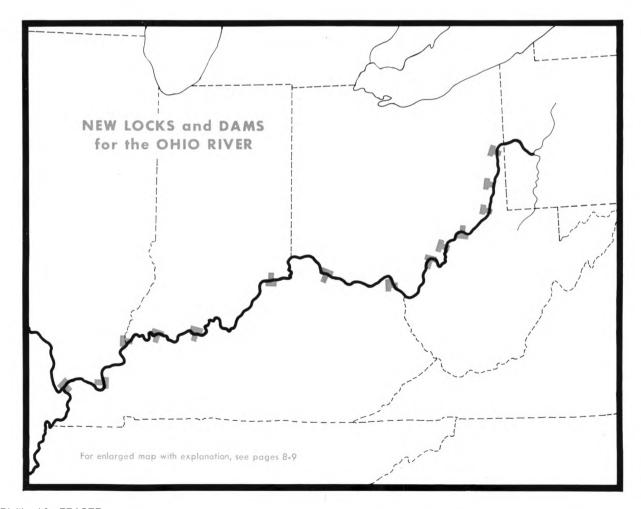
Business Review

- FEDERAL RESERVE BANK of CLEVELAND

February, 1960

IN THIS ISSUE

A New Profile for the Ohio River2
Recent Strength of Department Store Sales10
Business Trends in Cleveland14
Notes on Federal Reserve Publications16



A New Profile for the Ohio River

THE OHIO RIVER, first removed from the vagaries of unregulated flow by a system of dams constructed between 1910 and 1929, is undergoing a second major face-lifting designed to enlarge its capacity for moving freight with efficiency. Outlays for this renovation, including the construction of 14 entirely new lock and dam units, have been estimated at \$852 million.

The river, originating at Pittsburgh with the confluence of the Monongahela and Allegheny Rivers, flows 981 miles westward to its mouth near Cairo, Illinois, where it joins the Mississippi. The upper 490 miles of its length either borders on or lies within the Fourth Federal Reserve District.

The importance of the Ohio River as a commercial route may be attributed to a number of conditions, including especially: (1) its proximity to the nation's largest soft-coal deposits, (2) its all-water connection, via the Mississippi, with the very large petroleum reserves of the central south, and, (3) the industrial growth of the country, particularly that portion lying generally to the north of the river. The value of the river as an inexpensive avenue for bulk commodity movement could not have been realized without a stabilized flow of water and a guaranteed minimum channel depth. The federal government, recognizing this requirement at the turn of the century, assumed the responsibility for the full canalization of the river, in the interest of furthering interstate commerce.

The authority to fulfill the goal was delegated to the United States Army Corps of Engineers which has always been the principal agent for the construction, operation,

and maintenance of navigation improvements of the nation's rivers and harbors. With the annual rate of construction determined in part by Bureau of the Budget considerations and Congressional appropriations, the first full canalization was completed in 1929, about twenty years after authorization.

After World War II, some of the structures of this early system had reached an age of accelerating physical deterioration and were, as a result of improved carrier equipment and increasing traffic, approaching functional obsolescence. At present the structures are from thirty to fifty years old. The Corps of Engineers, cognizant of these conditions, prepared a long-range modernization plan which prescribed the construction of a new system of locks and dams. The new system in effect will change the profile of the river.

The waters of the Ohio flowed over fifty dams in 1929. In the mid-thirties, six of the oldest dams were replaced by two larger structures establishing the system which has remained unchanged for over twenty years. This year, with the completion of the first unit of the new system, four more old dams will be eliminated. When the current plan is carried to completion, the steps of the river will have been reduced to nineteen.

The Old Profile

The navigation improvements in use since 1937 consist of a series of slack-water pools maintained by forty-six dams. The location of these dams is indicated on the map (pages 8-9) by straight bars across the river. Cou-

pled with each dam is a lock, 600-feet long, providing the average 9 to 10-foot lift between pools. Auxiliary locks are located at five of the dams. A two-mile canal at Louisville, Kentucky, bypasses the "Falls of the Ohio", actually a stretch of rapids. Dam 41, located at the downstream end of the canal, has the highest lift, 37 feet, and is the only unit of the system utilized for the generation of electric power. (1)

Thirty-two of the 46 dams included in the old profile are located on the eastern half of the river, between Pittsburgh and a midpoint near the southwestern corner of the State of Ohio. This concentration of dams, made necessary by the steeper gradient of the river bed, impedes traffic flow by the frequent interruptions for lockage. All but five of these dams, however, can be lowered to the river bed, permitting lock-free navigation dowstream during limited periods of high flow.

The New Profile

The modernization program proposes a partial reconstruction of five of the existing units, and the construction of 14 entirely new non-navigable dams each accompanied by a dual-chambered lock. The T-shaped symbols on the map identify the proposed new units, eight of which are located on the upper half of the river east of Cincinnati. The pools created by the eight dams will submerge 25 of the old structures. A ninth, the Markland, just west of the river's mid-point, will create a pool extending upstream to the New Richmond Dam, east of Cincinnati, eliminating five of the old structures.

The five old units to be improved and retained as part of the new system include the following: three dams immediately downstream from Pittsburgh, originally completed in 1921, 1929, and 1936; the Gallipolis unit, upstream from the Huntington-Ashland area and completed in 1937; and finally, Dam and

Locks 41 at Louisville. The last named unit, including the canal, underwent major reconstruction in 1929. In recent years, traffic has become particularly congested at this point due to the heavy volume of traffic (see traffic flow chart) and the low capacity of the canal.

The average pool length between dams will be 46 miles, more than twice the existing 21-mile average. The three longest, including the Markland and the New Richmond pools in the middle stretch of the river, will permit about 100 miles each of uninterrupted movement. The longer pools will be a convenience, particularly for traffic which moves in limited portions of the river, such as the Hunting-ton-Ashland area in the Greenup pool. Larger pools may become a stimulus to intra-pool traffic.

One-third of the tows currently operating on the Ohio River, according to a recent Corps of Engineers estimate, require breakage at existing locks with passage effected in two sections. The longer chamber of the new dual locks will be capable of accommodating a modern large tow in one operation. Time consumed in the present "double-lockage" amounts to about an hour and a half; passage through the new locks will require about 20 minutes. A large tow in transit over the total length of the river through the new system could conceivably realize a time-saving of two and a half days.

Increased depths which will occur in much of the river behind the new high dams could mean greater operating economies for the water carriers through increased fuel efficiency and fuller use of barge capacities. The advisability of increasing the minimum depth from nine to twelve feet throughout the length of the navigable way has not been satisfactorily determined. Further analyses of costs and potential benefits are planned.

Under Construction

Construction work on units of the new system was started in 1954. Since then, six projects, including five of the new lock and

⁽¹⁾ Dams and locks of the old system are designated by numbers which were assigned in consecutive order from the head of the river; those of the new system have been assigned names.

Project Name	Started	Estimated Completion	% Complete*	Total Cost Estimate, 1959 (in thousands)		
New Cumberland	1955	1961	85.2	\$41,500		
Pike Island	1959	1964	7.2	63,500		
Greenup	1955	1960	81.7	57,600		
New Richmond	1958	1963	18.1	76,600		
Markland	1956	1962	52.3	73,600		
Locks and Dam 41	1956	1962	39.9	48,700		

^{*} As of end of fiscal 1960; 1959 and 1960 activity based on U. S. Bureau of the Budget estimates. Source; U. S. Army Corps of Engineers

dam units, have entered a construction phase. These projects are listed in an accompanying table which indicates the stage of progress and the estimated total cost of each. They are listed in order from east to west to facilitate location on the map where they are indicated by solid T-shaped symbols.

The locks of the Greenup unit, one of the two projects nearing completion, were opened to traffic in December 1959.

No new units are to be started during the current fiscal year, 1960, in accordance with a general restriction on all new public construction programs of the federal government. Of the remaining units prescribed in the master plan, the Belleville and Uniontown Locks and Dams, on the east and west portions of the river respectively, have been approved by the Board of Engineers and wait the availability of funds through Congressional appropriation. (2)

The Price Tag

A preliminary estimate, released in 1954, of the total funds required for the modernization of the Ohio River navigation system, from the planning stage to completion, was \$852 million. Although subject to revisions due to changes in costs and more detailed plan-

In 1910, the first full canalization of the Ohio River was authorized by Congress on the basis of an estimate of \$73 million. Since the latter part of the last century, excluding expenditures for work on the new system, the federal government has provided approximately \$145 million for construction of navigation improvements on the Ohio River. This is equivalent to only 17 percent of the price tag attached to the new-system plans.

In addition to appropriations for construction, \$150 million had been expended, through fiscal 1958, for operation and maintenance of structures, and \$52 million for "open channel" work. The grand total of \$347 million is equivalent to only 40 percent of the funds reported to be required for construction of the new system. A realistic comparison cannot be made, however, without consideration of changes in the value of the dollar over this long period of time.

Of the \$145 million spent for construction, 90 percent, or almost \$120 million, was for locks and dams completed since 1909 and still in use through 1959. The remaining percentage is accounted for principally by expenditures for reconstruction of the canal and for structures now replaced. (3) Had the structures

ning, this figure can be used as a rough measure of the magnitude of the project.

⁽²⁾ The review of a project by the seven-man Board of Engineers is the last step in project analysis preceding the report to Congress.

⁽³⁾ The canal was originally constructed by the State of Kentucky in 1830; the replaced structures were constructed by the federal government between 1890 and 1909.

tures covered by the 90 percent been built at 1958 construction costs, the tally of expenditures for them would have been in the neighborhood of \$500 million. (4) This figure is not quite 60 percent of the estimated construction cost of the new project. (See chart below.)

In order that the project may be completed by 1975, the goal recommended by the Corps of Engineers, the rate of outlay in the years ahead must on the average be equal to that experienced in the last few years and comparable to that of the late 1920's.

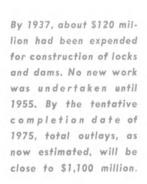
Construction costs, as shown by the chart on the next page, increased sharply during the First World War, fluctuated in the early twenties and remained relatively stable during the late twenties. Most of the work on the old navigation system was completed during years when costs far exceeded those anticipated when the project was authorized in 1910. Construction costs have moved up-

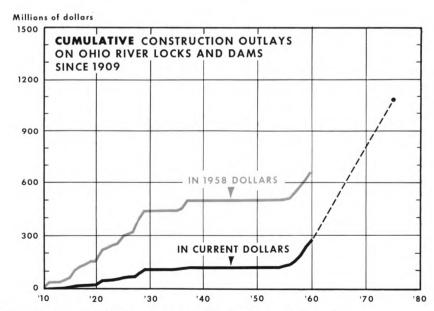
ward without pause between World War II and 1959, increasing on an average of 5 percent each year between 1954 and 1959.

A review of the yet brief history of the new project will cast some light on the potential increase in fund requirements over the 1954 estimate. An increase or decrease may be brought about by the new effect of changes in construction costs, by significant changes in the over-all plan or its parts, or by changes in requirements established on the basis of more detailed design plans. An unforeseen engineering problem, or absence of an anticipated problem, could be an additional contributing factor.

To facilitate discussion, the twenty construction units may be grouped by current stage of progress as: (1) units under construction, (2) units approved, and (3) units under study or tentatively proposed. These groups were approximately 42, 11, and 46 percent, respectively, of the early estimate of \$852 million.

The units under construction are, from the standpoint of expenditures, a little more

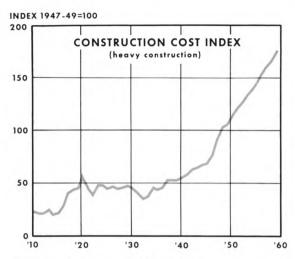




NOTE: Fiscal year ending June 30, Based on U. S. Army Corps of Engineers' data and Engineering News-Record Construction Cost Index.

⁽⁴⁾ The conversion of expenditures to 1958 costs was based on the Engineering News-Record Construction Cost Index taken for the approximate years during which the expenditures were made.

After authorization of the Ohio River navigation project in 1910, the costs of materials and wages rose rapidly for a decade and then stabilized temporarily in the late 1920's. Since the new project was started in 1955, costs have again been in a phase of upward movement.



Source of data: Engineering News-Record

than halfway toward completion. Revised estimates in 1959 for these six units averaged less than one percent above the original estimates and ranged from 18 percent above to 12 percent below. The estimates for the two units approved and awaiting appropriations increased an average 22 percent, the higher of the two reaching 28 percent. The average increase for all units in these two groups was only a little more than 5 percent.

The downward revisions of estimates in 1959 were limited to three units which at present are most nearly complete. Detailed plans for these units were completed or under way at the time the first estimates were prepared; therefore, it would appear that subsequent revisions of plans involving more economical design or less elaborate structures have more than offset increased construction costs. An allowance may have been made in

the original estimates for unforeseen cost increases which have on balance not materialized.

The estimates for five of the eight units for which revisions are available have moved upward. It would appear logical to assume that estimates for the remaining units under study or tentatively proposed, will also move upward, particularly if the cost of construction continues to climb.

A few changes, the value of which cannot be readily assessed, have been made in the original plan. Of the three units currently under study, one replaces two of the early plan. A similar alteration in plan occurs also in the group of units "tentatively proposed". Additional improvement of the third dam below Pittsburgh appears to have been incorporated after the original estimate was made. Changes such as these will no doubt continue to be made in the process of more detailed planning, particularly in the outline of the "tentatively proposed" category.

Non-federal Contributions

The cash contributions of local public and private interests since the turn of the century have amounted to less than two percent of the total expenditures for construction and maintenance of the Ohio River navigation project. This percentage division follows the national pattern of contributions for navigation improvements. The value of non-cash contributions such as land, rights-of-way, easements, and indirect costs resulting from the construction of navigation improvements is unknown.

Local cash contributions to the projects currently under way on the Ohio River have been made primarily for adjustments to and the relocation of facilities necessitated by planned higher water levels. Such facilities include railroad tracks, sewers, water intakes, utility lines, and freight terminals. These contributions represent only a part of the total cost of damages to existing land developments. An unknown quantity of such corrective work is carried out by the owners of the facilities involved as are adjustments that must be made to existing road and rail bridges to assure minimum clearances for navigation.

A joint contribution by the states of Kentucky and Indiana provides for the additional expenses involved in constructing one of the dams with a crest suitable for later improvement as a highway crossing.

All terminal facilities are provided by private interests, local public authorities, and municipalities. Although a necessary adjunct to the development of commerce, they are not in themselves navigation improvements.

The Problem of Economic Justification

The economic justification of federal expenditure for improvement of the nation's waterways has been in the last decade the subject of an increasing amount of critical analysis by two general groups of economists: those concerned with the wise use of federal funds for resource development, and those concerned with the national transportation policy. The former group has questioned the adequacy of the benefit-cost analyses, used in support of appropriation requests, to substantiate real economic gains, or a net addition to the national wealth. (5) Concern has also been expressed as to whether the benefits are sufficiently widespread to warrant sole support of the improvements by the taxpayer at the federal level.

The transportation economists have noted that in planning waterway improvements and in estimating potential benefits there has been a lack of coordination with other federal programs of aid to or regulation of transport media. An ideal transportation policy for the nation would assist in maximizing the unique qualities of the various forms of transport at a minimum cost to the economy as a whole. An approach to such a goal would imply more coordinated planning than exists at present.

Commerce on the Ohio River has far exceeded the expectations of the Congress that approved the first canalization plan. No studies of the Ohio River navigation system have as vet been undertaken to determine whether there is a balance or an imbalance between benefits returned over a period of years and the total costs of the project. This however is a question apart from any weaknesses in the justification process which precedes the initiation of new work. Weaknesses of the latter sort, when they do occur, result largely from an inability to obtain reliable data upon which to base projections of traffic, from the complexity of the rate structure of competing forms of transportation, and from an inability to anticipate the strength of forces, including the river improvements themselves, which change the rate patterns and stimulate growth of traffic. Data for the rate structure of water-borne commerce is perhaps the most limited of all rate information, as over 90 percent of the companies or individuals engaged in commercial operation on the inland waterways are exempt from Interstate Commerce Commission regulation. No other agency exists as a central source for widespread coverage of the actual rate structure for water-borne commerce.

The proponents of user charges have from time to time presented their case to Congress, arguing that such charges would be a means

⁽⁵⁾ The procedures used in benefit-cost analysis have been established by the Interagency Committee on Water Resources of the Executive Branch of the government. A project is considered justified by the Engineers if net benefits are in excess of costs. The costs are based on estimated capital costs, using prevailing prices, converted into annual charges for investment and amortization and combined with estimates of average annual maintenance and operation costs. A 50-year life for the structure is assumed. The benefits are expressed in terms of annual savings to shippers based mainly on estimated rates and theoretical projections of traffic.

of distributing the costs more justly and would place reins on projects of marginal value. This has been a highly controversial issue which may be brought forth again as a side effect of studies of the impact of the St. Lawrence Seaway on freight movement within the nation.

As yet, there is no accepted formula for an assured determination of the real benefits that will accrue from the \$800 or more million dollars that will be spent to improve the Ohio River. Although in the last ten years the total tonnage of freight moving on the Ohio River has doubled, and in ton-miles has more than doubled, generation of traffic beyond the current load will be required for full justification of the project.

Note on Sources:

Data for this study were derived for the most part from the following publications:

U. S. Army Corps of Engineers, Annual Reports of the Chief of Engineers, 1952-1958.

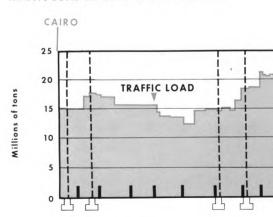
————, Engineer Division, Ohio River, Water Resources Development in Ohio, 1959.

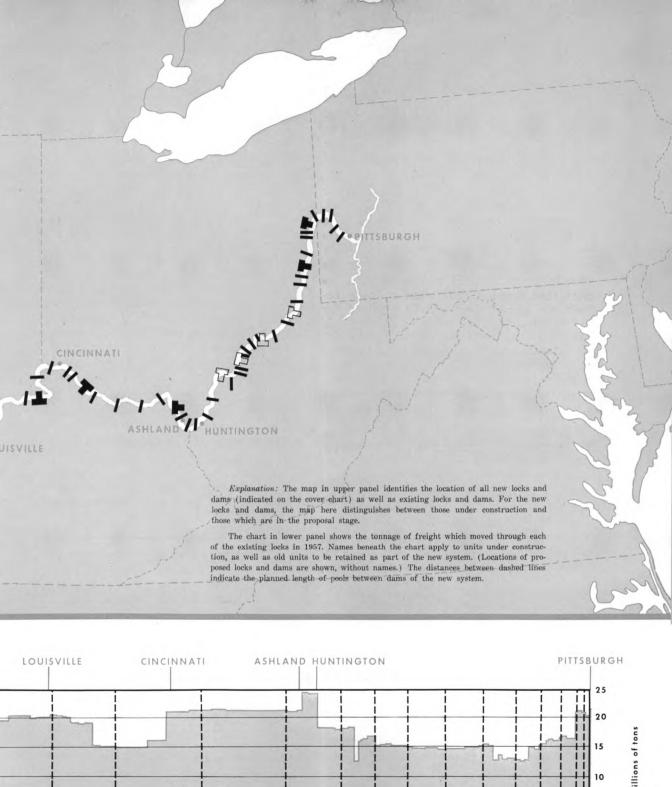
U. S. Commission on Organization of the Executive Branch of the Government, *Task Force Report on Water Resources and Power*, Volumes Two and Three, 1955.

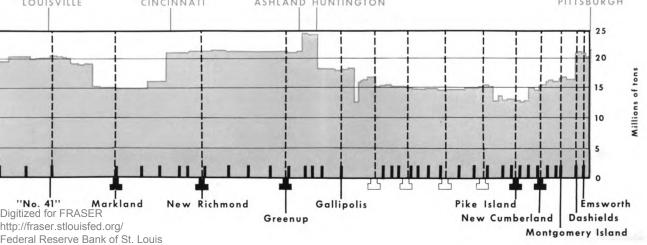
Hartley, Joseph R., The Economic Effects of Ohio River Navigation, Indiana University, Bloomington, Indiana, 1959.



TRAFFIC LOAD AT OHIO RIVER LOCKS 1957







Recent Strength of Department Store Sales

(A Fourth District Review)

Peratment store trade in the Fourth Federal Reserve District rose to a record level in 1959. In addition to outstanding total sales, 1959 sales activity established several individual monthly records. The all-time peak in seasonally adjusted monthly sales which was established in August of 1958 was surpassed by the August 1959 showing. This new record lasted only until December, when a new peak was reached; the December figure reflected the largest Christmas season sales in department store history, as well as heavy post-Christmas buying.

The year-to-year gain in sales by Fourth District department stores for 1959 was 7%, which was the same rate of gain shown by department stores of the nation.

Such a performance indicates strength in the consumer sector of the economy and is, in part, a reflection of the high level of overall business activity which prevailed in the District throughout most of the year. Department store sales in the District were little affected, in total, by the prolonged steel strike, in spite of the large concentration of steel output in this area. (Steel mills within the Fourth District produce approximately 40% of the nation's steel.) Sales in some of the individual centers of the District will be considered at a later point.

Total Sales

Month-to-month movements in seasonally adjusted sales and end-of-month stocks for Fourth District department stores are shown on an accompanying chart. Beginning in April of last year, after several months of erratic movements, seasonally adjusted sales

rose sharply and continued to rise until August. Adjusted August sales proved to be the largest for any month in department store history up to that time, with a seasonally adjusted sales index of 143% of the 1947-49 average, despite the fact that August was the first full month of the steel strike period. Sales in September and October, however, settled 8 points to 135, which represented a drop of about 6% from the August peak but which was 7% above the comparable months of 1958.

Department store sales edged back up to 138 in November. Sales for the year to date at that time were 8% greater than for the

Department store sales reached new high ground in 1959, with the Fourth District showing a 7% sales increase for the year. Stocks rose a more moderate 4%.



same eleven-month period in 1958. The steel strike was halted on November 8; the reduction in employment and production of those firms still faced with steel shortages, however, was considered in some quarters to dampen the sales outlook for the final two months of 1959.

Preliminary sales figures for December reveal that a new sales peak was reached, with the adjusted sales index soaring to 144. The Christmas shopping season was so strong that sales for December were 5% greater than the record response of the preceding year. The gain for the entire year turned out to be 7%.

Inventories

In spite of the record sales achieved by District department stores in 1959, inventory accumulation remained conservative, perhaps in part as a result of the caution bred by the 1957-58 business decline.

Inventories (after seasonal adjustment) were at a then all-time high in September of 1957. (See chart.) That level was destined to hold as a high-water mark for about two years. When sales began their decline in the last half of 1957 and early 1958, inventories also declined. By April 1958, stocks had been reduced some 12% to a three-year low of 124. Stock accumulation progressed slowly throughout the remainder of 1958. This conservative trend continued in 1959; although sales advanced 7% between the years 1958 and 1959, end-of-month stocks in 1959 averaged only 4% greater than in 1958.

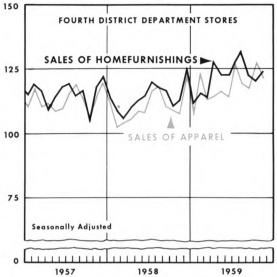
Lines of Goods

Another accompanying chart traces the course of seasonally adjusted sales by the apparel and homefurnishings groups of departments, the two major departmental groups within Fourth District department stores. (Apparel departments provided 43% of total store sales in 1958; homefurnishings accounted for 21% of the total.)

As discussed in the November 1959 issue

Sales of homefurnishings and apparel rose appreciably from the slightly reduced level of 1958. During a number of months, the homefurnishings performance was especially strong.





of this publication, homefurnishings sales in the 1958 business decline displayed a strength which had not been characteristic of previous recessions. Sales of homefurnishings appeared to follow approximately the same moderate downward movement as apparel sales instead of the more accelerated decline which was typical of homefurnishings sales during former downturns.

Expanding homefurnishings sales were a feature of 1959 sales activity. Starting in February, sales of homefurnishings began what proved to be a sustained advance, culminating temporarily in April with a sales mark of 128. This new peak represented a 22% hike from the recession low of March 1958 and a 15% gain from January 1959.

After two months of relatively sluggish sales activity, the advance began anew. The April high in homefurnishings was surpassed in August, when an adjusted sales index of 132 was recorded—a 3% rise from the previous peak.

SALES BY SELECTED DEPARTMENTS, 1959

Percent Increase or Decrease from 1958* Fourth District Department Stores

Department	% Change From 1958	
Juniors Coats, Suits and Dresses	+15	
Aprons, Housedresses, and Uniforms .	+13	
Domestic Floor Coverings	+12	
Men's Furnishings and Hats		
Major Household Appliances		
Radios, Phonographs, TV, Records,		
Sheet Music, etc		
Women's and Misses' Dresses	+10	
Blouses, Skirts and Sportswear	+10	
Girl's Wear	+10	
Furniture and Bedding	+ 9	
Blankets, Comforters, and Spreads	-0-	
Furs	-0-	
Silks, Velvets, and Synthetics	-0-	
Laces, Trimmings, Embroideries, and		
Ribbon	-0-	
Handkerchiefs	— 1	
China and Glassware	— 1	
Art Needlework	— 1	
Cotton Yard Goods	— 3	
Woolen Yard Goods		

^{*} Based on figures from January through November.

Going into the final quarter of 1959, homefurnishings sales showed some weakness, but they remained at a high level relative to the 1958 performance. Sales in November, the latest month for which departmental figures are presently available, showed marked improvement. With total department store sales for December reaching outstanding proportions, it is clear that this improvement continued through December.

Apparel sales, although moving erratically, exhibited an upward trend over most of the 1958-59 period. In February 1959, apparel sales matched the high which had been reached in December 1958. Following several months of settling and then a recovery, July

sales established a new all-time high. The adjusted sales index of 127 for that month represented a 9% rise from the January 1959 low and a 25% rise from the recession low of February 1958. Adjusted apparel sales declined in August and September but recovered in October to match the July high. November sales slipped a few points but with the large demand for apparel as Christmas gifts, December apparel sales regained the lost ground.

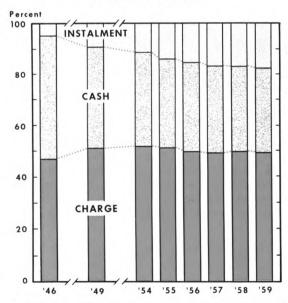
Sales by Individual Departments

The 7% gain in total department store sales from 1958 to 1959 represented increases by most of the individual departments which make up the two major departmental groups.

An accompanying table lists the departments registering declines or no change in

DEPARTMENT STORE SALES BY TYPE OF TRANSACTION

(Fourth District)



Instalment sales made up a larger proportion of total sales during 1959 than in any previous year on record.

their year-to-year sales activity, as well as those departments which made the largest gains over the preceding year. The table is based on data for January through November.

At the top of the list is the junior's coats, suits and dresses department for which sales in 1959 exceeded the previous year by 15%. Aprons, housedresses, and uniforms and domestic floor coverings departments posted gains of 13% and 12% respectively. Two departments, major household appliances and men's furnishings and hats, bettered their 1958 sales by 11%.

Among the five departments experiencing declines in sales during the first 11 months of 1959, cotton yard goods and woolen yard goods departments suffered the greatest setbacks, with a drop of 3% in each case. Art needlework, china and glassware and handkerchiefs departments slipped a slight 1% each.

Instalment Sales

Along with the revival of homefurnishings sales in 1959 there was a noticeable pickup in the proportion of sales represented by instalment transactions, a proportion which had remained relatively unchanged during the 1957-58 period. (See chart.) Homefurnishings include such high-priced items as major household appliances, furniture and bedding, as well as radios, phonographs, and television sets; these are the typical instalment items.

The importance of instalment selling by department stores has grown substantially since 1946, when they accounted for only 5% of total sales. By 1949, instalment sales accounted for almost 10% of all department store transactions. In the next ten years, instalment sales expanded to about 18% of total sales.

Until 1954, instalment buying increased at

DEPARTMENT STORE SALES BY CITIES

Percentage Change from 1958 to 1959

Metropolitan Area									Percent Change		
FOURTH	D	IS	T	RI	C	Г					+ 7
Portsmouth	١.										+10
Springfield											+10
Columbus											+ 9
Cleveland											+ 9
Lexington											+ 7
Cincinnati											+ 7
Pittsburgh											+ 6
Youngstown	n										+ 6
Canton .											+ 5
Erie											+ 4
Akron											+ 2
Wheeling											_ 2

the expense of cash purchases, with charge sales also acquiring a slightly larger share. But from 1954 to 1959, the proportion of total sales represented by sales on the instalment plan increased as the result of declines in the shares represented by both cash and charge transactions.

Metropolitan Areas

The year-to-year increase in sales during 1959 was shared by all but one of the major reporting centers, with the margin of increase ranging from 2% to 11%. The largest increase, 11 percent, was reported by Portsmouth. Wheeling posted the only decline from a year ago. Some of the steel centers, such as Youngstown and Canton, managed to post appreciable increases for the year, mainly because of the large business done in early 1959.

Business Trends in Cleveland*

HIGHLIGHTS OF CLEVELAND business statistics for 1959 were the all-time records posted by electric output, department store sales, and newspaper advertising lineage. For the most part, other business indicators were easily above the reduced positions of 1958 but generally remained below their pre-recession levels.

Toward the end of the year, following the prolonged hiatus in steel production, business activity proceeded at a stepped-up pace, with electric power output and department store trade showing pronounced strength, and with auto sales poised for a vigorous advance on the basis of renewed dealer inventories.

BUILDING. According to the dollar volume of building permits, over-all construction activity maintained a somewhat sluggish pace in Greater Cleveland (Cuyahoga County) during 1959. Yearto-year gains were restricted to residential building.

Permit volume in the entire county totaled \$279 million, up 10%, or \$26 million, from the reduced 1958 level. (For comparison, it may be noted that corresponding permit volume in the years 1955, 1956, and 1957 ranged from \$311 million to \$348 million.) All of the \$26-million year-to-year rise from the previous year was accounted for by an increase of that amount in the dollar volume of 1- and 2-family building permits. These totaled \$144 million in 1959 as compared with \$117 million in 1958; however, the total remained far short of the \$209-million record reached in 1955.

In Cleveland proper, total building permits dipped to a 10-year low of \$56 million, off 2% from the previous year. Residential building in the city rose by \$6 million to a total of \$20 million while nonresidential permits declined by \$7 million to \$36 million.

AUTOMOBILES. On the whole, sales of new automobiles made a good comeback from 1958 recession levels. However, sales weakness in the

third quarter and production shortages toward the end of the year held 1959 retailings to 76,141 units. Thus, volume was up one-third from 1958, but remained a little below pre-recession annual totals which approximated 79,000 in 1956 and 1957.

Used car sales numbered 83,162 last year, up about 9,000, or 12%, from '58, but still about 4,000 to 5,000 short of the 1956 and 1957 annual totals.

ELECTRICITY. Electric power production, measured in kilowatt-hours, surged above the 8-billion mark for the first time in local history. Output exceeded the previous record of 7.7 billion kwh. in 1957 by 9%, and surpassed the 1958 total by 12%. It was true of electric power production, as of most Cleveland business indicators, that, following excellent performance earlier in the year, volume declined somewhat during the second half of 1959, along with the shutdown of the steel industry. There was a brief period of year-to-year deficit early in November, but a quick turnaround came with the resumption of steel production and by December, new weekly records were being posted.

STEEL. Output of steel in the Cleveland-Lorain district last year is estimated at 4.9 million tons, up about one-fourth from 1958, but otherwise the lowest volume since 1954.

As a result of the unprecedently long strike in the second half of the year, 1959 steel production was held to about 60% of the industry's capacity as of the first of the year, or not a great deal better than the 50% operating rate of the preceding recession year 1958. Thus, there have just been completed two consecutive years during which unused steel-making capacity in this area has amounted to from 40% to 50% of the existing potential. This recent performance is in sharp contrast to the previous lengthy period, extending back to 1949 or earlier, during which operations showed an idle rate of less than 15% in all years except recession 1954, when downtime amounted to only 26% of annual capacity.

^{*}A reprint of the January 26 issue of "Cleveland Business Activity", a regular weekly news release of this bank.

CARLOADINGS. Railroad freight traffic was cut back sharply during the period of the steel industry shutdown. With the onset of the strike, outbound carloadings in Cleveland were immediately halved as Great Lakes iron ore shipments came to a complete halt. Presumably, rail shipments of manufactures were also adversely affected. Consequently, total outbound carloadings for the year amounted to only 274,000, up 14% from 1958 but otherwise the fewest in at least ten years. Inbound rail carloadings performed only moderately better; the 1959 total of 320,000 cars showed a 30% pickup from the extremely reduced 1958 level, but remained below all other recent periods except recession 1954.

UNEMPLOYMENT. For the full year, claims for state unemployment compensation averaged about 17,000 per week, or somewhat less than half the weekly average of the preceding year.

Prior to the large-scale layoffs that stemmed from steel shortages late in the year, the employment picture had been considerably brighter. Thus, for the six months April through September, unemployment claims had dropped to an average of about 12,500 per week, down from 24,000 in the January-March quarter. In the

October-December quarter, however, claims advanced rapidly, going as high as 26,000 mid-way in the period, with some tapering off thereafter, and averaging 20,000 for the three-month span.

ADVERTISING. There were 50.5 million lines of retail display advertising published in Cleveland's three major daily newspapers during 1959, showing a year-to-year increase of 5%. Volume set a new record, but with a narrow margin of less than 1% over the previous high reached two years earlier.

DEPARTMENT STORES. The volume of department store sales likewise posted a new dollar record, up 9% from the preceding year. Despite the fact that thousands of local workers were idled by the steel strike, sales held up remarkably well and were relatively better, on a seasonally adjusted basis, in the second half of the year than they had been earlier.

TRANSIT SYSTEM. Transit system revenue amounted to \$26.7 million. There was a gain of about 5% from 1958, but the total remained below that of other recent years, despite a higher fare structure.

NOTES ON FEDERAL RESERVE PUBLICATIONS

Among the articles published in the January monthly business reviews of other Federal Reserve banks are:

- "New Fashions in Consumer Lending", Federal Reserve Bank of Chicago.
- "The French Stabilization Program", Federal Reserve Bank of New York.
 - "Walking the Dog", Federal Reserve Bank of Atlanta.

 This is an address that was given at the University of Tennessee on the subject of Federal Reserve monetary policy by Earle L. Rauber, Vice President and Director of Research at the Federal Reserve Bank of Atlanta.

(Copies may be obtained without charge by writing to the Federal Reserve bank named in each case.)

"Weekly Financial Barometers" is the title of an informative booklet published by the Federal Reserve Bank of Philadelphia. The booklet is designed as an aid in learning how to interpret the weekly reports of condition of member banks and of the twelve Federal Reserve banks.

(Copies are available upon request either to the Federal Reserve Bank of Philadelphia or to the Federal Reserve Bank of Cleveland.)