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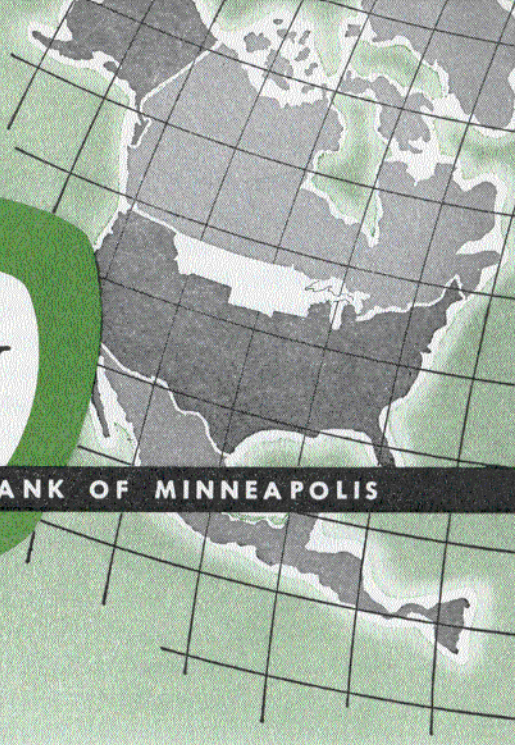

Monthly Review
OF THE FEDERAL RESERVE BANK OF MINNEAPOLIS

Gains mark year's start

The year 1959 opened with a continuation of the general upswing in economic activity in the Ninth Federal Reserve district. Employment, although still in a seasonal decline, continued to show improvement from year-ago levels. Assuming that the 1959 seasonal low in employment will occur in February as it usually does, a moderate improvement above the usual seasonal increase is foreseen during the late winter and spring months. This view is fortified by recent trends in building permits, store sales, farm income and business loans at weekly reporting banks. Actually, business loans have declined seasonally, but less than last year. Construction contract awards in 1958 showed a cumulative 23 to 25 percent gain over 1957 with substantial increases occurring late in 1958. New building permits were up 16 percent in November over a year earlier. The total dollar volume of check clearings at the Federal Reserve Bank of Minneapolis through January 20 registered a plus 12 percent from the same period a year ago. Cash farm income continues to run about 10 percent above last year, which is of particular significance to businessmen in the country areas.

Although the district economic situation and outlook is one of moderate optimism, employment remains relatively low in some durable manufacturing industries and in some mining areas. For example, the number employed in district mining during December was estimated at about 6,500, or 15 percent fewer workers than a year

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ago. Even here, however, employment is improving as iron ore producers step up preparatory operations for an anticipated better season in 1959. So far, too, new car registrations through early January were below a year ago. Part of this may be due to strikes in the industry which delayed deliveries to dealers.

This is the season of the year when many make or have made economic forecasts for 1959. The consensus of these unofficial forecasts is that the nation's total economic output this year will reach new highs. The more optimistic reports suggest a 7 to 8 percent growth—up to $485 billion by the fourth quarter with prices at about the same level. The less optimistic suggest a national growth rate closer to the long time average of 3 percent. The big question is how much economic growth can be achieved without generating inflation in the process. Surprising as it may seem, the first eight months of the current recovery have been accomplished with reasonable price stability. There have been some shifts as farm prices have drifted lower and industrial prices have firmed. In total, however, wholesale and consumer prices have remained remarkably stable.

Pressures for price increases tend to strengthen in the later stages of a cyclical business upturn as the nation's resources are more fully utilized. At the moment, however, unemployment remains relatively high (6.1 percent of the labor force in December) and a relatively large excess production capacity exists in many lines.

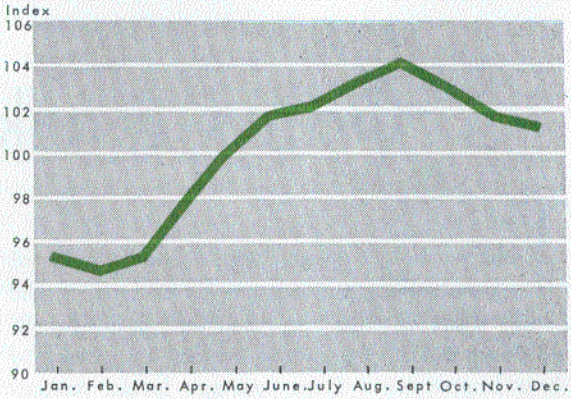
The following selected topics describe particular aspects of the district's current economic scene:

DISTRICT EMPLOYMENT IMPROVES

The district employment picture began to improve last fall in spite of the usual seasonal contraction. Firms engaged in outdoor work reduced their activity this year as always when winter weather engulfs this region, but other firms engaged in inside activity expanded their labor forces. As a result, the annual seasonal decline in employment during the fourth quarter of 1958 was less than in any year since 1952. Due to the small seasonal decline this last fall compared to the average and a large decline in the fall of 1957, the December district nonagricultural employment was above the preceding year for the first time in 1958.

In this district, nonagricultural employment has a large seasonal swing because of two major contributing factors: the processing of such agricultural products as vegetables and sugar beets, which constitute an important part of the food industry, is done in summer and early fall; and outdoor work is restricted by severe winter weather.

Ninth district seasonal employment* pattern



*Based on nonagricultural employment.

The seasonal low in nonagricultural employment is usually in February of each year. This was the situation from 1946 to 1957, inclusively. In 1958 employment was slightly lower in March than in February due largely to layoffs made by manufacturers of durable goods and postponement of rehiring by producers of iron ore.

Seasonal employment constitutes the livelihood of a substantial number of people in this area. The rise in district employment from the seasonal low to the peak has ranged from 84,300 in 1947 to

154,300 in 1950. In all but three of the post World War II years, seasonal employment has exceeded 100,000 and in recent prosperous years has been close to 150,000.

Recent trends

From mid-December 1957 to mid-March 1958, the number of persons employed in the district declined by 72,000. With the exception of one winter, December 1948 to February 1949, which was also a recessionary period, this was the largest drop in employment during these months since World War II. Considering the less than average seasonal contraction from last September to mid-December, the total seasonal contraction to mid-February 1959 very likely will be moderate. Shortly after the first of this year, earlier than usual, a number of iron ore producers recalled some of their workers for stripping operations and repairing of equipment, and manufacturers of durable goods have continued to enlarge their labor forces.

The seasonal low in employment this winter will probably remain substantially above last winter's low. In March 1958, district nonagricultural employment declined to a low of 1,316,400. In December, total district nonagricultural employment stood at 1,403,900. This was 4,500 above the year earlier December employment figure and provides evidence that employment is improving slowly even during the slack winter months.

Soft spots

In this district, the effect of the recent recession has been concentrated in manufacturing, largely durable goods, and in mining. As a result, soft spots in the employment picture have been in the Twin Cities and a few other cities in the eastern part of the district where most durable goods are manufactured and in the mining areas.

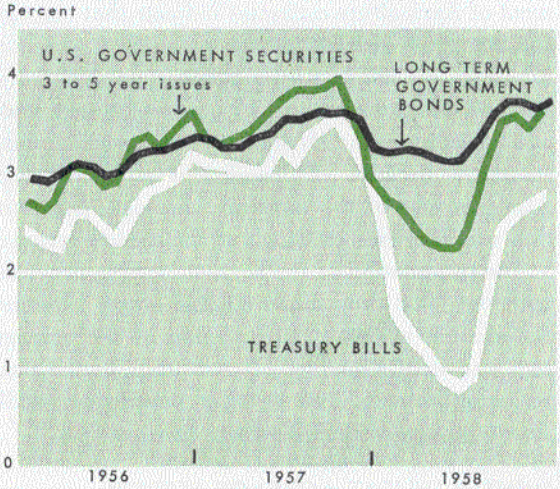
December employment in durable goods manufacturing, which is subject only to minor seasonal fluctuations, was down 10 percent in the district from the peak reached in August 1957—the crest of the previous boom period. In the Twin Cities metropolitan area, employment in durables was down 7 percent from the former peak month.

In Upper Michigan, December employment in mining was down 31 percent from a year ago. In Minnesota, it was down 12 percent and in Montana, down 7 percent. Mining employment in the entire district was down 15 percent which represents a reduction of 6,500 workers. This is a larger number than in manufacturing even though mining in this region is a relatively small industry. District manufacturing employment was off by 2,400 workers from a year ago. Of this number 2,300 were in the durable goods field and only 100 in nondurables.

LONG TERMS YIELD MORE

January witnessed a return to better than 4 percent yields on government securities. Except for a brief period in 1957, such high yields have not been available on government securities since the depression of the 1930's.

Yields on selected U. S. Treasury securities



On January 12 the Treasury offered for cash subscription approximately $750 million of 4 percent bonds due in 1980 and dated January 23, and approximately $2.5 billion of 3¼ percent 16-

month notes dated January 21. The bonds and notes were priced at 99 percent of face value and 99¾ percent of face value, respectively. Respective yields thus amounted to 4.07 percent and 3.45 percent. Subsequent to this offering, longer term government securities already issued fell in market price thereby raising available yields to above 4 percent.

While the return available on longer term bonds is now in the neighborhood of post-depression highs, short term rates in the government securities market and elsewhere are well below the post-depression highs established in 1957. Near the end of January, certificates and notes continued to yield less than 4 percent although, for a time in 1957, they yielded more than 4 percent. Also near the end of January, 91-day Treasury bills continued to yield less than 3 percent although in 1957 they yielded better than 3½ percent.

DISTRICT WINTER WHEAT CROP

A smaller winter wheat crop is in prospect in the Ninth district this year. Recent U. S. Department of Agriculture estimates indicate that acreage for the 1959 district crop is down 9 percent. In Montana, the major winter wheat state in the district, seeded acreages are 14 percent below a year ago. Seedings in Montana were reduced substantially because of insufficient soil moisture. Also, because of the moisture shortage, germination was only fair on much of the seeded acreage.

The termination of the acreage reserve program with the 1958 crop made eligible larger acreages for seeding wheat in 1959. Some of the acreage not seeded to winter wheat will shift to the conservation reserve, and weather permitting, additional acreage will shift to spring wheat.

WINTER WHEAT ACREAGE SEEDED

	1958	1959	% Change
Montana	2,413,000	2,075,000	—14%
South Dakota	534,000	603,000	+13%
Minnesota	33,000	40,000	+21%
Total	2,980,000	2,718,000	—9%

DISTRICT SAVINGS BOND SALES INCREASE IN 1958

During the first 11 months of 1958, U. S. Savings Bond sales totaled $135 million in the four full states of the Ninth district. This represented a 12 percent increase over the relatively low level recorded in the like period a year earlier. In most of 1957 interest rates on many alternative forms of financial saving were considerably higher than was the case in most of 1958. As a result, the E and H saving bond rate of 3¼ percent per year (if bonds are held to maturity) attracted more savers in 1958 than it did a year earlier. In the nation as a whole, series E and H bond sales picked up about $700 million in 1958 relative to sales in 1957.

In harmony with these trends, the fiscal agency of this bank reported handling not quite 10 percent more dollar volume of U. S. Savings Bonds in 1958 than it handled in 1957. The fiscal agency also redeemed almost 30 percent less dollar volume of savings bonds in 1958 than 1957.

Savings bond sales in the first 11 months of 1958 declined in all of Michigan from the comparable figure a year earlier. But sales advanced in all other district states, especially in the agriculturally prosperous Dakota's.

SPRING PIG CROP UP

The U. S. 1959 spring pig crop is expected to reach 59 million head, 13 percent larger than the spring crop of a year earlier. Recent U. S. Department of Agriculture estimates of the coming spring pig crop are based on an intended 12 percent increase in farrowings during the spring farrowing months, and a continued upward trend in the number of pigs saved per litter.

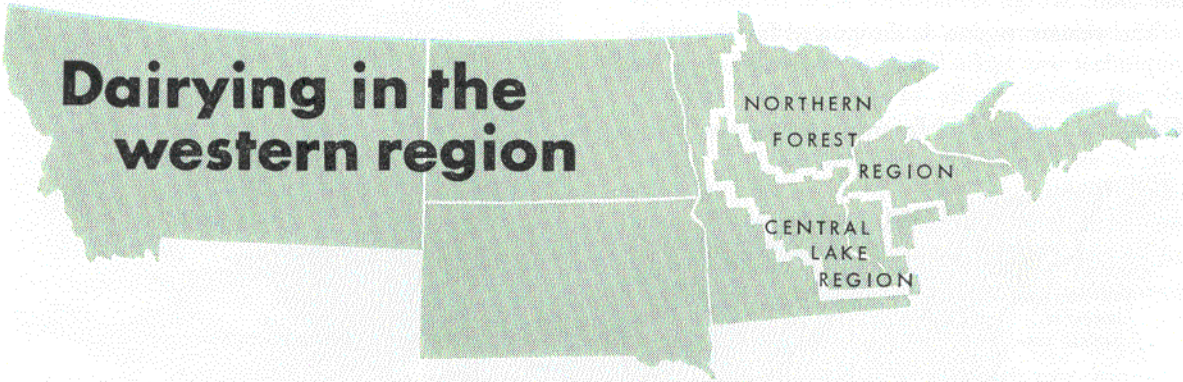
Hog producers in the Ninth district states of Minnesota, South Dakota, North Dakota and Montana are planning to increase farrowings this spring by 14, 13, 10 and 44 percent, respectively.

The prospective increase in the 1959 spring pig

crop is the first substantial rise in the spring crop since 1955; the 1959 spring crop as now forecast would be 2 percent greater than the spring crop of 1955.

However, there are several reasons why hog prices this fall are not likely to dip to the low of $10.60 reached in the fall of 1955. First, population is up over 6 percent since 1955—per capita pork production will be below the 1955 levels. Second, 1959 beef supplies are expected to remain unchanged from 1958 levels; this is in contrast to the 1955 period when beef supplies were increasing along with pork supplies. And finally, the spring farrowings in 1959 are expected to be much more evenly distributed throughout the spring months than they were in 1955. In 1955 the March-May farrowings in the United States were 134 percent larger than the December-February farrowings; this spring the March-May farrowings may be only a little more than 50 percent larger than the December-February farrowings. The more evenly distributed farrowings reduce chances of a big bulge in marketings and a severe price decline in the fall of 1959 similar to that of 1955.

Dairying in the western region



This is the third instalment in a series of articles on dairying in the Ninth district. This article will review briefly the dairy enterprise of the western part of the district. Two previous articles reviewed dairying in the district's major dairy regions, the "northern forest region" and the "central lake region."

Western region farmers netted $185 million from the sales of dairy products in 1956, an amount equal to 8 percent of their total farm marketings.

Dairying has been declining in importance as a source of income in the western region since the decade of 1930's. During the last two decades the contribution of dairying to western region incomes dropped one-third.

The two major dairy areas discussed in previous articles have increased in importance as the centers

TABLE I—ESTIMATED PROPORTION OF FARM INCOME FROM VARIOUS SOURCES IN WESTERN REGION

	1940	1950	1956
Dairy products	11.9%	8.3%	8.0%
Poultry	7.2%	8.2%	6.9%
Livestock (other than dairy, poultry)	33.1%	46.5%	38.4%
Livestock	52.2%	63.0%	53.3%
Crops	47.7%	36.9%	46.7%
Forest products	.1%	.1%	*
Marketings	100.0%	100.0%	100.0%

*Less than .05 percent

of dairy farming in the district relative to the western region. As recently as 1940 the western region farmers supplied 52 percent of the total dairy products sold from district farms; by 1956 the western areas accounted for only 38 percent of the total.

The western region as designated for this study is a large, very diverse area; throughout the area cash crop production, livestock raising and livestock feeding predominate. The physical and economic factors involved are such that other farming alternatives take precedence over dairying. Weather conditions as they relate to the pasture and feed conditions, sparsity of population, and distance to markets are some of the factors that are unfavorable to dairying in most of the western region. Thus the dairy enterprise has always been, with few exceptions, a minor or sideline enterprise to more profitable alternatives in the area.

Dairying in the western region is often characterized as a stabilizer of farm income. The dairy enterprise has tended to provide a relatively larger share of the region's farm income during periods of drouth and severe economic recession, and a smaller share of the region's farm income during periods of favorable weather and high level economic activity. The year to year variations in dairying incomes are somewhat less than the varia-

Chart I—Types of farming areas and great soil groups in the western region

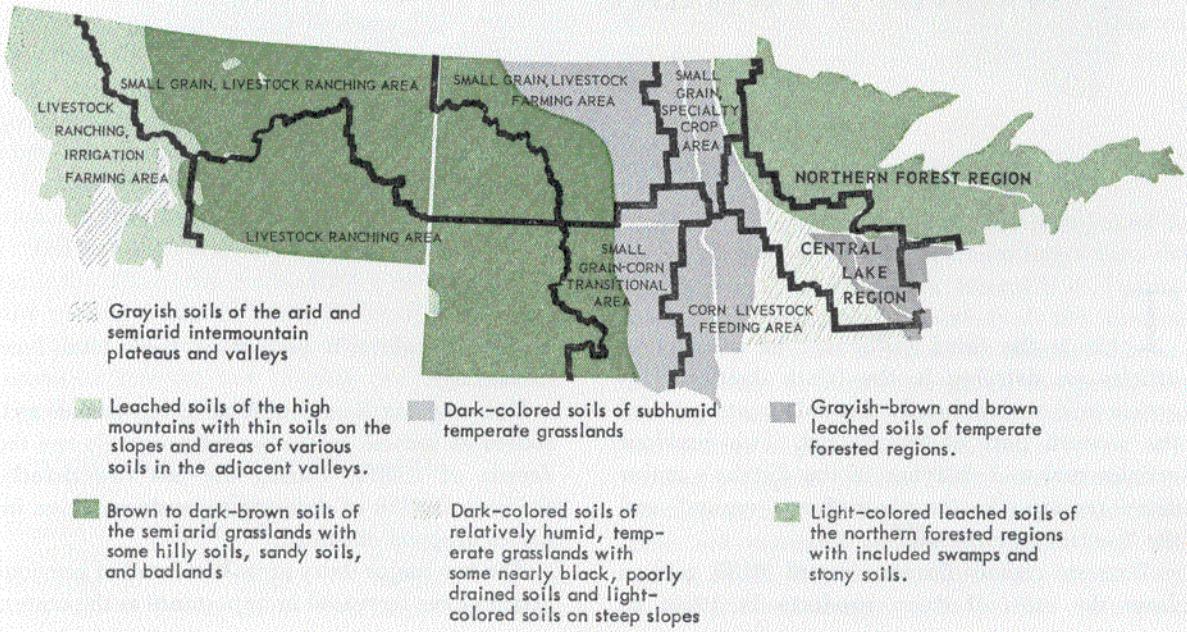
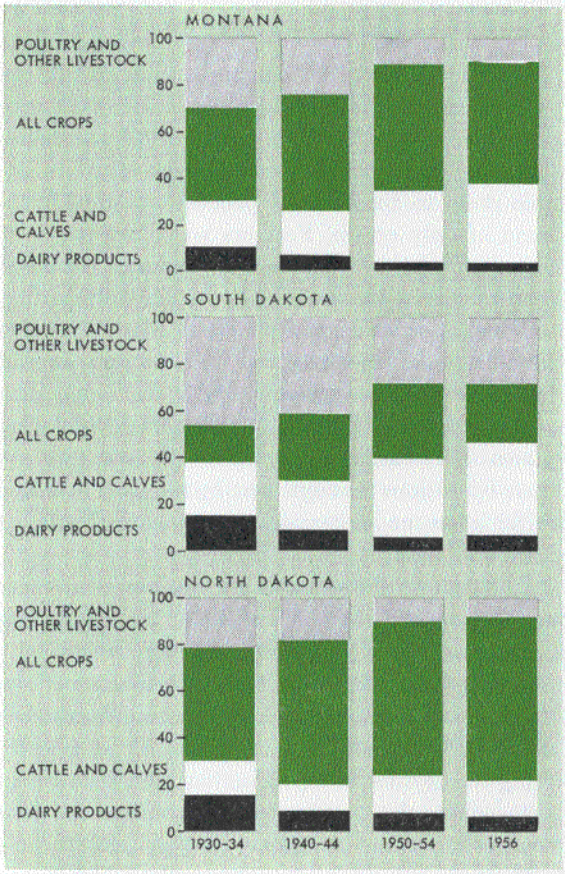


Chart 2—Relative changes in importance of cattle, crops and dairying as a source of income



tions in beef and grain incomes because milk prices and milk production change less dramatically in response to changing weather and economic conditions than do beef and grain prices and production.

Dairying also furnishes a seasonal stability to a farmer's income pattern in that the enterprise provides a continuing source of cash income throughout most of the year.

During the recent past the dairy enterprise has been losing popularity in the western region; between 1940 and 1956 the proportion of farms reporting milk cows declined from 83 to 67 percent of all farms. Beef cattle and cash crops have been increasing in importance as sources of incomes while dairying has registered declines.

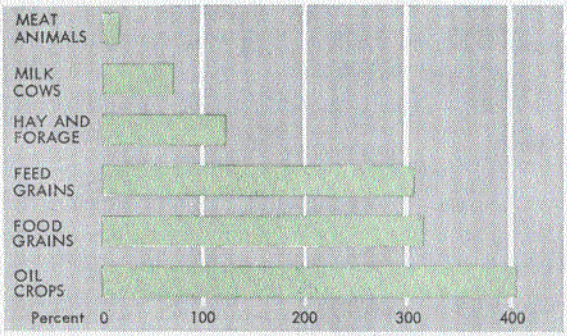
These historical shifts in the relative importance of dairying, beef, and cash crops in western region agriculture have been in response to shifts in the price relationships of the enterprises, and aided by favorable weather for crop production. For example, both beef and wheat prices have increased relative to the price of butterfat.

TABLE 2—VALUE OF BEEF AND WHEAT IN TERMS OF BUTTERFAT

Year	Pounds of butterfat to equal value of: 100 pounds of beef	1 bushel of wheat
1930-34	21.3	2.5
1940-44	24.6	2.7
1950-54	32.5	3.1

Agricultural productivity generally began increasing at an unprecedented rate in the early 1940's. The outbreak of war in Europe caused a vast expansion in the demand for agricultural commodities. Rising prices and incomes enabled farmers to make investments and adopt new techniques they had been unable to afford during the depression of the 1930's. Each of the main commodity groups has shared in this increase in productivity. However, greater productivity gains have been made in crop production than in livestock production; this has also contributed to the shift of resources away from dairying to cash crop production.

Chart 3—Changes in output per man-hour, selected commodities, 1940-1956



Trends in milk production

Milk production in the western region peaked during the early 1930's and again in the early 1940's; since that time milk production has declined. The 7,025 million pounds of milk produced in the western region in 1956 was 19 percent below the record production level reached in 1942, but 9 percent above the 1952 low point in milk production.

TABLE 3—NUMBER OF FARMS REPORTING MILK COWS, NUMBER OF COWS AND PRODUCTION PER COW IN WESTERN REGION

Year	Farms reporting cows	Percent reporting milk cows	Total number of cows	Average number cows per farm	Total pounds of milk produced	Pounds of milk produced per cow
			(thousands)		(millions)	
1940	229,100	83%	1,819	7.9	8,112	4,460
1942			1,890		8,680	4,593
1945	221,609	85%	1,798	8.1	7,793	4,434
1950	190,011	76%	1,362	7.2	6,648	4,881
1952			1,297		6,467	4,986
1954	159,535	67%	1,320	8.3	6,775	5,133
1956			1,319		7,025	5,326

Likewise the number of cows milked in the western region dipped to a low of 1,297,000 in 1952, the lowest point during the period since 1940. The break in beef cattle prices in the fall of 1952 was likely a major factor stopping the decline in milk cow numbers and milk production.

The dairy enterprise in the western region in total has not experienced the increases in individual herd size that have been recorded in the specialized dairy areas. The number of cows per farm in the western region has not changed widely during the period since 1940. Cows per farm dropped to 7.2 in 1950 — likely a reflection of favorable beef prices.

Milk production per cow in the western region has shown a considerable increase since 1940 despite the fact that herd size has shown little change. The increased productivity per cow in the western region reflects an increased amount of dairy stock breeding in the dairy herds. In addition, better feeding and an increased use of artificial insemination has contributed to the increased productivity per cow.

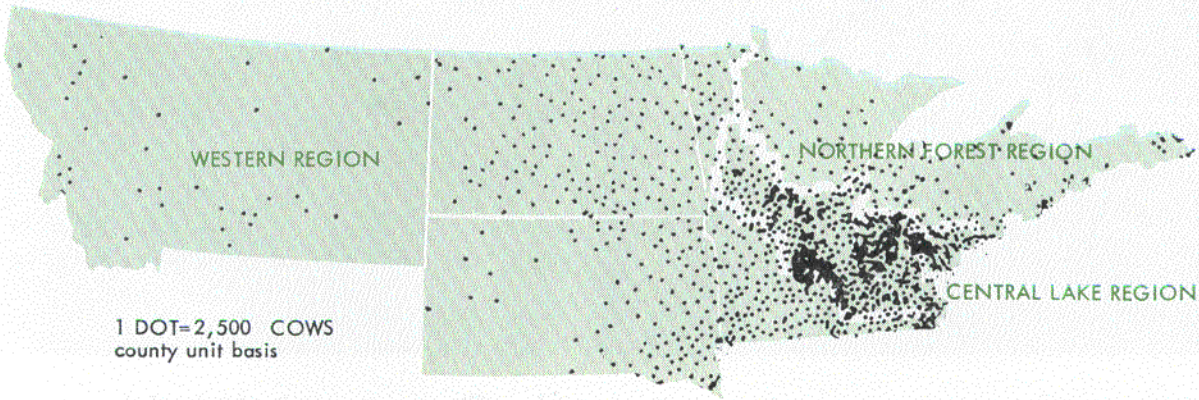
The shift from cream to milk

During the war the demand for dry milk expanded greatly. In areas of high density milk production, such as the "central lake belt," processing plants made rapid shifts in their operations to enable them to receive and process whole milk instead of only cream. Farmers welcomed the shift to selling whole milk because it reduced the labor requirement of the dairy enterprise by eliminating the task of separating. Farmers in most cases also found that the price received for skim milk as sold in whole milk was greater than the value they realized from feeding it to livestock. Processing plants have achieved greater diversification in their operations through time by the shift to whole milk; it has made possible an expansion of product lines and an increase in revenue.

Throughout the western region, however, there are few outlets for whole milk for manufacturing purposes. The main reason is the very low density of milk production in the region. A sparse population and small sized dairy herds account for the low density of milk production. The high cost of gathering whole milk in a production area of low density such as the western region prohibits the shift from selling farm-separated cream to selling whole milk. Although product quality suffers, cream can be delivered to the processing plant less frequently than is true of whole milk. Cream is better suited to the typical pattern of somewhat irregular deliveries by farmers—a practice which reduces transportation costs greatly. Thus, most western region dairy producers are tied to the market for cream.

There have been some increases in the number of outlets for whole milk for manufacturing purposes in the western region; the increases have occurred in parts of south-southwestern Minnesota and eastern South Dakota where milk density has warranted a shift from cream to milk. Where shifts have been made locally to whole milk the

Chart 4—Number of milk cows in Ninth district, 1954



dairy enterprise has not experienced the rapid decline that is true of the western region generally. In fact, recently there have been some localized increases in the importance of dairying in this area.

Throughout the region there are numerous areas where milk is produced for fluid consumption for local and nearby markets. In these cases, producers receive a much higher price for their product than do farmers selling butterfat. The producers supplying the local fluid markets in the western region are, by and large, specialized dairy operators, the same as their counterparts in other parts of the country. For example, the dairy producers supplying milk to the three federal order markets in the western region had an average annual milk production of 213,247 pounds in 1956, slightly larger than the amount supplied by the average producer in the Minneapolis-St. Paul market. The three western region federal order markets are designated as the Eastern South Dakota, Black Hills, South Dakota and the Sioux Falls-Mitchell, South Dakota markets.

Summary and conclusions

A continuation of physical and economic conditions favorable to the production of grain and beef is likely to result in a continued decline in the importance of dairying in the western region.

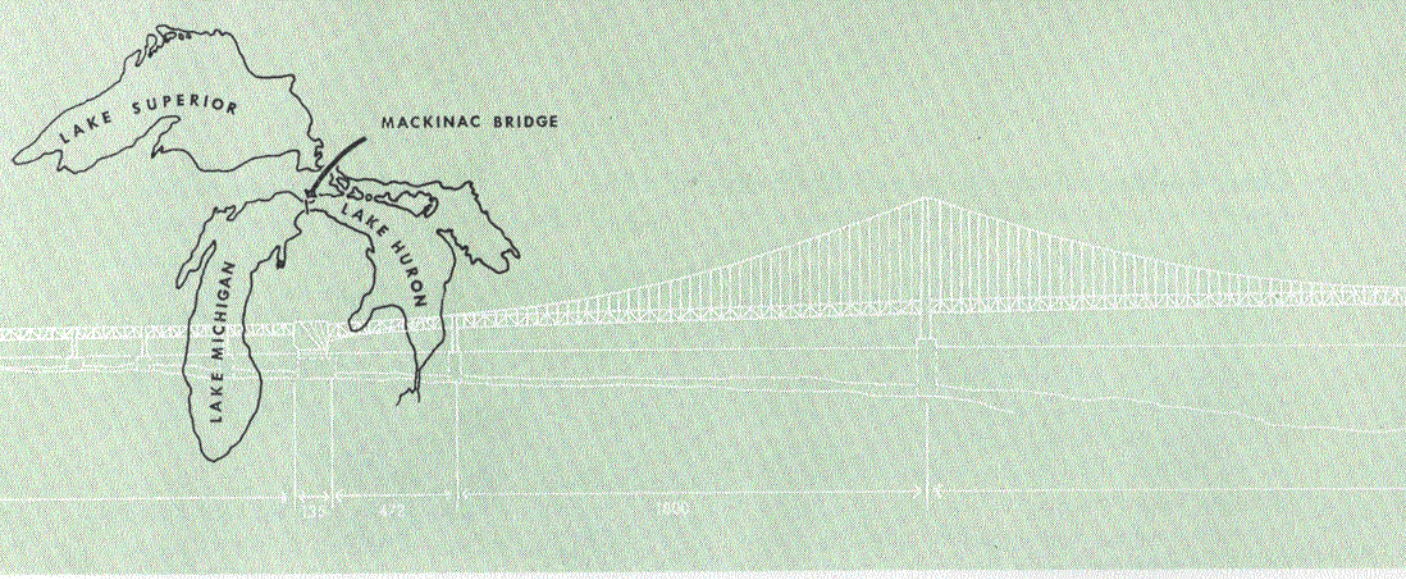
As grain and livestock farms and ranches in the western region continue to decrease in number and increase in size, there is likely to be a decreasing number of farmers who will keep dairy herds. This will further decrease the density of milk production and dairy producers will have to continue to look to the market for butterfat in cream as their outlet.

The trends toward larger herds and greater productivity that are discernible in dairying elsewhere can be expected among the whole milk producers in the western region. There would, however, seem to be little reason to expect much change in the size of dairy herds maintained as a sideline enterprise. Finally, milk production per cow is apt to continue at a low level among the small sideline herds as compared with the production per cow that can be expected among large specialized dairy herds.

Many western region farmers, particularly beginning farmers and those carrying a heavy debt load, will continue to look to the dairy enterprise as a regular source of cash income made possible through utilizing available feed supplies and off-season labor.

In contrast to the general trend of dairying in the western region, an extended period of drouth or a severe economic recession would, however, likely cause a increase in the importance of dairying in the farm income picture of the region.

—Arvid C. Knudtson



Mackinac bridge spurs traffic flow

In its first year of operation, 1,411,502 vehicles crossed the Mackinac bridge. This represents nearly a 50 percent increase over a year earlier in traffic between the upper and lower peninsulas of Michigan. This new direct route to the south and east for approximately one-half million people residing in Upper Michigan and northern Wisconsin has wide economic implication for the area.

The state ferry system formerly in operation across the straits was a bottleneck to transportation. The crossing time including the waiting period, which during hunting seasons has ranged as long as 19 hours, averaged 1½ hours in winter and 2½ hours in summer. The time has been reduced to 10 minutes by the bridge. The capacity of the bridge is 6,000 cars per hour, 12 times the capacity of the ferry system and thus, a large increase in traffic can be handled without congestion. In the peak years of 1955 and 1957, less than a million cars were carried across by ferry as compared to 1,411,502 vehicles last year. This number, however, fell short of the estimates made before the construction of the bridge was undertaken. The recent recession hit hard the automobile industry centered in Lower Michigan and the lower employment may have reduced the traffic over the bridge.

Financially, the bridge has paid its way. The Mackinac Bridge Authority collected $5,182,731 in tolls through October 31, 1958—enough to meet the interest and reserve obligations. The state of Michigan appropriates to the Authority from state highway department funds amounts sufficient to pay all expenses of operating, repairing and maintaining the bridge in each fiscal year until the bonds outstanding have been retired. However, the amount appropriated to the Authority is not to exceed $417,000 in any one fiscal year. However, in the first year the bridge was opened to traffic, the legislature raised the appropriation to $700,000.

Upper Michigan economy

As was expected, the first impact of the construction of the Mackinac bridge was on land use. Land values rose sharply along the approaches to the bridge and moderately in many spots on the peninsula. Frontage for gasoline service stations, for example, rose in some choice locations to $60,000—the former price of a whole section of land in the region. Land, especially in the eastern half of the peninsula, has been in demand for sites for motels, restaurants and other recreational facilities to accommodate an increasing number of

tourists. The valuation of building permits issued for residential nonhousekeeping structures in terms of percent change from the preceding year, rose by 75 percent in 1957 and by another 65 percent in 1958.

Easier access to the upper peninsula, which has long been a tourist mecca, is expected to add to the number of tourists in coming years. In addition to the locks at Sault Ste. Marie, the bridge itself, a remarkable engineering feat, will be a tourist attraction. The structure is located within a day's driving distance of the homes of more than 20 million people.

During the past tourist season, there were more visitors in Upper Michigan than in former years, in spite of the economic recession which apparently caused some families to cancel their vacation trips. In the Rocky Mountain region, Glacier and Yellowstone national parks had 8 and 11 percent less visitors, respectively, than in 1957.

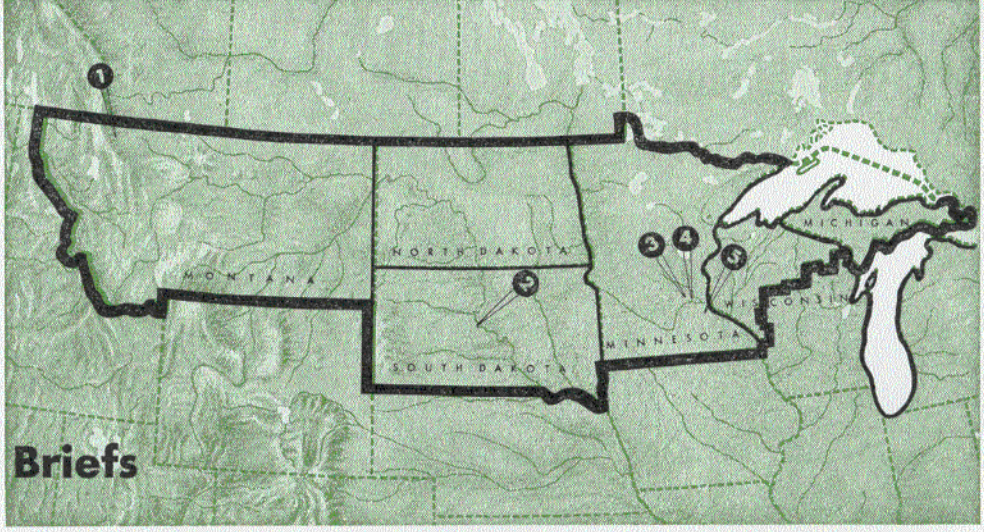
In addition to the possibility of Upper Michigan becoming a playground for people residing in eastern industrial centers, the bridge across the straits also provides a new direct route through the northern tier of states to the west. According to present plans, a four-lane divided highway from Detroit to Sault Ste. Marie will be integrated eventually with the 41,000 mile national system of interstate highways. Such a highway will open to many shippers as well as to tourists the shortest land route from northeastern industrial centers to the Pacific Northwest and Canada.

The bridge has also opened eastern markets to the Upper Michigan economy. The barrier of distance which has confronted producers, manufacturers and farmers alike through the years, has been reduced. Although the opening of the bridge has not as yet touched off an economic expansion, the expansion is now possible.

Tolls over the bridge, of course, are higher than they were over the state ferry system but the time of crossing has been reduced to minutes. The bridge tolls for trucks range from $4.25 to $14.00, depending on the size of the vehicle; state ferry tolls ranged from $2.00 to $3.00. The shipping of minerals, so important to the economy, will continue, of course, to depend on water transportation.

In general, the economy of Upper Michigan is likely to benefit from this new artery of traffic but the rate of growth may be slower than many had anticipated. Perhaps, as more people move into the area to serve the increasing number of tourists, industrial firms may also tend to move into the territory to serve growing local markets and a few may move in to serve more distant markets. As the population grows, additional community facilities will spring up to supply the economic, social and cultural needs of the people. As this region is strengthened, the whole Ninth district benefits.

—Oscar F. Litterer



Economic Briefs

1. Oil lands leased near Glacier Park

Recent bidding for oil leases on Blackfeet Indian acreage on the eastern boundary of Glacier Park topped more than a million dollars. Most of the interest was in a narrow strip about two miles wide and sixteen miles long, extending from the Alberta boundary southeast to the village of St. Marys. Some of the world's largest known gas fields, located just north of the area in Alberta, Canada, are part of the same geological trend. Leasing on a large scale has even taken place in the Flathead area west of the park, pointing to the possibility that the park itself may overlie an oil field.

2. New $25 million award at Oahe dam

A $25,306,349 award for power structure and downstream tunnels at the Oahe dam and reservoir near Pierre, South Dakota was made recently. The work will involve construction of seven 2,100-foot long power tunnels. The $380 million Oahe dam is about one-third complete at present.

3. General Mills plans research center

General Mills, Inc., plans to build a multimillion dollar food research center on a 112-acre site in Golden Valley, west of Minneapolis, starting next spring. The center will be finished in 1964 or 1965. It will be built in five stages and occupy a total of 360,000 square feet. About 500 scientists and associated workers will be employed in such fields as food flavor, quality, processing, preservation and the chemistry of starches, sugars and proteins.

4. Dayton's to build in St. Paul

Dayton's, the largest Minneapolis department store, has initiated a move into the St. Paul market with the purchase of Schuneman's, Inc. Schuneman's operates one of St. Paul's three leading department stores. Dayton's also acquired most of an adjacent block for a future new store building. The move is the sixth major expansion undertaken by Dayton's since 1952 when the company announced plans to build its first suburban branch in Southdale shopping center southwest of Minneapolis.

5. NSP to build plant near Red Wing

Northern States Power Company recently disclosed long-range plans to build a large-scale power generating plant near Red Wing, Minnesota. It will be the largest plant in this region and one of the largest in the nation. Construction of the plant, which will have a generating capacity of one million kilowatts, is scheduled to begin about 1968. The plant will be a conventional steam generating plant, using coal or gas for fuel. Selection of a site was determined by water and fuel availability.