May 31, 1960
Volume 15 · Number 5

Monthly Review

OF THE FEDERAL RESERVE BANK OF MINNEAPOLIS

Economy exhibits modest advance

An analysis of the district's economic indicator series suggests that modest improvement from year-ago levels occurred during April, but that they were not as large as in other recent months. Total nonagricultural employment in April, for example, registered a 1.1 percent increase from a year earlier—not quite as large an increase as prevailed during the first three months of 1960. The number of people drawing or registering initial claims for unemployment insurance also increased from year-ago levels. This failure of unemployment to improve despite employment gains is a reversal of the favorable trend noticed in recent months prior to April. It suggests that more people are coming into the labor force than have been absorbed by job opportunities. The Minnesota mid-April unemployment figure was 6.8 percent of the labor force, compared with 6.7 percent a year ago. The mid-April employment report in Minnesota also noted particular strength in manufacturing employment, but a reduction occurred in the average work week in manufacturing, from 40.5 to 39.7 hours.

The employment report also commented on the lag in construction activity for the month and on the reduction in factory overtime work. The low level of district building permits both as to number and valuation during March represented a reversal of the trend observable since last November.

Failure of the district economy recovery to fully match that of the nation has been attributed to re-

Agricultural exports

Second in a series on St. Lawrence Seaway and the Ninth district economy . . . page 6

duced income in the important farm sector. Farm income during the first quarter averaged about 10 percent less than in the same period of 1959.

The most important favorable economic statistic for the month of April over that of a year ago was a 9.3 percent increase in department store sales, adjusted for seasonal variation, trading days, and the late Easter this year. This is the only major district economic figure that led rather than lagged comparable U. S. data.

In contrast to the sales data are the April district bank debit data, which did not show a gain from year-earlier figures.

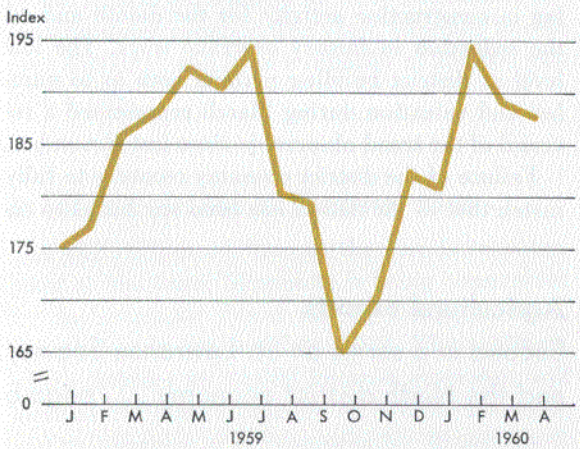
Bank debits indicate economic shifts

Sharp fluctuations in economic activity in the Ninth district during the latter half of 1959 and during the first four months of this year are reflected by the movement of the seasonally adjusted index of bank debits—the amount of checks drawn on banks. As may be observed on the accompanying chart, the adjusted index in July 1959 rose to a peak of 194 percent of the 1947-49 base period. In the following months, it dropped sharply to a low of 165 percent in October. Beginning in November, it again rose sharply reaching a high point of 195 percent in February and then receding a few points in March and in April to 190 percent and to 188 percent respectively.

Several factors contributed to these fluctuations in business activity. The spending stream for agriculture during the current crop year, July 1959 through June 1960, was determined in calendar year 1959. It is therefore of interest to look at developments in farm income in 1959.

Bank debits in 93 district cities

(Seasonally adjusted, 1947-49 = 100)



Changes by states 1958 to 1959

Minnesota: Cash receipts from farm marketings declined 6 percent. The decrease was attributed to lower receipts from the sale of hogs, eggs, soybeans, corn and small grains.

North Dakota: Lower cash receipts from wheat and other small grains were the primary causes of the reduced incomes in North Dakota.

South Dakota: Cash receipts were down 16 percent from 1958. Drouth cut crop production sharply in South Dakota. In addition, lower receipts from the sale of hogs contributed to the drop in South Dakota's income.

Montana: Total cash receipts from farm marketings were off 3 percent; this was mainly caused by smaller receipts from the sale of cattle and calves.

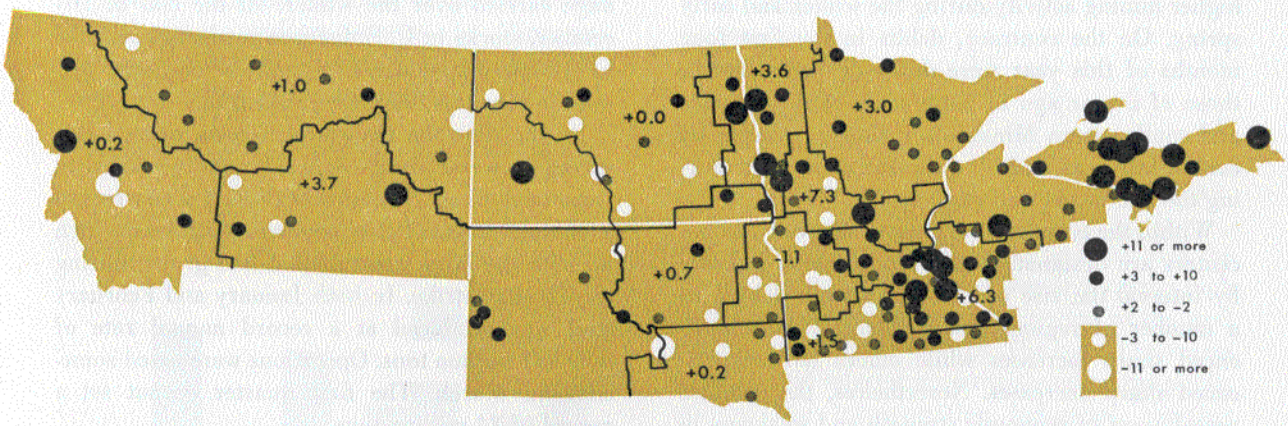
During the current crop year the income stream has been and will be below the level of a year ago because of reduced district output in 1959. Considering only the current crop year thus far, extending from July 1959 through March of this year, district cash receipts from farm marketings were down 15 percent from the corresponding period one year earlier. In the Dakotas they were down as much as 25 percent, and in Montana, 14 percent. In the eastern half of the district farm income has held up much better. In Minnesota it was down only 6 percent, in northwestern Wisconsin 7 percent and in Upper Michigan 4 percent.

Nonfarm sector

Economic activity was also markedly reduced by work stoppages in the iron ore and copper industries. The iron ore stoppage extended from

Bank debits by economic regions*

Percent changes from first four months of 1959 to same months of 1960



*Areas shown are economic sub-regions as defined by the Bureau of the Census.

July 15 to November 7, 1959. In copper mining and smelting, it extended from August 19, 1959 to February 15, 1960 in western Montana and from October 28, 1959 to February 22, 1960 at White Pine, Michigan. The work stoppages caused heavy losses in personal incomes in those areas affected. In addition, shortages of steel last October forced some layoffs in industrial centers. It was the spreading impact of work stoppages that reduced bank debits to such a low figure last October.

Beginning in February and extending through March, large areas of this district were blanketed by three snowstorms, and unseasonably cold weather forced the postponement of outdoor work. As a result, the usual seasonal rise in economic activity was delayed, as is reflected in lower seasonally adjusted bank debits for both March and April.

District economic growth

In spite of these developments, depressing to economic activity, the Ninth district economy has continued to grow. In the first four months of this year, bank debits were 5 percent above the corresponding period of last year.

Generally, some regions within the district expand more rapidly than others. Due to the drouth and work stoppages the variation in growth has been accentuated. On the accompanying chart, the district is divided into economic regions and the percentage changes in bank debits are listed for each region for the first four months of this year from the same period of last year. Bank debits rose from 6 to 7 percent over the period in agricultural areas of Minnesota where normal crops were harvested in 1959, and in industrialized regions—the Twin Cities and other centers in south-

eastern Minnesota and in a portion of Wisconsin. In mining regions of northeastern Minnesota, northern Wisconsin and Upper Michigan debits were up 3 percent, reflecting the gradual improvement in economic conditions resulting from the higher mining activity during the winter and early spring. On the contrary, debits in the first four months of this year were down or just equal to those of a year ago in large areas of the Dakotas and southwestern Minnesota seriously affected by drouth last year and by unfavorable weather during the late winter and early spring.

Within the economic regions on the chart, urban centers are designated by symbols which indicate by interval the rise or decline in bank debits. In a number of regions, some centers have experienced sharp increases while others have experienced sharp decreases. Nevertheless, the symbols reveal areas of economic strength and weakness in the district.

ORE SHIPMENTS OFF TO EARLY START

In spite of a cold winter and late spring, the iron ore shipping season on the Upper Great Lakes began March 28 when the first ore boat was loaded at Escanaba on Lake Michigan, traditionally the first port to be opened. Ice was broken relatively early to free boats from their winter moorings in the Duluth-Superior harbor and the way was cleared to the Two Harbor ore dock. As a result the first ore boats on Lake Superior were loaded during the first week of April.

A large volume of ore was shipped from the Lake Superior region during April. By the end of the month over 5½ million gross tons[1] had been shipped, only 46,978 tons of which came from Canadian ports. This amount was almost equal to that shipped by the end of April 1956, when ore boats transported the largest early-season tonnage since the end of the Korean War. Last year the season opened later, and less than 3 million gross tons were shipped in April.

In spite of the long strike in 1959, iron ore stocks at the close of the Lake Superior navigation season had been built up close to the usual tonnage carried over the winter. At the end of December, stocks in U. S. furnace yards and on Lake Erie docks aggregated 64½ million tons, only 1⅓ million tons less than one year earlier.

By the time the navigation season opened this spring, however, iron ore was urgently needed at some steel plants. Steel production set a new record as managements of steel companies strove to catch up with the large demand that had grown during the 116 day strike. In both January and February steel was produced at a record annual rate of over 141 million tons. Operations were eased somewhat in March. The first quarter output set a record of 34 million tons.

The heavy consumption of iron ore during the winter depleted stocks rapidly. This necessitated a step-up in ore deliveries at U. S. steel and iron plants during the first quarter, aggregating nearly 13½ million tons. The last-year quarter total was less than 10 million tons. Over one million tons of this year's shipments were Lake Superior ores,[2] compared with only 326,000 tons last year. Ore receipts from all sources during April apparently were high, although figures are not yet available. As a result of the increased shipments of ore since the first of the year, stocks at steel and iron plants have been maintained close to the usual level. Thus the demand for ore during the coming months, as in former years, depends on the output of steel and the stockpiling for next winter.

PERSONAL INCOME IN MINNESOTA

Minnesota's personal income in April was $7,055 million, calculated at a seasonally adjusted annual rate. This was 4 percent above last April. The comparable change for the nation was a 4.9

[1] Figures released by the American Iron Ore Association.

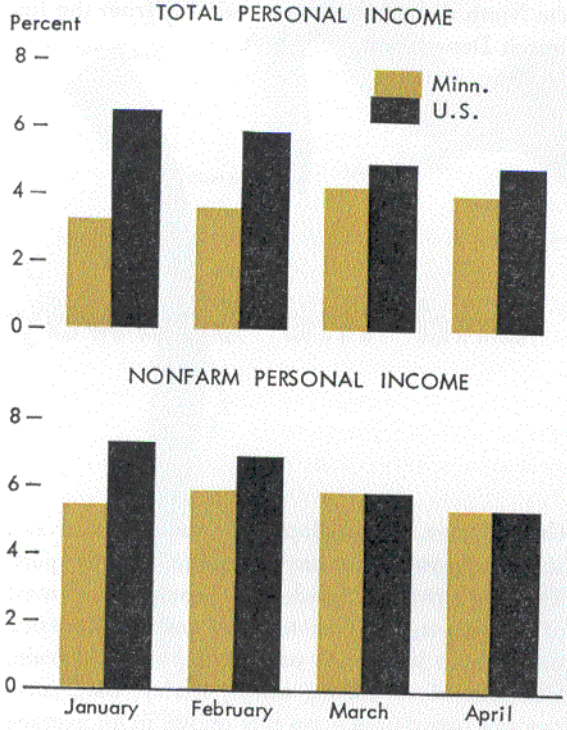
[2] The total consisted of 910,827 tons from U.S. mines and 309,559 tons from Canadian mines.

percent increase, as estimated by the U. S. Department of Commerce.

The accompanying chart shows that the Minnesota economy has not kept pace with the rate of increase registered by the national economy during the first four months of 1960. However, income received from nonfarm sources in Minnesota matched the U. S. expansion in March and April, though not in the first two months.

Percentage increase from 1959 to 1960

(January through April)



A comparison of some of the major components of this aggregate measure indicates that Minnesota has gained relative to the United States in the January to April period in the manufacturing and transportation industries, nonfarm proprietors' income, and the transfer payments category.

Decreases in the wages and salaries component from April 1959 to April 1960 were attributable to decreased rates of activity in the construction and mining industries. It should be noted that the April 1959 income in mining was abnormally high because of the buildup in anticipation of the steel strike in the summer months. The largest increases in wages and salaries were registered by the public utilities and transportation industries, together with federal government payrolls. The latter increase was primarily the result of earnings by temporary supervisors and enumerators employed to take the 1960 Census of Population and Housing.

Percentage increase from 1959 to 1960:
January through April

	Minnesota		U.S.	
	Jan.	Apr.	Jan.	Apr.
Wages and salaries	6.2	5.4	7.8	5.4
Commodity-producing industries	8.5	2.8	9.9	4.1
Manufacturing	8.2	5.8	10.4	3.5
Distributive industries	3.9	8.2	5.9	5.5
Service industries	6.9	5.0	8.7	7.1
Government	4.5	6.9	5.2	7.3
Nonfarm proprietors' income	1.3	5.5	5.7	3.8
Transfer payments	3.8	6.0	4.2	4.8

LOANS UP IN DISTRICT

Condition statements of weekly reporting member banks in the district for April 6 and May 4 disclose small gains in loans, investments and deposits for the period. A $7 million addition to loans (other than loans to banks) was entirely accounted for by added commercial and industrial loans. A year earlier, total loans rose by $34 million. Total holdings of United States securities increased by $3 million, although those due within a year fell $6 million. Total deposits rose $20 million in contrast to a decline of $8 million in the same period last year.

At country banks loans increased by $29 million in April—the same increase registered a year earlier, but considerably more than the average increase for the month of April since 1946. Total deposits of country banks fell by $47 million, an amount which exceeded any decline registered for

April since 1946. Last year country bank deposits rose by $22 million in April. Country bank borrowings from the Federal Reserve Bank of Minneapolis at $10.3 million averaged more in April than in any previous month this year, and more than in any of the past four Aprils. But in the week ended May 4 such borrowing had declined to an average of $8.6 million.

Borrowings by the reserve city banks from the Federal Reserve bank of Minneapolis, at $59.8 million in April, were last exceeded in May 1957 when borrowings averaged $61.5 million. In the week ended May 4, district city bank borrowings averaged just slightly less than the April figure.

Publications available

An abstract of the *Reports of Condition* of Ninth Federal Reserve district banks as of March 15, 1960, is available on request from the Research Department of this bank. This is the first publication of the abstract, which presents information by state and by reserve city and country bank breakdowns. Quarterly publication through 1960 is scheduled; subsequent publication will depend on response.

Copies of the *1959 Statistical Review*, presenting data for principal statistical series relating to the Ninth district, are also available from the Research Department.

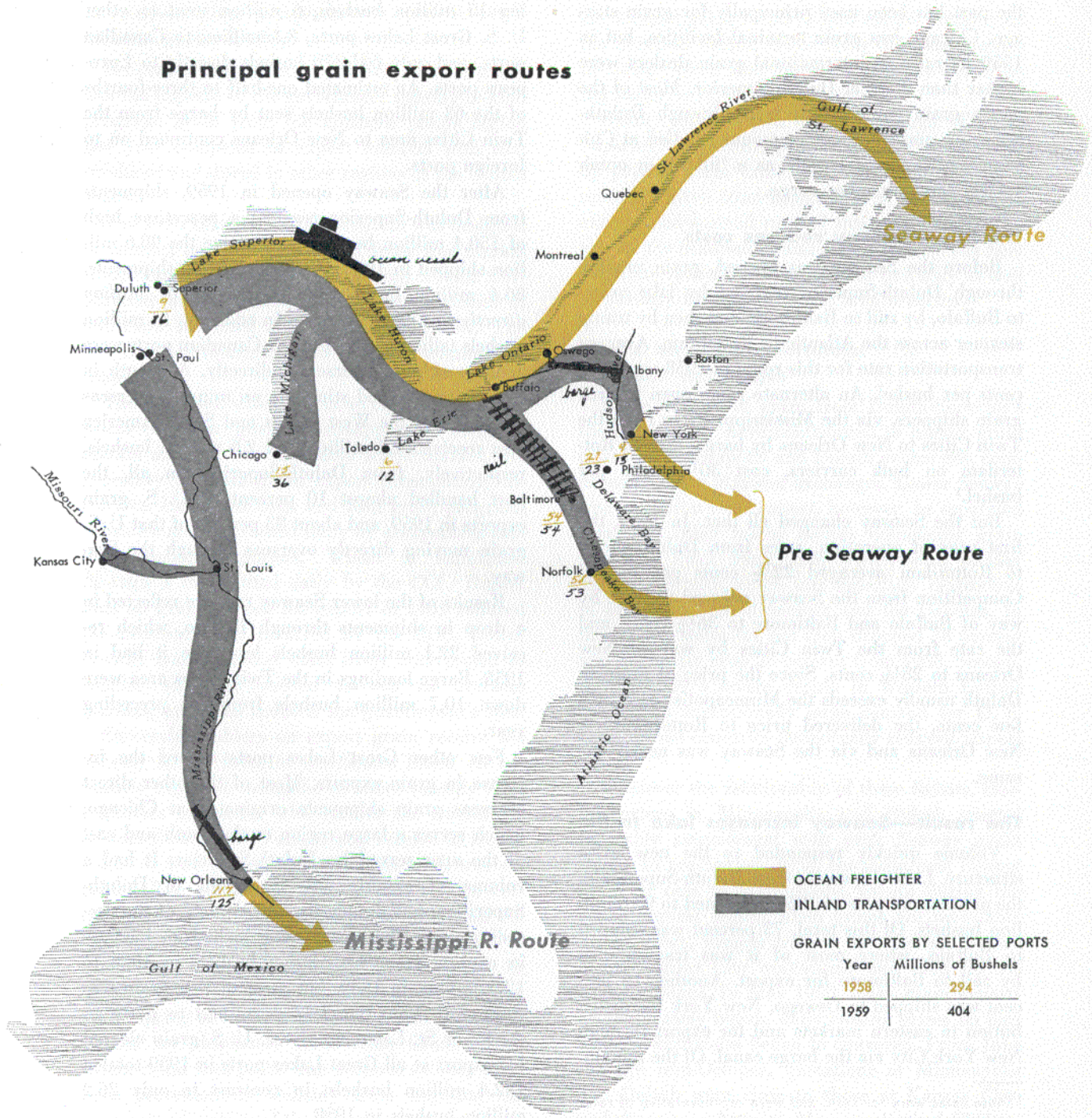
Agricultural exports and the Seaway

Historic routes followed by grain on its way from Midwestern producers to overseas consumers were dramatically modified with the opening of the St. Lawrence Seaway in April 1959. The port of Duluth-Superior was the focal point for a substantial part of the first year's jump in activity. While the increase in shipments was undoubtedly affected by a number of special circumstances, last year's experience nonetheless indicates that reduced shipping costs through the Seaway exerted a strong influence on the district's grain commerce—an influence likely to continue in future years.

Duluth-Superior and the grain trade

For an important sector of the grain-producing Great Plains, Duluth-Superior provides lower rail shipping costs than any alternate Seaway port. The port's primary 'trade area,' composed of most of Minnesota, the Dakotas, and eastern Montana, harvests an important part of the nation's grain. One-fifth of all spring wheat, barley, flax, corn, rye and oats comes from this region in an average year. Although some of it moved into export markets before the Seaway, the amount was much smaller, and it traveled by indirect routes.

Duluth-Superior's position is enhanced by the fact that there are no facilities for the handling of grain at other ports on Lake Superior. Nor do adequate facilities exist at some of the larger Lake Michigan ports, such as Green Bay and Milwaukee. The latter has a waterfront elevator which in



GRAIN EXPORTS BY SELECTED PORTS

Year	Millions of Bushels
1958	294
1959	404

the past has been used principally for grain storage. Chicago has grain terminal facilities, but in 1959 its rates to international grain dealers were higher than those at Duluth-Superior. Most of the area's grain consequently went through Duluth-Superior, and the smaller amount handled at Chicago was exported largely as a 'fill-in' on ocean vessels carrying other cargo.

The key—Seaway reduces costs

Before the Seaway was opened, grain moving through Duluth-Superior traveled by lake vessel to Buffalo, by rail to Baltimore, and then by tramp steamer across the Atlantic to Rotterdam. Average transportation rate for this route in 1958 was 38¼ cents per bushel. An alternate route open to area grain shippers, via the Mississippi River from the Twin Cities to New Orleans by barge, then to Rotterdam on bulk carriers, cost 30½ cents per bushel.[1]

But the Seaway changed all that. In 1959, the first year of operation, rates from Duluth *direct* to Rotterdam averaged 22½ cents per bushel. Competition from the Seaway reduced the rate by way of Buffalo and Baltimore to 36½ cents, and the rate from the Twin Cities by way of New Orleans to 28½ cents. Since the price of grain in Duluth usually exceeds the Minneapolis price by a few cents, the delivered price to Rotterdam via New Orleans and via the Seaway was nearly the same.

The result—Seaway increases lake traffic

Volume quickly responded to the new price structure. Lake shipments from Duluth-Superior in the pre-Seaway year of 1958 amounted to 98.6 million bushels. Of this total, 73 percent was shipped to Buffalo, where most of it was transshipped by rail to Baltimore for export. Another 12 percent was shipped to Oswego, New York for distribution in eastern markets and for export through New York City via the barge canal. Of the remaining 15 million bushels, 6 million went to other U. S. Great Lakes ports, 8.3 million to Canadian ports, and only 641,070 bushels directly to European ports. An estimated one-half to three-fourths of the 63 million bushels sent by barge from the Twin Cities area to New Orleans continued on to foreign ports.

After the Seaway opened in 1959, shipments from Duluth-Superior reached a peacetime high of 150.4 million bushels, well above the 98.6 million shipped in 1958. Of the total 1959 shipments, 86.4 million bushels were exported, *67 million directly to European ports.* In addition, 10 million bushels tallied as destined for Canadian ports were actually shipped overseas indirectly. A drouth in Europe had helped stimulate an unusual overseas demand, but the West Indies and South America also received 2.1 million and 2.6 million bushels, respectively, from Duluth-Superior. In all, the port handled almost 10 percent of U. S. grain exports in 1959, and about 83 percent of that U. S. grain moving directly overseas through the Seaway.

Results of the lower Seaway rate are reflected in a drop in shipments through Buffalo, which received 22.1 million bushels less than it had in 1958. Barge loadings in the Twin Cities area were down 10.7 million bushels from the preceding year.

Few other Great Lakes ports shared the increase in grain exports. Most of the other direct overseas grain shipments originated at Chicago, which serves a large region to the south and east of the area served by Duluth-Superior. It had a volume of exports less than half of Duluth-Superior's, but double its own volume of the preceding year. The port of Toledo had an increase in exports from 4.9 million bushels in 1958 to 12.5 million in 1959, but most of this grain was shipped to Canadian lake ports and to ports on the lower St. Lawrence River. U. S. grain cleared for export at all Great Lakes ports in 1959 totaled 132.4 million bushels, in contrast to only 26.2 million bushels in 1958.

[1] These rates were for corn, and were representative of rates on heavy grains.

Subsidy-in-kind program affects grain traffic

Because of the reduction in transportation costs, and the impetus of the government subsidy-in-kind program, grain from the northern plains region last year competed in export markets with that produced and stored in other regions of the United States.

The 1956 subsidy-in-kind program was designed to channel the export of wheat from free market stocks rather than from Commodity Credit Corporation stocks. A similar plan was established in mid-1958 for corn and other feed grains. The program has returned grain export to commercial trade.

The subsidies, which act as an equalizer between prices on the government-supported domestic market and the less profitable world market, are necessary to make grain export economically attractive. Under the corn and feed grain program, subsidies are established daily by competitive bidding among exporters. Wheat is subsidized through a rate posted daily by the CCC. Higher bids on grain offered for export in 1959 reduced the necessary loss incurred by the CCC. Lower Seaway transportation costs likely contributed to smaller subsidies needed to sell in overseas markets, and thus reduced the government's loss.

Successful bidders on export grain receive the subsidy in the form of certificates based on net bushels exported times the effective subsidy rate. Exporters or parties who receive the certificates present them to CCC offices and receive in return wheat or feed grains, depending on what was exported. The amount of grain exchanged for certificates is determined by their face value and the CCC current domestic price.

Varying subsidies formerly were offered to ports on different coasts. When the Seaway opened in the spring of 1959, however, uniform rates were offered for shipments made from Great Lakes, Atlantic and Gulf ports. The uniform subsidy rates have prevented the subsidy from negating the economic advantage of the Seaway route, and have encouraged grain to move into export markets by the cheapest means. Costs from different regions to foreign ports thus become a primary determining factor.

Grain exported in 1959 through Duluth-Superior was drawn primarily from stocks held by private grain firms. The CCC sold only 27.1 million bushels from stocks held in the region for export, and a small part of this was exported by way of the Mississippi and New Orleans. The Seaway thus opened new markets for privately as well as publicly held grain in the area it serves.

Effects on price quotations at grain exchanges

Large exports of grain from Duluth-Superior's trade area may have contributed to higher grain prices at Minneapolis and Duluth exchanges, compared to other Midwest exchanges. Lower Seaway transportation costs cannot, however, be separated from two other major factors influencing grain prices in 1959. First, crop yields were smaller due to a drouth which was especially destructive in some areas of Minnesota and the Dakotas. In these three states the oat crop dropped 38 percent and the barley crop 28 percent from 1958. Second, during 1959 a severe drouth in Western Europe created an exceptionally large demand for U. S. grain. Some countries temporarily reduced import duties.

Whatever the relationship of these factors, closing prices in Minneapolis and Duluth reacted favorably coincidental with peak Seaway grain traffic. In pre-Seaway 1958, the daily cash closing price on oats in Minneapolis, except during the area's harvest season when prices are invariably driven down, ranged from 0 to 4 cents a bushel below Kansas City quotations, and even further below Chicago. In May 1959, when grain exports on the Seaway began, daily closing prices on oats at these exchanges began to converge. From June through mid-October, quotations at Minneapolis and Duluth were close to those at Kansas City, and the spread between Minneapolis and Chicago

narrowed. In late October, as grain shipments on the Seaway tapered off, quotations at Minneapolis and Duluth leveled while those at Kansas City and Chicago continued to rise, thus increasing the spread.

Oats and corn at the Minneapolis exchange followed the same general pattern of fluctuations in relation to the navigation season.

The relationship of the lower transportation costs to grain prices must be observed for several years before this factor can be separated from others and adequately appraised.

1960 costs go up

At the close of the 1959 shipping season, international grain dealers began contracting with ship owners for the next one. The average rate, based on contracts drawn up before March 1, was 23¾ cents per bushel, or 1¼ cents higher than in 1959. Contracts since March 1 have averaged 24¼ cents.

Damages and delays to ocean vessels last season may have had a bearing on the higher rates. At Duluth-Superior, some elevator slips were too shallow and some loading spouts too low for ocean vessels, and inexperienced grain trimming crews prolonged loading time. Some of these problems were solved during 1959 and others were tackled while the port was closed for the winter.

On the basis of contracts drawn up before March 1, the 1960 rate from the Twin Cities by way of New Orleans was 29¾ cents per bushel. Although the barge rate was reduced by 1¼ cents per bushel after March 1, total costs for the route remain ½ cent higher than last year, due to ocean freight costs. From Duluth by way of Buffalo and Baltimore, the average to date was estimated at 35¾ cents per bushel, a decrease of ¾ cent. The advantage of Seaway shipping, based on estimated rates, has largely been maintained in 1960.

GRAIN TRANSPORTATION RATES TO ROTTERDAM[1]

Cost Items in Exporting Grain	1958[2]	1959[2]	1960[3]
	ST. LAWRENCE ROUTE: DULUTH-ROTTERDAM		
Ocean vessel rate	——	22½¢	24¼¢
	DULUTH-BUFFALO-BALTIMORE-ROTTERDAM ROUTE		
Duluth-Buffalo lake vessel rate	10¢	10¢	10¢
Buffalo to Baltimore rail rate (Includes elevator cost at Buffalo)	14¢	14¢	11¾¢
Elevator cost at Baltimore	3¢	3¢	3¢
Baltimore to Rotterdam ocean vessel rate	11¼¢	9½¢	11¢
Total	38¼¢	36½¢	35¾¢
	MINNEAPOLIS-NEW ORLEANS-ROTTERDAM ROUTE		
Minneapolis to New Orleans barge rate	15¢	15¢	13¾¢
Elevator cost at New Orleans	3¢	3¢	3¢
New Orleans to Rotterdam bulk carrier	12½¢	10½¢	12¼¢
Total	30½¢	28½¢	29¢

[1] Rates are based on corn.
[2] Average rates for season.
[3] Estimated average rates for 1960 based on contracts between grain dealers and barge and ship owners after March 1, 1960.
Source: Louis Dreyfus Corporation, Minneapolis, Minnesota.

New developments: Outlook for the future

A better competitive position for district grain in world markets has already been derived from the Seaway, and led to increased exports last year. Record volumes in the first season created some anticipation of larger exports, probably up to 130 or 140 million bushels, in the 1960 season. In addition, important grain producing states adjoining those immediately served by Duluth-Superior—Iowa, Nebraska, Wyoming and Colorado—could feasibly use it to market part of their crop.

But Duluth-Superior is now facing greater competition for the handling of grain from other Great Lakes ports. During 1959 no grain was shipped out of the port of Milwaukee, but in 1960 a substantial volume is expected to originate there. Facilities formerly used for storage will be converted to use in loading vessels.

Chicago grain elevators are located on Lake Calumet, which is connected to Lake Michigan by a river channel only 21 feet deep. This severely limited the loading of ocean vessels. Now, however, provision has been made for vessels to "top-off" their loads with grain transferred from a barge-elevator anchored at the mouth of the river, where depth is adequate. Proposals have also been made to reduce the number of bridges over the Calumet River from 14 to 8 over the next few years, and to dredge the channel to a depth of 27 feet. These improvements would reduce the time required to move vessels from Lake Michigan to the grain elevators and would permit them to load to full Seaway depth.

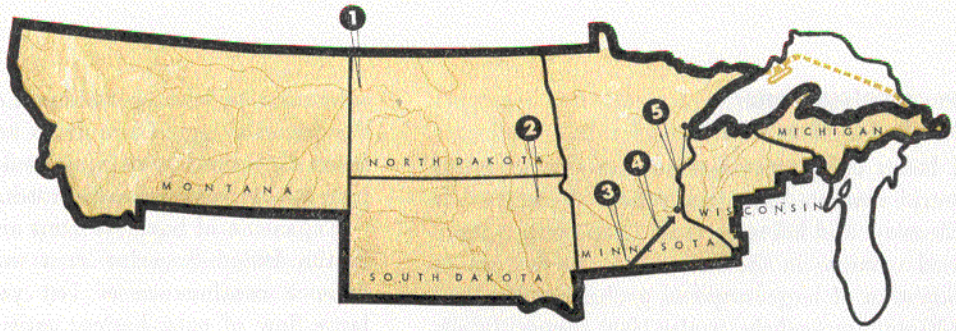
An increasing volume of grain may move by lake vessel from Toledo on Lake Erie to ports on the lower St. Lawrence River. Improved elevator facilities at St. Lawrence ports have reduced the ships' turn-around time in port, an important consideration to lake operations. Lakers engaged in the transporting of ore from eastern Canada to lower U. S. lake ports may haul grain on the return trip at very favorable rates.

Expansion of business firms and more new jobs in the Duluth-Superior area would likely result from a continuance of last year's surprisingly large flow of oats, barley, corn, wheat, flax, and in smaller volume, rye and soybeans. Some growth along these lines was already underway last year.

The possible future development of cargo shipments from foreign ports to Duluth-Superior could result in lower export freight rates. Most vessels chartered to haul grain in 1959 came to Duluth-Superior empty. If they carried cargo both ways, freight rates might be further reduced for both grain and imported goods. The ultimate degree and incidence of cost savings over the Seaway will, however, be difficult to appraise. What portion will accrue to producers, handlers, and consumers of grain over the long run cannot be accurately predicted from present information. Under some conditions of demand, the price of grain in a consuming area may show negligible response to a reduction in transportation costs. This may have been the situation in Europe, where production was down and demand up. Under other conditions, it is conceivable that a large part of any transportation cost reduction would be reflected in price reductions in the consuming area.

Finally, the Seaway holds potential and indirect benefits to the region it serves. The development of new industrial and commercial enterprises along the Great Lakes could bring increasing numbers of urban workers as consumers of farm products. The development, of course, would not be sudden or revolutionary, but would likely be gradual, extending over many years.

—Oscar F. Litterer



Economic Briefs

1. Water plant to supply Williston, N. D.

Work has begun on a $3 million water treatment and pipeline project 5 miles west of Williston, North Dakota. The new plant will be capable of processing 6 million gallons of water a day on a 24-hour basis. The new 30-inch transmission line, which has an 18 million gallons a day capacity, will supply water for drinking, filter cleaning, fire protection, and laboratory and other purposes. Completion is expected by May 1961.

2. Webster, S. D. chosen for water study plant

Webster, South Dakota has been chosen as the site of a plant for treatment of brackish water, one of five such projects in the nation being sponsored by the federal government to study methods of improving water supplies. The plant, expected to cost over $500,000, will have a capacity of 250,000 gallons a day.

3. Addition planned at Sherburn, Minn.

A $12 million addition to the Fox Lake power plant at Sherburn, Minnesota is being constructed by the Interstate Power Co. of Dubuque, Iowa. Completion is set for July 1962. The addition, which includes an 84,000 kilowatt generator, will increase the plant's capacity to 109,000 kilowatts, and the capacity of the company by 30 percent.

4. Pipeline to bring propane to Twin Cities

The first stretches of a 2,300-mile pipeline, one branch of which will carry propane to the Twin Cities, are being extended from the Permian basin of Texas. Total cost of the system, which will carry natural gas and butane as well as propane to McPherson, Kansas is about $60 million. The line is expected to reach Minnesota this fall.

5. Power line to connect NSP and MP&L

Construction will begin next fall on a 142-mile transmission line between the Minnesota Power and Light Co. at Adolph, northwest of Duluth, and the Northern States Power Co. at Long Lake, north of St. Paul. The $8,300,000 "power pool" project, scheduled for completion in May 1963, will permit exchanges of power between the two systems during emergencies and for relief during peak loads. Highest NSP demand falls in December, due to business and residential lighting; greatest MP&L demand occurs in late summer, due to mining activity. Power transfer via the 230,000-volt line will also eliminate duplication of generating facilities.

Correction

An item in the "Economic Briefs" section of the April 1960 *Monthly Review* incorrectly stated that a new soybean plant in North Dakota was to be built at Bismarck. The site chosen was Kindred, a few miles southwest of Fargo.