,827	147
Construction	1.577	25,905	16,116	2,527	6,504	758	16,430	16,116	314
Manufacturing	1.656	109,568	65,290	13,125	27,943	3,210	66,184	65,290	894
Transportation &		,-	- - ,	,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	,	,	
Communication	1.570	61,009	37,584	5,473	15,025	2,927	38,852	37,584	1,268
Wholesale &		-	-	-		•			-
Retail Trade	1.395	115,047	81,772	9,382	22,012	1,881	82,496	81,772	724
Finance, Insuran	ce								
& Real Estate	1.431	49,490	34,440	2,291	11,627	1,132	34,579	34,440	139
Public Adminis-									
tration	1.433	40,189	27,747	4,027	7,691	724	28,044	27,747	297
Services, Total	1.267	125,513	98,162	7,970	17,693	1,688	99,041	98,162	879
Services Total									
& Industry									
Not Reported	1.265	131,807	103,187	8,367	18,463	1,790	104,198	103,187	1,011

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TABLE D-29

WORKERS BY WORK PLACE IN CENTRAL CITY AND WORKERS BY RESIDENCE IN CENTRAL CITY AND THEIR RATIO,
BY INDUSTRY, FOR SEATTLE CENTRAL CITY IN SEATTLE-EVERETT SMSA, 1960

Industry Group	Ratio of Workers		Work Pl	ace in Cer	ntral City		Workers by Residence in Central City				
	by Place of Work to Workers by Place of Residence	Total	Live & Work in Central City		Ring, Work ral City Differ- ent County	Live Outside SMSA Work in Central City	Total	Live & Work in Central City	Live in Central City Work Outside SMSA		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		
	(Ratio)		(Workers in Numbers)				(Workers in Numbers)				
Total Agric., For., Fisheries &	1.363	268,857	194,711	59,868	11,990	2,288	197,291	194,711	2,580		
Mining	1.189	1,997	1,490	395	88	24	1,679	1,490	189		
Construction	1.517	13,450	8,557	3,582	1,139	172	8,867	8,557	310		
Manufacturing	1.620	74,396	45,416	24,401	3,863	716	45,912	45,416	496		
Transportation &		74,390	45,410	24,401	3,003	710	43,912	43,410	490		
Communication Wholesale &	1.333	23,753	17,248	4,949	1,200	356	17,823	17,248	575		
Retail Trade	1.322	59,500	44,617	11,978	2,458	447	45,019	44,617	402		
Finance, Insuran		<i>-</i> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	,,,,	_, .50	• • •	13,029	41,027	102		
& Real Estate Public Adminis-	1.282	18,759	14,532	3,328	756	143	14,636	14,532	104		
tration Services, Total	1.224 1.209	13,804 60,767	11,091 49,973	2,234 8,582	422 1,888	57 324	11,278 50,265	11,091 49,973	187 292		
Services Total & Industry Not Reported	1.214	63,198	51,760	9,001	2,064	373	52,077	51,760	317		

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TABLE D-30

WORKERS BY WORK PLACE IN CENTRAL CITY AND WORKERS BY RESIDENCE IN CENTRAL CITY AND THEIR RATIO,
BY INDUSTRY, FOR JERSEY CITY CENTRAL CITY IN JERSEY CITY SMSA, 1960

	Ratio of Workers			ace in Cer			Workers by Residence i Central City				
	by Place of Work to Workers by Place of Residence	Total	Live & Work in Central City		Ring, Work ral City Different County	Live Outside SMSA Work in Central City	Total	Live & Work in Central City	Live in Central City Work Outside SMSA		
	(1)	(2)	(3)	(4)		(5)	(6)	(7)	(8)		
	(Ratio)		(Work	ers in Num	bers)		(Workers in Numbers)				
Total Agric., For., Fisheries &	1.256	78,173	57,850	10,106		10,217	62,251	57,850	4,401		
Mining	1.000	73	58	3		12	73	58	15		
Construction	1.198	2,598	1,853	365		380	2,168	1,853	315		
Manufacturing	1.327	24,163	16,391	3,512		4,260	18,210	16,391	1,819		
Transportation &		,		J,311		1,200	10,210	10,371	1,015		
Communication	1.486	12,619	7,797	2,037		2,785	8,492	7,797	695		
Wholesale &		, , , , , , , , , , , , , , , , , , , ,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,		_ ,	- ,	.,	0,0		
Retail Trade	1.216	13,583	10,636	1,569		1,378	11,174	10,636	538		
Finance, Insuran	ce		-	•		•	•	•			
& Real Estate	1.166	3,615	2,835	537		243	3,100	2,835	265		
Public Adminis-			_								
tration	1.143	4,640	3,882	505		253	4,061	3,882	179		
Services, Total	1.124	16,098	13,790	1,507		801	14,316	13,790	526		
Services Total											
& Industry Not		16 000	14 000								
Reported	1.127	16,882	14,398	1,578		906	14,973	14,398	5 7 5		

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TABLE D-31

WORKERS BY WORK PLACE IN CENTRAL CITY AND WORKERS BY RESIDENCE IN CENTRAL CITY AND THEIR RATIO,
BY INDUSTRY, FOR NEWARK CENTRAL CITY IN NEWARK SMSA, 1960

Industry Group	Ratio of Workers		Work Pl	lace in Cer	itral City		Workers by Residence in Central City				
	by Place of Work to Workers by Place of Residence	Total	Live & Work in Central City		Ring, Work ral City Differ- ent County	Live Outside SMSA Work in Central City	Total	Live & Work in Central City	Live in Central City Work Outside SMSA		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		
	(Ratio)		(Work	ers in Num	nbers)		(Workers in Numbers)				
Total Agric., For., Fisheries &	1.903	188,900	92,845	50,398	26,889	18,768	99,266	92,845	6,421		
Mining	1.465	208	108	49	12	39	142	108	34		
Construction	1.779	6,637	3,303	1,496	1,000	838	3,730	3,303	427		
Manufacturing	1.946	65,535	31,589	15,607	10,564	7,775	33,684	31,589	2,095		
Transportation &		•	•	•	,	,,,,,		,	_,		
Communication Wholesale &	2.167	17,303	7,339	4,530	2,820	2,614	7,986	7,339	647		
Retail Trade Finance, Insuran	1.879	35,833	18,208	9,900	4,931	2,794	19,068	18,208	860		
& Real Estate Public Adminis-	2.803	19,167	6,405	7,627	3,335	1,800	6,837	6,405	432		
tration	1.529	9,883	5,934	2,233	897	819	6,464	5,934	530		
Services, Total Services Total & Industry	1.672	31,197	17,492	8,557	3,186	1,962	18,664	17,492	1,172		
Not Reported	1.608	34,334	19,959	8,956	3,330	2,089	21,355	19,959	1,396		

WORKERS BY WORK PLACE IN CENTRAL CITY AND WORKERS BY RESIDENCE IN CENTRAL CITY AND THER RATIO, BY INDUSTRY, FOR PATERSON-CLIFTON-PASSAIC CENTRAL CITY IN PATERSON-CLIFTON-PASSAIC SMSA, 1960

TABLE D-32

Industry Group	Ratio of Workers		Work Pl	ace in Cen	Workers by Residence in Central City				
	by Place of Work to Workers by Place of Residence	Total	Live & Work in Central City		Ring, Work ral City Differ- ent County	Live Outside SMSA Work in Central City	Total	Live & Work in Central City	Live in Central City Work Outside SMSA
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	(Ratio)		(Worke	rs in Numb	ers)		(Workers in Numbers)		
Total Agric., For., Fisheries &	1.553	91,981	52,529	10,388	24,044	5,020	59,240	52,529	6,711
Mining	1.280	242	173	23	37	9	189	173	16
Construction	1.510	3,798	2,070	494	1,008	226	2,515	2,070	445
Manufacturing	1.755	44,685	23,028	4,899	13,471	3,287	25,456	23,028	2,428
Transportation &		,	,	1,000	23, 172	3,207	23,430	23,020	2,420
Communication Wholesale &	1.469	4,927	2,231	1,075	1,404	217	3,354	2,231	1,123
Retail Trade Finance, Insuran	1.473	16,506	10,217	1,701	3,954	634	11,202	10,217	985
& Real Estate Public Adminis-	1.461	2,803	1,401	441	873	88	1,919	1,401	518
tration	1.132	3,167	2,606	333	179	49	2,798	2,606	192
Services, Total	1,354	15,129	10,239	1,391	3,055	444	11,171	10,239	932
Services Total & Industry		-,	,	_ ,	-,		, - · -		, , ,
Not Reported	1.343	15,853	10,803	1,422	3,118	510	11,807	10,803	1,004

TABLE D-33

WORKERS BY WORK PLACE IN CENTRAL CITY AND WORKERS BY RESIDENCE IN CENTRAL CITY AND THEIR RATIO,
BY INDUSTRY, FOR GARY-HAMMOND-EAST CHICAGO CENTRAL CITY IN GARY-HAMMOND-EAST CHICAGO SMSA, 1960

Industry Group	Ratio of Workers		Work P1	ace in Cen	itral City		Workers by Residence in Central City			
	by Place of Work to Workers by Place of Residence	Total	Live & Work in Central City		Ring, Work ral City Differ- ent County	Live Outside SMSA Work in Central	Total	Live & Work in Central City	Live in Central City Work Outside SMSA	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
	(Ratio)		(Work	(Workers in Numbers)				(Workers in Number		
Total Agric., For., Fisheries &	1.478	117,065	78,642	29,996	5,516	2,911	79,216	78,642	574	
Mining	1.817	169	87	50	9	23	93	87	6	
Construction	2.092	5,805	2,711	2,115	479	500	2,775	2,711	64	
Manufacturing	1.604	61,527	38,217	18,065	3,744	1,501	38,370	38,217	153	
Transportation &		- -,-	00,	20,005	3,7.77	1,501	30,370	30,217	133	
Communication	1.548	8,490	5,392	2,334	351	413	5,484	5,392	92	
Wholesale &		•	•	•		. — -	• • • • •	- ,		
Retail Trade	1.319	17,796	13,412	3,722	463	199	13,493	13,412	81	
Finance, Insuran	ıce,						-			
& Real Estate	1.425	3,368	2,355	845	116	52	2,363	2,355	8	
Public Adminis-										
tration	1.105	3,353	3,023	276	26	28	3,035	3,023	12	
Services, Total Services Total	1.203	15,551	12,782	2,293	316	160	12,928	12,782	146	
& Industry										
Not Reported	1.217	16,557	13,445	2,589	328	195	13,603	13,445	158	

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