

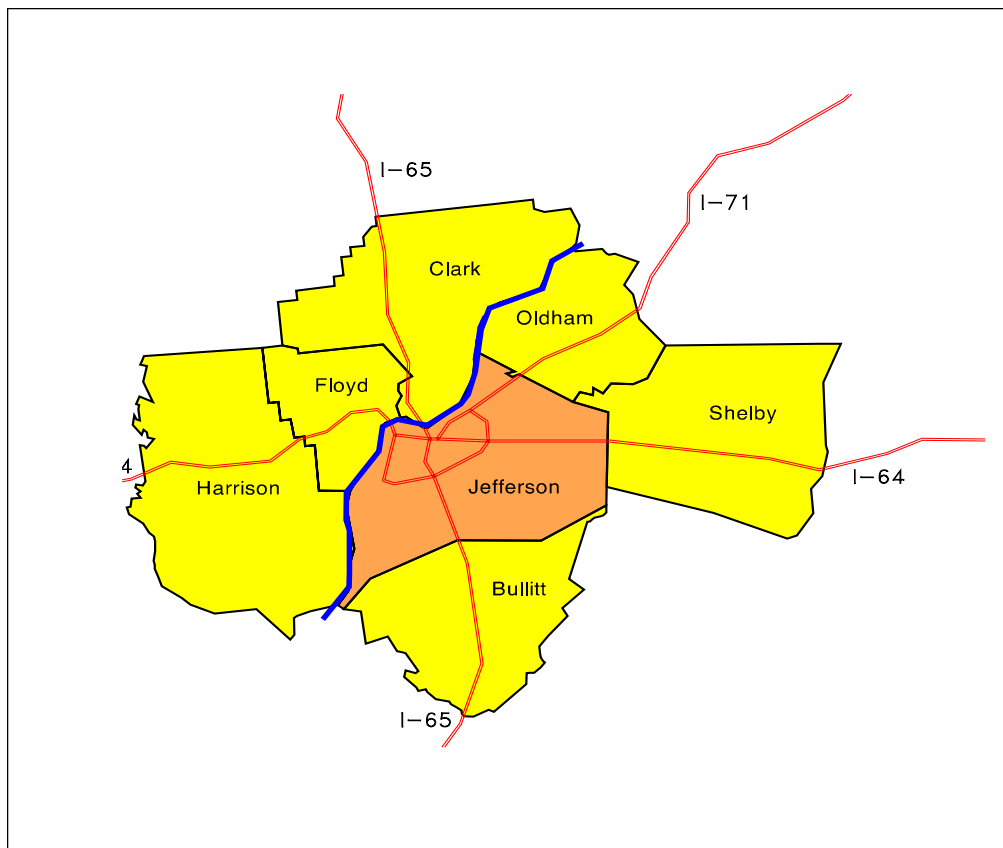


CORNERSTONE

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Louisville and Jefferson
County Comprehensive Plan

Greater Louisville Forecasts of Jobs, Population, and Income: 1995 to 2020



Final Report

July 1994



A project of the
Marketplace Committee
of Cornerstone 2020

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We especially want to acknowledge the busy professionals around the area who donated their time as members of our Delphi panel of experts. These experts reviewed many of the important details of the forecast as they were produced and gave us instant real world feedback on the numbers and methodology.

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Louisville and Jefferson
County Comprehensive Plan

Executive Summary

Residents, business people, and public officials have been taking a fresh look at the comprehensive land use plan for Jefferson County. The effort is called the Cornerstone 2020 project, and is a creative reexamination of the area's marketplace, its housing requirements, the environment, our transportation system, and other community uses of land in the County.

To anticipate the likely future demand on land, the community needs quality data on projected population characteristics, household formation, industrial growth, labor force developments, and commuting patterns. This report summarizes our efforts to provide such projections for the Louisville area.

Highlights of the forecast include:

- The addition of 40,000 jobs in the metro economy between 1990 and 1995 and an additional 117,000 jobs between 1995 and 2020, primarily in the service industries and in retail trade.
- A continuation of lower earnings per job in Louisville relative to the US for most industries.
- The addition of 32,000 residents in the metro area between 1990 and 1995 and an additional 167,000 residents between 1995 and 2020. The new residents are initially due to natural increase and a reduction in net outmigration and later due to net immigration. Jefferson County is projected to gain 67,000 residents between 1990 and 2020.
- An increase of over 100,000 new households in the metro area between 1995 and 2020, an increase of 25%. Jefferson County is projected to add about 48,000 new households during those 25 years. The number of households will continue to grow at a faster rate than the population. Average household size is expected to drop from 2.49 persons to 2.32 persons.
- Following national trends, African-American males are expected to increase at the fastest rate of all employed workers. From 1990 to 2020, the number of employed African-American males is projected to increase by 54%. With employment of African-American females rising 43%, the employment share of all African-Americans is expected to increase from 10.5% to 13.5%.

- The per capita income of Louisville area residents is projected to pass that for the United States over the next few years, then to converge back to the national average for the remainder of the forecast period. This is due to the above average job and earnings growth early in the forecast, before the population size expands. As people move to Louisville to fill the service industry jobs, per capita income is expected to grow more slowly.
- A gain in jobs and population is projected for all seven counties in the metropolitan area. Jefferson County is expected to lose manufacturing jobs, but these are more than offset by large gains in service sector jobs. Oldham County is expected to have the fastest population and service sector job growth. Shelby and Bullitt counties are expected to gain manufacturing jobs.

The forecasts have been prepared against a recently favorable backdrop. Louisville's economy has recovered vigorously from the gloomy conditions of only a decade ago. Area manufacturers are once again strong and competitive, buttressing Louisville's solid performance during the recent national recession. The populations of both the Louisville metropolitan area and Jefferson County are once again expanding, in sharp contrast to the outmigration of the early 1980s. All-time record numbers of new homes were built in the area during each of the past two years. Job and income growth locally has outpaced the nation for the last five years. Louisville's characteristic modesty notwithstanding, the economic future of the area looks better than it has in perhaps 20 years.

The forecasts all proceed from the proposition that the Louisville economy is defined by industrial linkages and patterns of commuting to work and shop that encompass many counties, not one county. We have prepared forecasts of jobs and people for the Louisville metropolitan area as a whole first, then projected the shares each county will likely receive.

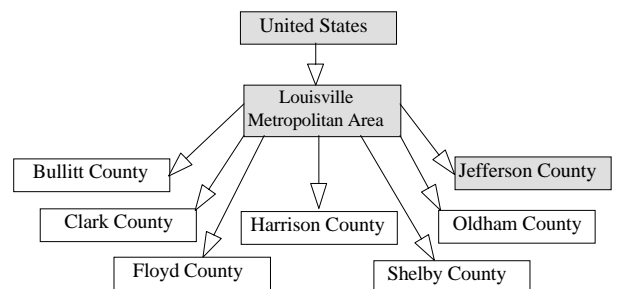
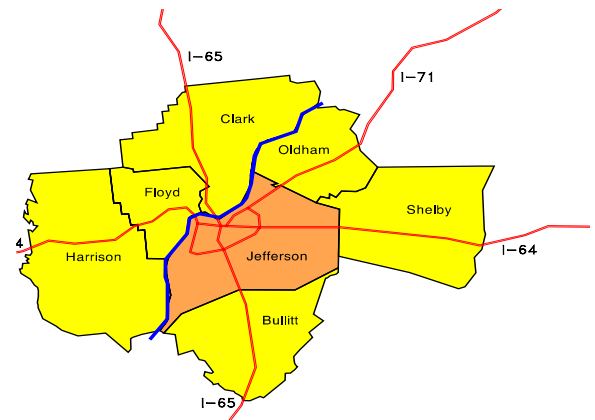
We have used the pre-1992 metropolitan area definition. The metro area includes Bullitt, Clark, Floyd, Harrison, Jefferson, Oldham and Shelby counties. Using this definition of the metropolitan area allows us to take advantage of our long historical database on that entity. In 1992, Scott County, Indiana, was added and Shelby County, Kentucky, was removed from the official MSA definition. When data are obtained on Scott County, the projections could be recalculated without much additional effort.

Forecasting Methods

Our economic and demographic projections for the Louisville area were made using a combination of standard forecasting techniques customized for the special needs of forecast users. The number of jobs and residents were projected for the seven county metropolitan area based upon a forecast for the United States. Separate forecasts were prepared for the individual counties by projecting trends in historical county shares. A team of 35 industry and planning experts contributed their special knowledge and judgment on several crucial components of the forecast.

Features of the forecast methodology include:

- A recognition that Jefferson County is at the center of a seven to ten county economy. While Jefferson County is by far the most populous county, its health depends largely upon the health of the entire area. Its share of residents and jobs in the metro area has been falling for two decades. Hence, projections for Jefferson County must depend upon projections for the number of residents and jobs in the metro area and upon the county's projected share of metro activity.
- A recognition that conditions in the Louisville area are related to national developments. Structural changes in industry and in the labor force locally are similar in many ways to changes occurring in all modern economies. Hence, we use a set of baseline trend projections for the United States as a starting point for our Louisville area projections.
- History suggests that, for Louisville, people follow jobs, not the converse. Hence, we first project job growth by industry and then let the job growth determine labor force requirements, migration, and ultimately household formation.



- Our job forecasts by industry were computed using a shift-share technique. Job requirements in each of 23 local industries were forecast using detailed national forecasts for each industry and judgment about how competitive each local industry is likely to be.
- A projection of the number of employed persons required to fill the forecasted jobs was generated next. There are not enough workers currently in Louisville to fill all the jobs forecast. This expected labor shortage leads to a modest immigration of workers and their dependents during the next two decades.
- A detailed cohort-component model of the metro area predicted the age, gender, and race profile of the population and household formation through the year 2020.
- Historical trends and national forecasts were used to project earnings per job and other components of personal income.
- Forecasts of each county's share of metro area population and jobs were made by projecting trends calibrated over the past 20 years.
- A 35-member panel of experts helped build a consensus on important judgment calls in the forecasting project, including projecting how competitive individual local industries will be, how jobs are likely to be filled, and how the component counties will share in the growth. The panel included top-level experts from key local sectors, including major utilities, manufacturing, banking, health care, education, transportation, and public administration. To ensure a regionwide perspective, we involved panelists who work and live throughout the seven county area.

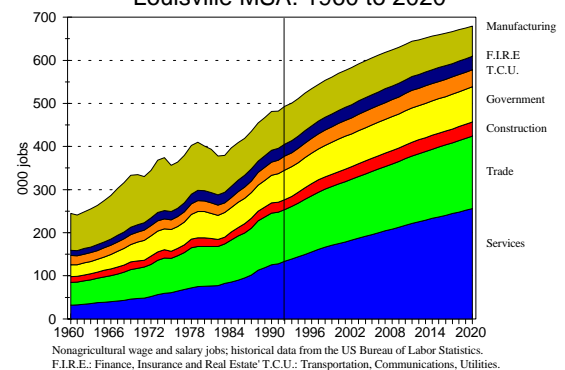
Expected Job Growth: 1995 through 2020

We project a growth of approximately 160,000 net new jobs in the Louisville economy between 1990 and 2020, with nearly 120,000 of these generated between 1995 and 2020. The projections include a continual slow decline in manufacturing jobs and a rise in jobs for all other sectors. The fastest growing sectors are projected to be business services, health services, other services, and retail trade - sectors also expected to provide most new jobs nationally. The retail trade and the business services and other services sectors are among the lowest paying industries in Louisville and the US. Jobs in the health services sector are among the highest paying.

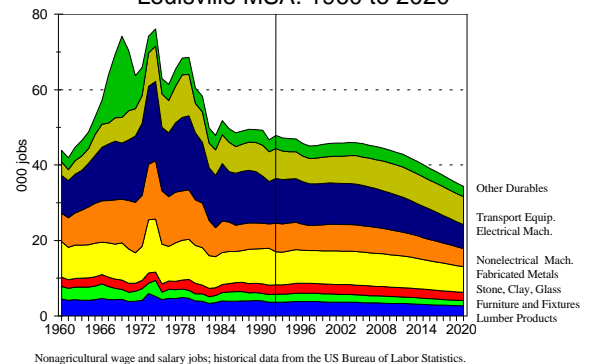
Among the detailed findings are:

- Nationally, the strongest job growth is expected to occur in business services, health services and other service sectors. These three sectors alone are expected to account for two out every three net new jobs over the next 25 years. The Retail Trade and the State and Local Government sectors account for most of the other net new jobs projected. Manufacturing is expected to continue to lose jobs nationally.
- We expect Louisville to perform much more like the United States than it has during the last two decades. We anticipate that the local manufacturing sector will do as well or better than manufacturers nationally, but still project a net loss of about 18,000 local jobs in that sector. We expect most new jobs to emerge in the business, health, and other service sectors.

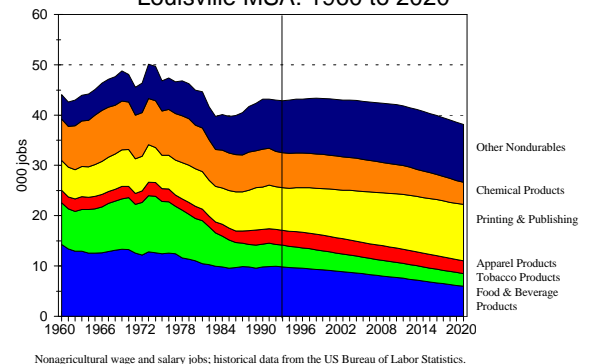
Job Growth by Major Industry
Louisville MSA: 1960 to 2020



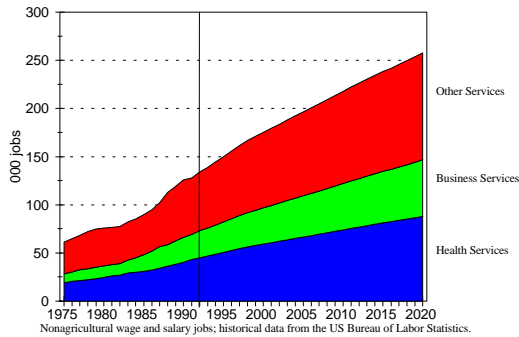
Job Growth, Durables Manufacturing
Louisville MSA: 1960 to 2020



Job Growth, Nondurables Manufacturing
Louisville MSA: 1960 to 2020



Job Growth in Service Industries
Louisville MSA: 1975 to 2020



- While we project that as a whole Louisville will lose manufacturing jobs over the next two and one-half decades, some manufacturers are likely to expand payrolls. The Printing and Publishing industry and Other Nondurables industry (textiles, rubber, plastics) in Louisville are manufacturing sectors predicted to add jobs during the forecast period. All others are expected to continue to slowly reduce the size of their workforce.
- The Louisville economy has been very competitive during the past five to seven years, adding jobs at a rate of around 10,000 per year and growing in percentage terms at almost twice the rate of the US as a whole.
- Because of the poor local economic conditions and resultant excess labor supply at the start of the last decade, the jobs which were created during the 1980s could be filled without population growth. Given the lack of population growth during the 1980s and the very different labor market conditions in Louisville today, job growth in the future will likely require some new population growth, i.e., immigration.

How Jobs Have Been Filled in Louisville

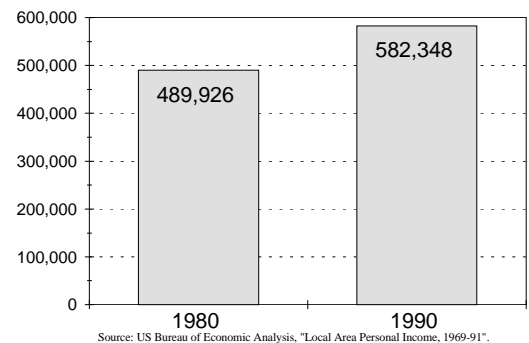
Modern history suggests that people follow jobs to and from the Louisville area, not the converse. Strong local job growth in the latter part of the 1980s was supported by a falling unemployment rate, rising labor force participation rates, a reversal of commuting patterns, and an increase in multiple job holding. Hence, few new residents were required to support the job growth.

How Jobs Were Filled in the 1980s:

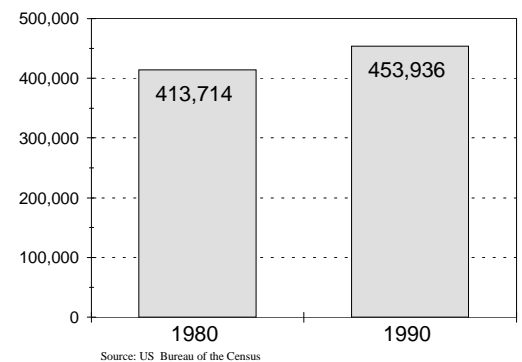
Between 1980 and 1990, the Louisville metropolitan area added around 92,000 wage, salary, and proprietor jobs. This occurred without any increase in the population of the metro area. A detailed analysis of census data reveals that the job growth can be accounted for by a combination of factors.

- About 40,000 more MSA residents were employed in 1990 than in 1980. Part of this increase was due to a falling unemployment rate locally. There was a labor surplus in 1980. The surplus evaporated during the 1980s as the demand for workers rose and as some workers left the area for jobs elsewhere. Also, the female labor force participation rate continued to rise in the 1980s, providing more workers without requiring more residents.
- As the local economy improved, local residents tended to commute outside the area less. Nonresidents continued to commute in. In 1980, there were 8,000 more people commuting out of the Louisville area than were commuting in. By 1990, the flow had reversed. Nearly 13,000 more workers commuted in than commuted out. Thus, this reversal accounted for about 21,000 more employed persons available to fill jobs in the Louisville economy.

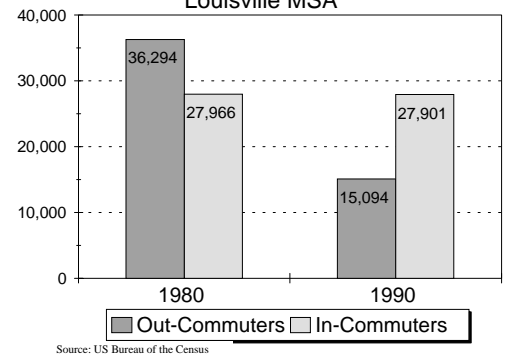
Job Growth in the Louisville MSA
Wage, Salary and Proprietor Workers



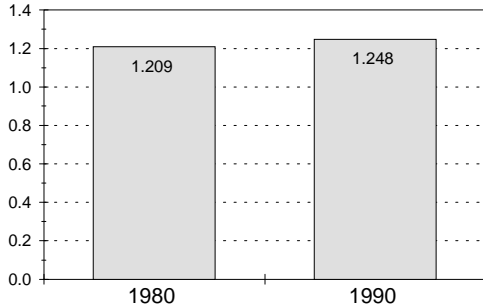
Employed Residents of Louisville MSA



Decline in Out-Commuting
Louisville MSA



**Jobs per Person Working
in the Louisville MSA**



Source: US Bureau of the Census

- Many of the net new jobs generated in the 1980s were part time. The fastest growing sectors were retail trade and the services, sectors which include restaurants, grocery stores, department stores, personnel firms, and the like. No data are available locally or nationally on the part-time/full-time mix of jobs by industry over this period. However, it is well-known that many of these jobs are part time and that many workers in these sectors hold more than one job.

Our conclusion is that these three factors account for the growth in jobs in the Louisville economy over the 1980s. We believe that two-thirds of these jobs can be accounted for by an increase in employed persons and that the other third is due to multiple job holding.