



# Monthly Review

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## Construction Activity in the Eighth District

Throughout the nation countless new buildings stand as tangible evidence of what the nation's construction industry has achieved during the past three and one-half years. Some of these structures represent the postwar realization of building programs conceived during the war but postponed because of wartime limitations on materials and manpower. In other cases they represent the fulfillment of plans based on requirements that developed since the war. In the aggregate nearly \$54 billion have been spent since the beginning of 1946 for the materials and labor required to transform these blueprints into physical realities.

These expenditures contributed greatly to the inflationary pressure generated during most of this period. At the same time, of course, they helped to lift the nation's economy to the highest level ever attained. In whatever light one may be disposed to regard the construction dollars spent during the three-year period of rising economic activity, the important consideration now is the likely relationship between construction expenditures and the trend in economic activity in the future.

In some respects, the outlook for the future can be brought into sharper focus by an appraisal of recent trends in construction expenditures. Last year was a record year for the industry with total expenditures amounting to \$26.8 billion\*. Expenditures for new construction totaled \$18.8 billion

while maintenance and repair outlays amounted to \$8.0 billion. Expenditures reached that level after increasing at an unprecedented rate for three years. Outlays for new construction in 1946 were more than twice as large as in 1945. The following year they were three times as large and by 1948 they were almost four times the 1945 expenditures.

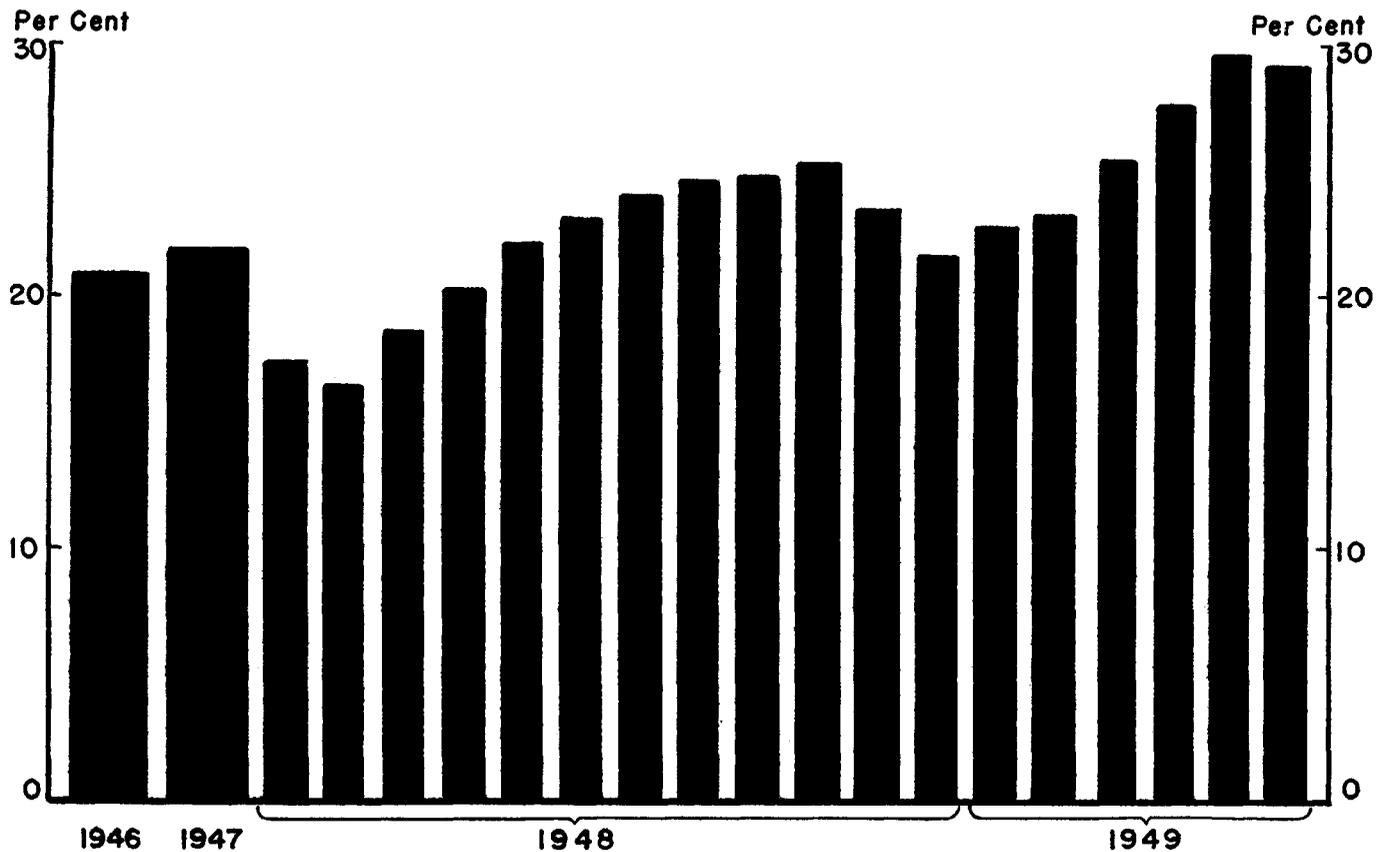
Throughout this period private funds accounted for most of the new construction expenditures. About 78 per cent of the aggregate outlays from 1946 through 1948 came from private and 22 per cent from public sources. This distribution is the same as it was during the building boom of the 1920's. Last year privately-financed construction was valued at \$14.6 billion; in 1947 it amounted to \$11.2 billion. Expenditures increased in most major categories in 1948 but there were exceptions, the principal one being industrial construction, which was off 18 per cent during the year. About one-half of the private expenditures in 1948 were for new residential construction which was valued at \$7.2 billion as against \$5.3 billion in 1947.

Expenditures did not increase at the same rate in all classes of construction. As a result, some categories were relatively more important last year than they were in 1947. Among these were residential building, religious and educational structures, electric light and power and telephone facilities. In other words, there was a shift in the use of private construction funds which in general resulted in proportionately smaller expenditures for industrial construction and relatively larger outlays for residential and some other types of building. Commercial work in 1948 was unchanged in volume, relative to the total, but again accounted for a smaller proportion than in 1946.

\* Actually, total construction expenditures were considerably more than \$26.8 billion. This figure does not include construction expenditures for crude petroleum and natural gas drilling, estimated at \$1 billion in 1948; outlays for major additions and alterations to residential buildings, plus some other expenditures logically classifiable as "construction" outlays, estimated at \$2.3 billion last year; and expenditures for tourist courts and cabins, privately-financed dormitories, park and playground construction, outlays by the Atomic Energy Commission and several other types of expenditures.

Chart I

## PUBLIC EXPENDITURES FOR NEW CONSTRUCTION PER CENT OF TOTAL, 1946 THROUGH JUNE 1949



SOURCE: Based On Estimates By U. S. Depts. Commerce And Labor

### The Shift from Private to Public Expenditures

As noted earlier, private funds have accounted for most of the expenditures for new construction since the end of the war, averaging about 78 per cent of the total from 1946 through 1948. In terms of actual expenditures, of course, both private and public outlays increased rapidly during this period. The rate of increase has been slightly less in the private sector, however, than in public outlays. As a result, private funds last year accounted for fractionally less than 78 per cent of the total as against 78 per cent in 1947 and almost 79 per cent in 1946.

This shift in relative importance has continued so far in 1949 as indicated in Chart I. In the first six months the total value of new construction put in place is some 3 per cent larger than it was through June last year. But the increase is due to larger public outlays which are up some 36 per cent. Private expenditures are actually 6 per cent less than they were in this period last year. As shown

in Chart II, this reflects declines in residential, industrial and commercial expenditures that more than offset increased outlays for churches, schools and other institutions, public utilities and railroads.

It is important that so far this year increased public expenditures for construction have more than made up for the declines in important segments of private expenditures. In general the declines in private spending for commercial and industrial construction were not unanticipated, since the urgent backlog in these categories was fairly well exhausted by the close of 1948. In addition some decreases were expected elsewhere in the private sector. The question at the close of 1948 was: how much of these anticipated decreases will be absorbed by increased public outlays?

As noted, larger public expenditures have enabled total construction volume to remain above last year's level so far in 1949. Consequently, the broad economic impact of the decline in private outlays

has been considerably less than otherwise would have been the case. As a result, construction expenditures have continued to represent a major bolstering factor in the economy during a period of decline in the level of operations in factories and mines.

It should be noted that the bulk of public construction expenditures represent state and local projects. Last year 78 per cent of all public outlays for new construction came from state and local governments and only 22 per cent from Federal sources. Similarly most of the increase in aggregate new construction expenditures by government in the past three and a half years has been for non-Federal activity. The reason is clear. Most local governments emerged from World War II with a substantial backlog of projects that were postponed during

the war. Streets and highways were needed; in many instances expanded local populations called for enlarged sewage and water supply systems; new public administration buildings were needed. In brief, the expansion in public construction since the war does not represent "make-work" programs. Rather, it has resulted from many of the same fundamental forces that pushed private building to its postwar heights.

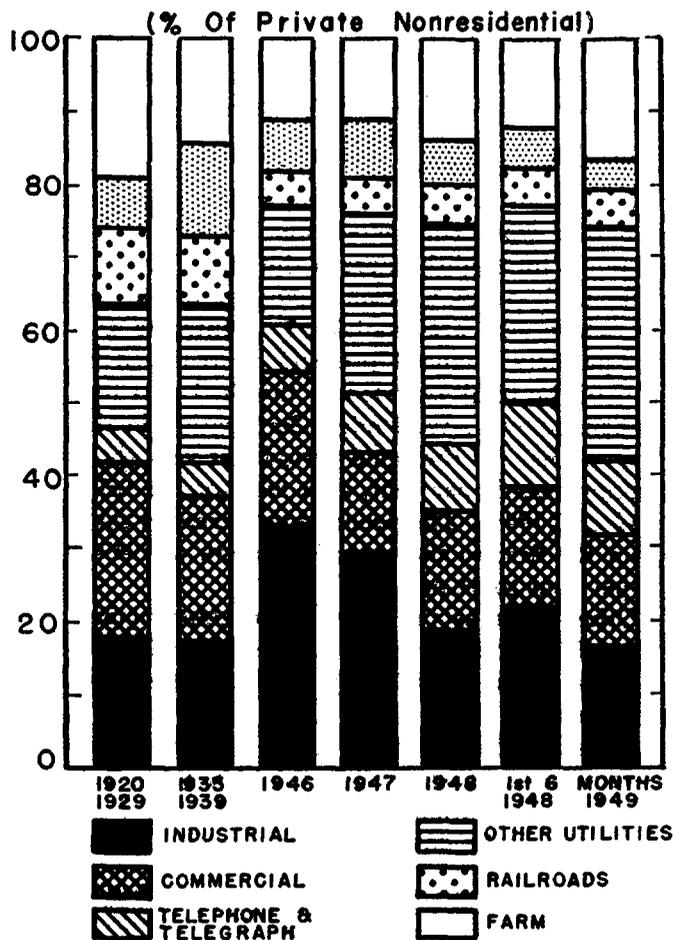
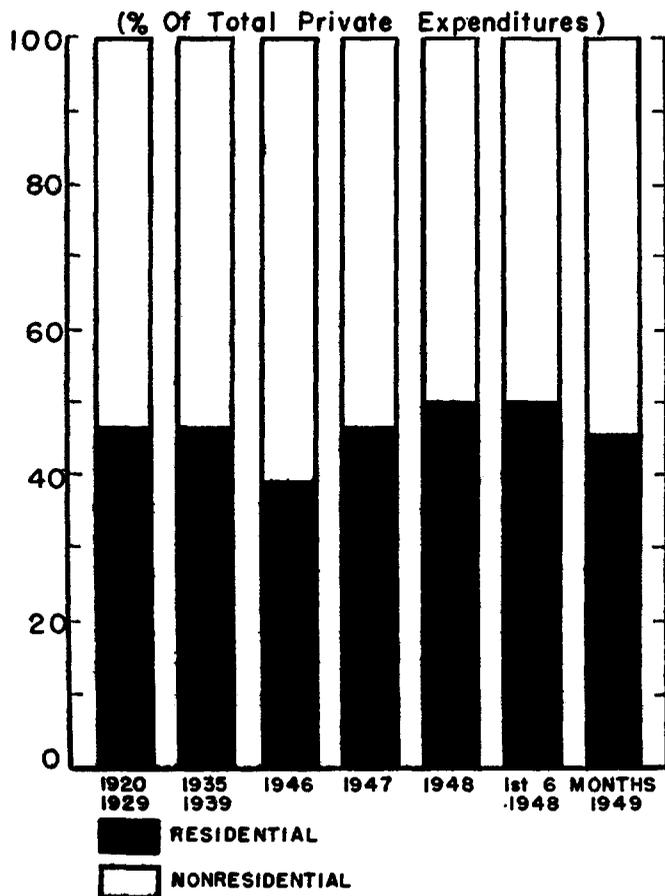
The residential picture, to a certain extent, is similar to that in the heavier construction field. Part of the decline in residential volume in the first half of the year reflects the fact that housing pressure is less urgent than it was. That is not to say that a demand for housing no longer exists. Nor does it have any implications with respect to the

Chart II

## PRIVATE EXPENDITURES FOR NEW CONSTRUCTION PERCENTAGE DISTRIBUTION IN SELECTED PERIODS

Through June A Smaller Proportion For Residential - A Larger Share For Non-Residential.

Nonresidential Expenditures - Less For Industrial, Commercial - More For Utilities And Miscellaneous.



SOURCE: Based on U.S. Depts. Commerce and Labor Data

adequacy of housing—as it exists or as it might be—relative to various income levels. It is obvious that there is still a large potential demand that can be expected to become active under a more favorable level of construction costs. In addition, many families continue to live “doubled up.” Nevertheless the 3 million new nonfarm dwelling units put under construction in the past three and one-half years, plus the additional units made available through conversions of existing housing and the use of temporary facilities, have somewhat reduced the urgent demand for residential construction.

With the easing in demand came a decline in construction costs. So far the downward movement has not been spectacular (averaging perhaps 5 to 10 per cent) although some estimates of the extent of the drop range as high as 25 per cent in isolated parts of the country. In St. Louis, estimates of Roy Wenzlick and Company indicate a decline of some 2 per cent in the cost of constructing a standard 6-room frame house during the past five months. In general lower costs reflect some decrease in materials prices, particularly lumber, increased labor productivity and in many cases lower profit margins for builders. Improvements in the quality of materials, in effect, also have resulted in some further reductions in costs. In addition, the fact that skilled labor is more readily available has tended to eliminate the need for premium and overtime payments which were prevalent a year ago.

#### POSTWAR VOLUME IN THE EIGHTH DISTRICT

In this district as in the nation as a whole, construction work contracted for by public agencies accounts for slightly more of the total this year than last—at least in a sizable portion of the district for which data are available.\* Contracts awarded for publicly financed projects represented 38 per cent of the total awarded in the St. Louis territory as defined by F. W. Dodge Corporation in the first six months. In the same period last year the public portion was 35 per cent, as it was for the full years 1947 and 1948. The proportion increased markedly from the first to the second quarters of 1949—from 31 per cent to 41 per cent.

Other changes peculiar to the construction pattern of the district as a whole, as well as of its component areas and major cities, deserve special attention.

Construction activity in this district reached “boom” proportions during the past three years as it did in the nation as a whole. Statistics are not available on the dollar value of materials and labor

actually put into construction projects. The best one can do is to look at district trends in terms of the value of construction contracts and building permits awarded in the area.

In the three and one-half years to mid-1949 approximately \$1.9 billion of construction contracts have been awarded in the Eighth District, according to F. W. Dodge Corporation reports. Nonresidential contracts totaled \$1.3 billion, residential contracts \$600 million. Almost one-third of the total, in terms of value, was let last year when volume climbed 8 per cent to \$625 million for the second best year on record. Three-fourths of the \$44 million increase in 1948 as compared with 1947 was in residential contracts, which were 20 per cent larger in value, amounting to \$200 million. Nonresidential awards last year were estimated at \$425 million—a little more than 2 per cent larger than in 1947.

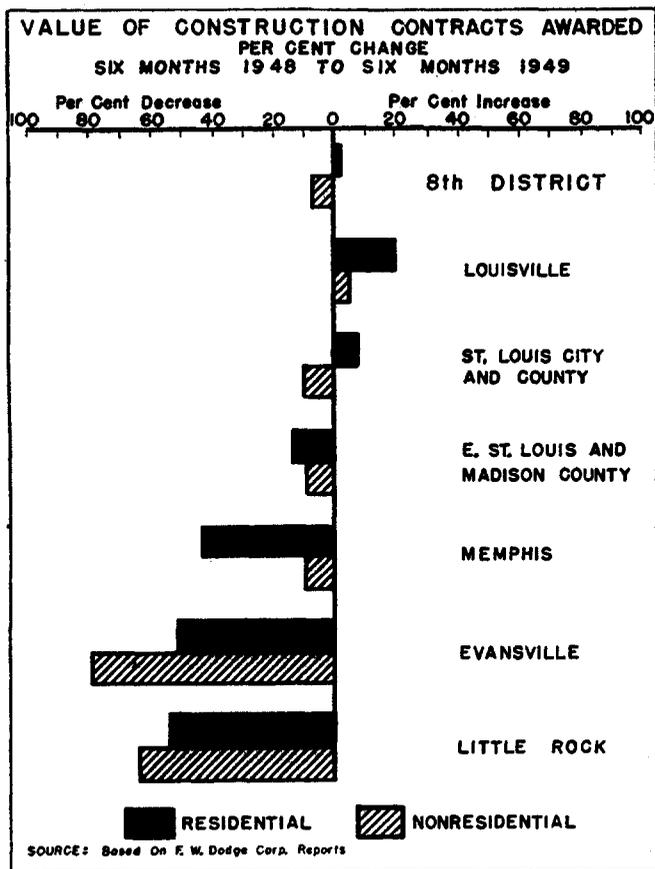
A break in this run of steady prosperity came in the fourth quarter last year. Reaching a peak in the third quarter, as in 1947, awards fell 30 per cent in value or almost twice as much, percentagewise, as during the same period of 1947. The downward trend continued into the first three months of this year and, again, at almost twice the rate of a year earlier. In each case residential as well as nonresidential awards dropped more sharply than they did in 1947 and early 1948. (In 1947 the value of residential contracts awarded increased 18 per cent in the fourth quarter when the late-season building program was in full sway.)

Following the first quarter of 1949 things began to pick up somewhat. From the first to the second quarter both residential and nonresidential awards increased much more, percentagewise, than they did last year. In the case of housing contracts, the increase in the second quarter was sufficient to lift the six-months total in this category to a level 2 per cent ahead of the first half of 1948. Nonresidential awards through June totaled 7 per cent less than a year earlier, although the value of these contracts in the second quarter was 13 per cent larger than in the same period last year. But these increases were not enough to better last year's mark. Total volume for the first six months was less than in the first half of 1948—\$283 million as compared with \$295 million through June a year ago.

The principal reason for the year-to-year decline in the first six months is that manufacturing awards were barely one-third as large in dollar value as in the first half of 1948. On the other hand, the sharp increase in the total value of awards since the seasonally low months early this year reflects increases in commitments in all categories of con-

\* F. W. Dodge reports are available for most of the Eighth District. The only areas for which estimates are not available are western Kentucky outside of Louisville, southern Indiana outside of Evansville, northern Mississippi and a small portion of the district part of Missouri.

Chart III



struction except hospitals and institutions and the public utilities field.

The increased flow of contracts in the second quarter was general throughout the district, insofar as the total value of awards is concerned. In East St. Louis and Little Rock, volume showed virtually no change between the first and second quarters, but in all other parts of the district increases were sizable. In St. Louis city and county combined, an increase in residential contracts offset a decline in nonresidential awards. Similarly, the decrease from the first half of 1948 reflected declines over a large part of this district—the major exceptions being southern Illinois (outside of East St. Louis), Louisville and Arkansas excluding Little Rock.

#### TRENDS IN DISTRICT AREAS

As suggested, the major trends in construction activity contracted for have been fairly applicable to most parts of the district. Some differences are apparent among the various portions of the region, however, as indicated in Chart III. For example, between the first half of 1948 and the first half of 1949 the rate of increase in both residential and nonresidential volume tended to be larger in non-urban than in urban centers. Similarly the seasonal

upswing in nonresidential projects so far this year appears to be a little stronger in the nonurban than in the urban areas. This is in contrast to the trend so far in residential construction, which is stronger in the cities than in the nonurban areas of the district.

**Eastern Missouri**—In this part of the district the \$72 million of contracts awarded in the first half of the year was about \$2 million less than in the same months of 1948. The decline was largely in the area outside St. Louis city and county. Nonresidential awards were off 11 per cent in St. Louis city and county (from \$21 million to \$18.6 million) and 32 per cent in the area outside this center. Decreases were principally in the manufacturing field, although public works and utilities volume, combined, in the nonurban part of eastern Missouri also was less than a year ago.

Residential contracts in St. Louis city and county and in the remainder of eastern Missouri were valued higher than in the first half of 1948. In St. Louis city and county, volume increased 8 per cent—from \$28.7 million to \$30.9 million—while in the remainder of eastern Missouri it jumped from \$2.8 million to \$7.9 million. These increases were not reflected in corresponding rates of gain in the number of dwelling units contracted for. In St. Louis city and county, new units totaled 2,771 in the first half of 1949—the same as in the first half of 1948—and 21,200 since the beginning of 1946. In the remainder of eastern Missouri the number was up only 7 per cent. One and two family units account for more of the total this year than last in each case.

From the first to second quarters this year there was a substantial increase in residential contracts, particularly outside of St. Louis city and county, both in terms of value and on a physical basis.

Nonresidential volume also increased outside this urban area in the second quarter but declined in the St. Louis area. Manufacturing contracts in St. Louis city and county were off 38 per cent from the first quarter—the same rate by which these awards declined in the first half year relative to the first six months of 1948. Contracts for commercial construction were cut in half in the second quarter but in the first six months totaled 30 per cent larger than in the same period last year.

**Southern Illinois**—Largely as a result of substantial gains in nonresidential contracts in the second quarter in this area, except in East St. Louis, the total value of awards in southern Illinois showed an increase from the first to second quarter and a gain over the first six months of 1948. Residential contracts also increased in value—from the first half

of 1948 and between the first and second quarters of 1949.

The gain in nonresidential dollar volume relative to the first six months of 1948 (from \$56 million to \$62 million) reflected increases in awards for utilities and public works construction plus a larger volume of commercial construction awards in the area outside of East St. Louis. The increase from the first to second quarter resulted from a larger volume of manufacturing awards in Madison County and a fairly general increase in commercial and public utilities and public works awards. Residential contracts increased in each of the southern Illinois areas in the second quarter and in the first six months were larger in value than in the same period last year except in East St. Louis.

**Western Tennessee**—A substantial decline in residential contracts during the first half of 1948 largely explains the 30 per cent year-to-year decrease in the total value of awards in this portion of the district so far in 1949. In Memphis, residential dollar volume, totaling \$12.1 million through June, was off 44 per cent and in the remainder of western Tennessee was off 7 per cent from a year ago. The number of dwelling units contracted for in Memphis dropped from 3,200 in the first half of 1948 to 1,800 this year bringing the three and a half year total to 16,300. Residential volume rose sharply in the second quarter, however, but remained 37 per cent below last year in terms of value and 32 per cent below in terms of dwelling units.

In the nonresidential field, Memphis is one of the few areas in the district where the value of contracts for manufacturing construction in the first half year was larger than it was a year ago. However, total nonresidential contracts were off from \$11.6 million to \$10.4 million. Commercial construction awards in Memphis were only one-third as large in value as in the first half of 1948 but public works and utilities work was up 12 per cent.

**Arkansas**—A smaller volume of most types of construction except that in the public works and utilities category has been contracted for this year as compared with the first half of 1948 in the state as a whole. In Little Rock awards in this category and for manufacturing plants were larger than a year ago, but total nonresidential awards totaling \$5.1 million were off about 65 per cent. Housing contracts in Little Rock also dropped sharply, totaling \$2.5 million, or about 55 per cent less than last year. The decline was slightly smaller in terms of dwelling units, since the number dropped from 695 last year to 295 in the first half of 1949. As in most parts of the Eighth District, resi-

dential volume picked up considerably in Little Rock in the second quarter but continued below last year in terms of units and dollar volume. The value of nonresidential awards, however, declined further in the second quarter despite an increase in manufacturing and commercial building awards.

In the remainder of Arkansas residential contracts through June were 30 per cent larger in value than in the first half of 1948, and total nonresidential awards were up 21 per cent because of a larger volume of public works and utilities contracts. Both major categories also showed an increase in the second quarter, with sizable gains reported in manufacturing and public works and utilities contracts.

**Louisville**—The data covering the district portion of Kentucky are limited to those for Louisville. In that city residential contracts through June amounting to \$7.2 million were up 20 per cent in value from a year ago and the number of dwelling units contracted for increased from 678 to 873. In the second quarter housing awards were larger than they were in the comparable period of 1948. Nonresidential contracts valued at \$8.8 million also totaled larger than in the first half of 1948 with the increase concentrated in manufacturing and commercial construction. The value of nonresidential commitments rose 20 per cent in the second quarter when increases in commercial and public works and utilities contracts more than compensated for a reduction in manufacturing awards.

**Evansville**—Although substantially more work was contracted for in the second quarter than in the first, construction awards valued at \$5.5 million for the first half year totaled only about one-fourth of the dollar volume during the same months last year. Residential volume through June estimated at \$2 million was about one-half what it was last year in the first six months, while nonresidential awards were valued at \$3.5 million, or about one-fifth of last year's. Declines occurred in all major categories of non-housing awards. In the second quarter of 1949 residential contracts increased substantially but did not reach the level of the same period last year. Nonresidential awards also increased, reflecting a pickup in commercial and miscellaneous types of work.

#### THE FUTURE

The trends in construction in recent months are likely to continue during the remainder of the year. In the nonresidential field the available evidence indicates that industrial construction will represent a smaller proportion of total activity this

year than last, for reasons suggested earlier. Commercial construction volume during the remainder of the year is not likely to show appreciable fluctuations from current levels. In the non-housing field, most indicators suggest that public construction expenditures will continue to become relatively more important as public buildings, highways and streets, sewers and water supply plants and the like come under construction.

A survey of firms active in the nonresidential field in the St. Louis area reveals the general belief that private nonresidential construction, particularly industrial and commercial, has passed its peak. Construction other than industrial and commercial at the present time provides considerable volume for many of these contractors but the consensus is that the over-all backlog is relatively small and few major jobs are pending.

Basically, the problem of residential construction is one of marketing. The need for housing remains one of the major problems of many people, despite the fact that it may be a less urgent need now than a year ago. There is a demand for low and moderately priced housing, and while construction of higher priced houses continues, there is evidence that many builders already are shifting to less expensive units. But it is apparent, too, that even more emphasis needs to be placed on construction in the low and moderate price range.

The Housing Act of 1949 which provides for Federal aid to local communities for new low-income housing, represents one approach to this problem. However, housing facilities constructed under the provisions of this act are not expected to become available until some time in 1950. A considerable amount of time will be required in most communities to initiate and complete the necessary preliminary steps required by the act.

Measurement of the need for housing in a specific area is difficult. It is a function of population growth and migration; of the rate at which new families are created; of income and savings; and other factors—all related to the supply of dwelling units available. Nationally the Housing and Home

Finance Agency estimates a need for 6 million additional nonfarm units by 1960 to keep pace with increasing family requirements for "adequate" housing. In addition the agency estimates that some 8.5 million nonfarm units will need to be replaced or rehabilitated.

If these calculations are applied to the Eighth District, an additional 700,000 nonfarm units would be needed in this area by 1960. Official estimates of the number of units constructed in past years in the district are not available. If the annual average cost per dwelling unit as estimated by the BLS on a national basis is applied to the value of residential contracts awarded in the district since 1940, an estimate of some 180,000 dwelling units constructed is obtained. During the same period, the population of the district has increased by about 370,000. Permits for approximately 74,000 new housing units were granted in the major metropolitan areas of the Eighth District from 1941 through 1948, according to Roy Wenzlick and Company. The number of permits granted reached a peak in St. Louis in 1941, in Evansville in 1943 and in Little Rock, Louisville and Memphis in 1947. In proportion to their 1940 population, Memphis and Little Rock have had the largest increases in dwelling units since 1941, followed fairly closely by Evansville, while St. Louis and Louisville lag far behind. Memphis has had twice as many new dwelling units in proportion to its 1940 population as has Louisville.

Estimates such as these are more significant with respect to the district's long-term needs than to its current requirements. Part of these immediate needs will be met this year if the trend in construction contracts through June is a reliable indicator of construction activity. Residential volume will be an important factor in holding construction activity in this area during the remainder of the year at a level perhaps not so high as a year ago but considerably higher than in previous peacetime years.

**Gertrude Krausnick Canning**  
**Weldon A. Stein**

