FEDERAL RESERVE BANK OF CHICAGO

ANNUAL REPORT 1962

CONSTRUCTION: Big, basic, diversified

To the Member Banks of the
Seventh Federal Reserve District:

It is our pleasure to submit to you the Annual Report of the Federal Reserve Bank of Chicago for the year 1962.

Following the brief review of major developments in the District, we present a discussion of the construction industry. Probably no other major type of industry is so widespread or closely related to business activity and growth of individual communities.

There have been a number of official appointments, elections and resignations during the year. These are reported on pages 29-31. The Bank's balance sheet and operating statement are presented on pages 32 and 33.

Reflecting the continued economic growth in the Midwest and the rising demand for financial services, the volume of transactions increased further in many departments of the Bank (pages 34-35).

On behalf of the directors, officers and staff, I extend to you warmest thanks for your continued cooperation and counsel.

Sincerely,

Charles J. Scanlon

January 18, 1963

CHARLES J. SCANLON
President

1962 IN REVIEW

Hesitant expansion in business, higher farm income, large rise in time deposits and bank assets

Nineteen hundred and sixty-two closed as it began, on a note of optimism regarding business prospects. While there had been periods during the year of widespread apprehension that a general decline in activity was imminent, each time favorable trends were reasserted and activity moved to higher levels.

Among the factors contributing to temporary setbacks in business confidence were the events touched off by an attempt to raise steel prices in April and the decline in common stock prices during the second quarter, highlighted by a severe break in the market on May 27. These spectacular developments, however, may have had less effect on the trend of business activity than some other forces.

The persistent efforts to reduce inventories of steel and other goods provided a drag on activity during the summer and fall. Another restraining influence was the continued large deficit in the United States balance of international payments. In the financial community, the expectations, widely held at the beginning of the year, that demand for credit would strengthen sufficiently to cause interest rates to increase were not realized.

While these adverse developments hampered the economy during 1962, the year brought substantial gains in industrial production, construction, employment, income, retail sales, personal saving and bank credit. In most of these, gains in the Seventh Federal Reserve District equaled or exceeded those at the national level.

Autos, farm machinery in strong rise

Among the important Midwest industries in which production in 1962 was 10 per cent or more above 1961 were autos and trucks, appliances, furniture, industrial machinery, construction machinery and farm equipment. Gains in production of autos and farm equipment exceeded 15 per cent. A rise of about 6 per cent was recorded for television even though production was reduced sharply after midyear in response to an inventory build-up. Steel production both in the District and the United States was about the same as in each of the two previous years.

Motor vehicles, the District's largest industry, operated at a record level in 1962. While the number of vehicles sold was somewhat below 1955, cars and trucks were sleeker, more powerful, more fully equipped and more expensive than in the earlier year. Although sales of autos were at a moderate level in the first quarter, a stronger trend developed in the spring and continued through the end of the year. Altogether, 8.2 million cars and trucks were produced and sold in 1962, 23 per cent more than in 1961.

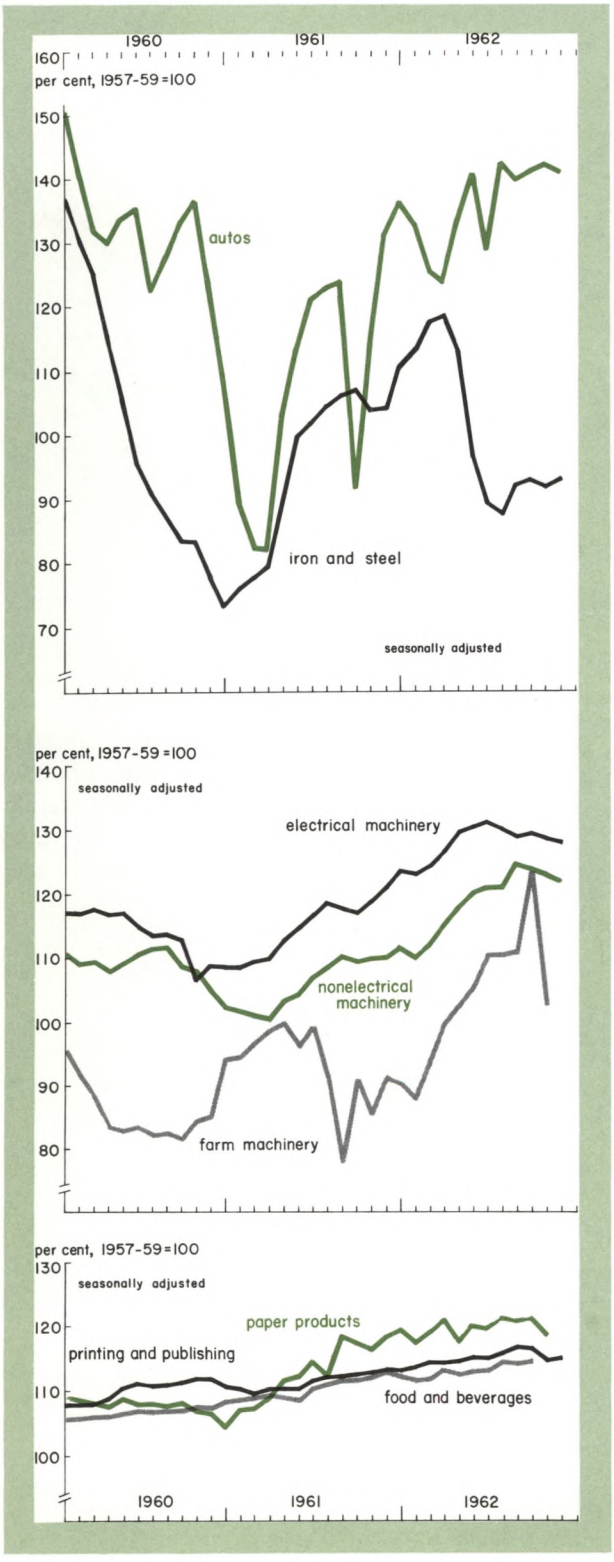
Production by manufacturers of durable goods exceeded the preceding year by 9 per cent, about twice as much as the rise in employment at these firms. The relatively small rise in employment reflects the continued progress in mechanization, the concentration of production in the most efficient plants and new investment in plant and equipment in recent years has been largely directed toward improving efficiency rather than increasing basic capacity, although the two are closely related.

Good year in agriculture

Farm income in the District increased somewhat more than the national average. However, results varied by type of agriculture. Cattle feeders reported substantial income gains as prices of top grades of slaughter cattle advanced. Income of cash grain farmers was up moderately as record yields per acre and substantial Government payments more than offset the effects of reduced acreage of feed grains. Also, the acreage planted to soybeans was increased to a record as acres were diverted from controlled crops. Income of hog producers was about maintained with both prices and production being close to the levels of the preceding year. However, incomes of dairy farmers declined as support prices for dairy products were reduced. While production of milk continued to expand throughout the year, this only partially offset the effects of lower prices.

Prices of farm land rose further during the year to equal or exceed previous record levels in most areas. This rise in value of real estate, along with increases in other farm assets, far more than offset a further

Most Midwest industries
reported substantial gains
in output in 1962



rise in farm debt. As a consequence, the value of farmers' equity in agriculture was at a record high at year end.

Big increase in bank assets

Total bank credit rose at a record rate during 1962 even though business activity, over-all, expanded at a somewhat slower pace than had been widely forecast at the beginning of the year. Loans at member banks in the Seventh District rose almost 12 per cent—more than twice as much as in 1961—and banks' holdings of securities rose about 8 per cent.

Although demand deposits increased only moderately, time and savings deposits of member banks in the District rose 20 per cent during the year with an unusually large proportion of the increase in the form of certificates of deposit. The rapid growth reflected, in part, the effects of higher interest rates offered by many banks after revision of Regulation Q by the Board of Governors of the Federal Reserve System and the directors of the Federal Deposit Insurance Corporation. The change, effective at the start of the year, permitted rates up to 4 per cent. Reserves to support the growth of deposits were provided by the System's purchases of securities in the open market and, in the fall, a reduction from 5 to 4 per cent in reserve requirements on time deposits.

With time deposits rising rapidly and the Federal Reserve System's continuing policy of monetary ease limiting any upward pressure on interest rates, banks were hard pressed to put funds to work at yields which would cover the additional interest expense. Demand for short-term credit by business and consumers was moderate until late summer. Consequently, banks turned increasingly to real estate mortgages and tax-exempt state and municipal securities. For the large District member banks which report weekly, real estate loans increased about 20 per cent while "other" securities, mostly municipals, rose about 35 per cent during the year.

Because of the ready availability of reserves, banks were able to increase loans and investment in tax-exempt securities without reducing holdings of Treasury issues. Total investments rose fairly steadily in contrast with 1959 when investments declined as loans rose. Although total holdings of Governments changed little, banks shifted from short- and intermediate-term issues, which had been built up sharply in 1961, to bonds with maturities of five years and longer. Large Seventh District banks reported a net decline of about 500 million dollars in Governments maturing in five years or less which was offset by a somewhat greater rise in holdings of longer maturi-

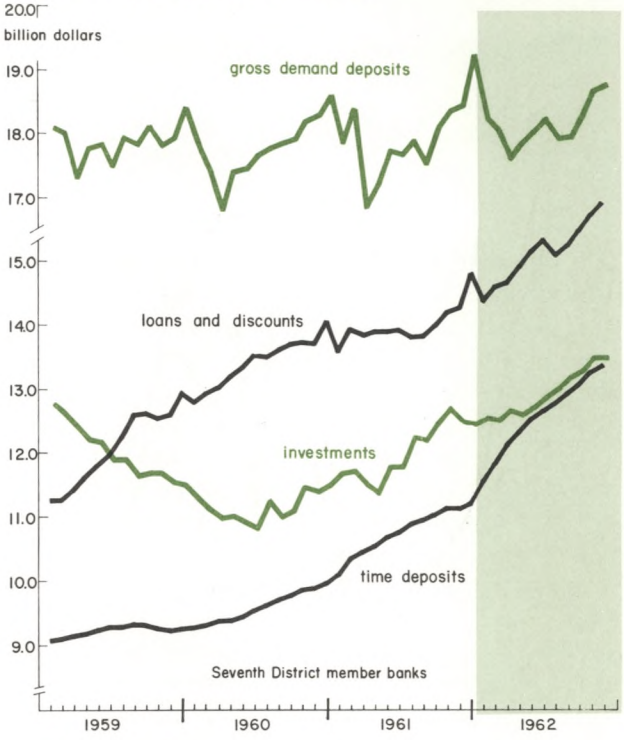
ties. Although this shift was accomplished largely through the Treasury's advance refunding operations rather than through purchases and sales in the market, it nevertheless reflected the banks' desires to move into higher-yielding issues.

Interest rates on long-term investments decline

The combined effect of the large accumulation of savings and the ready availability of bank credit was to increase the total supply of funds seeking investment somewhat faster than the growth in demand for credit. This was reflected in a fairly steady downward pressure on interest rates. At year end, average long-term yields on outstanding Governments, corporates and municipals were ¼ to ⅜ per cent below the levels at the beginning of the year and were close to their lows for the year. Mortgage rates also declined somewhat.

Rates on short-term money market paper remained within a narrow range above 2.70 per cent—slightly higher than the average maintained through most of 1961. Downward pressures in the short-term area were offset by both Treasury and Federal Reserve efforts to keep these rates competitive with yields obtainable on comparable foreign securities. The purpose of such action, of course, was to reduce the adverse effects on the United States balance of international payments from short-term capital outflows. A major factor in this effort was the Treasury's policy of financing its cash needs almost entirely by sales of short-term securities. This was augmented to some extent by System purchases of intermediate and long-term securities in its open market operations.

Surge in time deposits supplied funds for both loan and investment gains in 1962



The discount rate remained at 3 per cent throughout the year. Member banks had little need to borrow from the Federal Reserve Banks because of generally easy monetary conditions. Outstanding borrowings by member banks in the Seventh District averaged only 25 million dollars per day in 1962.

Big, basic, diversified

CONSTRUCTION

At the end of 1962 the value of all structures in the United States was approximately 1,000 billion dollars.[1] This total, well over half of the nation's man-made wealth, is divided about equally between housing on the one hand and business and government structures on the other.

Construction stands with agriculture and textile manufacturing as an industry supplying a fundamental necessity of life. For the most part, construction provides shelter—the homes, schools and churches in which people live, study and worship, and the factories, stores and offices in which they work. In addition, it encompasses many specialized applications, including defense installations and the highways, railroads, pipelines and air terminals serving the nation's transportation requirements.

Unlike the production of food and clothing, construction activity is not concentrated in specialized regions of the nation. In each community there are construction contractors and men skilled in the building trades who handle most of the run-of-the-mill jobs. And, in large communities there are firms with facilities and skills to tackle even the most complex projects. Moreover, because of the weight and bulk and widespread availability of raw materials, factories for the production or processing of such important building supplies as brick, tile, cement and gypsum products are widely dispersed throughout the nation.

Growth rate—4 per cent

During the 17-year period since the end of World War II, outlays on new construction have totaled almost 670 billion dollars, or more than 10 per cent of all expenditures on goods and services. In terms of 1962 prices, construction in this period exceeded 780 billion dollars. A rough comparison with the comparable period following World War I, 1919-35, indicates that the volume of construction since 1946 was about

Earthmoving costs less than in the Twenties

[1]Estimate based on data developed by Raymond W. Goldsmith and the U. S. Department of Commerce.

twice as great as in the earlier period and accounted for a somewhat larger proportion of total spending on goods and services.

Depreciation and demolition of existing structures also have been at record rates since 1945. Nevertheless, there has been a continuous rise in the nation's inventory of buildings and other structures. During the postwar years the inventory has grown 75 per cent compared with a 30 per cent increase in population. The inventory of structures in constant-dollar per capita terms is now about $5,500 compared with $4,100 in 1945 and $4,600 in 1929. Nonresidential structures have increased somewhat more rapidly than housing.

On the commonly used "rule of thumb" that the over-all average life for structures is about 50 years, the annual depreciation of the current stock, at a rate of 2 per cent, would be at least 20 billion dollars. Population growth, about 2 per cent a year, requires not less than 20 billion dollars of new construction if the stock is to be maintained on a per capita basis. Since construction currently is running at a rate somewhat in excess of 60 billion dollars per year, the inventory of structures is being increased on a per capita basis at an annual rate of about 2 per cent. The current level of construction activity, therefore, may be increasing the inventory as much as 4 per cent per year, in line with the rate of economic expansion many believe to be required for reasonably full use of the nation's labor supply and other resources.

A "local" industry

Since requirements for living space and other structures are closely related to population, both the inventory of structures and the current level of construction activity in any area tend to be proportional to the size and volume of over-all economic activity. This is true of the Seventh Federal Reserve District and, for any fairly long period, tends also to be the case for most communities within the District.

In recent years construction employment in the five Seventh District states—Illinois, Indiana, Iowa,

What is "construction"?

New construction includes the design and engineering as well as the production of all new structures and major additions and alterations of those in existence. Maintenance and minor repair work are excluded. In addition to buildings, construction includes dams and bridges, airfields, highways, canals and navigation channels. Equipment which is an integral part of a structure, such as plumbing, heating, air conditioning and elevators, is included, but machinery and furnishings which can be removed readily are excluded. Costs of site preparation are part of construction but the acquisition of land, often an important part of the total cost of a project, is excluded.

Obviously, there are difficulties of classification in determining what is new construction and what is not. The distinction between major alterations and repairs is not always clear. Another difficulty concerns the nature of such products as mobile homes and houseboats which may serve the same functions as other structures and contain similar materials but are not included in the estimates of total value of new construction. The various types of new construction may be classified in many different ways. Often, as in this article, they are grouped conveniently into three broad categories: residential, private nonresidential and public. In recent years the residential sector has accounted for about 40 per cent of total construction and each of the other sectors 30 per cent. Total construction often is divided into two other broad aggregates—private and public—as in the following table showing new construction in the United States during 1962.

	Value (billions)	Proportion
Private construction	**$ 43.7**	**71.3%**
Residential (nonfarm)	25.1	41.0
Industrial	2.8	4.6
Commercial	5.0	8.1
Institutional buildings	3.6	5.8
Farm construction	1.6	2.6
Public utilities	5.4	8.8
All other private	0.3	0.5
Public construction	**$ 17.6**	**28.7%**
Residential	1.0	1.6
Nonresidential	5.1	8.3
Military facilities	1.3	2.1
Highways	6.1	10.0
Sewer and water systems	1.8	2.9
Public service enterprises	0.5	0.8
Conservation and development	1.5	2.4
All other public	0.4	0.6
Total new construction	**$ 61.2**	**100.0%**

Note: Totals do not add due to rounding.
SOURCE: U. S. Department of Commerce.

Michigan and Wisconsin—has averaged 15 per cent of the total for the nation, about the same as the share of the nation's population residing in these states. While larger than proportional shares of some types of building materials are produced in the District, including the general categories of stone, clay and glass products and plumbing and heating equipment, this is not true of some other building materials. The lumber industry, once of great importance in Michigan and Wisconsin, has long since shifted to the South and Far West where more ample stands of saw-timber exist. However, the District produces about 25 per cent of the nation's millwork—windows, doors, wood flooring, etc. — and about 70 per cent of the construction machinery.

Fifteen per cent of the economy

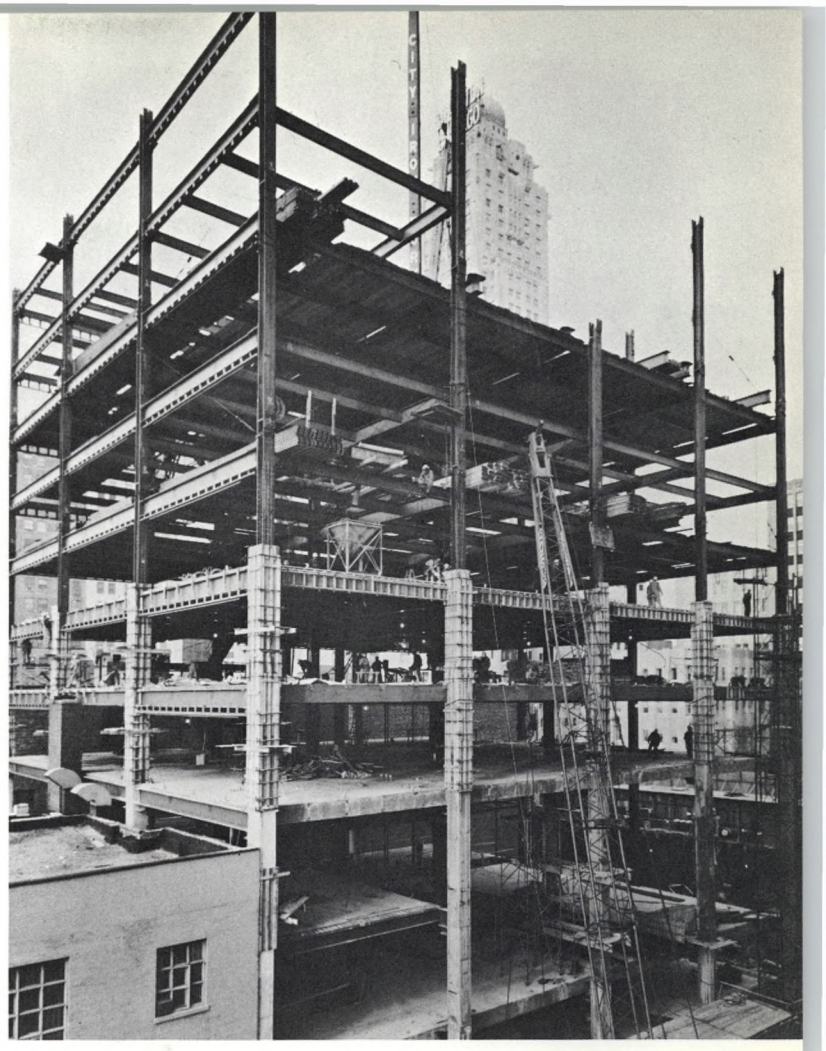
New construction of all types, including major additions and alterations, has accounted for about 11 per cent of total spending on goods and services in recent years. If outlays for the repair and maintenance of existing structures are included, the proportion is boosted to 15 per cent. On this basis, construction activity was at a record level of about 83 billion dollars in 1962, 7 per cent above the previous year.

Employment in contract construction averaged about 4.1 million in 1962, somewhat more than 6 per cent of total employment. In addition to those employed by contractors, there are many thousands of construction workers on the "force accounts" of business firms and governmental bodies.

About 2 million workers in manufacturing and mining produce building materials and components, and construction machinery. Other hundreds of thousands of persons are engaged in finance, transportation, distribution and other services directly related to construction.

Altogether construction and related activities provide employment for, perhaps, 8 million workers—about 12 per cent of the total. While these estimates are for the nation, the proportion of Midwest employment dependent upon construction is similar. Contract construction currently is somewhat less important in this region than in the nation, but production of structural components and construction machinery is relatively more important.

Production of construction materials accounts for over 10 per cent of all manufacturing. Virtually all of the nation's output of cement, asphalt, wood products and other building materials and a substantial portion of all steel, aluminum, paint and glass are used in construction. The level of construction activity in large degree determines the demand for plumbing and heating equipment, electrical supplies, air conditioning equipment, water heaters and household appliances.



Construction uses most of the nation's cement and a large proportion of the steel output

Construction and business fluctuations

The demand for structures, basically, is similar to the demand for most other goods and services and depends very largely upon income, population and taste. Families, businesses and public bodies continually are weighing decisions to build, rent or lease. These decisions in the aggregate determine the overall pattern of total spending and, therefore, the allocation of resources to construction and other uses.

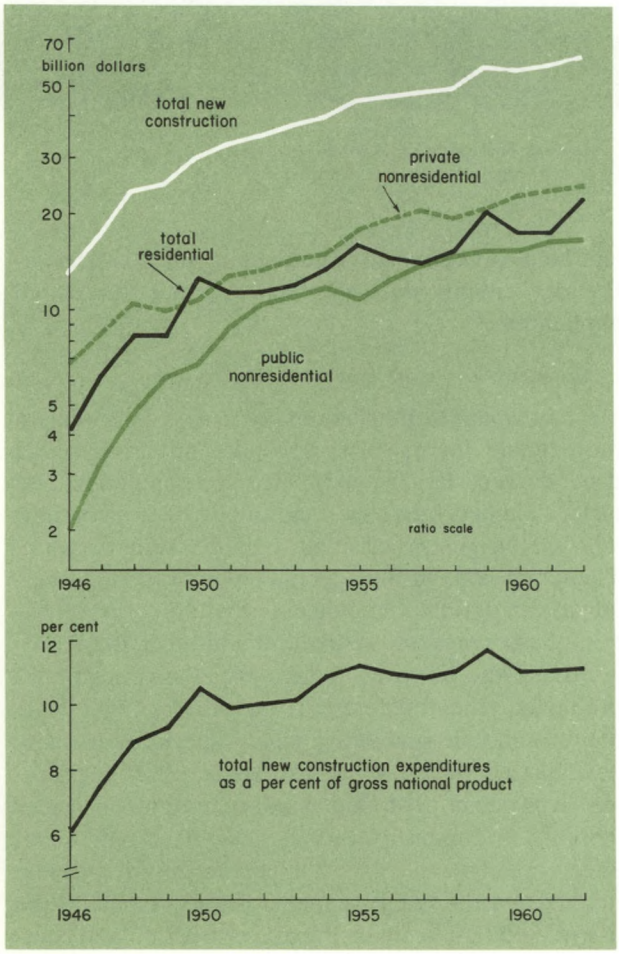
Structures, however, have special characteristics that make them different from other goods. Normally immobile and often highly specialized, many have limited marketability. Moreover, their long service lives mean that depreciation and other forces working to diminish the total stock have only small effect in any one year. The existence of a resale market and the fact of long service life facilitate the use of credit in the financing of construction and com-

monly a large share, often 50 per cent or more, of the cost is financed with borrowed funds.

These characteristics caused construction activity to be highly cyclical prior to World War II. Increases in the inventory of structures during booms reduced the need for new building in subsequent years. Furthermore, in periods of recession individuals and businesses became more reluctant to borrow and lenders more cautious in extending new credit to finance building. Defaulted loans resulted in foreclosures which depressed market prices and reduced the profit potential of new ventures. These factors were at work between 1926 and 1933 when the dollar volume of private construction declined almost 90 per cent.

Residential building has been more volatile than either public or nonresidential private construction throughout most of the past half century. Five year-to-year declines have occurred in residential construction since World War II. Public construction, nonresidential private construction and the combined total of all kinds of construction, however, have declined in only one postwar year, 1960.

Construction has risen at about the same pace as total output



Demand for housing is closely related to family formation, which during periods of recession usually proceeds at a somewhat slower pace. Moreover, in times of financial stringency families can and do "double up." Homebuilding is relatively more sensitive to credit availability than other types of construction; rents and amortization payments comprise a larger share of borrowers' income than is the case for business concerns. As a result, homebuilding tends to be restricted when credit is "tight," primarily because of heavy demand for loans from other sectors, and stimulated when money is "easy" or confidence is high.

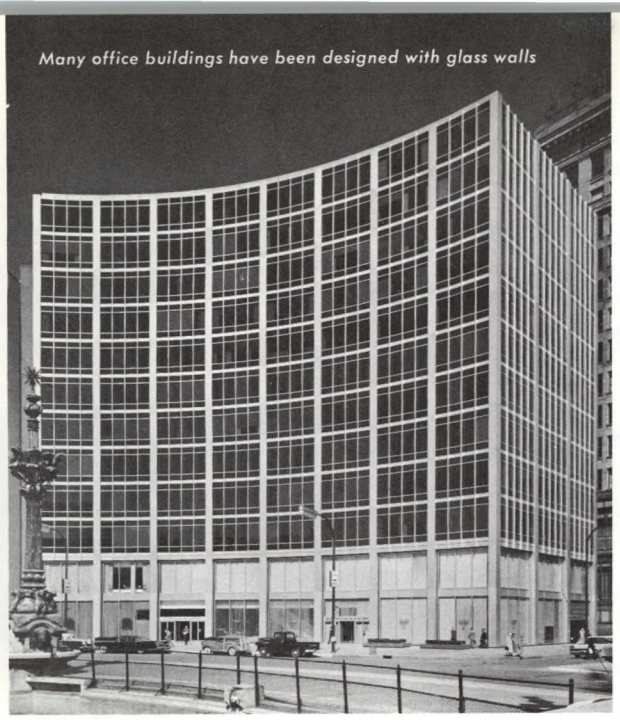
During the prosperous decade of the Twenties, construction activity "peaked out" three years before the start of the sharp general decline in business that began in late 1929. At the top of the building boom — the four-year period 1924-27 — construction accounted for more than 12 per cent of gross national product. This proportion had dipped to 10 per cent by 1929. Between 1929 and 1933 gross national product shrank almost half. In the latter year new construction was only a fourth as great as at the peak and accounted for only 5 per cent of total production.

Public construction, less affected than private by general economic conditions, did not reach a peak after World War I until 1930. From then to 1933 it dropped 42 per cent, as state and local governments encountered severe financial difficulties.

Construction activity, measured in constant prices, did not surpass the peak of the mid-Twenties until 1950, although there was a substantial recovery from the low point of the depression by the late Thirties. Public construction, strongly stimulated by various Federal programs, moved well above the 1929 level by 1936 and remained high until Pearl Harbor.

In the early postwar period the high and rising volume of construction was attributed widely to the "pent-up" needs inherited from the depressed Thirties and World War II. A sharp decline was commonly expected once the backlog of demand was exhausted. Instead, construction activity continued to rise.

After the end of World War II, spending for construction increased faster than total spending, rising from 6 per cent of the gross national product in 1946 to 11 per cent in 1954. Since then this proportion has been maintained with only small variation. The stability and growth of construction during the postwar



Many office buildings have been designed with glass walls

period have been both a cause and a reflection of the stability and growth of the economy as a whole.

In both 1949 and 1954, years that brought slight slowdowns in total economic activity, construction outlays rose. Only in 1960 was there a slight drop in construction from the year earlier, but activity in 1959 had been very high. In the postwar period, therefore, construction can be described as a stabilizing rather than destabilizing segment of the economy.

An industry of small firms

Like most industries, construction has its giants, those that operate on a national and even international basis, but most firms are very small. Average employment is only nine compared with 50 in manufacturing. Seventy per cent employ three or less.

Construction concerns can be created or expanded easily. Many individuals after gaining experience working for existing firms set out to operate as independent contractors. It is possible to start with a relatively small amount of capital. Materials can be obtained from suppliers on terms geared to progress payments and new or used machinery can be leased or purchased with a small down payment and the remainder of the purchase price amortized over several years. Capital requirements also are minimized by extensive use of subcontracting and technological developments such as ready-mixed concrete and prefabrication of components which reduce investment in equipment and inventory.

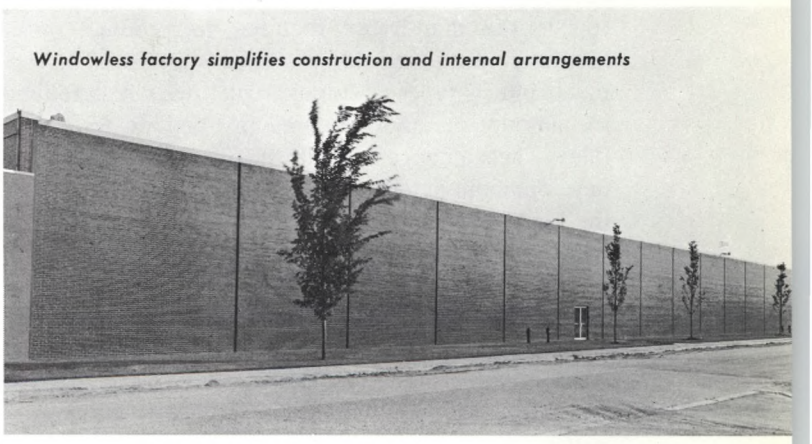
Contractors who have successfully handled small jobs can expand operations rapidly by adding men and equipment. Once a capable work force has been assembled there is a tendency to try to maintain the group in slack periods by accepting contracts estimated to cover out-of-pocket costs.

Many characteristics of the construction industry are conducive to vigorous competition: the large number of firms, ease of entry of new firms and expansion of existing firms; the ready availability of materials and technical knowledge; and the general use of competitive bidding for contracts. Formations and discontinuances of construction concerns, therefore, are relatively higher than for other types of business. In 1961, new firms amounted to 14 per cent of those in operation at the start of the year and discontinuances, 13 per cent. For all businesses these ratios were 9 and 8 per cent, respectively.

The number of construction firms has continued to rise in recent years but much more slowly than in the earlier postwar period. The total now is on the order of 470,000, including both general and specialized contractors. This is about 10 per cent of the number of operating businesses of all types.

Technological change and obsolescence

Before World War II, construction was looked upon as an industry of slow technological change. This view has changed. Construction firms that fail to



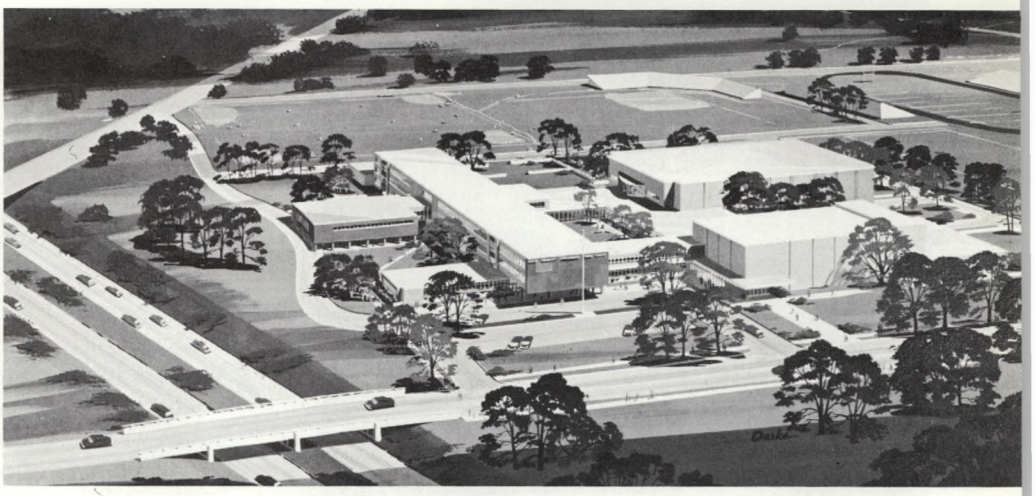
Windowless factory simplifies construction and internal arrangements

adapt to changes in technology soon find they are priced out of the market.

Construction is affected not only by the development of new materials, designs and techniques in the industry but also by outside developments that are quite unrelated to the construction process. These often have their major impact by hastening the obsolescence of existing structures.

An outstanding illustration is the effect of improved layout of industrial plants. This has affected both the type and location of factory buildings. In many areas,

old multistory structures, often located in the central portions of large cities, have given way to new one-story plants on spacious tracts of land in the suburbs accommodating not only the building but parking areas as well. These moves have been influenced also by the increased reliance of workers on automobile transportation and the easier movement of trucks when "downtown" areas are avoided.



Spacious settings commonly provided for new schools

Similar developments have taken place on Midwest farms. Corn cribs are gradually becoming obsolete as a result of the development and gradual adoption of the picker-sheller. This machine eliminates the need for conventional cribs, reduces the man-hours and greatly shortens the time required in the drying, storing and marketing of corn. On many dairy farms the most expensive structure—the dairy barn—is being replaced by simpler and cheaper structures which enable the farmer to reduce the man-hours required to produce milk. Similarly, many farmers have made substantial investments in new types of storage structures which reduce the amount of labor required in handling feed supplies. These changes are illustrative of the impact of developments outside the construction industry upon the kind, amount and location of structures required in particular uses.

The improvements in lighting and air conditioning have had different types of effects. Many factories, for example, are now constructed with few if any windows thereby simplifying both construction and internal arrangement. In sharp contrast, residential structures and many office buildings have been designed with more and larger openings and in some instances "all glass" exteriors.

Illustrative of changes in materials and construction methods have been the rise in use of prefabricated components, greater use of conveyors and new types of cranes to handle materials "on the site" and the spraying on of plaster and fireproofing materials. One of the most impressive improvements in the construction industry has been the use of larger equipment. A given volume of earth, for example, can be moved at lower cost today than was the case in the Twenties. Concrete mixers perform their task enroute to the construction site from the overhead bins containing the aggregates and other ingredients. These and other changes have reduced the man-hour requirements at the construction site and shortened the over-all time required to complete structures.

In the case of public works, modern four-lane, limited-access highways have improved the speed and safety of motor travel. New materials and designs have vastly extended the clear, pillarless spans of exhibition halls and sports arenas. A spectacular development has been the new stadium which can be enclosed in inclement weather, opened in fair.

Among the most striking examples of new structural design in recent years have been in the architecture of banks, churches and schools. But equally significant, if less apparent, have been the changes in design of most other kinds of structures.

Probably the overriding force bringing about innovation in construction has been the continuing pressure to reduce costs and provide a more attractive and serviceable product. One result has been to increase the product per construction worker. Between 1947 and 1962, average construction per worker, in constant dollars, rose 52 per cent. In part, this reflects the increased cost of materials, related undoubtedly to the greater use of prefabricated components. It has been estimated that about 36 per cent of the total expenditure on construction represents "value added" by construction firms compared with 42 per cent in the early postwar period. Prefabrication has had its most striking development in homebuilding where factory-built homes now account for about 17 per cent of the total number built annually.

In construction, the natural human instinct to resist change is strengthened by the complexity of build-

ing codes and the great array of skills or "trades," each of which strives quite naturally to "protect" its own role in over-all activity. With this setting it is perhaps surprising that the pace of innovation has quickened in the industry. This has been, in part, because of the strong postwar demand for construction —a factor intensifying pressures to overcome uneconomic practices. Probably more important has been the resourcefulness of manufacturers in supplying new building materials and components and of designers and engineers in combining them into structures. Increasingly, the slow, time consuming jobs such as bricklaying, plastering and carpentry are being bypassed.

Residential construction—the provision of living space

Since World War II, nearly 20 million new houses and apartments have been built in the United States. This number compares with an estimated 60 million units in the nation's present-day inventory of dwellings.

The cost of the new homes has been nearly 225 billion dollars, or about a third of total expenditures for construction of all kinds during the period. At today's costs, the total outlay would have been higher still, by 30-35 billion dollars.

In addition, 57 billion dollars was spent on residential alterations and additions, much of it providing added living area to existing structures. The construction of hotels, dormitories and motels has accounted for a further outlay of 8 billion dollars.

Maintaining and repairing residential structures amounted to roughly 100 billion dollars, or nearly half as much as the cost of all the new homes built. While not "construction" in the usual sense, repair and maintenance make use of the same kinds of materials and manpower and thus constitute a part of over-all residential building activity.

Although the number of new homes built since World War II is a third of the total now standing, this overstates the *net* addition to the nation's housing. Between 1950 and 1960, for example, about 15 million new homes were built, but the total housing inventory grew only 12.2 million; demolitions and alterations of existing structures made the difference (see table).

In 1960 the five District states accounted for 16 per cent of the nation's housing units—the same as their proportion of the total population in that year. During both the Forties and Fifties the housing supply in these states increased somewhat less, proportionately, than in the nation—largely a reflection of the exceptionally rapid growth in population and residential construction in the South and Far West.

Michigan stands apart from the other District states with a gain in housing units that exceeded the nation's

Anatomy of the growth of housing in the United States, 1950-60

Units added	
New construction	15,000,000
Conversion of nonresidential structures to dwellings	1,100,000
Conversion of large housing units to smaller	800,000
Total added	16,900,000
Units subtracted	
Demolition and other destruction	3,700,000
Merger of small units into larger	1,000,000
Total subtracted	4,700,000
Net addition	12,200,000

in the past two decades. This, of course, was associated with the state's substantial population increase, particularly before 1957, under the impetus of high levels of defense and automobile production.

Population gains have brought about the largest part of postwar growth in the nation's stock of housing. During the Fifties, for example, three-fourths of the 12 million net gain in housing inventory was required to accommodate a 9 million increase in households. The additional 3 million units enabled some previously doubled-up families to find homes of their own and served also to lessen pressure on the housing supply and thus facilitate needed relocation of population.

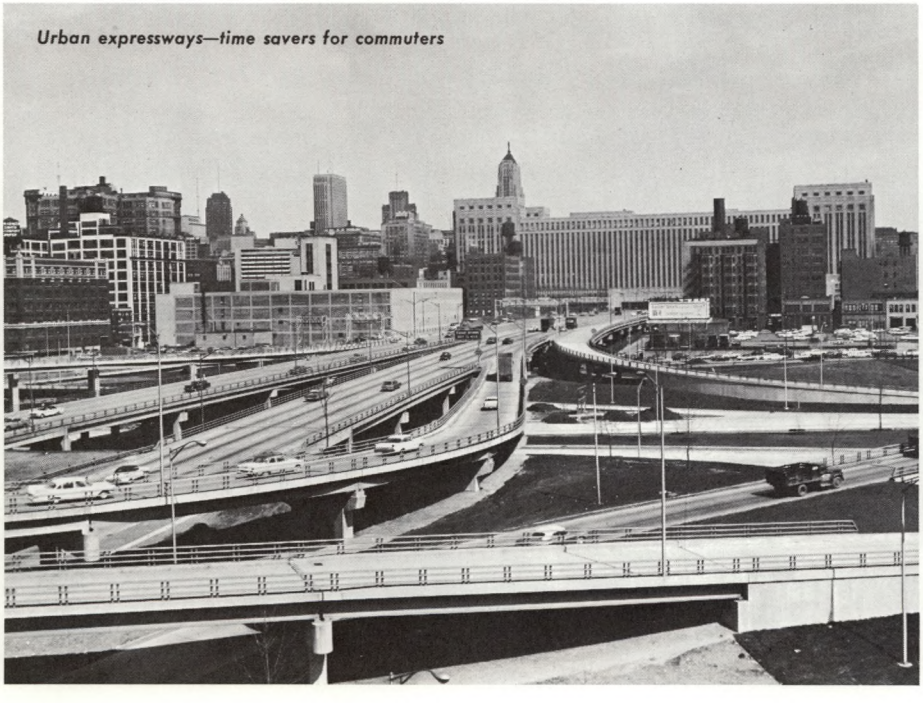
New homes in growing areas

Mirroring closely the pattern of postwar population growth, homebuilding activity has been considerably more active and enlargement of the housing inventory more pronounced in metropolitan than in nonmetropolitan areas. In the five District states as a group, the stock of housing in metropolitan communities expanded 29 per cent between 1950 and 1960, while the over-all gain in rural areas and smaller cities was only half as large, 14 per cent. Within the large metropolitan areas growth was greatest, by far, in the suburbs, which scored an over-all increase of 55 per cent. The central cities of these areas gained also but only about 16 per cent.

In the major Seventh District centers, expansion of housing in suburban communities almost exactly matched the rise in population, as would be expected. Within the cities, however, moderate enlargement of the housing supply took place alongside either outright decline or considerably less-than-commensurate growth in the number of inhabitants.

On balance, these tendencies are indicative of the "loosening up" of urban housing that took place during the period. Undoubling of families and other home occupants began as soon as building activity resumed in the wake of the war and accounted for a good share of homebuilding in the earlier postwar years. Since the early Fifties, this factor has been of dwindling significance. To the extent that homebuilding since then has outpaced population growth, vacancy rates have tended to rise somewhat, not only permitting easier movement of population within the city but pushing the older, less desirable and often dilapidated housing units closer to eventual demolition.

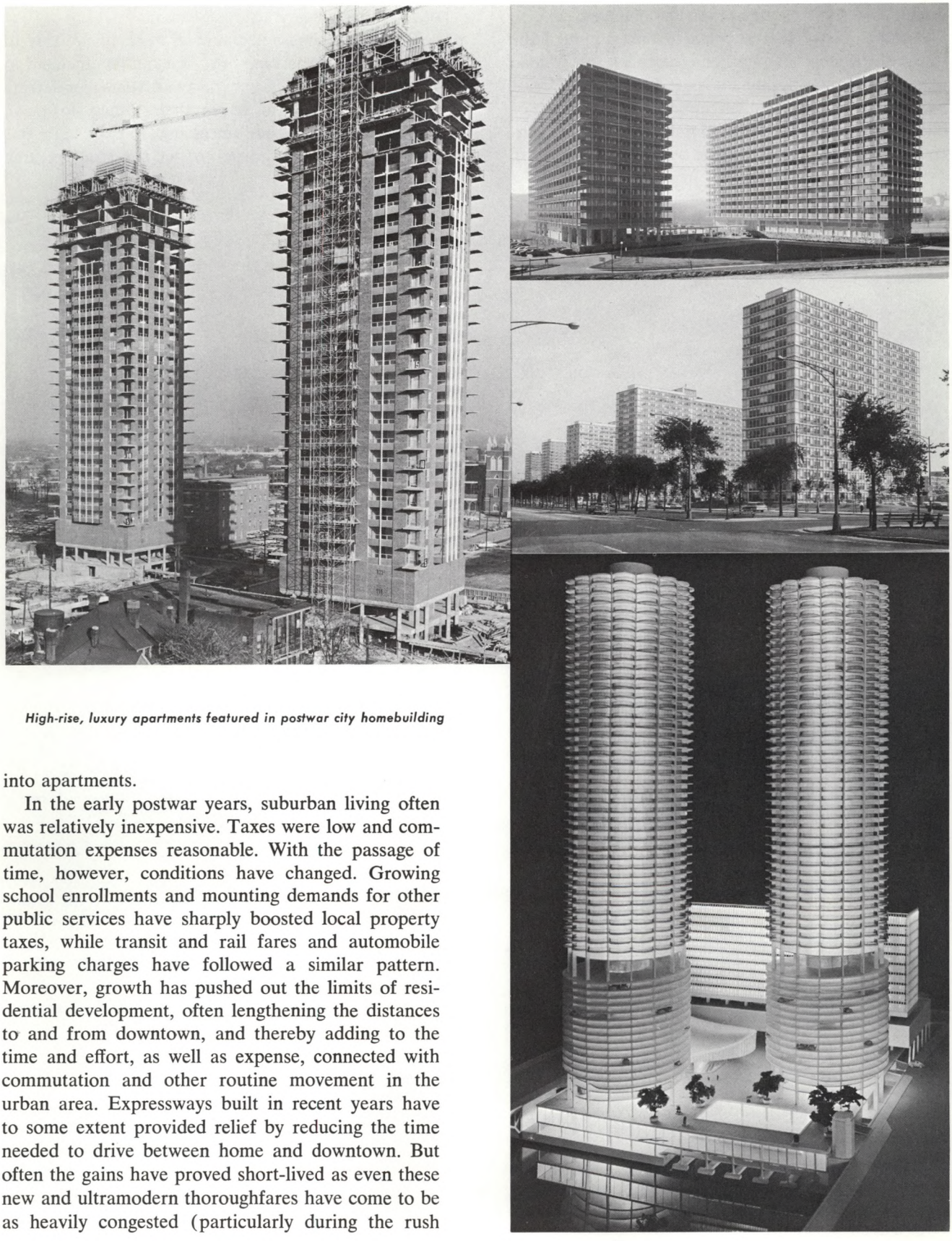
The large majority of new homes built in the suburbs since the war have been single-family, detached houses, spread out over huge acreages of one-time farmland. In the past half dozen years, however, the construction of apartments has greatly increased. While much of the new apartment building has taken place in the suburbs, a sharp upsurge in multi-family construction has occurred inside the big cities.



Urban expressways—time savers for commuters

Return to the city?

Many observers interpret the resurgence of in-city apartment construction as a sign that the "flight to the suburbs" has passed its peak. Prospects of a big increase in family formations in the next few years are cited as one reason. Newly married couples ordinarily seek rental housing — often in locations close to work and the recreational and cultural attractions of downtown. Furthermore, increasing numbers of couples whose children are grown and away at school or married are reported to be "escaping" from the cares of homeownership by moving



High-rise, luxury apartments featured in postwar city homebuilding

into apartments.

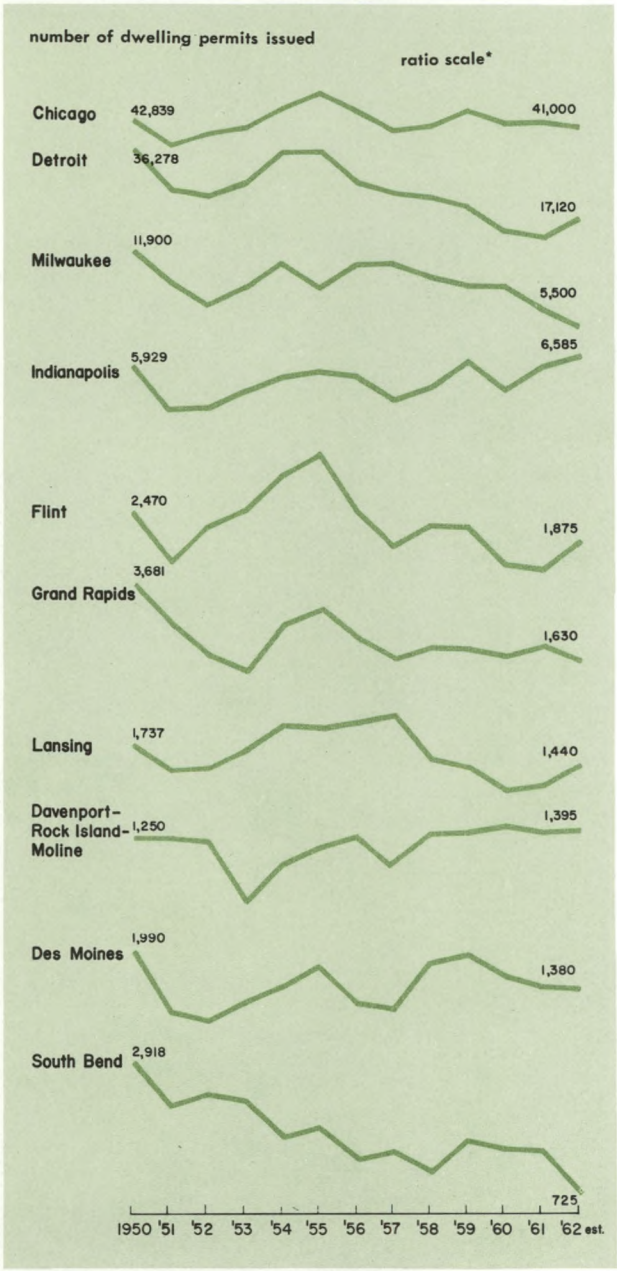
In the early postwar years, suburban living often was relatively inexpensive. Taxes were low and commutation expenses reasonable. With the passage of time, however, conditions have changed. Growing school enrollments and mounting demands for other public services have sharply boosted local property taxes, while transit and rail fares and automobile parking charges have followed a similar pattern. Moreover, growth has pushed out the limits of residential development, often lengthening the distances to and from downtown, and thereby adding to the time and effort, as well as expense, connected with commutation and other routine movement in the urban area. Expressways built in recent years have to some extent provided relief by reducing the time needed to drive between home and downtown. But often the gains have proved short-lived as even these new and ultramodern thoroughfares have come to be as heavily congested (particularly during the rush

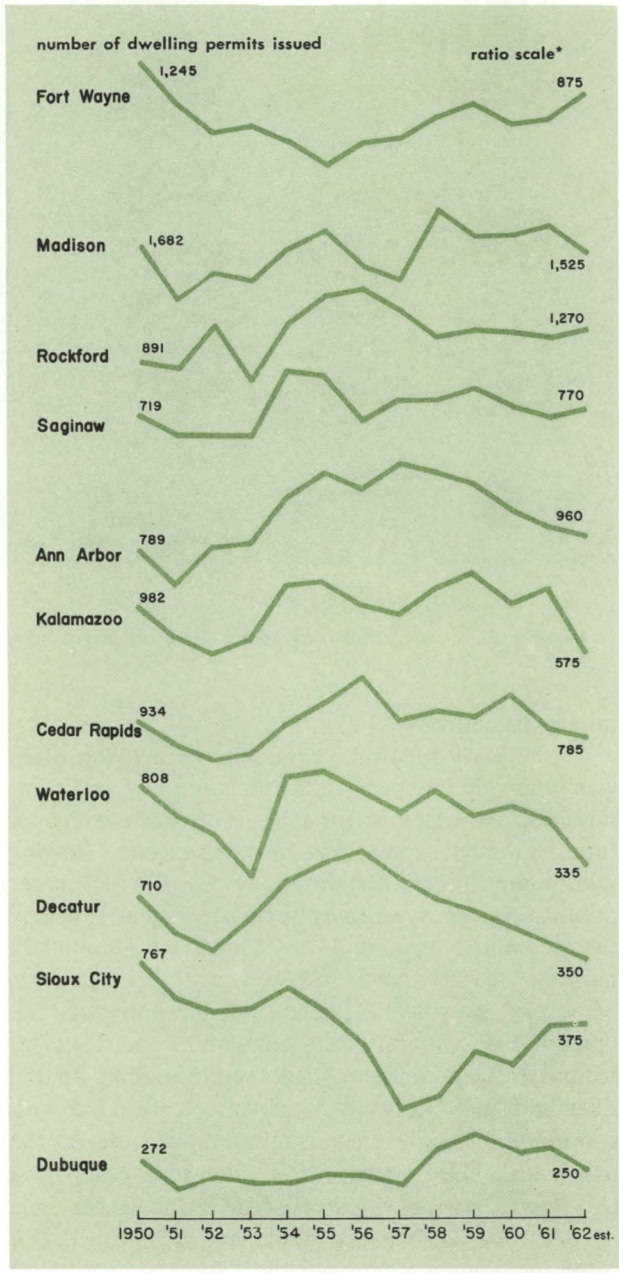
hours) as the routes they have supplemented.

Another factor that appears to have dimmed the luster of the single-family home has been the plateau in market prices during the past few years. Resale recently has often entailed either a capital loss or little more than recovery of initial outlay. Homeownership, therefore, has lost some of the favor as a form of investment that it enjoyed earlier.

With sluggishness in the market, families likely to move from time to time have become less inclined to buy than in the earlier postwar years, preferring to rent in order to assure their ability to move promptly when circumstances demand. In part, this has simply shifted a portion of the supply of existing

Profiles of homebuilding in Midwest metropolitan areas





Note: Data are shown for each Seventh District standard metropolitan statistical area (SMSA) in which at least 80 per cent of building activity is covered by Department of Commerce reports. Chicago area includes Northwest Indiana.

*On a ratio scale equal increases or decreases indicate equal percentage changes.

Population and the housing inventory in major Midwest metropolitan centers, 1950-60

	Suburbs		Central city	
	Population	Housing units	Population	Housing units
	(per cent change)			
Chicago	72	71	— 2	10
Detroit	79	79	—10	6
Milwaukee	42	45	16	28
Indianapolis	78	75	12	18
Des Moines	19	20	17	25

single-family houses from owners to tenants. Even more significantly, it appears to have constituted one more reason for the switch in emphasis in new building from single-family homes for owner occupants to multi-family units for rental occupants.

Some indication that living in the city has regained favor on its own merits, and not solely because it gives access to a greater variety of rental housing, appears in the return to popularity of cooperative apartments. "Co-ops" call for much the same form of "equity" investment and assumption of ownership risks and responsibilities as single-family houses. Under the relatively new and thus far little used device of "condominium," the position of the occupant of a unit in a multi-family structure even more closely resembles that of the individual homeowner; each occupant has a mortgage loan financing his "property" and each makes an equity investment. This has the added appeal that real estate taxes and mortgage interest, unlike monthly rent, are deductible under the individual income tax.

Revival in rental housing

The pickup in apartment construction of the past five years already has carried the annual volume of multi-family starts well above the peak rate of the Twenties. Nationally, multi-family volume in 1961 totaled 375,000 units—10,000 more than in 1925—while last year's total is estimated at nearly a half million. Cumulatively, however, the postwar period has fallen far short of matching the 4.3 million apartments constructed during the 10 years from 1920 to 1929. From 1947 through 1962—a span of 16 years—the total was considerably smaller, at about 3.6 million units.

In a relative sense also, the current upsurge has failed to match the earlier boom. Last year's record number of multi-family starts was only about a third of the combined total of new single- and multi-family homes; during the Twenties, apartments accounted for nearly 40 per cent of all the homes built.

Among the larger Seventh District centers, *Chicago* has seen the most vigorous expansion in apartment construction in the past few years. By a succession of yearly gains that began in 1957, the number of new apartments built in the area in 1962 pulled abreast of the number of single-family homes. Even so, the pace of multi-family construction last year was well below levels reached in the Twenties. In that earlier boom period, new apartments generally were confined to Chicago, where they spread throughout the city—although such large, close-in suburbs as Evanston, Oak Park and Cicero also had a sizable volume.

The contemporary upsurge, in contrast, has extended far into the outlying suburban area, while leaving many sections of the city comparatively unaffected. During both periods, the construction of multi-story buildings, generally in the high-rental

Since World War II—nearly 1.4 million mobile homes

category, reached substantial proportions—especially along the lakefront, both north and south of the Loop. High-rise structures have also been characteristic of much of the public and low-to-moderate-income privately owned urban renewal housing built in the recent period. Large areas of the South Side and portions of the Near North and West Sides have been transformed by new construction of this type.

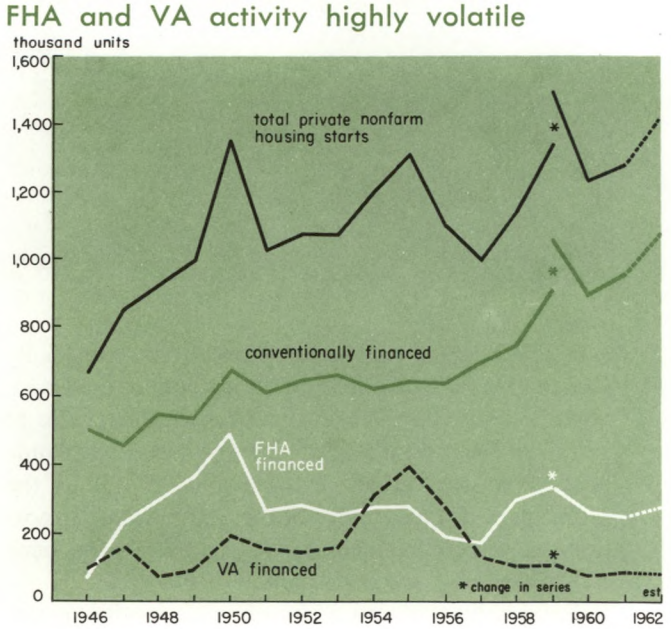
Detroit, by tradition a city of single-family homes,

experienced a sharp increase in apartment building in 1962. A number of sizable high-rise structures close to the downtown section have highlighted this development. Among these are three multi-story buildings under way—along with a number of low-rise townhouses—in the extensive Lafayette Park urban renewal area. Several more are in progress at riverfront sites that offer easy access to the central business district. Altogether, however, the postwar period has lagged far behind the Twenties in the volume of multi-family homebuilding.

In *Milwaukee* more multi-family housing units have been built in recent years than in the Twenties. With the volume of apartment construction relatively small in both periods, Milwaukee continues to have a preponderance of owner-occupied dwellings. Only the low level of single-family homebuilding in the past few years accounts for the high proportion—50 per cent in 1962, or about the same as in Chicago—of multi-family to total starts. In both of the past two years, moreover, apartment construction in Milwaukee has declined, in contrast to experience in the other large centers in the District.

Construction of apartments in *Indianapolis* has moved somewhat erratically in the postwar years, falling considerably short of the pace of the Twenties. Since 1959, there has been a sharp advance, however, with considerable emphasis in the past year or so upon high-rise, luxury units.

Conventional mortgages steadily widen share in postwar home financing—FHA and VA activity highly volatile



In *Des Moines* apartment construction has picked up in the past three years. In 1961, permits were issued for 213 units—up from 147 the year before. Indications are that about 250 apartments were built during 1962, with 100 units in a single 11-story luxury building. Among the larger centers of the District, Des Moines, as Detroit, displays a pronounced preference for the owner-occupied home. In both areas, roughly two-thirds of all homes were owner-occupied at the time of the 1960 Census of Housing. This ratio compares with 48 per cent for Chicago, 55 per cent for Milwaukee and 61 per cent for Indianapolis.

Manufactured homes

Conventional on-site construction continues to account for the overwhelming bulk of new housing. Nevertheless, prefabrication—essentially a process of factory production of housing components needing little more than assembly on prepared sites—has developed rapidly in the postwar years. Sales of prefabricated homes in 1962 are estimated to have reached a record 175,000 units, up from 156,000 the preceding year. For the whole postwar period through 1962, sales totaled about 1.4 million units. If substantially all of these are still standing, prefabricated homes built since 1945 make up about 2 per cent of the nation's present-day housing inventory. Factory-built units now account for about a sixth of new homes. The largest market for prefabricated homes has been toward the lower end of the price scale but this by no means includes all of these structures. In the past few years, spacious and luxurious models selling in the middle and upper-middle price brackets have been widely marketed.

The mobile home is even more completely a factory product. Since World War II, nearly 1.4 million of these wheeled, movable dwellings—defined as units measuring at least 25 feet in length, or weighing 4,500 pounds or more—have been manufactured. These have been in addition to the production of the substantial number of smaller vehicles designed for less permanent use and not ordinarily classed as housing. The Midwest is an important producing area in the prefabricated and mobile home industry, with Indiana and Michigan together accounting for more than a third of the national output of mobile homes.

Credit terms affect homebuilding

The supply and cost of credit have an important influence on homebuilding. In part, this is because of the effect of interest rates upon the cost of financing. At 5½ per cent, the monthly payment needed to amortize a $10,000 loan in 25 years is $61.41; at

Mortgage debt outstanding

Dec. 31	Total all properties	Type of property					Type of mortgage holder						
		Total	Nonfarm residential		Commercial and other	Farm	Total	Savings and loans	Life insurance companies	Commercial banks	Mutual savings banks	Government agencies	Individuals, other
			1 to 4 family houses	Multi-family									
	(billion dollars)						(per cent)						
1946	42	37	23	5	9	5	100	17	17	17	11	6	32
1947	49	44	28	6	10	5	100	18	18	19	10	5	30
1948	56	51	34	6	11	5	100	18	19	20	10	5	28
1949	63	57	38	7	12	6	100	18	21	18	11	5	27
1950	73	67	46	8	13	6	100	19	22	19	11	5	24
1951	82	76	52	10	14	6	100	19	23	18	12	5	23
1952	91	84	59	10	15	7	100	20	23	17	13	5	22
1953	101	93	66	11	16	8	100	21	23	17	13	5	21
1954	114	106	76	12	18	8	100	23	22	17	13	4	20
1955	130	121	88	13	20	9	100	24	22	16	14	4	20
1956	145	135	99	13	22	10	100	25	22	16	14	4	19
1957	156	146	108	13	25	10	100	25	22	15	14	5	19
1958	172	161	118	15	28	11	100	26	22	15	14	4	19
1959	191	179	131	17	31	12	100	28	20	15	13	5	19
1960	207	194	141	19	34	13	100	29	20	14	13	5	19
1961	225	211	153	21	37	14	100	30	20	14	13	5	18

6½ per cent the monthly instalment rises to $67.53. Moreover, when interest rates are relatively high, loan maturities often tend to be somewhat shorter. With amortization in 20 years instead of 25, the monthly instalment on a 6½ per cent, $10,000 loan rises to $74.56. The combined effect of a one-point rise in the contract interest rate and a five-year reduction in term, therefore, is an increase of about $13—or one-fifth—in the monthly mortgage payment.

Under a rule commonly followed by mortgage lenders, a borrower's income must be equal to at least five times his monthly housing expense (monthly mortgage amortization plus provision for insurance and real estate tax). In the example given above, the shift from "ease" to "tightness" in the mortgage market would increase the income needed to qualify for the mortgage about $65 a month. From this it is evident that credit terms can have a substantial effect on the number of potential home buyers who qualify as borrowers. Of course, conditions giving rise to higher mortgage interest rates may also lead to smaller loans relative to property values. The effect of this would be to *lower* monthly mortgage payments but at the expense of larger down payments.

Credit market conditions are influential in other ways as well. With an upward movement in market rates of interest, new Federal Housing Administration (FHA) and Veterans Administration (VA) loans, which are subject to statutory or administrative maximum rates, often are "discounted." While this keeps their effective yields in line with yields on other investments, the aversion of some life insurance companies and mutual savings banks to discount transactions reduces the supply of funds available for FHA or VA financing. This may be offset by greater availability of money for "conventional" mortgage loans, but only partially, since most of these funds come from different institutions than the money for FHA and VA loans. In 1961, for example, nearly 94 per cent of all single-family home loans made by savings and loan associations were conventional mortgages; the associations' share of the 24.6 billion dollar total of conventional home lending exceeded one-half. On the other hand, FHA and VA loans made up 53 per cent of the 8.9 billion dollars in home mortgages originated by the life insurance companies, mutual savings banks and mortgage companies, as a group, and this constituted 72 per cent of all FHA-VA home financing.

Loan-to-value and maturity requirements typically are somewhat less liberal in conventional mortgage lending than under the insured and guaranteed programs, so that some would-be borrowers are excluded from the market when the supply of FHA-VA loans declines. Changes in credit conditions, therefore, in-

Before

fluence residential construction, both because of the importance of interest in the monthly payments and because of differences in the way that rate movements affect the availability of the various types of mortgage credit.

A conspicuous feature of postwar experience in home financing has been a progressive lengthening of loan maturities and reduction in down payments. In the early years after the war, conventional residential mortgage loans commonly were limited to 15 or 20 years, with required down payments of a third to a half of purchase price. Today, maturities in conventional lending frequently are 25 years and more, with down payments of 20 to 25 per cent and, in some instances, as little as 10 per cent. In FHA and VA financing, "terms" in general have been easier than in the conventional end of the market, and this continues to be true, although the margin has narrowed.

Many observers credit the postwar upsurge in homebuilding in part to the easing in mortgage loan terms and contend that this impetus now is largely past. The equity investments or down payments currently required of home buyers are about as small as practical, especially in view of the flattening out in home prices during the past two or three years. Furthermore, extension of loan maturities has a progressively smaller effect on monthly mortgage payments the longer terms are to begin with. Thus, extending the maturity on a 4½ per cent loan from 20 to 25 years reduces the monthly payment 12 per cent, while stretching it out another five years effects a further reduction of only 9 per cent. If the interest rate is 5½ per cent instead of 4½, the effect is smaller still in an extension from 25 to 30 years—roughly 7½ compared with 9 per cent.

Savings finance housing

The principal suppliers of credit used to finance housing are such savings-type financial institutions as savings and loan associations, life insurance companies and banks. At the end of 1961, more than 75 per cent of the 225 billion dollars in all mortgage debt then outstanding—174 billion of it secured by residential properties—was held by these three categories of institutions (see table on page 17).

Savings and loan holdings of mortgage loans have increased tenfold in the postwar period and since 1954 have constituted the largest single share of mortgage debt outstanding. This rapid growth has been intimately related to the strength in single-family homebuilding, as the associations confine their mortgage lending predominantly to this type of property. Financing of multi-family structures lately has grown in importance to the savings and loan associations. For the greater part, however, this field, calling for the capacity to extend sizable individual loans, is dominated by the larger life insurance companies which have the necessary lending powers.

The share of total mortgage lending by both life insurance companies and commercial banks has in general narrowed in the course of the postwar period. During the past year, however, the commercial banks have displayed renewed interest in residential financing. This, in part, is attributable to the relaxation of Regulation Q early in 1962 to authorize higher interest rates on savings deposits. In the face of vigorous competition for loan volume from other suppliers of funds, the commercial banks' share of total mortgage holdings apparently has changed little during the past year despite a substantial gain in dollar terms.

In the financing of home construction, the commercial banks play an important part in extending short-term credit to developers and builders to finance their operations during the stage of building activity. This is in addition to their role as suppliers of permanent mortgage financing. Frequently the banks hold the permanent loans only up to completion of construction activity, when they are turned over to such long-

After

Public housing has aided urban redevelopment

term investors as life insurance companies, pension and welfare funds and mutual savings banks. In other cases, however, mortgage loans originated by the banks are held in investments for the full term of their amortization.

Government housing

Since the Thirties, the Federal Government has financed the construction of roughly 1 million housing units, about half of them for rental occupancy by low-income families. State and local governments financed an additional 41,000 low-income rental units during this period. Government financing also has provided a sizable supply of housing connected with defense and other Federal installations; about 125,000 such dwellings remained on hand at the end of 1961, a substantial proportion of the total erected at Government expense during the war years having been sold subsequently to private owners.

Provision of housing by the Federal Government at low rentals is a form of subsidy-in-kind to needy persons. The bulk of public housing has been built in the big cities, often on sites cleared of dilapidated privately owned residential structures. Thus, public housing has served not only to improve the economic position of some families but also to aid in removing urban slums.

Urban renewal is another form of Federal participation in slum clearance. Under this program, local governmental agencies acquire title to dilapidated property—if need be by condemnation—clear the land and sell it to private owners for redevelopment. Financial losses incurred in the process are shared by the Federal Government and sponsoring local agencies in the ratio of $2 in Federal money to $1 of local funds (three to one, in some smaller communities).

At the end of 1961, urban renewal activities were under way in 66 communities in the Seventh District states—26 in Michigan, 19 in Indiana, 16 in Illinois, 3 in Iowa and 2 in Wisconsin. Altogether 300 million dollars had been set aside as the Federal Government's share in the estimated cost of 111 separate projects; five of these, all within Illinois communities, had been completed.

Mortgage insurance—aid to financing

Perhaps the most important form of participation by the Federal Government in housing is the protection extended to residential mortgage lenders or investors under the FHA and VA programs of home mortgage insurance and guarantee. The FHA and VA programs have tended to standardize mortgage loans and thereby widen the market for them. This has stimulated the flow of private capital into residential property, especially single-family owner-occupied houses, which have been so important in postwar homebuilding.

Since 1959, FHA and VA have insured or guaranteed mortgage loans on between 25 and 30 per cent of all privately owned new homes built. In the earlier postwar years, the proportion had been generally higher, exceeding 50 per cent in both 1950 and 1955, two of the biggest homebuilding years of the period. Serving to facilitate FHA and VA mortgage financing have been the activities of the Federal National Mortgage Association (Fannie Mae), which provides a secondary market for Government-underwritten loans as well as direct financing for special types of property. Fannie Mae's mortgage portfolio of about 6 billion dollars accounts for half of all mortgage debt held at the present time by Federal agencies.

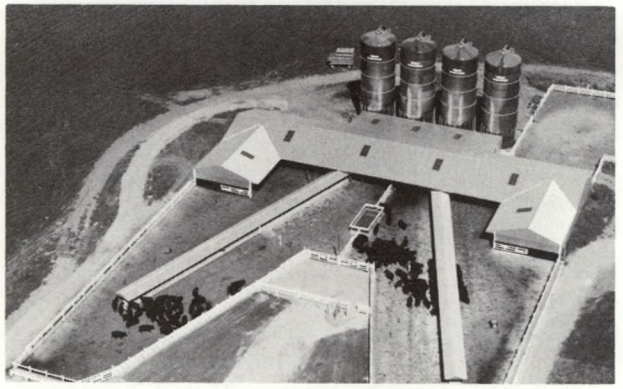
Much of the year-to-year variation in homebuilding activity has been associated with swings in the volume of Government-underwritten mortgage financing. Year-to-year changes in housing starts under conventional or noninsured and nonguaranteed mortgage financing have been comparatively moderate.

New space for businesses and institutions

Just under one-third of all construction during the postwar period has been accounted for by stores, factories, office buildings, hotels, power plants, churches and a wide assortment of other privately owned nonresidential structures. In 1962 prices, expenditures for such facilities have totaled 240 billion dollars, 20 per cent less than outlays on homes but 14 per cent more than the dollar volume of public construction.

About three-fourths of the nonresidential total represents construction by commercial (and industrial) enterprises, including farms. The building of structures accounts for about a third of the capital expenditures in these sectors with the remainder largely for machinery and equipment. Other nonresidential construction is made up of outlays by such nonprofit organizations as schools, hospitals, churches and private clubs.

Mechanization of storage and feed handling characterize cattle feeding layout



Expenditures on certain categories of nonresidential private construction have risen in some postwar years when others have declined. As noted earlier, this component of construction has been relatively more stable in the aggregate than homebuilding.

Because of the prominence in recent years of new office buildings and shopping centers in and around urban areas, there is some tendency to exaggerate the importance of structures of this type in the over-all construction picture. Total "commercial" construction in 1962 was 5 billion dollars, about equally divided between office buildings and warehouses on the one hand and stores, restaurants and garages on the other.

During both 1961 and 1962, commercial building amounted to 8 per cent of total construction. This proportion had been about 5 per cent in the 1947-54 period. Commercial construction started slowly in the postwar period partly because of the still fresh memories of the many projects of the late Twenties in which investors suffered losses. In 1929 commercial construction had risen to 11 per cent of the total in a boom which saw a wave of skyscraper building in major centers.

Commercial construction rose sharply in the mid-Fifties. Requirements for new work space became more pressing and changes in the tax laws permitted faster depreciation, thereby enabling investors to look forward to capital gains on property sales. Moreover, these years witnessed the rapid development of integrated shopping centers with ample parking space that increasingly drew consumers from established shops in downtown and neighborhood areas. The suburban shopping center has enabled retailing to follow the movement of population (especially consumers with relatively high incomes) to outlying areas.

The postwar boom in office construction has been somewhat more concentrated than that of the Twenties, with half of all new skyscraper construction since 1945 taking place in New York City alone. Several major midwestern centers, however, have witnessed a substantial pickup in this type of construction, particularly during the past few years. In Chicago, almost a seventh of all present-day downtown office space is in buildings erected during the last dozen years. The downtown Detroit area also has seen a sizable volume of new office and other commercial construction in the wake of a number of civic improvements—principally Cobo Hall and the Ford Auditorium and new city and county office buildings—facing the Detroit River.

Suburban shopping centers enable retailers to follow customers

New office buildings—a facelift for downtown

Indianapolis and Des Moines also have gained a number of new downtown office buildings, with governmental facilities a big part of the total in Indianapolis. The riverfront Marine Plaza project in downtown Milwaukee has been another major development.

The peak postwar year for capital expenditures in manufacturing and public utilities was 1957, when industrial and utility outlays amounted to 7.4 and 11.3 per cent, respectively, of total construction. These proportions had been exceeded in the Twenties, especially in utilities. In 1962, despite increases from the previous year, factory construction was only 4.6 per cent of the total and the building of public utility plant facilities 8.8 per cent.

Farm construction rose rapidly after the end of the war and amounted to 7.8 per cent of total construction in 1947. After that year, however, it declined as a proportion of the total and shrank in dollar terms from 1952 to 1960, a period when farm income was substantially lower than earlier. In 1961 and again last year farm construction rose somewhat but accounted for only 2.7 per cent of the 1962 total.

Many nonresidential private structures are financed in much the same manner as housing. Because of the specialized nature of nonresidential improvements, the ratio of loan to value for these properties typically is smaller than for homes. Most banks, savings associations, insurance companies and other lenders finance the process of business construction and make mortgage loans on finished structures. Growth in the supply of funds available to financial institutions for investment in long-term obligations in recent years has stimulated interest in commercial and industrial mortgages.

About 37 billion dollars of the total noncorporate mortgage debt of 225 billion outstanding at the beginning of 1962 was secured by commercial and industrial properties. Nevertheless, the largest share of credit used to finance business structures probably is not designated as mortgage credit but constitutes part of borrowings obtained through general purpose bonds and loans.

Construction in the public sector

Postwar construction outlays by governmental units —Federal, state and local—have totaled almost 190 billion dollars, or about 28 per cent of combined private and public construction. Projects under state and local ownership—mostly highways, schools and public utilities—have accounted for three-fourths

of all public construction. Military installations and a variety of conservation and resource development undertakings have been the principal categories in the Federal Government's 25 per cent share.

Construction has been quite stable as a proportion of total public expenditures since 1949, moving within a range of 9.5 to 11.4 per cent. During World War II and the first years that followed, government building activity was at low ebb; available supplies of materials and manpower were devoted primarily to higher priority uses. Before the war, however, construction had constituted a considerably larger proportion of all public spending. In 1927, for example, the share was nearly 19 per cent—largely under impetus of the hard roads program in which the states were engaged—and only slightly lower in the Thirties and early Fifties.

The main reason for the *relatively* lower level of public construction in recent years has been the tremendous expansion since the Thirties and Forties in government expenditures for current as opposed to capital purposes. Much of this growth reflects the adoption or enlargement of expenditure programs entailing transfer payments to individuals (social security and interest on the public debt, for example) that require no accompanying outlay on public "plant" facilities.

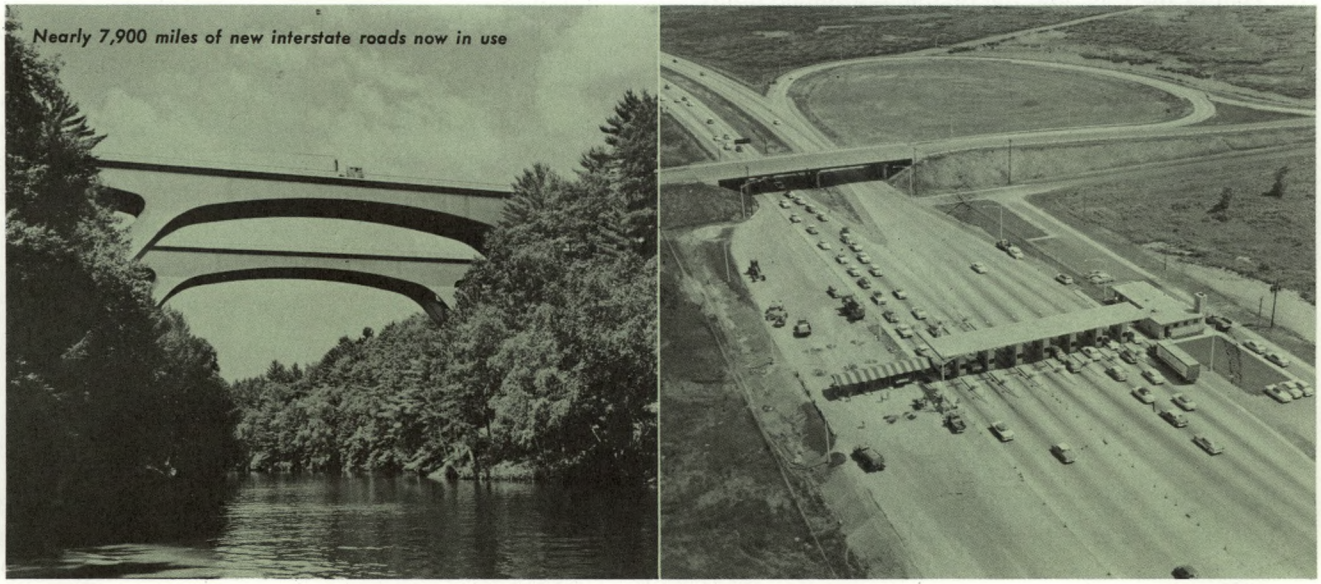
New streets and highways

Measured in dollar terms, spending on new roads and streets is the most important segment of public construction. In 1962, an estimated 5.9 billion dollars—more than a third of total government construction expenditure—was for highway building. Annual expenditures under this heading have climbed rapidly since the war and have more than doubled in the past decade.

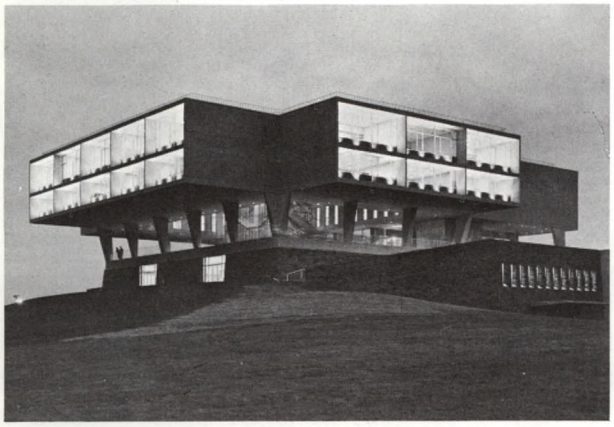
Growth in outlays for new city streets and local roads—facilities mainly to provide access to major urban and interurban traffic arteries—has been incurred largely as a result of the continuing outward sprawl of the nation's urban centers. A big share of public spending for construction of streets and roads has been in new housing developments. The rising demand for intercity highway facilities on the other hand has been traceable largely to the rapidly growing number of highway vehicles in use, although population growth and migration have been influential also.

An important stimulus to highway expenditure has been the Federal Interstate Highway Program launched in 1956. Scheduled for completion in 1972, but lagging currently, the 41,000 mile interstate network will link most of the nation's metropolitan areas. Cost of the entire system of ultramodern, divided-lane and limited-access roads was estimated initially at 41 billion dollars, or an average of 1 million dollars per mile.

Through September 30, 1962, some 7 billion dollars had been spent on the nearly 7,900 miles of new road completed and opened to traffic. Roughly 2,300 miles of existing toll roads and 3,000 miles of modern independently developed and financed, but not fully standard, nontoll highways also had been absorbed into the system. Altogether, 32 per cent of the projected mileage was in operation. At the same date, work was under way on nearly 16,000 miles of additional roadway expected to cost nearly 7 billion dol-



Nearly 7,900 miles of new interstate roads now in use



Milwaukee's war memorial serves as civic center

lars; 4,900 miles were under construction and 10,800 miles more were at the engineering or right-of-way acquisition stage. Work remained to be started on slightly more than 12,000 miles of the system, including a considerable amount in built-up urban areas where progress is expected to be slow and costs high.

The Seventh District states have been allotted almost 5,000 miles of the projected network. Four of the five states are reported to have made somewhat faster than average progress toward completion of their portions. Both Michigan and Wisconsin, with 1,079 and 453 miles, respectively, of interstate roads projected, had reached almost the halfway mark by the end of last September. Moreover, virtually all the mileage classed as completed was new and in full compliance with interstate standards.

Unlike most other classes of public construction, new highway facilities are largely "self-financing." Fuel taxes, tolls and vehicle licenses provide revenues related quite directly to highway use. The more vehicles there are on the road and the more they are driven, the greater the revenues available to pay for the highway plant (and current operations) serving users. This is, of course, less true of local access streets than of intercity and urban arterial highways. Property taxes and other general revenues commonly are utilized to provide a substantial share of the funds needed to build and maintain the essentially local facilities.

Highway construction in the United States has totaled roughly 60 billion dollars since World War II. In the District states, expenditures have been in excess of 9.5 billion, or about a sixth of the national total. This ratio is in close agreement with the five states' share of the nation's 3.6 million mile street and highway network and its total population.

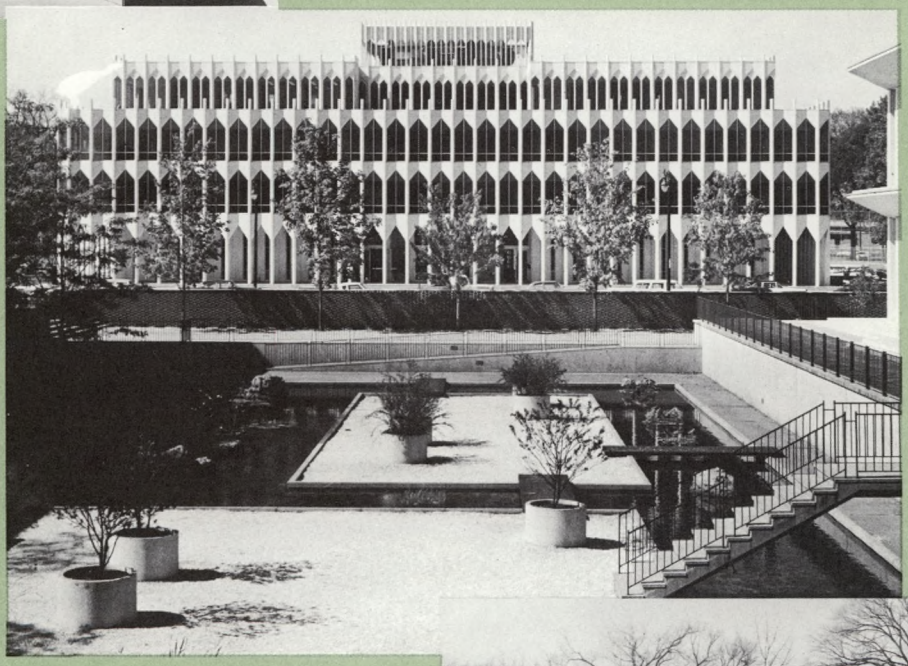
Spending on new school facilities

After climbing rapidly in the first 10 years following the war, annual expenditures for construction of new public primary and secondary schools have fluctuated between 2.0 to 2.4 billion dollars since 1956. For the entire postwar period, outlays have exceeded 26 billion dollars. Publicly owned colleges and universities, too, have participated in the rising outlay for new construction, with expenditures totaling 5.6 billion dollars. The rise in construction outlays for schools and colleges, of course, has been in response to the surge in school age population and rise in the proportion of young people continuing with formal education beyond high school.

Pupil enrollment in public grade and high schools has grown more than 60 per cent during the Forties and Fifties, but the growth has been uneven, with especially sharp gains in many newly settled residential areas and often much smaller increases, or even decreases, in older communities. Thus, the over-all climb in enrollment does not fully reflect the growth in demand for new school facilities. Nevertheless, the huge sums poured into new construction have increased the number of classrooms more rapidly than enrollment in recent years and has partially satisfied the backlog of demand in this sector.

Enrollments have grown even more rapidly at institutions of higher learning than at the elementary and high school levels. Degree-credit students in the fall of 1961 totaled nearly 3.9 million, nearly twice the number in 1946. Bearing the brunt of the upsurge during the past 10 years have been the publicly supported schools. In the first postwar years, total attendance at colleges was divided almost evenly between public and private institutions. Now, however, the

Ford Auditorium—pivotal feature of riverfront redevelopment in Detroit



School design has changed strikingly in recent years

number of students at state and municipal colleges and universities is almost half again as great as at private schools. The burden of supplying structures to accommodate the rising college enrollments has been shifting increasingly to the public sector of construction.

Michigan has maintained the largest system of publicly financed higher education in the Midwest. The state's three major universities and score of other tax-supported schools have enrolled more than three times as many students as in-state private institutions. In Illinois, enrollment in state colleges and universities has been about equal at tax-supported and private institutions. In Iowa, private school enrollment has exceeded that at publicly supported institutions and Iowa stands alone among the District states in experiencing far greater postwar growth in attendance at private colleges and universities than at state and community supported schools.

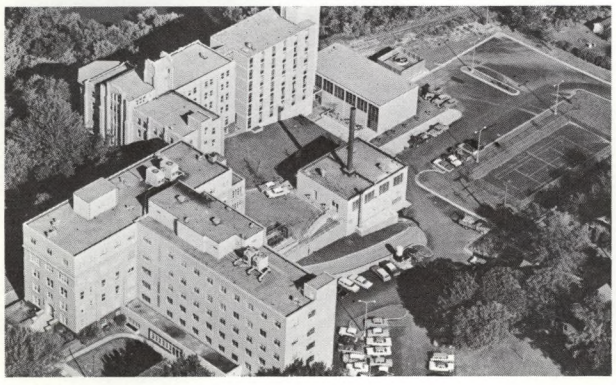
Other public works

The building of new water and sewerage facilities ranks third in importance among the broad categories of public construction. Expenditures for this purpose have shown sharp gains in the past two years and are expected to continue rising for at least a few years.

Public construction of water supply and sewage disposal works in the postwar years has totaled more than 17 billion dollars—10 per cent of all public construction. This huge bill has been part of the price of population growth and mobility and the residential, industrial and commercial development taking place concurrently.

Illustrative of the diversity of public construction are a number of important postwar projects in the Midwest. A 67 million dollar suspension bridge spanning the Straits of Mackinac to afford a direct highway link between the two peninsulas of Michigan is one

Tax funds have financed a big share of medical facilities



New jet-age airport nears completion

example. The huge air terminal at O'Hare Field in Chicago, now approaching completion at an outlay in excess of 145 million dollars, and the jet-age Metropolitan Airport serving Detroit are other large-scale undertakings of an out-of-the-ordinary character. In addition, there are the new water filtration plant which will serve the North Side of Chicago at a cost exceeding 100 million dollars, new exhibition and convention halls in Detroit, Chicago and Milwaukee and a variety of lake and waterway improvements and new port facilities in the Great Lakes.

Paying for public construction

Federal Government outlays for construction are indistinguishable from expenditures for "current" purposes, from the standpoint of their financing. Although early plans for the interstate highway system called for the use of borrowed funds with principal and interest payments to be met from the proceeds of "user charges" rather than general revenues, the borrowing feature of the plan was dropped and revenues from the charges serve simply to pay currently for the construction. The Interstate Highway Program, therefore, illustrates the use of "earmarked" revenues to finance specific undertakings—a device employed sparingly by the Federal Government but quite widely by the state and local governments.

In state and local, or "municipal," financing it is common for construction and other capital costs to be met by borrowing. Debt service is met from special or earmarked revenues (as in revenue-bond borrowing), general tax funds (general obligation or full faith and credit borrowing) or a combination of the two.

Since World War II, state and local long-term bor-

rowing for capital purposes, including land acquisition and the purchase of existing improvements as well as new construction, has totaled nearly 80 billion dollars. By the end of 1962, state and local indebtedness stood at 70 billion dollars, after a more than fivefold increase since the termination of the war.

The Seventh District states account for nearly 15 per cent of the total debt of all state and local governments in the nation, only slightly under their proportion of United States population.

The future of construction

Although the dollar volume of construction has risen in each postwar year except one and for a decade has remained a relatively stable proportion of total spending, unused capacity has become increasingly evident both in the building industry and in the industries supplying materials and equipment. In recent years prices of building materials have declined as has the number of construction workers, and builders have complained of narrow or nonexistent profit margins.

Throughout most of 1962, prices were under downward pressure for virtually all types of building materials, especially cement, glass, aluminum products, roofing and siding, wallboard and ceiling and floor tile. Quoted prices for all construction materials in 1962 averaged 3 per cent below the 1959 peak, while the average for all wholesale prices was about the same in both years.

The rise in capacity to produce construction materials is illustrated by the case of cement. Production in 1962 was about equal to the 1959 record of 339 million barrels, but this was only 77 per cent of estimated capacity at the beginning of 1962. As late as 1956, with production substantially below recent levels, operations were at virtual capacity. This story is repeated in varying degrees in most kinds of building materials and structural components.

With some materials such as glass, hardwood plywood, reinforcing bars, nails and screws, imports have supplemented domestic sources to a considerable degree. By and large, however, foreign supplies are relatively unimportant, and more intense competition in markets for construction materials is the result of additions to domestic productive capacity at a rate outpacing increases in usage.

Wage scales of construction workers have continued to rise in recent years while prices of building materials have declined. In 1962 average weekly earnings in contract construction were $121 compared with $63 in 1947—an increase of 92 per cent, about the same as in manufacturing. Wage increases have more than offset declines in material prices, gains in productivity and reductions in contractor profit margins in recent years so that total construction costs have continued to edge upward.

Because of the great importance of construction and its vulnerability now that urgent needs developed in the depression, World War II and the postwar boom in population growth have been largely satisfied, questions are being raised again about future

Postwar bank buildings feature advanced architectural design

prospects. For the nearer term, the official Construction Outlook for 1963—released in November 1962 by the U. S. Department of Commerce—projects a rise of about 3 per cent in total construction activity between 1962 and 1963. But, what about the years beyond 1963?

For the late Sixties there is little question that demand for homes will rise along with family formations, which are expected to reach 1.2 million per year—20 per cent above the current level—by 1969. This would imply a total need for 1.5 or 1.6 million new housing units annually, allowing for replacement of those to be demolished or abandoned, along with the needs for added space to house the growing population. Over and above this is likely to be additional demand traceable to a continued rise in personal income, a factor influencing the pace of quality upgrading of the nation's housing stock. On balance, homebuilding appears to be headed for an annual volume during the later years of the Sixties above the 1.4 million units started in 1962.

Public construction, aided by a strong rise in highway building, is expected to increase about 5 per cent next year. Although great progress has been made in satisfying public needs in the past 17 years, many observers believe that a substantially greater effort will be required to bring public services up to "acceptable" standards. The actual level of public construction, of course, will continue to depend upon the willingness of legislators and taxpayers to provide the necessary funds. Continued population growth and a high level of private construction activity would appear to call for further gains in the volume of public construction in the coming years.

Many believe that the boom in stores and office buildings soon will peak out and that outlays will level off or decline. Surges of construction always have given way to reactions in the past. For 1963, however, the Government projection estimates an 8 per cent rise in outlays for office buildings and a 3 per cent increase for stores. Gains also are expected for industrial and utility construction. In total, nonresidential private construction is expected to be up 4 per cent in 1963, climbing to a new record.

Between 1957 and 1962 the share of total construction contracts accounted for by the five District states declined from over 16 per cent to 13 per cent. Although most areas of the Midwest continue to be relatively prosperous, income and population in these states have not been rising as rapidly as in other regions, notably the Far West, Texas and Florida. Areas which are gaining population most rapidly, of course, have the greatest need for new housing, schools, stores and municipal and utility services.

Although the need for additional structures has been less pressing in the Midwest than in some other areas, the desire to replace dilapidated or obsolescent structures has been strong. In all the large District centers, and in many smaller cities as well, demolition of the old to make way for the new is taking place on an unprecedented scale. Sites for new projects are being cleared, often with the aid of Government subsidies. At the same time some stores, factories and residences stand vacant as individuals and economic activities move to outlying areas.

Construction activity, like most other kinds of production, depends only in part upon current or prospective "need." Trends in income and shifts in the willingness of investors and lenders to channel funds into new buildings and other structures, as well as changes in price and cost relationships, also have important effects.

Government officials have estimated that construc-

tion outlays will increase more than 70 per cent between 1962 and 1975, a considerably greater rise than is foreseen for total economic activity. If these projections are realized, construction activity in the Midwest will show substantial gains even if the region continues to grow at a slower pace than the nation. However, Midwest producers of construction machinery and construction materials and components can look forward confidently to a substantial expansion in the demand for their products.

An increase in the proportion of construction to total activity probably will require an even greater relative increase in the proportion of loanable funds channeled to this use. Much of this money is supplied by savers, in part directly, but usually through financial institutions. The funds that will be required to finance further expansion of the big, basic and diversified sector of the economy occupied by construction can be expected to rank importantly among the outlets for savings and credit in the years ahead.

Elaborate industrial research facilities largely a postwar development

Appointments, elections, resignations and retirements

During the year 1962 the following appointments and elections were announced:

Robert P. Briggs, Executive Vice President, Consumers Power Company, Jackson, Michigan, a Director since 1956, Deputy Chairman in 1960 and Chairman and Federal Reserve Agent since 1961 was redesignated Chairman and Federal Reserve Agent for 1963.

Max P. Heavenrich, Jr., President, Heavenrich Department Store, Saginaw, Michigan, was appointed Director of the Detroit Branch Board on November 5 to complete the three-year term expiring December 31, 1963, of Carl A. Gerstacker, Chairman of the Board, The Dow Chemical Company, Midland, Michigan.

James H. Hilton, President, Iowa State University, Ames, Iowa, a Director since 1960 and Deputy Chairman since 1961 was reappointed Director for a three-year term ending December 31, 1965, and redesignated Deputy Chairman for 1963.

C. Lincoln Linderholm, President, Central Bank, Grand Rapids, Michigan, was reappointed Director of the Detroit Branch Board for a three-year term ending December 31, 1965.

James W. Miller, President, Western Michigan University, Kalamazoo, Michigan, was designated Chairman of the Detroit Branch Board effective January 1, 1963, succeeding J. Thomas Smith, President, Dura Corporation, Oak Park, Michigan.

Guy S. Peppiatt, President and Director, Federal-Mogul-Bower Bearings, Inc., Detroit, Michigan, was appointed Director of the Detroit Branch Board for a three-year term ending December 31, 1965.

Harry W. Schaller, President, The Citizens First National Bank of Storm Lake, Storm Lake, Iowa, was elected Director for a three-year term ending December 31, 1965, effective January 1, 1963, to succeed Vivian W. Johnson, Chairman of the Board, First National Bank, Cedar Falls, Iowa.

Kenneth V. Zwiener, President, Harris Trust and Savings Bank, Chicago, Illinois, member of the Federal Advisory Council from the Seventh Federal Reserve District in 1962 was reappointed member of the Council for 1963.

Charles J. Scanlon, formerly First Vice President, was elected President of the Federal Reserve Bank of Chicago on January 4.

Hugh J. Helmer, Vice President, was promoted to First Vice President on April 1.

Leland M. Ross, formerly Chief Examiner, was named Vice President on May 1.

James R. Morrison was appointed Chief Examiner and Harris C. Buell and Carl W. Weiskopf were appointed Assistant Chief Examiners on May 1.

George W. Cloos and Lynn A. Stiles, Senior Economists, were elected officers of the Bank, effective January 1, 1963.

Ward J. Larson came to the Bank as Assistant Counsel and Assistant Secretary on July 1 following the resignation of Joseph B. Lederleitner as of April 30.

Louis J. Purol was appointed Assistant Cashier at the Detroit Branch on June 6.

Vivian W. Johnson and J. Thomas Smith retired as directors on December 31, 1962. Mr. Johnson was a Director of the Bank since 1945. Mr. Smith, was a Director of the Detroit Branch Board since 1956 and Chairman since 1961.

Arthur J. Wiegandt, Assistant Cashier, retired on May 31 after 30 years of service at the Detroit Branch.

The employees listed below, all with service records of more than 25 years, retired in the course of the year from the Head Office and Detroit Branch:

Norman S. Allen
Dell A. Berriman
Nevin Black
Florence Crosell
Mary E. Daly
Lawrence A. Dow
Peter H. Gronley
Laura A. Gustafson
Lionel H. Hansen
Helmer C. Henrickson
Agnes M. Januszewski
Raymond C. Kelly
Arthur R. Monson
Veronica K. Normile
Kathryn T. Plummer
Arthur Rogers
Robert W. Schumacher
Howard I. Singleton
Minor B. Smith
Otto Widemark
Arthur C. Zimmerman

These retired employees of the Bank represent a total of 769 years of service to this institution.

DIRECTORS

ROBERT P. BRIGGS, Executive Vice President
Consumers Power Company
Jackson, Michigan
Chairman and Federal Reserve Agent

JAMES H. HILTON, President
Iowa State University
Ames, Iowa
Deputy Chairman

JOHN H. CROCKER, Chairman of the Board
The Citizens National Bank of Decatur
Decatur, Illinois

WILLIAM A. HANLEY, Director
Eli Lilly and Company
Indianapolis, Indiana

VIVIAN W. JOHNSON, Chairman of the Board
First National Bank
Cedar Falls, Iowa

DAVID M. KENNEDY, Chairman of the Board
Continental Illinois National Bank
and Trust Company of Chicago
Chicago, Illinois

GERALD F. LANGENOHL, Treasurer
and Assistant Secretary
Allis-Chalmers Mfg. Co.
Milwaukee, Wisconsin

WILLIAM E. RUTZ, Director
and Member of the Executive Committee
Giddings and Lewis Machine Tool Company
Fond du Lac, Wisconsin

JOHN W. SHELDON, President
Chas. A. Stevens & Co.
Chicago, Illinois

DETROIT BRANCH

J. THOMAS SMITH, President
Dura Corporation
Oak Park, Michigan
Chairman

MAX P. HEAVENRICH, JR., President
Heavenrich Department Store
Saginaw, Michigan

C. LINCOLN LINDERHOLM, President
Central Bank
Grand Rapids, Michigan

WILLIAM A. MAYBERRY, Chairman of the Board
Manufacturers National Bank of Detroit
Detroit, Michigan

JAMES W. MILLER, President
Western Michigan University
Kalamazoo, Michigan

FRANKLIN H. MOORE, President
The Commercial and Savings
Bank of St. Clair
St. Clair, Michigan

DONALD F. VALLEY, Chairman of the Board
National Bank of Detroit
Detroit, Michigan

MEMBER OF FEDERAL ADVISORY COUNCIL

KENNETH V. ZWIENER, President
Harris Trust and Savings Bank
Chicago, Illinois

December 31, 1962

OFFICERS

CHARLES J. SCANLON, President

HUGH J. HELMER, First Vice President

ERNEST T. BAUGHMAN, Vice President

JOHN J. ENDRES, General Auditor

ARTHUR M. GUSTAVSON, Vice President

PAUL C. HODGE, Vice President, General Counsel and Secretary

LAURENCE H. JONES, Vice President and Cashier

CLARENCE T. LAIBLY, Vice President

RICHARD A. MOFFATT, Vice President

HAROLD J. NEWMAN, Vice President

LELAND M. ROSS, Vice President

HARRY S. SCHULTZ, Vice President

RUSSEL A. SWANEY, Vice President

CARL E. BIERBAUER, Assistant Vice President

FRED A. DONS, Assistant General Auditor

ELBERT O. FULTS, Assistant Vice President

EDWARD A. HEATH, Assistant Vice President and Assistant Secretary

JAMES R. MORRISON, Chief Examiner

BRUCE L. SMYTH, Assistant Vice President

ROBERT E. SORG, Assistant Vice President

JOSEPH J. SRP, Assistant Vice President

GEORGE T. TUCKER, Assistant Vice President

CHARLES G. WRIGHT, Assistant Vice President

HARRIS C. BUELL, Assistant Chief Examiner

JOHN J. CAPOUCH, Assistant Cashier

LE ROY A. DAVIS, Assistant Cashier

LE ROY W. DAWSON, Assistant Cashier

DANIEL M. DOYLE, Assistant Cashier

FRANCIS C. EDLER, Assistant Cashier

LESTER A. GOHR, Assistant Cashier

VICTOR A. HANSEN, Assistant Cashier

WILLIAM O. HUME, Assistant Cashier

ERICH K. KROLL, Assistant Cashier

WARD J. LARSON, Assistant Counsel and Assistant Secretary

KARL A. SCHELD, Assistant Cashier

CARL W. WEISKOPF, Assistant Chief Examiner

DETROIT BRANCH

RUSSEL A. SWANEY, Vice President

RICHARD W. BLOOMFIELD, Assistant Vice President

GORDON W. LAMPHERE, Assistant General Counsel

PAUL F. CAREY, Assistant Cashier

LOUIS J. PUROL, Assistant Cashier

W. GEORGE RICKEL, Assistant Cashier

December 31, 1962

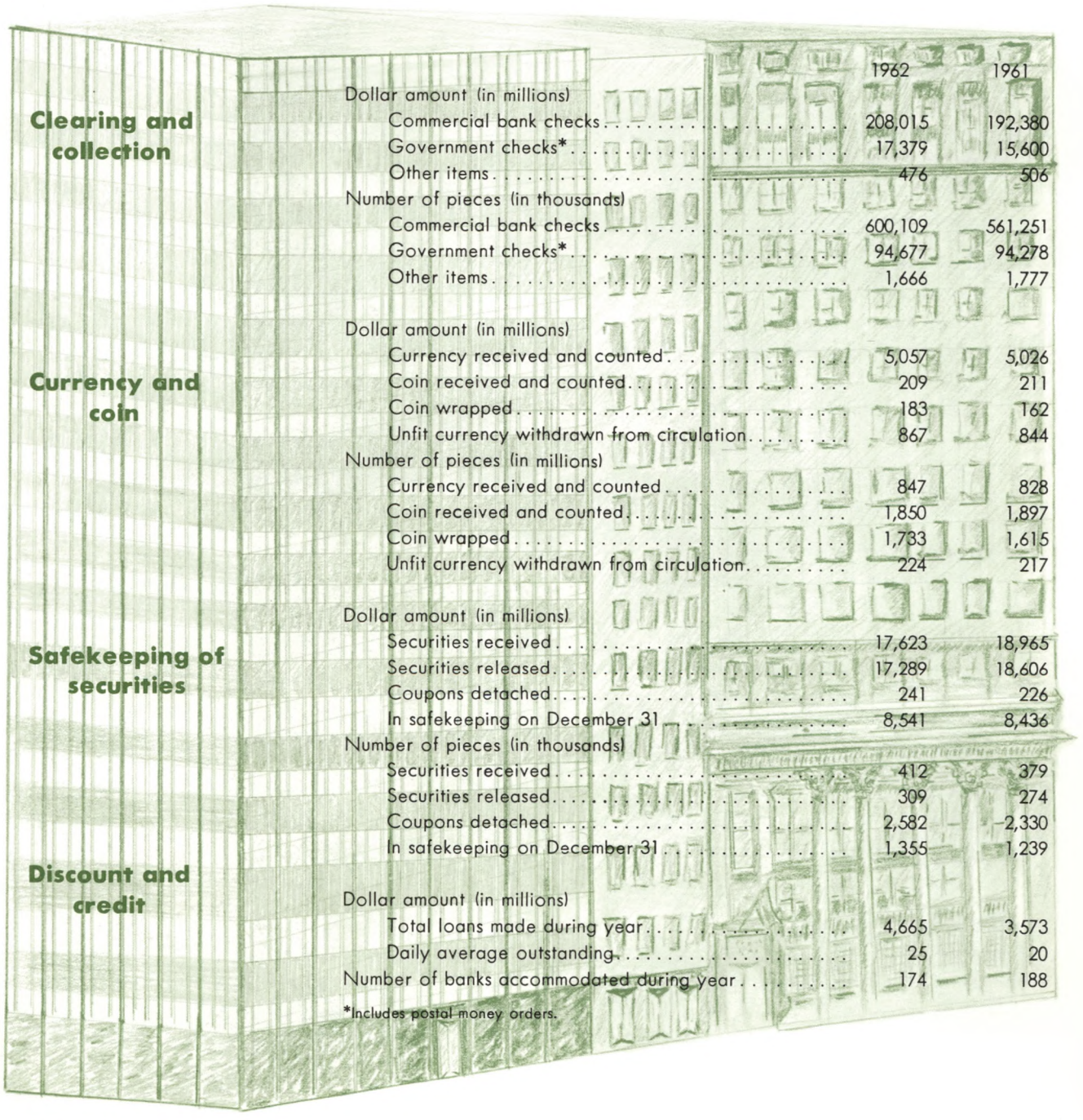
STATEMENT OF CONDITION

Assets	December 31, 1962	December 31, 1961
Gold certificate account	$2,363,399,116	$2,564,681,898
Redemption fund for Federal Reserve notes	221,393,100	211,636,890
Total gold certificate reserves	$2,584,792,216	$2,776,318,788
Federal Reserve notes of other Banks	43,790,500	38,893,000
Other cash	51,018,279	58,328,505
Discounts and advances:		
Secured by U.S. Government securities	$ 250,000	$ 350,000
Other	139,000	2,115,000
Total discounts and advances	$ 389,000	$ 2,465,000
U. S. Government securities	5,160,197,000	4,907,667,000
Total loans and securities	$5,160,586,000	$4,910,132,000
Cash items in process of collection	1,329,032,213	1,238,947,337
Bank premises	23,806,641	24,249,956
Other assets	57,621,585	40,309,602
Total assets	$9,250,647,434	$9,087,179,188
Liabilities		
Federal Reserve notes	$5,528,456,435	$5,361,534,170
Deposits:		
Member bank reserves	$2,671,601,971	$2,539,800,738
U. S. Treasurer—general account	86,321,327	66,400,647
Foreign	36,140,000	37,365,000
Other	19,343,622	12,015,216
Total deposits	$2,813,406,920	$2,655,581,601
Deferred availability cash items	699,287,857	874,167,816
Other liabilities	11,387,472	10,622,801
Total liabilities	$9,052,538,684	$8,901,906,388
Capital accounts		
Capital paid in	66,036,250	61,757,600
Surplus	132,072,500	123,515,200
Total liabilities and capital accounts	$9,250,647,434	$9,087,179,188
Ratio of gold certificate reserves to deposit and Federal Reserve note liabilities combined	31.0%	34.6%
Contingent liability on acceptances purchased for foreign correspondents	$ 11,689,900	$ 17,625,000

STATEMENT OF EARNINGS AND EXPENSES

	1962	1961
Current earnings:		
Discounts and advances	$ 875,033	$ 608,563
U. S. Government securities	175,591,640	160,030,217
Foreign currencies	486,831	—
All other	44,435	46,602
Total current earnings	$176,997,939	$160,685,382
Current expenses:		
Operating expenses	$ 26,460,163	$ 25,363,764
Federal Reserve currency	1,250,370	1,040,334
Assessment for expenses of Board of Governors	927,100	886,200
Total	$ 28,637,633	$ 27,290,298
Less reimbursement for certain fiscal agency and other expenses	3,806,210	3,726,826
Current net expenses	$ 24,831,423	$ 23,563,472
Current net earnings	$152,166,516	$137,121,910
Additions to current net earnings:		
Profit on sales of U. S. Government securities (net)	$ 336,027	$ 592,468
All other	134,433	40,031
Total additions	$ 470,460	$ 632,499
Deductions from current net earnings	230,550	2,851
Net additions	$ 239,910	$ 629,648
Net earnings before payments to U. S. Treasury	$152,406,426	$137,751,558
Dividends paid	3,849,832	3,613,523
Paid U. S. Treasury (interest on Federal Reserve notes)	139,999,294	126,275,435
Transferred to surplus	$ 8,557,300	$ 7,862,600
Surplus account		
Surplus, January 1	$123,515,200	$115,652,600
Transferred to surplus—as above	8,557,300	7,862,600
Surplus, December 31	$132,072,500	$123,515,200

OPERATIONS



	1962	1961
Clearing and collection		
Dollar amount (in millions)		
Commercial bank checks	208,015	192,380
Government checks*	17,379	15,600
Other items	476	506
Number of pieces (in thousands)		
Commercial bank checks	600,109	561,251
Government checks*	94,677	94,278
Other items	1,666	1,777
Currency and coin		
Dollar amount (in millions)		
Currency received and counted	5,057	5,026
Coin received and counted	209	211
Coin wrapped	183	162
Unfit currency withdrawn from circulation	867	844
Number of pieces (in millions)		
Currency received and counted	847	828
Coin received and counted	1,850	1,897
Coin wrapped	1,733	1,615
Unfit currency withdrawn from circulation	224	217
Safekeeping of securities		
Dollar amount (in millions)		
Securities received	17,623	18,965
Securities released	17,289	18,606
Coupons detached	241	226
In safekeeping on December 31	8,541	8,436
Number of pieces (in thousands)		
Securities received	412	379
Securities released	309	274
Coupons detached	2,582	2,330
In safekeeping on December 31	1,355	1,239
Discount and credit		
Dollar amount (in millions)		
Total loans made during year	4,665	3,573
Daily average outstanding	25	20
Number of banks accommodated during year	174	188

*Includes postal money orders.

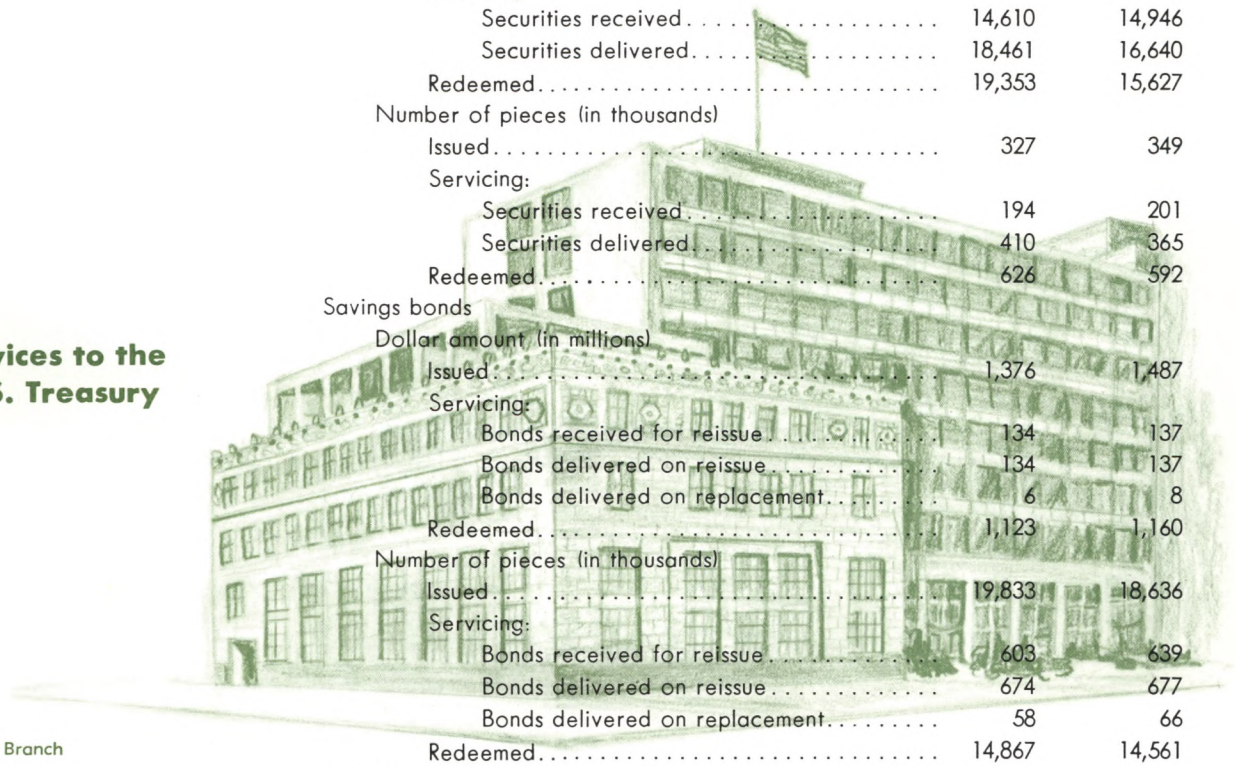
Head Office

Investment

Transfer of funds

Services to the U. S. Treasury

	1962	1961
Purchases and sales of securities for member banks		
Dollar amount (in millions)	1,788	1,342
Number of transactions	15,800	14,200
Dollar amount of funds transferred (in millions)	392,429	333,998
Number of transfers (in thousands)	498	461
Marketable securities		
Dollar amount (in millions)		
Issued	16,002	15,285
Servicing:		
Securities received	14,610	14,946
Securities delivered	18,461	16,640
Redeemed	19,353	15,627
Number of pieces (in thousands)		
Issued	327	349
Servicing:		
Securities received	194	201
Securities delivered	410	365
Redeemed	626	592
Savings bonds		
Dollar amount (in millions)		
Issued	1,376	1,487
Servicing:		
Bonds received for reissue	134	137
Bonds delivered on reissue	134	137
Bonds delivered on replacement	6	8
Redeemed	1,123	1,160
Number of pieces (in thousands)		
Issued	19,833	18,636
Servicing:		
Bonds received for reissue	603	639
Bonds delivered on reissue	674	677
Bonds delivered on replacement	58	66
Redeemed	14,867	14,561
Federal tax receipts processed		
Dollar amount (in millions)	7,346	6,695
Number of pieces (in thousands)	1,783	1,696



Detroit Branch

Acknowledgments

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