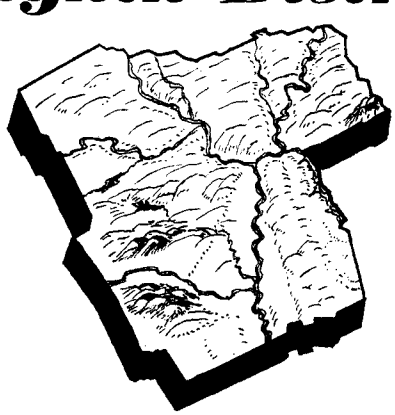
FEDERAL RESERVE DISTRICT 8

Monthly Review

FEDERAL RESERVE BANK OF ST. LOUIS

Volume XXXIV SEPTEMBER, 1952 Number 9

Features of the ECONOMIC GEOGRAPHY of the Eighth District



The Eighth Federal Reserve District has unity from an administrative and an economic point of view. There is a geographic basis for this unity in the district's relatively small size, landlocked position, interconnected rivers, moderately rough topography, and humid, middle-latitude climate. But its soils and underground resources are complex. And when man and his works are added to the geographic landscape, it is seen to have great diversity.

Census economic areas show this diversity as a production pattern that can be closely associated with the physical geography of the district.

Smaller areas, also closely related to geographic characteristics, are being defined by this bank. They will provide even more detail, highlighting the economies of cities and distinguishing more precisely between type-of-farming areas and regions where mining and recreational activities predominate.

Thus geographic factors underlie the grouping of man's activities in the district.

The Eighth Federal Reserve District has unity from an administrative and an economic point of view.

"PUT first things first" has always been good, if trite, advice. It is particularly applicable to the relationship between physical geography, and an analysis of the Eighth District economy. An understanding of the district's economy begins with an understanding of its physical geography. For the fundamental basis of man's activity is his physical environment—climate, soils, landforms, and so on.

The Eighth Federal Reserve District is both an administrative and an economic unit. In fact its administrative boundaries were determined in large measure by important economic considerations. One of these was to form an area of closely knit transportation routes and facilities which would speed up collection of checks and transfers of money between member banks and the Federal Reserve. And since transportation patterns generally reflect trade patterns, it follows from this fact alone that this district has a certain unity of trading patterns. The question arises, however, as to whether it has other elements of similarity or if these trading areas are superimposed upon an otherwise largely dissimilar physical and cultural landscape.

. . . there is a geographic basis for this unity in the district's relatively small size, landlocked position. . . .

In the search for unifying characteristics the first and most obvious fact that comes to mind is that the district is physically united and is relatively small in size. The district's 196,000 square miles comprise less than 6 per cent of the territory of the United States, and its 10.5 million inhabitants are only 7 per cent of the country's total. However, size is a relative matter and may be a poor criterion of unity. Thus, to a European, the district's size might be most impressive as it is nearly the size of France with about one-fourth as many people. And the approximately 5 million square miles of the Anartic Plateau are undoubtedly more alike in most respects; certainly the Great Sahara Desert is. The search for unifying characteristics must turn elsewhere.

A study of the district's position on the globe suggests a better basis for unity. Here is a region lying entirely within the Temperate Zone and entirely continental (Figure 1). It is nearly 180 miles distant from the Gulf of Mexico, 500 miles from the Atlantic Ocean, and 1,500 from the Pacific.

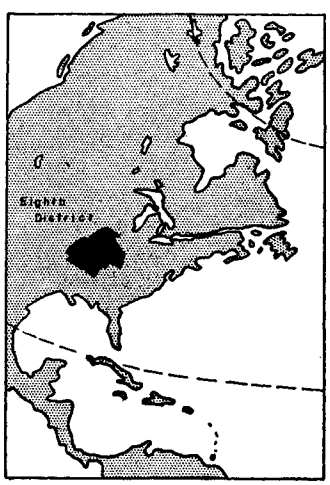


Figure 1—The district's continental position is illustrated by this map. Dotted lines show extent of the Temperate Zone. In this particular map projection, the size of the district is somewhat exaggerated and that of the northern half of the continent is relatively too small.

. . . interconnected rivers, . . .

Thus far the district has been examined from its global aspects—size, shape, and location. The search for other elements of similarity now turns within its boundaries. Note the vast, interconnected network of rivers impressed much like the outline of a tree upon the surface of the district (map, Figure 2). The main trunk is the mighty Mississippi whose 40-mile wide valleys appear as large basins on the otherwise hilly surface of the district. Major branches extending to left and right are the Missouri and Ohio, the Arkansas and the Tennessee. But numerous smaller rivers wind across the surface of the map—many equally well known in song and story as well as economic importance—the Illinois, the Wabash, the Cumberland and the Green, the White and the Black, the Current and the St. Francis, the Yazoo and the Sunflower, the Ouachita and the Red. Truly, this district is throughout a land of flowing waters. Contrast this area to the Great Plains Region with its intermittent streams, to the almost dry region of the Great Basin, centering in Nevada, to other regions which have their streams, but not in such abundance nor in similar generous pattern. Here, indeed, is an element of homogeneity.

. . . moderately rough topography, . . .

Next examine the land surface itself which has been so cut up by these many water courses (Figure 3). Two things are evident. First of all, it is generally a rough surface. Here are no vast expanses of plain. Secondly, with but few exceptions, the relief—the distance from the trough of a valley to the crest of a hill—is small. However, upon closer examination, it can be seen that, despite the generally relatively small relief in the district, the terrain divides itself into smaller areas with considerable differences in relief.

On the north are found the *Till Plains*. The work "till" means that they are composed of earth mate-

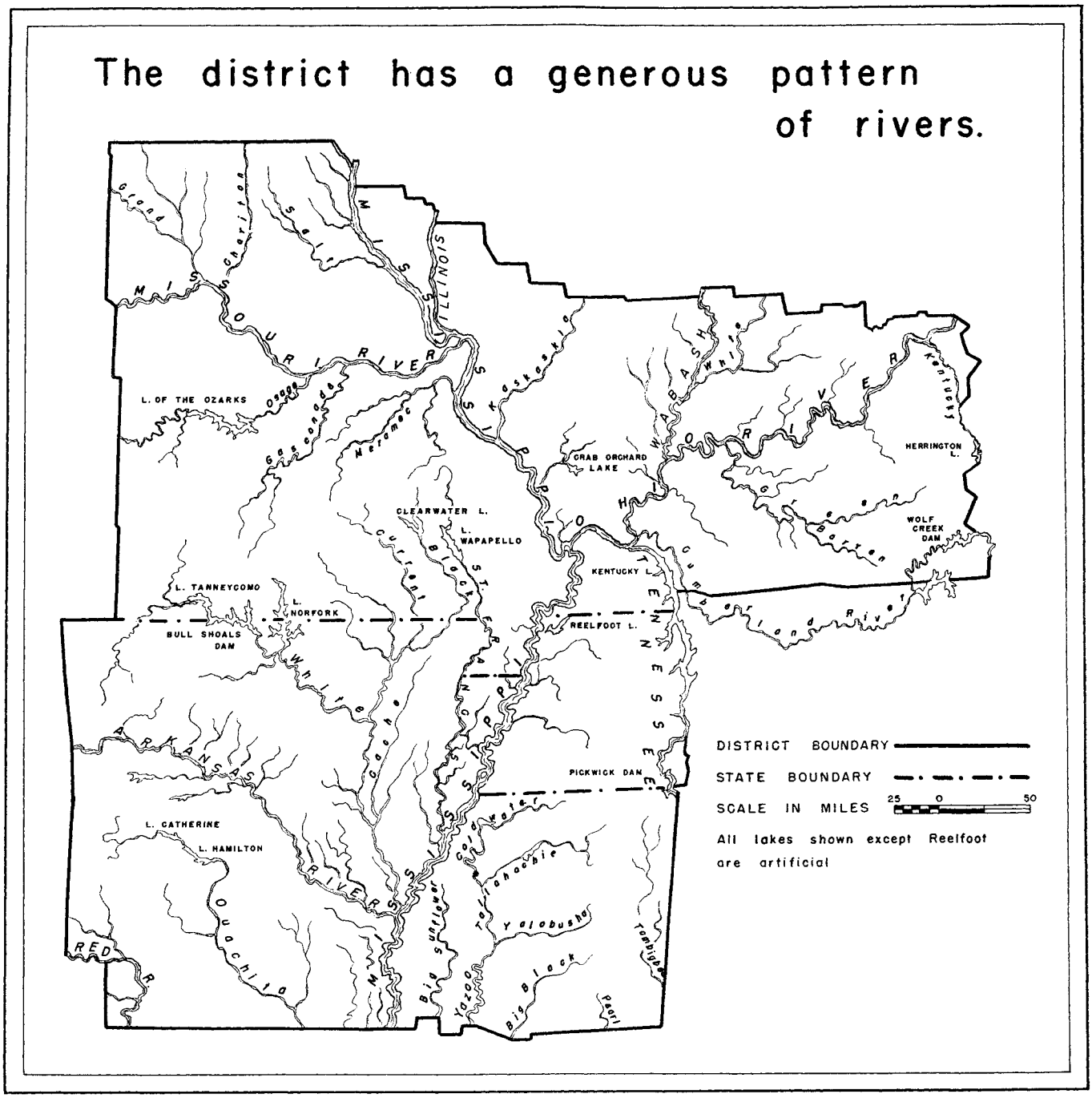


Figure 2—The Mississippi River dominates the district. The Missouri and Ohio rivers are most prominent in the northern portion and the Tennessee, Arkansas, and White, in the southern. Note the large number of artificial lakes. Reelfoot Lake, near the northern Tennessee border, was formed by an earthquake in 1811.

rial (known as till) which has been scraped and left behind by a glacier. This is the most level terrain of the district, with the exception of the Mississippi Alluvial Plain. Here the glacier as it receded left behind a mantle of earth and rocks from less than fifty to several hundreds of feet in depth. Since the glacier advanced and receded over soft limestones, on the whole, the residue left behind was finely ground, lending itself to soil formation at later stages and affording a relatively stone-free surface for the plow, thousands of years later. By contrast, for example, the glacier crossing the granites of New England exposed hard bedrock at many places, tore off chunks of varying sizes and left behind thin, stony soils that make farming difficult.

The glaciated plains of the district are not uniform by any means, however. One principal difference is that they are more dissected in northern Missouri than they are in district Illinois, but the height of the hills is generally not over 50 to 100 feet. The southern boundary of the Till Plains (see map) is the southern boundary of glaciation in the district.

Although the balance of the district is unglaciated, large areas of it in Tennessee, Missouri, and Southwestern Arkansas have somewhat similar relief. These are parts of the *Gulf Coastal Plain* (see insert map, Figure 3.) As the main map shows, this plain is a series of hills arranged in belts that curve northward, paralleling the Mississippi River. These hills extend from the southern border of the district into the Purchase area (southwestern corner) of Kentucky. The first series on the east is known as the *Fall Line Hills.* Their width varies from 50 miles in the south to 8 miles in the north and they extend about midway into Tennessee. Underlying rock formations are sandy and soils are generally of low productivity. To the west of these hills is the richest and best-known lowland of the Coastal Plain Province—the *Black Belt.* It is named for its deep, black soil formed on a very soft limestone (Selma chalk) which overlies the sandy formations. It ranges from 20 to 25 miles in width at the Mississippi western border to only a few miles in width where it finally thins out a little north of the Tennessee border. Moving still closer to the Mississippi River, a third belt is found, an upland of sand and clay called the *Pontotoc Ridge.* Only a small wedge-shaped portion of this ridge is prominent. Beginning at the southern Tennessee border, it narrows to a point 90 miles farther south. Most of its soils produce well. The next belt is another lowland, the *Flatwoods,* which curves south and east from the Tennessee-Mississippi border to beyond the Mississippi-Alabama border. Only from 5 to 8 miles wide, it has a relatively smooth surface, but is largely composed of clays that are sticky when wet, cracked when dry, and poorly drained. It is, therefore, generally poor for farming.

By far the widest belt of hills borders the Flatwoods on the west. This is a sandy formation known geologically as the *Red Hills* because of its bright colored soils. It extends into the Purchase region of Kentucky. This belt is a heavily eroded area, but includes some broad, fertile valleys. The belt of hills terminates on the west when it is overlaid by loess (wind-deposited soils) in a strip 5 to 15 miles wide and extending along the Mississippi River to the Gulf. Though this band of loess thins out on the west, traces of it may be found as far as 100 miles east of the river.

On the west of the Mississippi Alluvial Plain, the Gulf Coastal Plain resumes its belted character, but only one belt of any size, a broad band of sand-clay, timbered hills, is located in Arkansas. These hills are cut by the valleys of the Ouachita and Red rivers.

Between, these areas of mild relief on the north and south of the district are two physiographic provinces which in some places attain the boldness of mountains. These are the *Ozark* and *Ouachita Provinces* on the west. The *Highland Rim* of the Interior Low Plateaus on the east (see insert map, Figure 3) is also generally rough. The Ouachita Province with its mountains of that name has the most rugged terrain in the district, with many of the central ridges over 2,500 feet and the distance from valley bottom to mountain ridge often better than 1,500 feet. Just to the north, in the *Upper Arkansas Valley,* a sub-region of the Ouachita Province, Mount Magazine attains 2,823 feet—the highest point in the district. The *Boston Mountains,* still farther north, and structurally part of the Ozarks, have a horizon of 2,250 feet for many miles and also have deep valleys. In Missouri, the *St. Francis Mountains* do not quite attain 1,800 feet with a general relief of from 500 to 800 feet.

The *Highland Rim* area in Kentucky is statistically less impressive than any of the mountain areas of Missouri or Arkansas. But anyone who has wound about its snake-like roads, seen its hidden valleys, sugar loaf hills, limestone sinks, and tumbling waterfalls, will hesitate to discount the mountain atmosphere of a large part of it. On the other hand, obscured by this general classification are a number of notably level areas such as the *Pennyroyal Plain.* This plain is named after a perennial mint with small pungent leaves, which grows profusely there. The central Bluegrass is also gently undulating, but much of the outer part in the district is rugged. It is named for the bluegrass native to the area and flourishing there due to phosphorous in the limestone soil.

The final physiographic area, the *Mississippi Alluvial Plain,* is entirely different in contour from the balance of the district. The Plain is generally monotonously level. But even this flat, bottom lands area has its hills, known as *Crowley's Ridge,* which parallel the St. Francis River from southern Missouri into Arkansas. The Alluvial Plain begins at the point where the Mississippi, only recently strengthened by the Missouri, is now joined by the

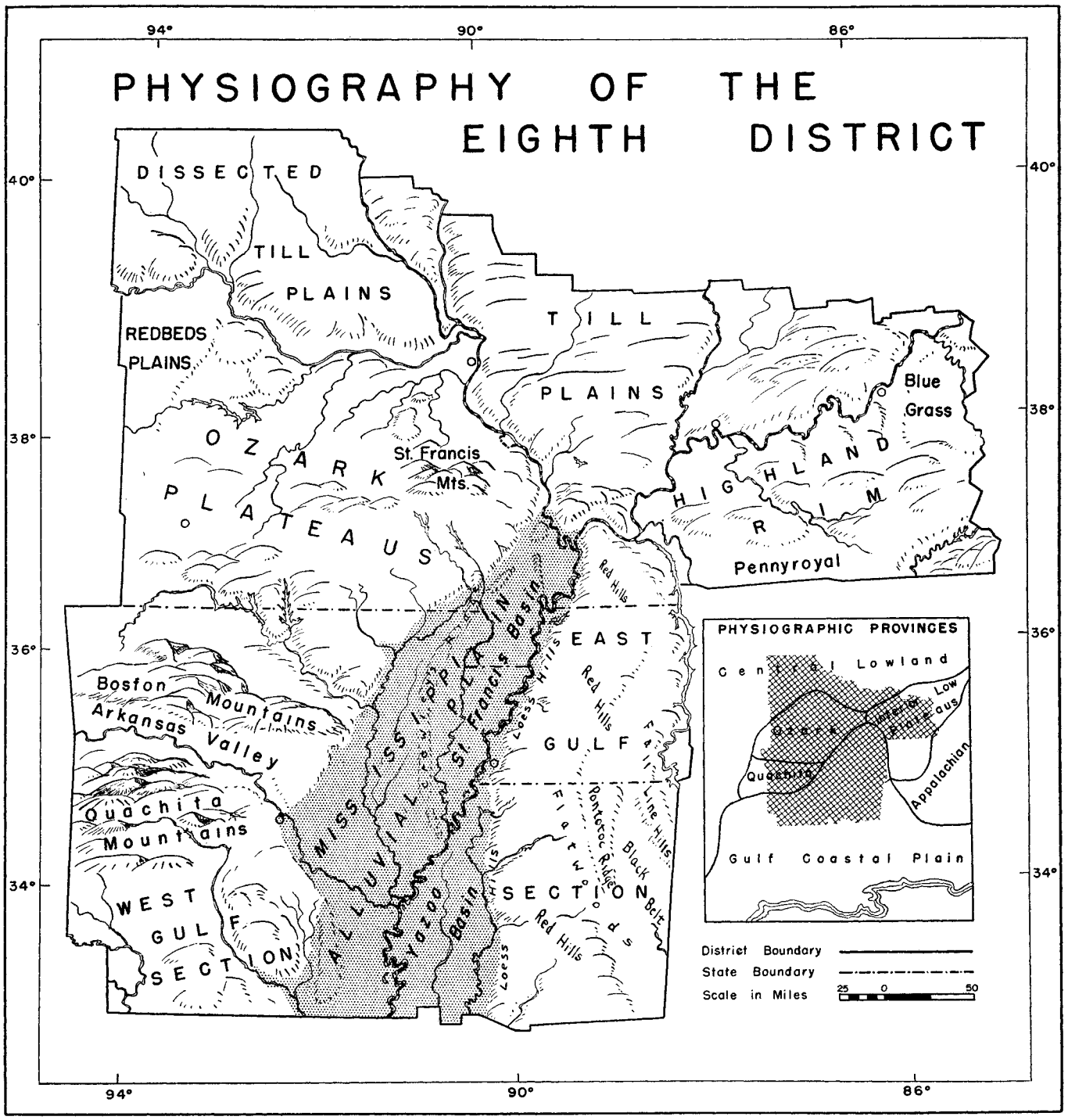


Figure 3—Even lowlands of the district have many hills, though contours are exaggerated above. The St. Francis and Yazoo basins are known as the DELTA in Arkansas and Mississippi. Insert map shows how lowland areas are separated by plateaus. Adapted from A. K. Lobeck, PHYSIOGRAPHIC PROVINCES OF NORTH AMERICA, 1948.

Ohio and bursts its bonds to form a wide silt-covered trough on the platform of the coastal plain. Here are found the renowned deltas of Arkansas and Mississippi, identified on the map (Figure 3) as the *St. Francis* and *Yazoo* basins.

Taking a broad, over-all view of the physiographic characteristics that have been noted, the district assumes a unity of landform: an area of moderate relief surrounding and draining from all sides into a great basin.

. . . and humid, middle-latitude climate.

The district's climate (not to be confused with day-to-day weather), like its physiography, has many elements that are similar from one end of the district to the other. This is no Twelfth District (Federal Reserve District of San Francisco) which embraces radically different climates ranging from a Mediterranean type to a desert type upon crossing the western mountain ranges, to a rainy west-coast type farther north. Instead the Eighth District has one world climatic type with two characteristic features throughout: humidity and pronounced temperature changes.

Of course, examined in more detail, the climate of this district is found to have considerable variation as well as these two universal characteristics. In general, the variation proceeds from north to south rather than east to west. Two principal reasons can be cited for this: (1) there are no mountain barriers of sufficient height to supersede the latitudinal control caused by the shifting of the sun's rays; and (2) the weather of the district is largely determined by dried continental air masses which more over the great land area to the north and west or moisture-laden air masses which move in from the Gulf of Mexico. The effect of these two major phenomena is that the northern part of the district is drier and colder—the southern, wetter and warmer. In actual figures, average annual rainfall approximates 36 inches in northern Missouri, 52 in southern district Mississippi. And the average monthly January temperature in the north is 24 degrees, in the south 46 degrees. The growing season varies from less than 170 days in the north to more than 230 days in the south with the critical line of 200 frost-free days, which can be considered the minimum for economical cotton production in the district, approximately coinciding with the northern Arkansas border, including the Bootheel of Missouri, and then continuing southeastward along the Tennessee River.

But its soils and underground resources are complex.

As more and more features of the district are analyzed, the elements of diversity become more prominent and it is harder to keep the concept of unity in view. This is particularly true when soils and underground resources are considered.

The Great Soil Groups occupying the largest acreage in the district are the Red and Yellow Podzolic soils (acid soils formed under a coniferous forest—poor to medium productivity). The Ozark Plateaus and the Gulf Coastal Plain, with the notable exception of the river basins, lie largely within these soil groups. Other members of the Great Soil Groups found extensively in the district are the Gray-brown Podzols (moderately acid soils formed under deciduous forest—medium productivity) in river bluff regions, the Planosols (soils having an impervious layer of clay in the subsoil—medium to low productivity) in southern Illinois and northern Missouri, and the Prairie soils (neutral soils formed under grasses—high productivity) in northwestern Missouri and northern district Illinois. Alluvial soils, found in all the river basin areas, vary greatly in productivity, but more are on the plus than on the minus side in the district.

The principal economic minerals of the district are coal (southern Illinois, Indiana and Kentucky, northern and western Missouri, and central-western Arkansas); oil and gas (the Tri-state district in Illinois, Indiana and Kentucky, a large field along the southern Arkansas border, and some production in the Upper Arkansas Valley); lead (north of the St. Francis Mountains in Missouri); and limestone, clay, gravels and sand (all widely distributed). The district has an important share of United States' production of bauxite, manganese, barite, and fluorspar.

And when man and his works are added to the geographic landscape, it is seen to have great diversity.

In no case is the diversity of the district clearer than when man and his works are thrust upon the physical concept of it. Suddenly the pattern becomes highly complex. In the first place, man is very unevenly distributed over the face of the district. Secondly, there are great differences among the people themselves in temperament, interests, training and abilities. And the evidences of man's productive activity add to the diversity. Now corn and cotton, rice and tobaco, cattle and hogs, lumber and coal, factories and warehouses, to mention a few, are found in an unordered array.

Census economic areas show this diversity as a production pattern . . .

Having arrived at a point where differences far outweigh similarities, the question arises as to how man's productive activity can be grouped and measured meaningfully. The significant word is "grouped." Over-all measurements, either aggregative or average, have an important place in economic analysis, but these total measurements may obscure significant and offsetting developments. In most fields today, the quest is for more precise detail as to this complex called "man's productive activ-

ity." Extremely useful methods have been developed for estimating total production, total spending, total saving. And these aggregative indexes are available in many very useful breakdowns; for example, the total production of autos, tons of steel, or total corporate spending or total consumer spending. But there is a growing realization that more thorough economic understanding requires extension of work on the measurement problem in terms of smaller areas or regions. The need for regional data along with national aggregate rests on the fact that small-area behavior can vary significantly from over-all behavior. Flood disaster or drouth or unemployment in relatively small areas of the United States economy may change national totals very little or their effects may be entirely offset by exceptionally large crop outturns and above normal employment situations elsewhere, but these developments are important to the affected small-areas and require consideration in the determination of national policy.

So, in developing Eighth District economic measurements, this Bank, while not neglecting total data or average data for the entire district, gives weight to evaluating the relationships between the all-district data available and to developing small-area measurements which will permit a better understanding of the whole.[1] In view of the Bank's continuing interest in regional analysis it follows quite naturally that the remainder of this study is concerned with the relation of basic geographic resources of the district to the productive activity in its several smaller economic areas.

The areas to be used in this analysis have been fixed by the Bureau of the Census as part of its project of setting up small economic areas for regions throughout the United States. Where these areas are sufficiently different from both an agricultural and nonagricultural standpoint they are identified separately. But, in other cases, where a number of agricultural areas can be combined into one homogeneous nonagricultural area, the agricultural areas are shown as subdivisions of the latter areas. Of course, in establishing boundaries for these economic areas, a number of other considerations had to be taken into account by the Bureau.[2]

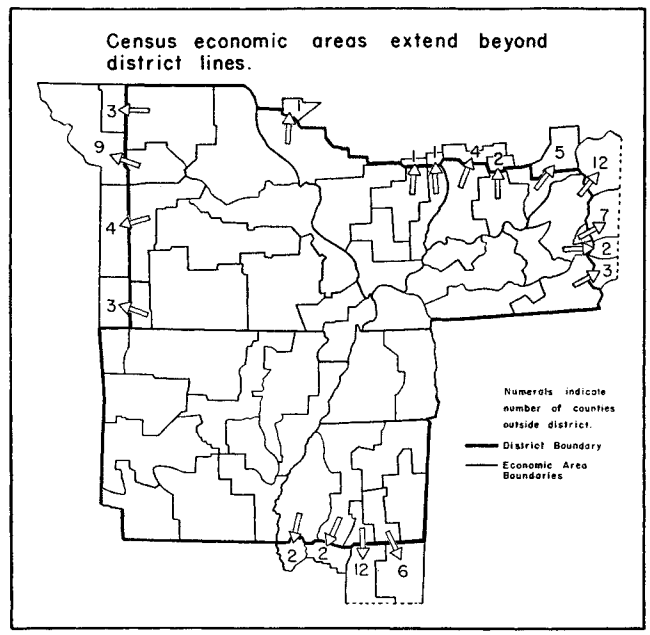


Figure 4—Areas outlined by the Bureau of the Census are shown above. They will be used in this article (center insert) to analyze district production. But the fact that these areas extend beyond district boundaries in so many instances is one reason for further dividing them for statistical analysis in the future.

. . . *that can be closely associated with the physical geography of the district.*

These Census economic areas can be closely associated with the physical geography of the district as will be shown. But this does not mean to imply that the physical environment is the determinant. The same terrain and climate that once served as as base for marauding Kaskaskia Indians now are the source of wheat and soybeans. Swamps may be drained and deserts irrigated. And scientists may be able to seed the clouds and furnish water for thirsty pastures in Arkansas. But somewhere, sometime as a practical matter, man runs into physical forces which must be reckoned with and employed. And faced with the same physical forces in the same locality, man's reaction is often similar.

Bearing in mind, then, that man is the active force, nature the passive, the following relationships between geography and economic areas in the Eighth District are presented in the form of a

[1] Cf., *Income Growth in the Eighth District,* MONTHLY REVIEW, March 1949 and *The Eighth District Balance of Trade,* MONTHLY REVIEW, June 1952.

[2] Cf., STATE ECONOMIC AREAS, Bureau of the Census, 1951. General rules followed by the Census in delimiting economic areas may be summarized as follows:
1. Areas must follow county lines.
2. Areas must distinguish metropolitan centers.
3. Homogeneity with respect to economic and social conditions should govern delimitation of areas.
4. Delimitation should be made on the basis of statistical and other objective evidence, insofar as possible.
5. Areas should be delimited on two levels: (a) a detailed level for use in publishing agricultural data, and (b) a more generalized level for all other Census tabulations.
6. Counties within any one grouping should be contiguous.
7. Most metropolitan areas are combined with surrounding state economic areas for tabulation of agricultural statistics.
8. Each area for general tabulation shall contain at least 100,000 inhabitants—in the case of agricultural areas, at least 10,000 farms.
9. State boundaries are also economic area boundaries.
10. It must be possible to integrate state economic area boundaries across state lines.

description and map (Figure 7) on the center insert. The areas are those of the Bureau of the Census. The numbers, names, and descriptions of these areas, however, are those of this Bank. Furthermore, each area is considered separately irrespective of any combination made by the Census Bureau. Census metropolitan areas are not described.

Smaller areas also closely related to geographic characteristics are being defined by this bank. They will provide even more detail, . . .

The analysis of production given in the center insert (between page 122 and page 124) touches the highlights of the economic areas. To those familiar with these areas, and thinking about them in more detail, a number of possible further subdivisions will come to mind. A much more detailed analysis of productive activities could have been presented in this article by using this bank's smaller income-areas, introduced in pioneer studies in this field in 1949.[3] But these areas are now undergoing revision of their boundaries to facilitate integration with Census economic areas (see map, Figure 5).

There are two principal reasons for subdividing Census areas into smaller units for district analysis. First, as already noted, upon closer examination further significant breakdowns are found. These may involve too much detail to be shown on a national basis, but they are of importance in comparing regions within the district. In the second place, Census areas extend beyond district boundaries (see map, Figure 4) and consequently include areas not relevant to district analysis.

While an analysis of the new income areas of this bank will be presented in a future REVIEW article, the major features of these areas can be pointed out here, thus showing how they are related to Census areas.

[3] Cf., *Income Growth in the Eighth District*, MONTHLY REVIEW, March 1949.

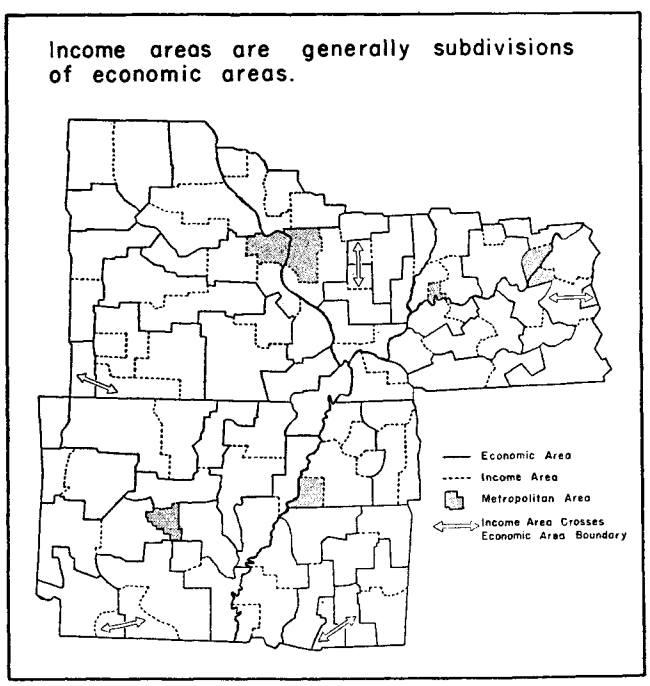


Figure 5—The probable manner in which Bureau of the Census Economic Areas will be subdivided to form Income areas for use in this bank's statistical analyses is shown above. There are only five cases in which Income areas lie across Economic area boundaries. But in all instances the bank's areas are cut off at district boundary lines. Economic areas are not (see figure 4).

. . . highlighting the economies of cities . . .

One of the principal types of smaller areas which the new income areas of the bank will highlight is the urban area not now classed as a major metropolitan area. Or, to put it another way, the bank areas will segregate areas of substantially different population density. The principal sources of income for a highly urban region are obviously quite different from those of a rural area. All metropolitan areas and major cities of the Eighth District, therefore, are featured as income areas. The map (Figure 6) shows all cities of over 10,000 population in the district according to the 1950 Census. It is perhaps somewhat of a surprise to find that there are so few in an aggregate population of 10.5 million. This fact alone suggests the importance of measuring their economic activity and of further analyzing their income bases.

. . . and distinguishing more precisely between type-of-farming areas . . .

Another major type of smaller area into which some Census tracts will be subdivided is one that has specialized types of farming not shown in the larger units. An example of this is found in Tennessee where a diversified farming, fruit and vegetable region in Gibson county and extending somewhat into Crockett county has been made into a separate income area. Segregation for urbanization also helps segregate for types of farming as agriculture is generally more intensive near cities.

. . . and regions where mining and recreational activities predominate.

A third type of sub-area justifying division of Census areas is one with certain nonagricultural activities of district importance, but obscured by the larger area. Under this category can be listed areas of oil and gas production and recreational facilities.

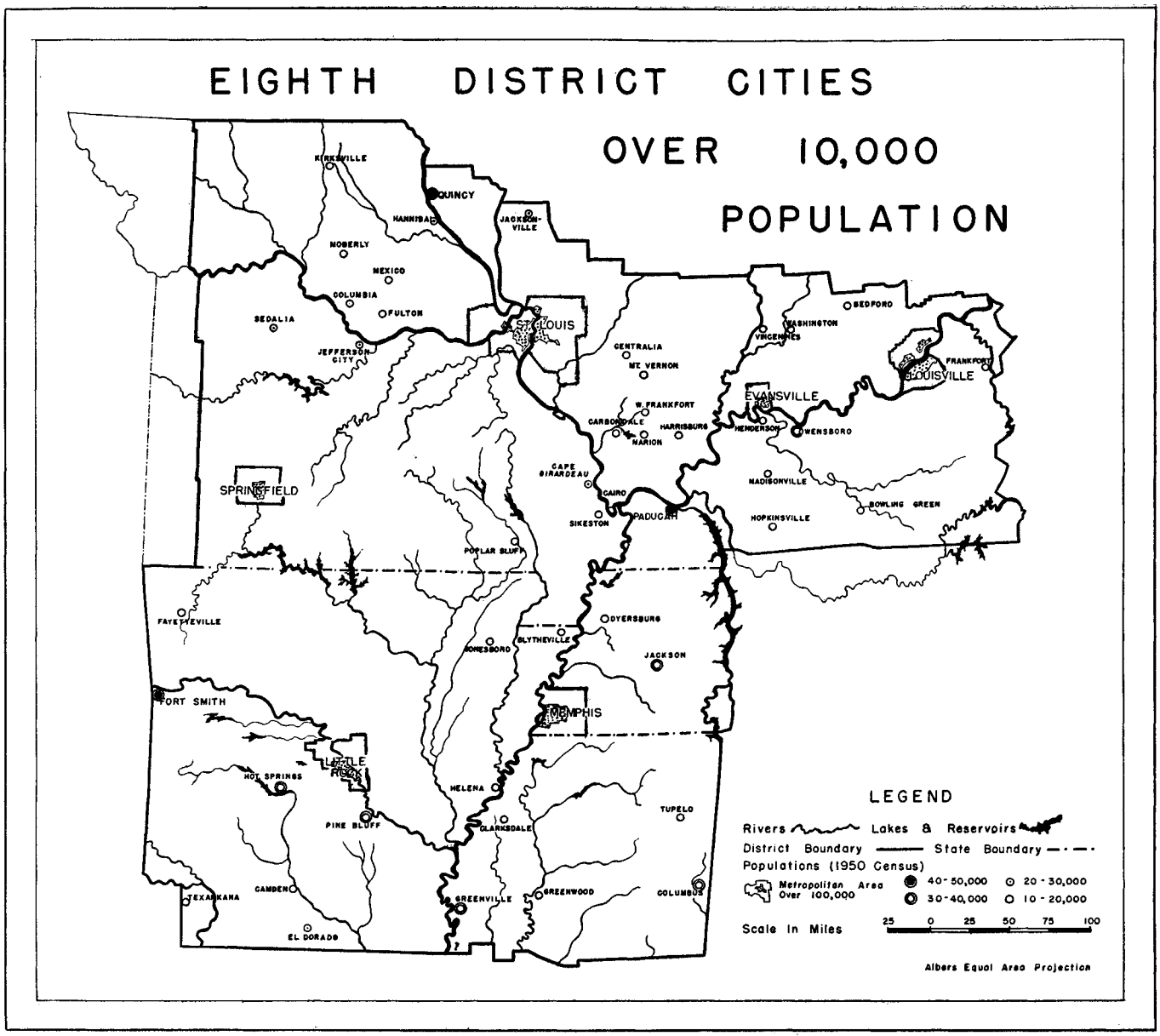


Figure 6—The district has six metropolitan areas by Census definition. The map emphasizes the relationship of cities to the district's rivers. It is interesting to note that Springfield is the only metropolitan area in the district not on a major river. Louisville and Evansville are on the Ohio, St. Louis and Memphis on the Mississippi, and Little Rock on the Arkansas. Conversely, away from the rivers, especially in the central Ozarks of Arkansas and Missouri, there is a notable absence of cities with a population of sufficient size to be noted on the map.

Thus geographic factors underlie the grouping of man's activities in the district.

Reviewing the description of the Eighth Federal Reserve District from its physical characteristics to its production characteristics, as shown by this study, it is seen that geographic factors underlie the grouping of man's activities in the district. Thus economic areas of the Bureau of the Census and the smaller income areas developed by this bank are closely associated with the district's geographic characteristics.

A description of the Economic areas was outlined in the district by the Bureau of the Census follows.

As was noted, the following correlation of physiographic and production characteristics with Census economic areas in the district omits Census metropolitan areas. Also, three metropolitan areas are omitted because they lie largely outside Eighth District boundaries.

Description of District's Economic Areas

NOTE: AREA NUMBERS ARE REPEATED FOR EACH GROUP

Glaciated Plains Region (Corn Belt Farming)—This area is associated with the relatively level and often fertile Till Plains physiographic region of Missouri and Illinois. It lies entirely in the Corn Belt. The four Missouri areas of this general region are all meat production farming areas. But they have considerable differences in intensity of land use and combinations of farm enterprises, which, in turn, are largely due to differences in soil and topography.

Area 1 has unquestionably the most productive upland soils in Missouri. So grain yields are high, forage crops do well, and highly finished hogs and beef cattle are raised there. Adjoining rich bottom lands furnish an abundant extra supply of feed.

Area 2 has a serious erosion problem in some sections, particularly the eastern. Yields are not as high as in area 1, legumes and pastures not as good. And grain supplies from river bottom lands are not so accessible. Thus, livestock are less numerous per acre and less finished. Regarding nonagricultural production, area 2 has the major coal production of Missouri, but there are some mines in areas 3 and 4. Illinois mines in areas 5 and 6 produce more coal than area 2, though they are by no means the leader in that state.

Area 3 has relatively more pasture land than area 2. Feed crops production is less than that in either of the first two areas discussed and pastures have less livestock-carrying capacity.

Area 4 is composed of two sections from the standpoint of soil types. The land is definitely more fertile on the north, and the southern half (on the Redbeds Plains) has much less livestock per acre and lower crop yields than any of the other areas and more stocker and feeder livestock are raised there. Combining the good section with the poorer, this area is rated inferior to the others in production.

Area 5 features a climatically sheltered fruit production area where the Illinois River forms a delta with the Mississippi. The balance of the farming is prosperous (corn, other grains and legumes, livestock, poultry, dairying) with rich soils similar to those in area 1 on the east.

Area 6 is distinguished from 5 particularly because of large wheat acreages, along with dairying.

Ozark Region (Mixed Farming, Lumbering, and Mineral Production)—This is the area with the most rugged terrain in the district, with generally poor to medium productive soils, and diverse mineral resources. It straddles the critical 200-day growing season line. Three major ways in which its agriculture differs from that in the Glaciated Plains are: (1) meat animals are largely stocker and feeder, intended to be finished in other areas rather than fattened on the farm although there are some significant dairying districts; (2) there is more non-commercial farming; (3) a large share of the land either is being or should be used chiefly for timber production.

Area 1 is on the border of the Ozarks, and has better upland soils than the Central Ozark Plateau. It is a fairly prosperous dairying, corn and wheat growing region benefiting from a close proximity to markets in St. Louis.

Area 9, in Arkansas, considered next because it is also a border region, has soils that are not as good as those of area 1. It is characterized by small cotton and vegetable and general farms, and can be regarded as a transition zone between the Central Arkansas Ozarks and the much better river bottom lands to the east.

Areas 2 and 3, in the Central Plateau Region both have considerable relatively level uplands and resemble each other in having many general farms specializing in meat production. But in the western part of area 3, where pastures can be used nearly all year around and marketing facilities have been highly developed, there is a prosperous dairying industry, supplemented by poultry, which is not duplicated in area 2. The southern border counties of area 3, however, have largely non-commercial farms, and the ratio of income from timber marketing to farm income is high.

With regard to nonagricultural activity, all three areas benefit from tourist activity. Area 1 has numerous springs, area 2 has Lake of the Ozarks, area 3 has the White River resort area including a number of dams. The western tip of area 2 is a major producer of barite though it has been superseded by area 10. Area 2 is one of the few producers of manganese in the United States.

Area 4 is the poorest farming area of the state. This is the Big Spring and cave country of Missouri where the terrain is in general so rough, hilly, and stony that agriculture on uplands is practically impossible. Most farms are at or near the subsistence level. A major part of the land is in forest.

Area 5 (shown by numeral, but not boundary line, for it is not a separate census area) is similarly poor in agricultural activity, for here the granite hills of the St. Francis Mountains arise. But it is distinguished for its mining activity. Its mines have been producing over a third of this country's lead production. The district's only iron mine is also located here.

Areas 6 and 7 can be compared to each other. Both have fruit, poultry and vegetables, with marketing facilities being particularly well developed on the Arkansas side of the border. The Missouri area is part of the Tri-state Zinc District but most of the mines are outside the district.

Areas 8 and 10 can also be compared to each other. Both have exceptionally rugged relief (the Boston and Ouachita mountains) so an unusually high portion of the land is in forest. Cattle ranches are being developed in both areas. And both have many subsistence farms and supplement income through resort activities. However, nonagricultural activities are better developed in area 10 (Hot Springs resort, bauxite and barite mining) than in area 8 (Bull Shoals and Norfork dams).

Area 11 has the relatively high hills of the Illinois Ozarks and other hilly terrain on the one hand and large, flat, low-lying areas subject to flood on the other. The former yields timber, fruit and vegetables. The latter has cash grain farms. Fluorspar mines near Rosiclare (and also on the Kentucky side of the Ohio River) supply over 80 per cent of United States production.

River Plain Region (Cotton Belt Farming, Rice Production and Lumbering—This region is associated with the alluvial plains of the Mississippi, Arkansas, and Red rivers, including other stream valleys such as the St. Francis and the Yazoo. Cotton, corn and soybeans are major crops throughout the region, with livestock raising often an important supplemental activity. Rice production dominates one area.

Areas 1, 2 and 3 can be singled out because of the intensity of their cotton production even though agriculture is more diversified now than formerly. State lines account for the division of these delta lands into three areas.

Area 4 is also delta land (the lower Arkansas River) but much of it is too swampy for cultivation, hence it has a much lower per capita income.

Area 5 is a famed rice growing area adjacent to Stuttgart. It has unique hardpan soils ideally suited to rice cultivation.

Area 6, to the north, also has considerable rice production, but is chiefly a cotton and corn production area on river terrace lands not quite as rich as the delta. Both it and area 7, in Missouri, have livestock and fruit farms on Crowley's Ridge.

Area 7 is similar to area 6 with the exception of rice culture.

Areas 8 and 9 have the valleys of the upper Arkansas River and the Red Rivers, respectively. The bottom lands here are excellent cotton, vegetable and fruit producers. But the uplands of these areas are heavily forested. Both areas have distinctive nonagricultural activities. Area 8 has the only coal production in Arkansas (a semi-anthracite type excellent for heating private residences) and some oil and gas production. Area 9 has some of the most productive oil and gas wells in the state, though the center of production is to the east.

Coastal Plain Region (Cotton Belt Farming and Lumbering)—This region is associated with the sand, clay, and loessial soils of the Gulf Coastal Plain. Cotton production dominates most of the region, but yields are not as high as those of the better River Plain areas. The region has the finest timber in the district. Like the Ozark region, much of it is heavily forested.

Areas 1 and 2 can be considered together and areas 3 and 4, the separation being made on account of state lines. These are highly generalized areas. Areas 1 and 2, on the whole, are more productive agriculturally.

Areas 3 and 4 are somewhat poorer than areas 1 and 2 for the reasons noted under the discussion of the terrain features (page 117). All four of these areas are characterized by small cotton farms. They have important livestock and fruit and vegetable subareas.

Area 5, the "Purchase Region" of Kentucky, is very diverse. Though related to the others physiographically, it has more bottom lands along the Mississippi and Ohio rivers where excellent corn, hog, cattle farms are operated. And it has considerable tobacco farming, which extends only

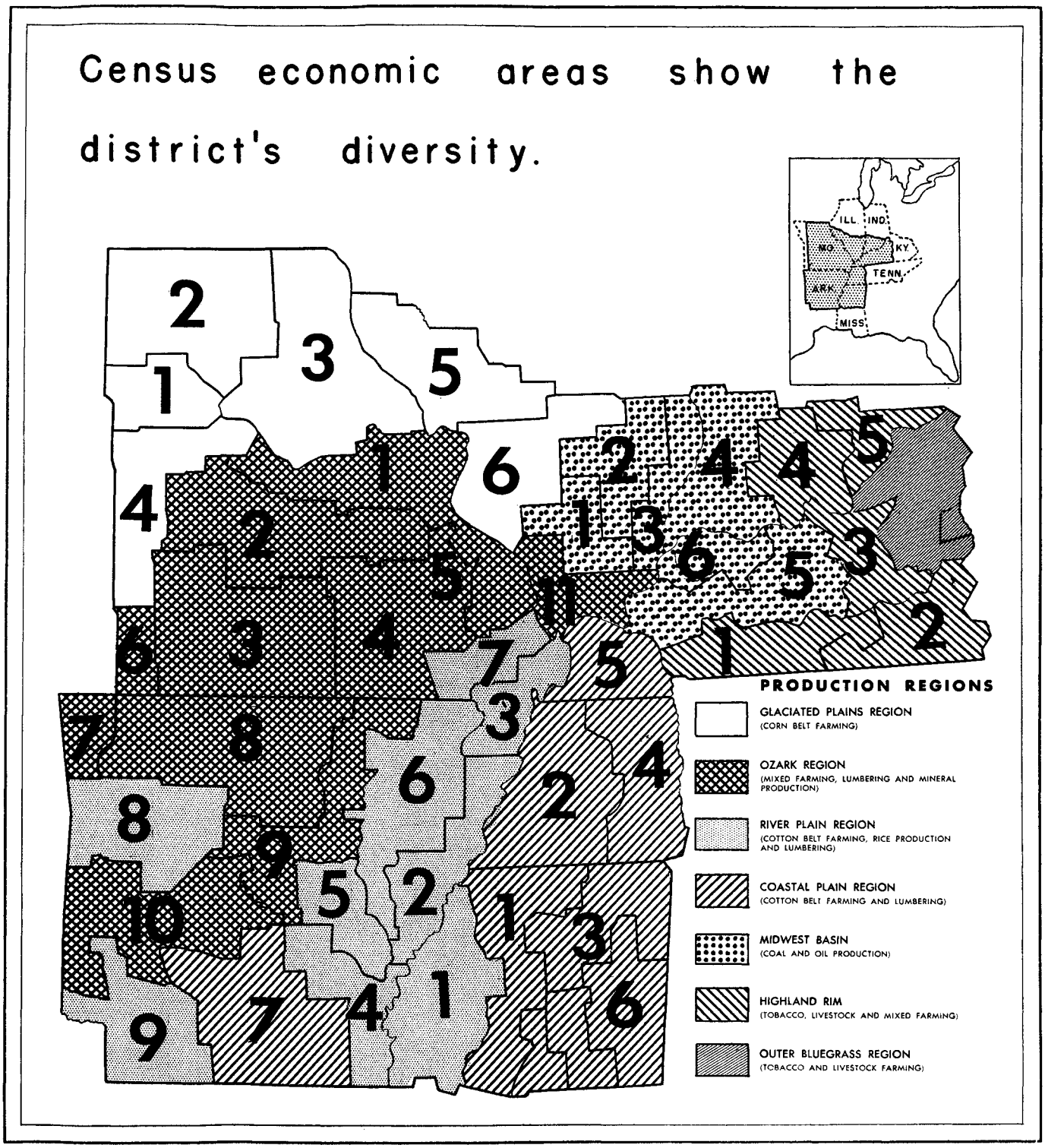


Figure 7

slightly over the Tennessee border into area 4. In nonagricultural activities, areas 4 and 5 differ from the others in the benefits they receive from TVA dams on the river, the Paducah atomic plant with supporting electric plants and the other chemical industries.

Area 6, is truly unique. It is known as the "Black Belt" for its black, prairie-like soils. This area, which curves into Alabama, was once world-renowned for high cotton yields. But man plundered the soil resource. And the region became an infamous example of how man's abuse could ruin

nature's bounty. Now it has come back as a leading example of diversification with some of the most outstanding livestock and dairy enterprises in the South. Cotton is still important.

Area 7 is another unique area with respect to its splendid pine forests, which are the source of considerable high-grade lumber and of pulp for a rapidly growing paper industry. It it also distinguished for its oil and gas production, having the major share of Arkansas production (see River Plain areas 8 and 9). Small cotton farms, with some important fruit and vegetable enterprises, are intermingled with the forest lands.

Midwest Basin (Coal and Oil Production)—This area is classified according to its mineral production because this is more distinctive than its agriculture. Basins supporting the mineral production lie partly under the Till Plains and partly under the Highland Rim physiographic regions. Climatically, the region is still in the Corn Belt, although due largely to soil differences tobacco is the major cash crop south of the Ohio River.

Considering nonagricultural activities first, areas 1, 4, and 6 are the most productive coal producing areas in their respective states, and the Illinois coal fields, which extend far to the north, have the largest bituminous coal production of any region in the United States. Areas 2 and 3 in Illinois have the major oil and gas production of that state. And area 4 and area 6 have the major oil and gas production in Indiana, and Kentucky, respectively. The areas are distinguished according to farming characteristics in the following four paragraphs.

Areas 1 and 2 are both mixed-farming areas, but area 1 is less prosperous, with general and part-time farming, while area 2 is the more prosperous with more fruit and poultry.

Areas 3 and 4 are both along the Wabash River, but on the Illinois side there is much more alluvial land, so more grains, while the upland prairie on the Indiana side (area 4) has more livestock. Both these areas are better farming areas than areas 1 and 2.

Area 6, in Kentucky, can be likened to area 4 in Indiana with regard to its farming enterprises, though its soils are different.

Area 5 is a poor, part-time and general farming area like 1, but has tobacco, as was pointed out above.

Highland Rim (Tobacco, Livestock and Mixed Farming)—this region is associated with the generally eroded and hilly Highland Rim physiographic region. But much of the area has a limestone soil which is potentially productive and the Pennyroyal Plain has a gently rolling topography that is adapted to the livestock-tobacco enterprises which characterize the region.

Area 1, in the western Pennyroyal Plain, is relatively level. It supports large, prosperous cotton and toacco farms.

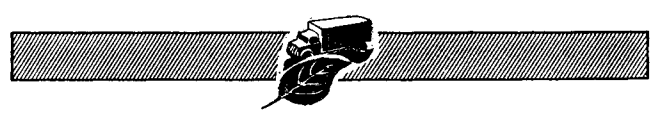
Area 2, in the eastern part of the Pennyroyal and also extending into the rugged Cumberland River Valley on the southeast, is rougher. Farms are smaller and general farming predominates (corn, cows, hogs, poultry, tobacco).

Area 3 is characterized by limestone sinks, but many of these can be farmed. Thus farms here are often prosperous tobacco and livestock enterprises, though smaller than in area 1.

Area 4, across the Ohio River in Indiana, is similar to area 3 in some of its topographic features, but has very little tobacco farming, and farms are less prosperous. A variety of farming types exist, with this area having the largest number of noncommercial farms in the state.

Area 5, also in Indiana, is a somewhat more prosperous farming area than the central Indiana area described above and has more tobacco acreage. The principal farming types are general and dairy, hay and tobacco.

With regard to nonagricultural activity, area 2 can boast of the recreational attractions of Wolf Creek Dam on the Cumberland River; area 3 has Mammoth Cave and the soldiers and gold of Fort Knox; and in area 4 the world-renowned French Lick Springs is located and Bedford building stone quarried.



Outer Bluegrass Region (Tobacco and Livestock Farming—This area is within the physiographic division called the Bluegrass, although the section in the district is mostly the Outer Blue Grass. Most of the famed racing stables are located in the Inner Bluegrass, just to the east of the district boundary. But much of the district part of this region is a prosperous livestock, tobacco, corn area.

HARRY B. KIRCHER

Survey Of Current Conditions

STRIKES AND THE WEATHER combined to jolt the expanding activity of the Eighth District economy during July. But recovery was evident in the first half of August as workers returned to their jobs, trade improved and rains came to the aid of crops in most areas.

Employment and industrial production were reduced in July, chiefly as a result of layoffs at metal using plants such as automobile, machinery and refrigerator manufacturers. Expansion at defense plants and in some seasonal industries was not sufficient to outweigh these layoffs. But by mid-August many workers had returned to their jobs. And the one defense plant shut down here for lack of steel resumed full operations on August 18.

Retail trade declined more than seasonally during July as a result of limited supplies of new automobiles and as a reaction to the stimulation of sales of seasonal merchandise by the hot weather in the previous month. In addition, a truck strike was a minor factor limiting retail sales in the St. Louis area during July. But department store sales in the first three weeks of August were above year-ago levels, indicating a possible return to the fairly high level of consumer spending evident in May and June. Crop production prospects continued to decline during July and the first week in August as a result of the hot, dry weather. However, rains in the second week of August came to the aid of crops in most parts of the district.

Bank loans expanded in July, as business loans increased more than the seasonal amount for the period. Consumer credit loans and real estate loans also increased.

In the nation also, economic activity was reduced in July. Industrial production in July, as measured by the Federal Reserve Board, dropped 6 per cent from June to 191 per cent of the 1935-39 average. This level was about equal to that of the first half of 1950, immediately preceding Korea. Most of the decline occurred in durable goods manufacturing, which dropped roughly one-tenth from May to June and again from June to July. The drop in June was due primarily to lower steel production, while the decline in July was due to lower output of steel-using plants. The decline in nondurable goods production reflected vacation shutdowns in textile and paper industries, not fully accounted for in seasonal adjustment factors.

Other lines of activity in the nation also slowed in July. Nonfarm employment was down 400,000 persons from June; construction increased less than seasonally. Automobile sales were restricted by lack of merchandise and department store sales were limited by hot weather and interest in political conventions.

Steel mill output was limited after settlement of the strike by the time spent in restoring coke ovens, blast furnaces and open hearths to working conditions. However, operations have been increased rapidly, and for the week ended August 23, four weeks after the strike was settled, were scheduled at 97 per cent of capacity. Automobile output in August is expected to approximate only 300,000 cars and trucks, compared with pre-strike operations of about 500,000 vehicles a month.

While the short-term effects of the steel strike were deflationary, the longer-run results will tend to be inflationary. The price of steel has been increased and will sooner or later be reflected in higher per unit material costs for many consumer durables. Further, the steel wage increase may well become the model for union demands in other industries, increasing the wage cost for these goods.

WHOLESALE PRICES IN THE UNITED STATES

Bureau of Labor Statistics (1926=100)	July,'52	June,'52	July,'51	July, 1952 compared with June,'52	July, 1952 compared with July,'51
All Commodities	111.8	111.2	114.2	+ 1%	— 2%
Farm Products	110.2	107.2	111.1	+ 3	— 1
Foods	110.0	108.5	110.7	+ 1	— 1
Other	112.6	112.6	115.7	–0–	— 3

CONSUMER PRICE INDEX*

Bureau of Labor Statistics (1935-39=100)	July 15, 1952	June 15, 1952	July 15, 1951	July 15, 1952 compared with June 15,'52	July 15, 1952 compared with July 15,'51
United States	190.8	189.6	185.5	+ 1%	+ 3%

*New series.

RETAIL FOOD*

Bureau of Labor Statistics (1935-39=100)	July 15, 1952	June 15, 1952	July 15, 1951	July 15, 1952 compared with June 15,'52	July 15, 1952 compared with July 15,'51
U.S. (51 cities)	234.9	231.5	227.7	+ 1%	+ 3%
St. Louis	248.6	247.6	237.9	–0–	+ 4
Little Rock	230.4	228.7	223.1	+ 1	+ 3
Louisville	221.2	218.1	216.0	+ 1	+ 2
Memphis	236.8	235.6	232.3	+ 1	+ 2

*New series.

In addition, rising income, resulting from higher levels of wages and employment, and rising prices will stimulate consumer interest in buying in the future. Consumer buying may also be stimulated by the reduction in retail stocks of automobiles and appliances.

Construction activity will be affected for a time by the limited supplies of structural steel. The delay has in effect stretched out the defense expansion program and prolonged the time before less essential construction projects may be started. Thus the stimulus given to the entire economy by high-level plant and equipment expenditures while temporarily weakened has been continued further into the future.

Employment

By mid-August employment in the district had substantially recovered from the layoffs occasioned by the steel strike. Most of the layoffs which occurred during July lasted for only a few weeks, but a few plants were closed for longer than a month. The impact of the strike was only partly revealed by July 15th employment figures, since some plants were operating that week, but were shut down either before or after that time. In St. Louis, employment in seven major industry groups which use steel was cut nearly 8,000 persons from mid-June to mid-July. But total manufacturing employment in the city dropped only 6,000 from June to July, as gains in defense plants and seasonal industries partly offset the layoffs caused by the steel strike. In Louisville, about 5,500 fewer workers were employed in the machinery, equipment and instrument industry groups in July than in June. The Louisville Employment Service estimated that, at one time or another during July, between 7,000 and 8,000 workers were laid off. As in St. Louis, layoffs in Louisville were partially offset by gains in other industries, chiefly defense.

The recovery from the steel strike can be measured roughly by the trend in unemployment insurance claims. In seven district states at the end of June, after one month of steel strike, the number of weeks of unemployment claimed was 170,000, not materially larger than the 165,000 weeks claimed four weeks earlier. But by the end of July, weeks claimed rose to 249,000, an increase of 46 per cent in four weeks. Two weeks later claims dropped off to 212,000, as workers were recalled to their jobs.

In the United States the total number of workers employed in nonfarm jobs dropped 400,000 between mid-June and mid-July. Seasonal gains in construction and food processing employment plus expansion of employment by Federal defense agencies partially offset the 900,000 workers unemployed by the steel strike. About one half the workers idled by the strike were directly affected steel workers and iron ore miners. The rest were workers in steel-using plants and related industries.

Industry

Slowdowns due to the shortage of steel and fabricated metal parts from sources outside the district were reflected by a sharp drop in the district's industrial output in July. But the after-effects of the steel strike tapered off in early August.

Manufacturing—In July, manufacturing activity showed a large drop from the previous month and a year ago for the first time this year, according to reports on use of electric power by industries at six major cities in the district. The daily average consumption was 11 per cent below both June this year and July a year ago. The decline in activity was greatest in transportation equipment, machinery, fabricated metals and chemical manufacturers. Some strength was indicated in the food and shoe industries.

In contrast to the national steel situation (where production was 18 per cent of capacity), ingot production in the St. Louis area during July was 62 per cent of capacity. By the third week of August the St. Louis mills increased operations to over 100 per cent of capacity.

Lumber production in the district through mid-August continued at practically the same moderate levels as in June, in response to a still rather sluggish market. Inventories at dealers were relatively low, however, so any pickup in consumer demand was expected to be felt almost immediately at mills.

Whiskey production in Kentucky again fell off. At the end of July only 12 distilleries were in operation, five less than a month or a year ago.

Transportation activity reflected the generally lower level of industrial activity. Freight inter-

CONSUMPTION OF ELECTRICITY
Daily Average*

(K.W.H. in thous.)	July, 1952 K.W.H.	June, 1952 K.W.H.	July, 1951 K.W.H.	July, 1952 compared with June, 1952	July, 1952 compared with July, 1951
Evansville	835	830	768	+ 1%	+ 9%
Little Rock	480	547	572	—12	—16
Louisville	3,717	4,135	3,936	—10	— 6
Memphis	1,121	1,458	1,484	—23	—24
Pine Bluff	321	328	447	— 2	—29
St. Louis	4,354	4,840	4,911	—10	—11
Totals	10,828	12,138	12,118	—11%	—11%

*Selected Manufacturing firms.

changes at St. Louis showed a recovery in July from a 9 per cent drop in June, but were still 11 per cent below those of July, 1951. Furthermore, truck movements were affected throughout the month by a truck drivers strike in the city.

An exception to the general direction of industrial activity was district shoe production. It was up somewhat both in comparison with June and with July last year, according to the sample of use of industrial power. This experience corresponded to the situation nationally where shoe production for the first seven months of the year was estimated by the National Shoe Manufacturers Association to have been running at 5.5 million pairs ahead of the national annual rate of consumption.

Mining—Coal mines in district states reduced production 22 per cent in July compared with June, and 17 per cent compared with July a year ago, according to preliminary figures. This reflected the seasonal drop experienced in recent years and the lower level of sales this year. Crude oil production in July continued at about the same level, which also approximated that of a year ago.

Construction

Construction activity during July in the nation increased less than seasonally. This was the net result of a decline in public expenditures after seasonal adjustment which was only partly offset by a gain in private construction expenditures. Defense construction remained at high levels. The steel strike had little effect on building operations during the period, but was expected to have some effect on work in later months.

New housing starts in June and July throughout the United States were at the seasonally adjusted annual rate of 1,063,000 and 1,088,000 respectively. If August starts are also less than 1,200,000 (seasonally adjusted annual rate) downpayment requirements under Regulation X on residential construction must be reduced to not more than 5 per cent as provided by the 1952 amendments to the Defense Production Act. Present requirements range from 5 to 40 per cent.

Contracts awarded for private residential construction in the St. Louis territory of the F. W. Dodge Corporation during the first seven months of the year were about the same as those in the corresponding months last year. Since March of this year, however, the dollar volume of contracts awarded has been improving over that of last year and the margin of gain was considerable by July. But a recent survey by this bank indicates that this uptrend may not continue. According to this survey, private housing starts for the next six months will be about one-sixth less than those in the corresponding period last year.

Public residential housing awards, in contrast to private, have shown sharp gains over year-ago figures. From January to July, the gain was 66 per cent. A notable start was made at St. Louis in July on a 1,736 unit public housing project.

Total construction contracts awarded in the Eighth District during July were $106 million, excluding the $459 million contract by the Atomic Energy Commission for an addition to the uranium separation plant near Paducah. Also excluding this one contract, awards were 41 per cent above July, 1951, but were 10 per cent below June, 1952.

While total construction contracts awarded in the first seven months have been larger than in the same period last year, not all areas of the district

LOADS INTERCHANGED FOR 25 RAILROADS AT ST. LOUIS

			First Nine Days			
July,'52	June,'52	July,'51	Aug.,'52	Aug.,'51	7 mos.'52	7 mos.'51
108,461	98,767	117,779	33,393	33,795	758,848	819,367

Source: Terminal Railroad Association of St. Louis.

COAL PRODUCTION INDEX
1935-39=100

Unadjusted			Adjusted		
July,'52	June,'52	July,'51	July,'52	June,'52	July,'51
92.0 P	118.5	111.4	104.5 P	126.0	126.6

CRUDE OIL PRODUCTION—DAILY AVERAGE

(In thousands of bbls.)	July,'52	June,'52	July,'51	July, 1952 compared with June,'52	July,'51
Arkansas	76.6	76.2	76.1	+ 1%	+ 1%
Illinois	165.1	170.0	169.3	— 3	— 2
Indiana	32.5	32.8	30.1	— 1	+ 8
Kentucky	33.5	33.9	29.4	— 1	+14
Total	307.7	312.9	304.9	— 2%	+ 1%

SHOE PRODUCTION INDEX
1935-39=100

Unadjusted			Adjusted		
June,'52	May,'52	June,'51	June,'52	May,'52	June,'51
140.9	145.4	132.4	136.8	150.0	128.5

P—Preliminary

BUILDING PERMITS
Month of July

(Cost in thousands)	New Construction Number 1952	Number 1951	Cost 1952	Cost 1951	Repairs, etc. Number 1952	Number 1951	Cost 1952	Cost 1951
Evansville	107	94	$ 242	$ 241	99	95	$ 116	$ 58
Little Rock	52	36	438	5,994	206	191	247	100
Louisville	177	214	968	974	87	93	194	83
Memphis	1,985	2,088	4,196	3,774	204	201	299	166
St. Louis	267	240	20,696	1,966	329	244	1,180	800
July Totals	2,588	2,672	$26,540	$12,949	925	824	$2,036	$1,207
June Totals	2,047	2,448	$ 6,445	$ 7,265	917	924	$1,906	$ 956

have shared the same experience. The most recent information available, that for the first half year, indicates that construction contracts awarded in the three largest cities of the district increased sharply over the corresponding period last year, but those awarded in Little Rock and Evansville decreased.

TOTAL CONSTRUCTION CONTRACTS AWARDED IN FIRST HALF OF YEAR

(Dollar amounts of thousands)

	1952	1951	Per cent change
St. Louis area	$195,283	$150,405	+30
Louisville	43,805	35,822	+22
Memphis	52,168	31,932	+63
Little Rock	9,697	10,711	—10
Evansville	6,545	13,612	—52

Source: F. W. Dodge Corporation.

Trade

Sales during July were at a somewhat lower level than in June. Normally sales drop seasonally from June to July, but this year the decline was somewhat more than seasonal in some lines of trade. This reflected chiefly a reaction to the concentrated buying of "hot weather" merchandise during June's record heat wave and secondly a reaction to the weather which continued depressingly hot through July. Interest in the political conventions was also a limiting factor in the month as was the protracted truck drivers strike in the St. Louis area. Automobile sales were restricted in July and early August by the reduced output of new cars.

Department store sales during July totaled almost one-fifth less than in June. The drop from June was somewhat more than seasonal, placing the seasonally adjusted index of daily average sales at 99 per cent of the 1947-49 average, which compared with 111 per cent in June. Adjusted sales a year ago were 104 per cent of the base. Cumulative district sales for the first seven months of 1952 totaled 2 per cent larger than in the like period last year.

In major district cities, department store sales generally declined from June to July. The smallest decline was recorded by Little Rock department stores where sales dipped 6 per cent below those a month ago. The largest decline occurred in Paducah where sales averaged almost one-third below those in June. In comparison to the general decline from June to July, St. Louis area department stores recorded the only decline from July, 1951. Elsewhere in district cities, sales increased. The largest gain from last year was reported in Paducah where sales were 14 per cent larger than in July, 1951.

District furniture store sales during July were somewhat above those a year ago. Indications were that much of the gain occurred in the major

TRADE

DEPARTMENT STORES

	Net Sales: July, 1952 compared with June,'52	Net Sales: July,'51	Net Sales: 7 mos. '52 to same period '51	Stocks on Hand: July 31,'52 comp. with July 31,'51	Stock Turnover: Jan. 1 to July 31, 1952	1951
8th F.R. District	—18%	+ 2%	+ 2%	—11%	2.09	1.85
Ft. Smith, Ark.[1]	— 8	+ 1	+ 1	— 6	1.94	1.83
Little Rock, Ark.	— 6	+ 8	+ 3	— 9	2.06	1.75
Quincy, Ill.	—11	+ 3	— 7	—16	2.09	1.87
Evansville, Ind.	—16	+ 6	+ 3	—15	1.85	1.67
Louisville, Ky.	—21	+ 5	+ 3	+ 3	2.21	2.12
Paducah, Ky.	—31	+14	+31	.....	.....	.....
St. Louis Area[1,2]	—22	— 2	+ 1	—15	2.08	1.78
Springfield, Mo.	—10	+ 1	+ 4	—12	1.85	1.60
Memphis, Tenn.	—11	+ 5	+ 3	— 3	2.17	2.07
All Other Cities[3]	—15	+10	+ 5	+ 1	1.79	1.70

[1] In order to permit publication of figures for this city (or area), a special sample has been constructed which is not confined exclusively to department stores. Figures for any such nondepartment stores, however, are not used in computing the district percentage changes or in computing department store indexes.

[2] Includes St. Louis, Clayton, Maplewood, Missouri; Alton and Belleville, Illinois.

[3] Fayetteville, Pine Bluff, Arkansas; Harrisburg, Mt. Vernon, Illinois; Vincennes, Indiana; Danville, Hopkinsville, Mayfield, Kentucky; Chillicothe, Missouri; Greenville, Mississippi; and Jackson, Tennessee.

Outstanding orders of reporting stores at the end of July, 1952, were 11 per cent larger than on the corresponding date a year ago.

PERCENTAGE OF ACCOUNTS AND NOTES RECEIVABLE
Outstanding July 1, 1952, Collected During July

	Instalment Accounts	Excl. Instal. Accounts		Instalment Accounts	Excl. Instal. Accounts
Fort Smith	%	46%	Quincy	18%	60%
Little Rock	17	44	St. Louis	19	52
Louisville	18	44	Other Cities	13	50
Memphis	20	36	8th F.R. Dist.	18	47

INDEXES OF DEPARTMENT STORE SALES AND STOCKS
8th Federal Reserve District

	July, 1952	June, 1952	May, 1952	July, 1951
Sales (daily average), unadjusted[3]	81	103	106	85
Sales (daily average), seasonally adjusted[3]	99	111	102	104
Stocks, unadjusted[4]	112	118	124	129
Stocks, seasonally adjusted[4]	120	125	124	139

[3] Daily average 1947-49=100

[4] End of Month Average 1947-49=100

SPECIALTY STORES

	Net Sales: July, 1952 compared with June,'52	Net Sales: July,'51	Net Sales: 7 mos. '52 to same period '51	Stocks on Hand: July 31,'52 comp. with July 31,'51	Stock Turnover: Jan. 1 to July 31, 1952	1951
Men's Furnishings	—36%	—10%	— 1%	—23%	1.26	1.10
Boots and Shoes	—21	— 8	+ 2	— 8	2.44	2.31

Percentage of accounts and notes receivable outstanding July 1, 1952, collected during July:

Men's Furnishings 45% Boots and Shoes 42%

Trading days: July, 1952—26; June, 1952—25; July, 1951—25.

RETAIL FURNITURE STORES

	Net Sales: July, 1952 compared with June,'52	Net Sales: July,'51	Inventories: July, 1952 compared with June,'52	Inventories: July,'51	Ratio of Collections: July,'52	July,'51
8th Dist. Total[1]	—10%	+ 8%	+ 1%	—10%	23%	26%
St. Louis Area[2]	— 3	+ 3	+ 1	— 7	55	57
St. Louis	— 4	+ 2	+ 1	— 7	58	60
Louisville Area[3]	—21	+ 6	+ 4	—17	13	14
Louisville	—17	+ 4	+ 4	—15	12	13
Memphis	—17	+25	— 2	—10	12	15
Little Rock	—28	+ 7	+ 4	+ 3	17	20
Springfield	— 8	+ 6	— 1	— 9	16	17
Fort Smith	—0—	+17	*	*	*	*

* Not shown separately due to insufficient coverage, but included in Eighth District totals.

[1] In addition to following cities, includes stores in Blytheville, Pine Bluff, Arkansas; Hopkinsville, Owensboro, Kentucky; Greenwood, Mississippi; Hannibal, Missouri; and Evansville, Indiana.

[2] Includes St. Louis, Missouri; and Alton, Illinois.

[3] Includes Louisville, Kentucky; and New Albany, Indiana.

Percentage Distribution of Furniture Sales

	July,'52	June,'52	July,'51
Cash Sales	15%	13%	14%
Credit Sales	85	87	86
Total Sales	100%	100%	100%

WHOLESALE TRADE

Line of Commodities	Net Sales		Stocks
Data furnished by Bureau of Census, U.S. Dept. of Commerce*	July, 1952 compared with June,'52	July,'51	July 31, 1952 compared with July 31, 1951
Automotive Supplies	+ 9%	+25%	+ 3%
Drugs and Chemicals	—11	—11	+10
Dry Goods	—20	—21	—28
Groceries	+10	+12	— 6
Hardware	— 5	— 2	—18
Tobacco and its Products	+ 6	+13	+ 3
Miscellaneous	— 1	+ 7	—21
**Total All Lines	— 7%	-0-%	—20%

*Preliminary.
**Includes certain items not listed above.

appliance division with mechanical refrigeration and cooling equipment accounting for the major portion of the increase. Some renewal of interest in purchase of television sets was credited to sales promotions and interest shown in political conventions.

Inventories held by reporting retail lines on July 31 were below those a year ago. Department store inventories throughout the district averaged about one-tenth below their July, 1951, levels. Furniture store inventories on July 31 were off a similar amount.

At department stores throughout the district the volume of outstanding orders on July 31 was larger than a month earlier and 11 per cent over July 31, 1951.

Banking and Finance

Tightness in the money market was the dominant factor in the financial picture during July and early August. Despite the pressure, banks in the district expanded their credit sharply, especially their loans to businesses. By contrast, banks in the rest of the country expanded their loans and investments only moderately with business loans showing little change. Also reflecting the tightness of the money market and the demand for credit, interest rates moved up somewhat in the period.

The amount of checks cashed at district banks in July (seasonally adjusted) was larger than in recent months but slightly less than the peak levels.

Money Market—During July and early August the money market remained very tight. This situation dominated the financial picture. Commencing the period without much cushion, banks were drained of a sizable amount of funds as a result of an outflow of money into circulation, Treasury operations and an increase in foreign Federal Reserve deposits. A partial offset to these drains was provided by net System purchases of Government securities.

Banking—Commercial banks, to meet the drain of funds, increased their borrowings sharply, sold a sizable amount of short-term Government securities or allowed maturing issues to run off, and in some cases tightened their loan policies (most large banks, for instance, increased their rates on loans to brokers against Stock Exchange collateral from 2½ per cent to 2¾ per cent).

Total loans at all commercial banks in the country showed only a moderate climb during July and early August. Expansion centered in a further gain in loans to consumers and on real estate. Outstanding loans to businesses showed little change on balance over the period. Public utilities and manufacturers of metal and metal products made substantial net repayments. Most other types of businesses increased their borrowings moderately.

Loans to dealers for purchasing or carrying U. S. Government securities jumped sharply early in July, reflecting bank financing associated with Treasury borrowings, but then declined steadily over the rest of the period.

Districtwise, bank credit rose substantially in July and early August. As in the entire nation, both consumer and real estate loans continued to climb. But in contrast with the rest of the country, business loans rose sharply. The gain, which was much more than seasonal, centered in banks at St. Louis, Louisville and Memphis. Normally, loans decline somewhat at this time at Memphis and Louisville. The largest increases in loans went to sales finance companies. However, banks reported increases in loans to most other types of businesses also.

Banks in both the large and small centers increased their Government security holdings in July and early August. The gains consisted primarily of net purchases of Government bonds.

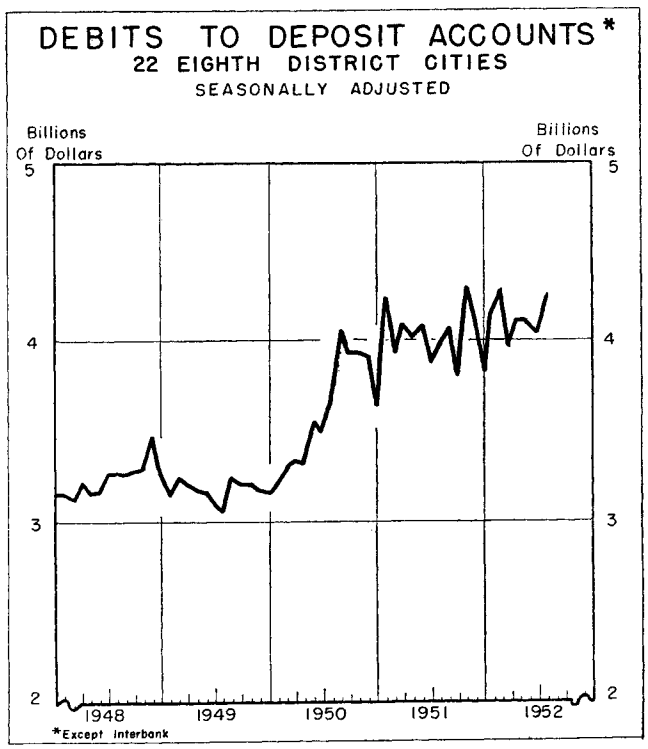
Interest Rates—Also reflecting in part the tight money market conditions, interest rates hardened somewhat in the period. Average rate on accepted bids for Treasury bills dated June 26 was 1.68 per cent. For bills dated August 14, the rate rose to 1.90 per cent (a record high since 1933). At the same time yields on short-term Government bonds rose from less than 2 per cent to roughly 2¼ per cent. Long-term bank restricted bonds declined in price from over 98 to less than 97. Yields on both medium and high grade municipal bonds were up somewhat over the period also. In addition most large banks increased their rates on loans to brokers on securities other than U. S. Government obligations from 2½ per cent to a level of 2¾ per cent.

Checks Cashed—Debits to deposit accounts at 22 cities in the Eighth District were $4.3 billion

on a seasonally adjusted basis during July. This was up somewhat from the levels of recent months but slightly below the peaks on October, 1951, and February, 1952.

Largest gains over the previous month were reported by banks in Fort Smith and Pine Bluff, Arkansas; Evansville, Indiana; and Jefferson City, Missouri. On the other hand, Owensboro, Kentucky, had a substantially smaller amount of checks cashed than in June.

Nationally, as well as in the district, there appeared to be a sharp uptrend in the number of checks cashed. Debits to deposit accounts reported by banks in 342 cities totaled $147 billion during July, an amount 18 per cent above July, 1951. By contrast the cumulative total for checks paid for customers of these banks in the first six months of 1952 was only 5 per cent over the corresponding period of a year ago.



DEBITS TO DEPOSIT ACCOUNTS

(In thousands of dollars)	July,'52	June,'52	July,'51	July, 1952 compared with June,'52	July, 1952 compared with July,'51
El Dorado, Ark.	$ 24,339	$ 23,762	$ 25,976	+ 2%	— 6%
Fort Smith, Ark.	47,912	44,459	41,630	+ 8	+ 15
Helena, Ark.	6,700	7,010	7,282	— 5	— 8
Little Rock, Ark.	146,166	150,937	136,705	— 3	+ 7
Pine Bluff, Ark.	38,161	34,278	30,430	+ 11	+ 25
Texarkana, Ark.*	18,954	18,057	13,579	+ 5	+ 40
Alton, Ill.	32,743	33,045	28,275	— 1	+ 16
E.St.L.-Nat.S.Y., Ill.	130,332	129,552	124,036	+ 1	+ 5
Quincy, Ill.	34,138	35,241	31,235	— 3	+ 9
Evansville, Ind.	154,518	142,987	149,367	+ 8	+ 3
Louisville, Ky.	684,681	656,861	633,838	+ 4	+ 8
Owensboro, Ky.	35,060	43,150	36,469	— 19	— 4
Paducah, Ky.	42,391	43,126	22,596	— 2	+ 88
Greenville, Miss.	19,083	19,995	20,087	— 5	— 5
Cape Girardeau, Mo.	13,233	12,505	12,459	+ 6	+ 6
Hannibal, Mo.	10,462	10,413	8,922	-0-	+ 17
Jefferson City, Mo.	54,515	48,758	49,421	+ 12	+ 10
St. Louis, Mo.	1,956,287	1,989,005	1,808,652	— 2	+ 8
Sedalia, Mo.	11,430	10,843	9,567	+ 5	+ 19
Springfield, Mo.	70,695	67,832	65,962	+ 4	+ 7
Jackson, Tenn.	19,924	19,277	20,048	+ 3	— 1
Memphis, Tenn.	526,738	540,883	507,235	— 3	+ 4
Totals	$4,078,462	$4,081,976	$3,783,771	-0-%	+ 8%

* These figures are for Texarkana, Arkansas, only. Total debits for banks in Texarkana, Texas-Arkansas, including banks in the Eleventh District, amounted to $40,074.

Agriculture

Prospects for Eighth District crop production continued to decline during July and early August due to hot, dry weather. Rains during the second

EIGHTH DISTRICT MEMBER BANK ASSETS AND LIABILITIES BY SELECTED GROUPS

(In Millions of Dollars) Assets	All Member	Change from: June, 1952 to July, 1952	Change from: July, 1951 to July, 1952	Large City Banks[1]	Change from: June, 1952 to July, 1952	Change from: July, 1951 to July, 1952	Smaller Banks[2]	Change from: June, 1952 to July, 1952	Change from: July, 1951 to July, 1952
	July, 1952			July, 1952			July, 1952		
1. Loans and Investments	$4,317	+106	+316	$2,522	+ 79	+189	$1,795	+ 27	+127
a. Loans	1,928	+ 39	+137	1,262	+ 38	+ 90	666	+ 1	+ 47
b. U.S. Government Obligations	1,989	+ 68	+144	1,061	+ 44	+ 71	928	+ 24	+ 73
c. Other Securities	400	— 1	+ 35	199	— 3	+ 28	201	+ 2	+ 7
2. Reserves and Other Cash Balances	1,336	— 28	+ 19	817	— 35	+ 6	519	+ 7	+ 13
a. Reserves with the F.R. bank	699	— 4	+ 25	448	— 6	+ 14	251	+ 2	+ 11
b. Other Cash Balances[3]	637	— 24	— 6	369	— 29	— 8	268	+ 5	+ 2
3. Other Assets	50	-0-	— 1	32	-0-	+ 4	18	-0-	— 5
4. Total Assets	$5,703	+ 78	+334	$3,371	+ 44	+199	$2,332	+ 34	+135
Liabilities and Capital									
5. Gross Demand Deposits	$4,186	+ 19	+193	$2,552	— 5	+ 99	$1,634	+ 24	+ 94
a. Deposits of Banks	636	+ 7	— 4	600	+ 6	+ 2	36	+ 1	— 6
b. Other Demand Deposits	3,550	+ 12	+197	1,952	— 11	+ 97	1,598	+ 23	+100
6. Time Deposits	1,031	+ 9	+ 55	498	+ 2	+ 19	533	+ 7	+ 36
7. Borrowings and Other Liabilities	113	+ 50	+ 71	103	+ 47	+ 68	10	+ 3	+ 3
8. Total Capital Accounts	373	-0-	+ 15	218	-0-	+ 13	155	-0-	+ 2
9. Total Liabilities and Capital Accounts	$5,703	+ 78	+334	$3,371	+ 44	+199	$2,332	+ 34	+135

[1] Includes 13 St. Louis, 6 Louisville, 3 Memphis, 3 Evansville, 4 Little Rock and 4 East St. Louis-National Stock Yards, Illinois, banks.
[2] Includes all other Eighth District member banks. Some of these banks are located in smaller urban centers, but the majority are rural area banks.
[3] Includes vault cash, balances with other banks in the United States, and cash items reported in process of collection.

week of August were beneficial over much of the district, although coming too late to help some crops. Up to mid-August the drouth had not been broken in Southeastern Indiana and South-Central Kentucky. Nationally, prospects for crops were reasonably favorable due chiefly to a bumper wheat crop already harvested and to good crop conditions in the main Corn Belt.

Grain Production—August estimates for district crop production were below July estimates. However, the August estimates, although below 1951 production figures, still point to relatively large crop production despite the widespread drouth. District corn production is expected to be 15 million bushels, or 4 per cent, less than in 1951 and 5 per cent less than the 1941-50 average. This forecast is the net result of expectations for a larger 1952 crop of corn in Missouri than in 1951, but substantially smaller crops in other district states where the drouth was more severe. In Arkansas, for example, a 48 per cent reduction is expected, compared with the 1951 crop. The district wheat crop, produced under favorable conditions, is nearly one-third larger than in 1951; the oats crop is practically the same as last year's. The district soybean and burley tobacco crops are estimated at 4 and 12 per cent less than in 1951 but 1952 production will exceed the 1941-50 average considerably. The district rice crop will be 51 per cent larger than the ten-year average and 7 per cent larger than the 1951 crop.

ESTIMATED PRODUCTION FOR MAJOR CROPS, EIGHTH DISTRICT, AUGUST 1, 1952

	(In thousands) Estimated production Aug. 1, 1952	Per cent change from 1951	Per cent change from 1941-50 average
Corn (bu.)	335,705	— 4%	— 5%
Wheat (bu.)	52,754	+30	+38
Oats (bu.)	41,979	-0-	—33
Soybeans (bu.)	78,737	— 4	+60
Rice (bags)	10,367	+ 7	+51
Cotton (bales)	3,104	— 8	—14
Burley tobacco (lbs.)	174,288	—12	+ 7

Source: Adapted from Crop Production, USDA, August, 1952.

Hay and Pasture Crops—Hay and pasture were among the most severely affected crops in district states. Less hay will be harvested in all district states in 1952 than in 1951; the reductions in Kentucky, Missouri, Arkansas and Tennessee are estimated to be 15, 26, 38 and 43 per cent, respectively. Pasture conditions in Illinois and Indiana were higher as a percentage of normal than the national average, the other district states being below the national average condition. The 30 per cent of normal in Tennessee was the lowest of any state in the nation.

ESTIMATED HAY PRODUCTION AND PASTURE CONDITION, EIGHTH DISTRICT STATES, AUGUST 1

	(1,000 Tons) All Hay Production		Pasture Condition Aug. 1
	1952	Per cent change from 1951	Per cent of normal 1952	1951
Arkansas	807	—38%	35%	91%
Illinois	4,426	— 6	79	95
Indiana	2,491	— 7	73	92
Kentucky	1,933	—15	49	78
Mississippi	751	— 3	45	75
Missouri	3,651	—26	55	99
Tennessee	958	—43	30	82
U. S.	99,646	— 8	69	86

Source: Crop Production, USDA.

CASH FARM INCOME

(In thousands of dollars)	June, 1952	June, 1952 compared with May, 1952	June, 1952 compared with June, 1951	6 month total Jan. thru June 1952	1952 compared with 1951	1952 compared with 1950
Arkansas	$ 26,817	— 5%	+ 11%	$ 187,647	+ 9%	+46%
Illinois	136,286	—10	— 2	875,902	— 2	+13
Indiana	74,777	— 2	— 5	477,114	— 1	+20
Kentucky	32,423	+10	— 9	244,842	+ 4	+ 7
Mississippi	23,126	+ 6	+ 33	139,238	— 5	+41
Missouri	74,922	— 1	— 11	440,034	— 5	+13
Tennessee	33,831	+10	+ 14	189,687	+ 5	+19
Totals	$402,182	— 3%	— 2%	$2,554,464	— 1%	+17%

RECEIPTS AND SHIPMENTS AT NATIONAL STOCK YARDS

	Receipts			Shipments		
	July 1952	July, '52 compared with June,'52	July,'51	July, 1952	July, '52 compared with June,'52	July,'51
Cattle and calves	125,850	+30%	+ 8%	53,554	+39%	—14%
Hogs	221,573	—17	—19	78,807	—13	—32
Sheep	64,980	+10	+ 7	41,553	+24	+24
Horses						
Totals	412,403	— 3%	— 8%	173,914	+ 7%	—17%

Soybeans—In Missouri, 1952 soybean production is expected to be substantially higher than in 1951 when floods and wet weather reduced the size of the crop materially. Substantial declines are expected, however, in the other important soybean-producing states of Illinois and Indiana. Soybean production has been hit particularly hard by drouth in Kentucky, but declines also are expected in other district states.

Cotton—Cotton production is expected to be less than in 1951 in all district states with the exception of Missouri, where a one-third larger crop is indicated this year than last. The decrease in production in the mid-South and southeast is expected to be partially offset by expected increased production in Arizona and California.

ESTIMATED SOYBEAN AND COTTON PRODUCTION, EIGHTH DISTRICT STATES, AUGUST 1

(Production in thousands)

	Soybeans		Cotton		
	Indicated production bushels	Per cent change from 1951	Indicated production bales	Per cent change from 1951	Per cent change from 1941-50 average
Arkansas	11,310	— 9%	1,050	—16%	—24%
Illinois	82,203	—13	—	—	—
Indiana	31,842	—13	—	—	—
Kentucky	1,768	—28	—	—	—
Mississippi	5,850	— 2	1,450	—10	—12
Missouri	29,104	+13	410	+33	+13
Tennessee	3,045	— 5	500	— 6	— 9
United States	264,395	— 6	14,735	— 3	+17

Source: Crop Production, USDA.