“Diversity” best describes the current economic situation in the Ninth Federal Reserve district. Agriculture, by far the most important single industry in the district, has improved its position noticeably in recent months. In Minnesota the 1960 index of total crop output is the highest on record, and crop output is estimated at a near record for the district as a whole. An exceptionally late frost date was particularly helpful to corn and soybeans, which were late in maturing this season. District cash farm income in August was about 17 percent higher than a year earlier. It now appears probable that the district’s agricultural cash receipts in the current crop year ending next June 30 may be approximately 5 percent larger than in the preceding year. This would be an important factor in maintaining total personal incomes and consumer buying during the months ahead.

Total personal income in Minnesota during September (data for other district states not yet available) was 6.8 percent higher than a year earlier. The increase is in part attributable to the improved agricultural situation. Continued improvement in total non-agricultural employment from year-earlier figures is also a factor in higher personal incomes. September bank debits registered on the plus side as they did in August—up 8 percent and 14 percent respectively from year-ago levels.

General cargo
Last in a series on the St. Lawrence Seaway and the Ninth district economy . . page 5
The gain in new claims for unemployment compensation insurance and the increase in the total number of people drawing unemployment insurance are notable among the less favorable district economic trends. Nevertheless, the increase from a year earlier (roughly 15 percent in September in both categories) was not as pronounced as it was for the nation as a whole, which had a 30 percent increase. District non-agricultural employment, moreover, was 2.2 percent above the level of September of last year. In Minnesota, non-agricultural employment reached 955,400, an all-time high for any month.

A further decline was noted in recent weeks in the number of new building permits issued in the district. Cumulatively, since the first of the year, the decline has averaged 14 percent less than a year earlier. Residential building has been particularly weak, and outside construction work is now faced with a seasonal decline as cold weather develops.

District department store sales were on the plus side in August relative to a year earlier, but since then weakness has developed due mainly to unseasonably warm weather in September and early October. The lumber industry in the western part of the district has been on the weak side in recent months, with hours worked per week down and sales down sharply. Copper mining activity in Montana is also on the slow side currently, and the outlook is clouded by surplus supplies of the metal. Rainfall in the western Dakotas and in Montana has been on the light side so far this fall. If not corrected soon, this would adversely affect the 1961 outlook for winter wheat.

Improvement in the district's farm income may have been an important factor in an improvement in district member bank's reserve positions during recent weeks. Demand deposits at member banks were up sharply in September; borrowings at the Federal Reserve Bank of Minneapolis were reduced as liquidity positions improved. Loan demand at city member banks continues strong with only a modest increase at country member banks.

The following selected topics describe particular aspects of the district's current economic scene:

DEMAND DEPOSITS RISE

In the month ended September 28, the demand deposits of district member banks increased by more than in the comparable period of any of the years since 1950. City bank demand deposits rose $48 million, reflecting gains in deposits owned by banks and by others which more than offset a sizable reduction of U.S. Treasury balances; a demand deposit increase of $14 million was registered a year earlier. At the country banks, demand deposits rose $53 million in the month ended September 28; an increase of $40 million was registered a year earlier.

Loans at the city banks increased by $11 million in the month ended September 28, while investments fell $3 million. A year earlier loans had increased $10 million and securities $11 million. All of the most recent loan increase at the city banks was recorded in the commercial and industrial category. Total loans at the country banks, unchanged in the month of August, increased by $3 million in September.

The improvement of district member bank reserve positions resulting from the more rapid increase of their deposits than of their loans has been reflected by the volume of their borrowings at the Federal Reserve. Borrowings averaged $2.8

### SEPTEMBER CHANGE OF DEMAND DEPOSITS (millions of dollars)

<table>
<thead>
<tr>
<th></th>
<th>City</th>
<th>Country</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1951</td>
<td>+29</td>
<td>+50</td>
<td>+79</td>
</tr>
<tr>
<td>1952</td>
<td>+5</td>
<td>+43</td>
<td>+48</td>
</tr>
<tr>
<td>1953</td>
<td>-1</td>
<td>+45</td>
<td>+44</td>
</tr>
<tr>
<td>1954</td>
<td>-23</td>
<td>+40</td>
<td>+17</td>
</tr>
<tr>
<td>1955</td>
<td>-13</td>
<td>+40</td>
<td>+27</td>
</tr>
<tr>
<td>1956</td>
<td>+12</td>
<td>+54</td>
<td>+66</td>
</tr>
<tr>
<td>1957</td>
<td>-19</td>
<td>+67</td>
<td>+48</td>
</tr>
<tr>
<td>1958</td>
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<td>+63</td>
<td>+73</td>
</tr>
<tr>
<td>1959</td>
<td>+14</td>
<td>+40</td>
<td>+54</td>
</tr>
<tr>
<td>1960</td>
<td>+48</td>
<td>+53</td>
<td>+101</td>
</tr>
</tbody>
</table>
million less in September than in August, reflecting a decline of $300,000 in reserve city bank borrowing and a decline of $2.5 million in country bank borrowing. At $8.4 million, the level of district member bank borrowing in September was lower than in any month since January of last year.

NEW AND USED HOUSING PRICES CONVERGE

Prices paid by purchasers of new houses in Minneapolis and its immediate suburbs have declined from a peak reached in 1957. The decline can be traced to a trend toward purchasing smaller houses. Prior to 1957, prices had risen year after year. However, prices paid for used houses (those that have been lived in before) apparently have not crested; the average price paid during the first half of 1960 was the highest ever recorded. As a result of these divergent trends, the differential between prices paid for new and used houses narrowed to less than $500 in the first half of 1960.

Housing transactions included in the annual survey conducted by the Federal Reserve Bank of Minneapolis were divided, as in previous years, into three brackets according to market price. Transactions were distributed according to sales price, the lowest 60 percent of the total number being classified as low-priced, the next 34 percent as medium-priced, and the top 6 percent as high-priced.

The range in the low-priced bracket on new houses extended up to $15,000 and on used houses up to $16,000. The average price paid for new houses in this bracket in the first half of 1957 was as high as $14,450; in the first half of 1960 it was down to $13,500. Over the same period of time, the average price on used houses rose from $11,500 to $12,500.

The price range in the medium bracket of new houses extended up to $26,400 and on used houses up to $26,500. In this bracket, the average price of new houses declined from $19,700 in the first half of 1957 to $18,700 in the first half of 1960. During the same period the average price of used houses rose from $17,900 to $19,400.

In the high bracket, the average price has followed the trend described for the other two brackets. For new houses, it was $31,800 in the first half of 1957 and $29,500 in the first half of 1960. The average price of used houses in the two years was $32,000 and $32,600, respectively.

FARMLAND VALUES DROP

Farmland values at midyear were below March levels in all Ninth district states except Montana. The recent U. S. Department of Agriculture estimates indicate farmland values dropped 1 percent in North and South Dakota, 2 percent in Minnesota, and 3 percent in Wisconsin during the four-month period ending July 1960.

The national index, estimated at 172 (1947-49...
for July 1, 1960, was down 1 point or .6 percent from the record level established in March of this year. However, the July index at 172 was 1 percent above the level of a year ago.

The USDA indicated that no new elements in the agricultural situation account for the recent slippage in land values. Crop prospects for the nation as a whole were excellent and total farm output is expected to exceed the two previous record years. Nationally, farm income in 1960 is expected to be equal to 1959 levels.

Income prospects in the Ninth district at mid-1960 were even more favorable compared with a year ago than was true in the nation as a whole; the district alone suffered a relatively severe drouth in 1959. Although district crop output was off somewhat from early expectations, because of a wet late season and a summer drouth, the 1960 small grain crop was up sufficiently from 1959 to boost expected total crop income an estimated 12 percent. It would thus appear that the land price easing noted in the district could not be traced to current agricultural conditions.

The USDA observed that the demand for additional land by operating farmers continues to be the major factor underpinning the market for land. The demand for land as an investment was noted to have slackened because of higher rates of return obtainable from alternative investments.

**HOG PRODUCTION INCREASES**

The U. S. Department of Agriculture's September Pig Crop Report points to an approaching upturn in hog production. A decline in hog production which began late in 1959 led to a 1960 spring pig crop which was 16 percent less than the spring crop of 1959. Producers in 10 major corn belt states\(^1\) reported in September that they had also cut June-August farrowings 7 percent from 1959 levels. However, a turn-around in farrowings is currently in the making; hog producers in the 10 states indicated plans for a 3 percent increase in farrowings for the September-November farrowing period compared with 1959. Minnesota and South Dakota producers are planning 10 and 36 percent increases, respectively, during the September through November period.

Producers in the 10 states also indicated they planned to increase farrowings 4 percent during the period December 1960 to February 1961, compared with last year. Minnesota hog growers intend a 5 percent increase in this period; South Dakota growers plan a 30 percent increase. The relatively large increases planned by South Dakota producers result from the sharp production cuts made a year earlier, when drouth cut feed production substantially.

If these intentions to increase hog output are realized, and assuming the late spring pig crop shows a similar upward trend, the 1959-60 downturn in hog production will be the shortest on record.

The USDA indicates that conditions at present are favorable to an upturn in hog production. First, feed grains are in plentiful supply. Although 1960 U. S. feed grain production is now estimated to be down 2 percent from 1959, the carryover of feed grains into the 1960-61 feeding year will be at a record level. USDA economists also expect prices of feed grains to average a little lower this fall and winter than they did in 1959-60. At the same time, they expect hog prices to continue through the fall months at levels above a year ago.

The hog-corn price ratio\(^2\) during the next few months—the months of planning for spring farrowings—is expected to range between 15 and 15.5, according to USDA estimates. It was noted that although the corn-hog ratio has had less effect on hog production in recent years than earlier, a September-December ratio of 12.8 or over (U. S. price basis) has always been followed by an increase in farrowings the following spring.

\(^1\) Ohio, Indiana, Illinois, Wisconsin, Minnesota, Iowa, Missouri, South Dakota, Nebraska and Kansas.

\(^2\) This ratio refers to the number of bushels of corn required to equal the value of 100 pounds of live hog.
the handling of a ton of general cargo results in the expenditure of six to seven times as much in a port area as does the handling of a ton of bulk cargo.

The movement of general cargo through a port also affects industrial growth in the region served by the port. To the extent that transportation charges on exports are lower than formerly, an incentive evolves to broaden existing foreign markets or develop new ones. Doors also are opened wider for imports. An increase in imports generally results in a readjustment in markets among business firms, expanding markets for some and curtailing them for others. Some manufacturers find it advantageous to use imported products as parts in the fabrication of their products, forcing others to face competition of foreign products in the domestic market. In any case, consumers benefit from an increase in general cargo imports.

General cargo potential

The highly industrialized states bordering the Great Lakes manufacture many products which enter export trade, and receive many imports. The broad expanse between the Allegheny and Rocky Mountains from the Canadian border south to the Ohio and Missouri Rivers accounts for over half (53 percent in 1958) of the nation's manufacturing. Heavy manufacturing industries located here to take advantage of cheap water transportation and dense markets in the lower lakes region. Over two-thirds of the nation's primary metals are produced in the area. Steel mills were built close to the lakes to use economical water transportation for raw materials, such as iron ore from the Lake Superior mines and coal from the Appalachian region. Fabrication of steel products is also concentrated in the lake region, which accounts for over 60 percent of these products. The production of automobiles, trucks, trailers, and other vehicles is centered in Michigan, but the manufacture of parts extends to surrounding states. A substantial proportion of the nation's agricultural, construction, mining and electrical machinery is built in states bordering the Great Lakes.

Although manufacturing has expanded slowly in the states or portions of states bordering Lake Superior, due primarily to their greater distance from markets, a total of 351,000 tons of general cargo exports originated and imports terminated in this geographic region annually before the Seaway was opened. With access to ocean shipping, Duluth-Superior was expected, with many Great Lakes ports including Milwaukee, Chicago, Detroit and Cleveland, to become an important seaport.

General cargo movement

Over the years, United States bulk and general exports and imports over the St. Lawrence route accounted for a relatively small tonnage. In 1958, the last year before the improved seaway was opened, total exports aggregated 391,000 short tons to Canadian ports east of Montreal and 360,000 tons to overseas countries. Total imports from

GENERAL CARGO MOVEMENT THROUGH THE SEAWAY IN 1959

<table>
<thead>
<tr>
<th>Origin and Destination</th>
<th>Short Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Upbound</td>
</tr>
<tr>
<td>United States to Foreign(^1)</td>
<td>431,800</td>
</tr>
<tr>
<td>United States to Canada</td>
<td>927</td>
</tr>
<tr>
<td>United States to United States</td>
<td>4,148</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>5,075</td>
</tr>
<tr>
<td>Canada to Foreign</td>
<td></td>
</tr>
<tr>
<td>Canada to United States</td>
<td>303,956</td>
</tr>
<tr>
<td>Canada to Canada</td>
<td>21,710</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>325,666</td>
</tr>
<tr>
<td>Foreign to United States</td>
<td>709,713</td>
</tr>
<tr>
<td>Foreign to Canada</td>
<td>295,788</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,005,501</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td>1,336,242</td>
</tr>
</tbody>
</table>

\(^1\) "Foreign" designates countries other than Canada and the United States.

Source: Traffic Report of the St. Lawrence Seaway 1959; St. Lawrence Seaway Authority and the St. Lawrence Seaway Development Corporation.
eastern Canada to Great Lakes ports were 1,918,000 tons, mostly consisting of iron ore imported from the newly developed Quebec-Labrador mines. Imports from other foreign countries totaled 343,000 tons. After the Seaway was opened in 1959, total exports to eastern Canada rose to 1,736,000 tons and to overseas countries to 2,759,000 tons. Imports to Great Lakes ports from eastern Canada rose to 5,752,000 tons and from overseas countries to 1,053,000 tons.

Prior to the opening of the Seaway, general cargo shipments at Great Lakes ports had been a small fraction of the bulk volume. Shipments between the United States and overseas countries were very small immediately after World War II, but expanded steadily even before the Seaway was opened. In 1946, such shipments totaled only 30,000 short tons. By 1950, the total had grown to 212,000 tons, by 1955 to 535,000 tons, and by 1958 to 708,000 tons. In 1959, the first year the Seaway was opened, the movement of general cargo between Great Lakes ports and overseas countries, although not up to expectations, increased 60 percent to 1,142,000 tons. In addition, general cargo movements between U.S. Great Lakes ports and eastern Canada aggregated 361,000 tons.

The general cargo movement has continued to expand in 1960. In spite of dock strikes which halted Seaway traffic in several Great Lakes ports earlier this year, general cargo tonnage through the St. Lawrence canal system was up 5 percent over a year ago in the April through August period. The tonnage in August was up 36 percent over a year ago, indicating that the total for the season may show a larger increase than for the first five months. Approximately one-half of the general cargo movements through the Seaway (Lake Ontario to Montreal section) in 1959 were between U.S. Great Lakes ports and overseas countries. Another one-fifth were between the United States and Canada. United States foreign trade thus accounted for nearly three-fourths of the general cargo movements through the Seaway, and Canadian trade

<table>
<thead>
<tr>
<th>TOTAL GENERAL CARGO MOVEMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Montreal-Lake Ontario section)</td>
</tr>
<tr>
<td>1959</td>
</tr>
<tr>
<td>April through August</td>
</tr>
<tr>
<td>August only</td>
</tr>
</tbody>
</table>


Although the second year of operations will show an expansion in general cargo movements over the first year, it will fall far short of forecasts made before the Seaway was opened. Forecasts for the first year, made while the proposed Seaway was under study by Congress and later while it was under construction, ranged from 5,700,000 to 11,038,000 tons. However, general cargo shipped through the St. Lawrence Seaway (both United States and Canada) during the first year—1959—aggregated only 1,931,000 short tons.

A number of factors held general cargo movements down during the first year. The late spring thaw in 1959 postponed the opening of the St. Lawrence route. United States exports in 1959 were at a relatively low level. Delays and congestions at Great Lakes ports and especially at the Welland Canal caused some shippers to avoid the Seaway. These problems are gradually being solved as harbors and channels between lakes are deepened and traffic through locks is accelerated. Nevertheless, it now appears that it will be a number of years before general cargo tonnage equals the original minimum forecast.

**Port competition for general cargo**

Over one-half of the general cargo at U.S. Great Lakes ports in 1959 originated and terminated at Chicago. Over three-fourths of the total was handled at Chicago, Detroit and Cleveland.
Among the U. S. Great Lakes ports, Duluth, which ranked seventh in general cargo tonnage, handled about one percent of the inbound and outbound cargo.

As was true prior to the opening of the Seaway, the large proportion of general cargo moving through the ports of Chicago, Detroit and Cleveland reflected the concentration of manufacturing in these vicinities. Ports east of Cleveland experienced greater competition from the North Atlantic coast, especially from the port of New York. Buffalo ranked fifth in general cargo tonnage, down materially from the volume at Cleveland. Tonnage was very small at Erie, Pennsylvania and Oswego, New York. Duluth, on the other hand, is in a sparse manufacturing area. This has a direct bearing on the volume of cargo moving into trade channels to and from the region.

The volume of general cargo movement through the port of Duluth has not been sufficient to establish trends among commodities. The major export in 1959 was bentonite, at 2,140 tons; none has been exported through this port in 1960. The major export this year has been scrap iron, amounting to 45,791 tons by October 17. A small tonnage of flour and dried milk has been exported in both years.

Steel, steel products and wood pulp have led imports both years. Steel and steel product imports totaled 5,932 short tons in 1959 and 3,023 tons through October 17, 1960. Wood pulp totaled 2,500 tons last year and 4,675 tons so far this year. Imports of considerably smaller tonnage include ferrosilicon, glass, twine and liquors.

**Transportation charges**

To shippers in this region, Duluth offers lower transportation costs as compared with those of the traditional routes to overseas ports. The savings incurred will determine, in large measure, the eventual use of this port, provided steamship companies offer frequent and regular scheduled service.

Transportation charges, based on rail and water freight rates in effect as the Seaway opened in 1959, were computed from Minneapolis to Antwerp-Rotterdam on a number of commodities produced in this region and exported annually. The savings are substantial as compared with the traditional route by way of New York. For example, the savings on a long ton of powdered milk by way of Duluth as compared with New York is $16.80. On agricultural implements the saving is $21.28 and on soybean oil, $32.26. Savings are smaller compared with the New Orleans route. In fact, the

**TOTAL RAIL AND OCEAN TRANSPORTATION CHARGES FROM MINNEAPOLIS TO ANTWERP-ROTTERDAM ON SELECTED COMMODITIES, 1958**

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Duluth2</th>
<th>Chicago</th>
<th>Milwaukee</th>
<th>New York3</th>
<th>New Orleans4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk, powdered</td>
<td>$46.59</td>
<td>$48.38</td>
<td>$47.71</td>
<td>$63.39</td>
<td>$51.11</td>
</tr>
<tr>
<td>Flour, bagged</td>
<td>23.74</td>
<td>25.09</td>
<td>25.09</td>
<td>26.84</td>
<td></td>
</tr>
<tr>
<td>Lard, case or barrel</td>
<td>41.66</td>
<td>44.13</td>
<td>44.13</td>
<td>53.31</td>
<td>39.33</td>
</tr>
<tr>
<td>Soybean Oil, drum</td>
<td>29.56</td>
<td>34.27</td>
<td>34.27</td>
<td>61.82</td>
<td>50.53</td>
</tr>
<tr>
<td>Agricultural Implem.</td>
<td>31.36</td>
<td>43.23</td>
<td>45.47</td>
<td>52.64</td>
<td>35.97</td>
</tr>
</tbody>
</table>

1 Effective October 24, 1960 rail rates were increased (except to Duluth) by 11.2 cents per long ton on former rates of $14.56 per long ton and under, and 22.4 cents per long ton on former rates of over $14.56 per long ton.

2 Duluth rates are based on penalty assessed Lake Superior ports by Great Lakes Overseas Freight Conference, Chicago—5 cents per cu. foot or 10 cents per hundredweight over Michigan ports.

3 Includes 6 cents per hundredweight port terminal service charge.

4 In barge load minimum of 600 net tons.

transportation charges on land by way of New Orleans to Antwerp and Rotterdam is less than by Duluth and the Seaway.

The savings per long ton between the port of Duluth and Lake Michigan ports such as Milwaukee and Chicago is small. Savings on farm implements shipped from Minneapolis by way of Duluth rather than Chicago amount to $11.87 and on other commodities range from about $1.50 to $4.71.

**Seaway route disadvantages**

In spite of the savings in transportation charges, growth of general cargo shipments over the Seaway is retarded by three disadvantages. The Welland Canal has proven to be a bottleneck both to vessel operators and to shippers of high value merchandise. The winter freezeover of the Great Lakes forces shippers of general merchandise to use salt water ports for four months of each year. Furthermore, favorable railroad rate differentials between the Great Lakes region and Atlantic and Gulf coast ports encourage shipping through coastal ports.

The Welland Canal, completed by the Canadian Government in 1932, lifts and lowers vessels 327 feet between Lake Ontario and Lake Erie to circumvent Niagara Falls. The canal has one guard lock and seven modern locks, three of which are twin installations that permit traffic to move in both directions simultaneously. The other four are single installations.
When the Seaway was opened in 1959, a pileup of ocean and lake vessels seeking passage through the canal resulted in long delays. A normal eight-hour passage stretched out as long as 50 hours. Ship companies estimated that the delay cost them from $750 to $2,500 per day, depending on the size of the ship and the pay scale of the crew. Interest and insurance on the cargo and costs arising from delay in delivery were also borne by shippers.

The serious congestion at the Welland Canal in 1959 has not re-occurred during the second season. During the winter the Canadian Government made some improvements for handling the increased volume of traffic. By 1960, pilots and crews of ocean vessels were more familiar with the passage, and personnel at the locks had learned how to handle larger ocean vessels. Nevertheless, as traffic grows congestion may again result. In view of large investments already made, both in harbor improvements and in port facilities to accommodate ocean shipping, additional investment may ultimately be required to prevent the limited capacity of the Welland Canal from stifling the growth of commerce on the Seaway.

The closing of shipping on the Seaway for about four months each winter affects general cargo shipments more than bulk shipments. Iron ore and coal can be stored cheaply at dock sites, and grain must be stored in any case because of the annual harvest. But manufactured products with high values must be moved promptly to consignees. During winter months shipments must be made by way of ocean ports. Unless shippers reap significant savings by the Seaway route, they may be reluctant to make the annual transfer. Foreign trade involves highly complex relationships with service industries such as banks, insurance companies, freight forwarders, railroads or truck lines and dock terminal facilities, which make the transfer difficult.

Lastly, the eastern railroads serving Great Lakes ports east of Chicago also serve Atlantic and Gulf coast ports. Because they secure more revenue on hauls to these ports than to lake ports, they favor them. This year eastern railroads reduced rates as much as 20 percent on steel and chinaware and made substantial reductions in rates on paper, paper products, and farm machinery moving between Chicago and New York. These railroads seek to protect their large investments in terminal facilities at coastal ports.

Since the opening of the Seaway, eastern railroads have been experimenting with plans to retain all of the shippers' business in the Great Lakes region. Attractive rates have been offered to shippers with the proviso that a high percentage (such as 90 percent) of their shipments be moved by railroad to a salt water port.

**Duluth port disadvantages**

The competition between the Seaway and alternate routes to Atlantic and Gulf ports also exists among Great Lakes ports. Intense competition has sprung up between the Duluth-Superior port and ports on Lake Michigan.

Only two steamship lines serve the port of Duluth on a loosely scheduled basis. Another line carries imports to Duluth, but its vessels leave empty for Lake Michigan ports to pick up export cargo. In contrast, approximately 50 steamship lines service the ports of Chicago and Milwaukee with regular scheduled liner service.

Steamship agents who keep shippers informed on the availability of general cargo at ports have stated that the region served by Duluth has an insufficient volume of potential cargo to warrant ships calling at its port. Some effort has been made to divert the cargo which would be more economically shipped to Duluth than to Lake Michigan ports. The steamship conference set ocean freight rates between Duluth and overseas destinations approximately 10 percent higher than those from Lake Michigan ports. Yet the distance of 2,342 miles from Duluth to the Atlantic Ocean is only 92 miles, or 4 percent greater than from Chicago; it is 158 miles, or 7 percent, greater than from Milwaukee. The transferring charge for loading and unloading of railroad cars and trucks, averaging about $1.50 per short ton,
has been absorbed by steamship companies at Lake Michigan ports, while at Duluth this cost has been charged to the owners of the cargo. Public marine terminals assess a charge of about 20 cents per short ton, known as "wharfage," on cargo passing through the terminal. At Lake Michigan ports, this charge has also been absorbed by steamship companies while at Duluth it has been assessed against the account of the owner. In isolated instances steamship companies, either directly or indirectly, have also absorbed the additional inland freight to Lake Michigan ports on cargo originating in the Duluth area.

Adjustments made in railroad rates have favored Lake Michigan and Gulf ports. For example, the rail rate on bentonite clay from Belle Fourche, South Dakota, to Duluth is 77 cents per 100 pounds. To Chicago, which is 203 miles further, the reduced rate is 78 cents. In the 1960 season, scrap iron has been exported through the Duluth port. Recently, rail rates on scrap iron were reduced from the Twin Cities to Peoria and Sterling, Illinois and to St. Louis, Missouri, while the rate to Duluth was left unchanged. The reduction, which has been suspended, would tend to shift scrap iron shipments from the Twin Cities to Gulf ports rather than to Duluth.

In an attempt to be in a better position to compete with Lake Michigan ports, the Duluth Port Authority is constructing a tank farm for the handling of vegetable and animal oils, fats, and greases which are processed in the region served by the port and exported in large quantities. A 3,200 ton capacity tank farm will be in operation by the opening of the 1961 Seaway shipping season. The Authority hopes shipowners will be attracted to the port to load the deep tanks in their ships with the oils, and that they will also provide the general cargo service so much needed by the port.

**Conclusion**

The movement of general cargo on the St. Lawrence Seaway route during the first season was at a lower annual tonnage than had been forecast. However, shipments during the second season reveal a definite expansion indicating that the tonnage over an extended period of time may rise to the expected volume.

Duluth-Superior, in its bid for general cargo, is facing stiff competition from Lake Michigan ports. If steamship companies began to offer frequent and regular scheduled service at Duluth-Superior, as they do now at Lake Michigan ports, shippers in this region would be inclined to take advantage of the lower transportation costs. Thus the direct ocean route will be integrated into the transportation system of the region.

—Oscar F. Litterer
Economic Briefs

1. $13.5 million pipeline to cross Montana
   A 433-mile crude oil pipeline will cut across Montana by the summer of 1961. It will run from oil fields at Cut Bank, near the Canadian border, to the Wyoming state line south of Billings, and will include a 55-mile spur line to several central Montana oil fields. Cost of the pipeline, which will have an initial capacity of 50,000 barrels of crude a day, is $13.5 million. At its southern end, the pipeline will connect with other lines to carry crude to St. Louis, Chicago, and other Midwestern cities.

2. Milk products plant built in S. D.
   A $1,750,000 plant for the manufacture of milk products for babies has been built at Mitchell, South Dakota. The 750,000-square-foot plant employs 40 to 50 persons, and will eventually be used in making other milk products.

3. Grain elevator opens at Savage
   A new 5-million-bushel grain elevator has begun operations near Savage, Minnesota. It consists of 68 concrete silos, each 120 feet high and having a capacity of 62,000 bushels; 48 interstices, each with a capacity of 15,000 bushels; and a 220-foot-high head house. The elevator will employ 30 persons when it begins full scale operations in December, after automatic railroad car equipment is installed.

4. Wisconsin abrasive plant expands
   Minnesota Mining & Manufacturing will expand its coated abrasives plant in Cumberland, Wisconsin by 50 percent, to relieve crowded conditions. The plant presently employs 350. Completion of the 38,000-square-foot addition is expected early in 1961.

5. Mine shaft sunk in Upper Michigan
   A mine shaft costing $2 million will be sunk into a copper ore body 2,000 feet below the surface, southwest of White Pine, Michigan. Completion of the shaft, which is being built by Copper Range Co., is scheduled for the fall of 1961. If tests on the ore body indicate mining conditions similar to those at the company’s White Pine Mine, a new mining unit will be set up. Ore from the new mine would be processed by White Pine Copper Co., a subsidiary of Copper Range.