on inside pages:

☆ Second Postwar Employment Dip
☆ Dakota Gas Plant
☆ Population and Prosperity
☆ Current Topics

FEDERAL RESERVE BANK OF MINNEAPOLIS

MONTHLY Review

VOL. 11 OCTOBER 30, 1954 SERIAL NO. 22

Ninth District Farmers Maintain Sound Financial Position

Spot check indicates good repayments of farm loans, smaller loan volume for most banks this fall

THROUGHOUT most areas of the Ninth Federal Reserve district, the current credit position of farm operators compares favorably with a year ago, a recent spot check among district banks regarding farm credit and financial conditions indicates. Bankers generally expect repayment of their farm loans this fall to be as good as they were last year, and in many areas better than a year ago. In some localities, of course, where crops were particularly hard hit by rust or drought (or both), lenders look for some increase in their total of farm loans outstanding. But even in these areas, the financial and credit condition of farmers is considered sound.

Although crop results in several areas of the Dakotas and Montana were below normal because of dry weather and rust damage, total crop production throughout the Ninth district has remained at a high level. For the entire district, this year's total grain and forage output will be one of the largest on record.

Reduced wheat plantings, because of acreage restrictions imposed under the Government's farm price support program, along with lower yields in most of the spring wheat producing areas, have resulted in less income from that source compared with a year ago. In many wheat areas, however, high protein content in the wheat harvested has resulted in some price premiums. Cash sales of wheat and flax at market prices during recent weeks have been more common than a year ago.

Throughout the main corn producing areas of the district, this season's corn crop is rated excellent, comparing well with the near-record output of last year. High-level livestock production, with marketings at relatively good prices, also has favored the continued sound financial position of most district farmers. In fact, in many areas where small grain crops were disappointing, income from livestock sales has helped to maintain farm income and the capacity to repay loans.

Better loan pay-off expected

As a result, many district bankers are looking forward to this fall as a season when credit lines can be reduced and farm borrowers can work down their debts to somewhat lower levels. Lenders generally are of the opinion that present economic conditions and outlook make this action desirable. They also indicate that many of their farm borrowers are in much the same frame of mind.

Smaller loan volume

The volume of loans extended to farm operators (or expected in the near future) differs according to area. In areas where crop production has been favorable, it's expected that loans will be paid off at a higher rate than normal this fall. This is already happening, many lenders report. In addition, livestock returns are helping to make repayments possible where crop production was poor. As a result, most district lenders expect to have a smaller volume of farm loans outstanding this fall than they had a year ago.

However, some banks report they look for higher loan volumes this fall. In a few cases where machinery sales were unusually low last year, increased machinery purchases in 1954 have caused some increase in machinery loans. Also, in some western parts of the district, where feed and crop conditions are good this fall, lenders expect some increase in their livestock credit lines as more cattle may be held over through the winter. In some localities, of course—particularly in the strictly spring wheat and durum areas—cash income is down enough to affect the pay-off of farm loans adversely. In these localities, loan volume is expected to remain about the same or increase slightly.

No change in interest rates

Lenders throughout the Ninth district report interest rates at a stable level compared with last year, with no indications for an increase in the months ahead. Rather, there is "a noticeable lack of upward pressure" on interest rates, most lenders agree. They feel that lending rates are now well in line with current economic conditions.

Although borrowers generally are being urged to reduce their credit lines this fall, the pressure is not urgent. In other words, there is no general problem of loan repayment, or of loan extension where that is necessary. Except for a few localized areas lenders report no more than the normal frequency of "problem loans"—perhaps a few less than usual.

Even in those areas which have suffered rather poor crop conditions over the past two or three years, lenders report that credit has been used in a very conservative manner, so that repayment is no particular problem.

Less refinancing with real estate

The practice of refinancing short-term farm debts into longer-term real-estate debt has become much less common than was true during the previous two years. Those few instances now reported are usually in connection with major farm improvements or long-term investments in the development of a livestock enterprise. Most of these conversions have been at the request of the borrower to meet a particular situation. They usually represent a major increase in the borrower's line of credit rather than the adjustment of an over-extension in short-term borrowing.

Land prices reflect crops

Activity in the farm real estate market is reported as being rather spotty throughout the district, and seems closely associated with crop conditions. The overall volume of real-estate transfers and the volume of real-estate loans continues at a very conservative level.

Farm land values declined only slightly for the district during the four months from March to July of this year, and in July were down about 4 percent from a year ago. However, some localities, where crop conditions are improved this year compared with the past season or two, are reporting significant increases in land prices. Although sales are few even in these areas, some lenders report average land prices 10 to 15 percent higher than last year for their locality. Such reports are confined largely to southern and southwestern Minnesota and southeastern South Dakota.

First half cash receipts same as last year

High level output coupled with conservative spending and good financial management have undoubtedly been an important combination in maintaining the sound credit and financial position of district farmers. The current season has demonstrated the wisdom of combined livestock and crop enterprises in a number of areas which tend to emphasize cash grain farming.

It should be noted, however, that farm income in the Ninth district has not been reduced to the extent that has been true for the nation generally. For the first six months of 1954, farmers' cash receipts from marketings averaged the same as in 1953 for the four district states, compared with a 3-4 percent decline in cash receipts for farmers nationally. Cash receipts of Montana and Minnesota farmers held even with a year ago during this first-half period. North Dakota, which receives most of its income from crop marketings, experienced a 12 percent drop in income for the first half of 1954. In South Dakota, where livestock sales are the main income source, cash receipts were up 9 per cent over first half 1953.

District not included in drought area

By mid-October, some 869 counties in an extended range of western, southern and southeastern states had been designated by the Secretary of Agriculture as "drought disaster area." No Ninth district counties were included in this drought area, as of October 16. (Some counties in the Black Hills area of South Dakota had requested that designation, but were declined.)

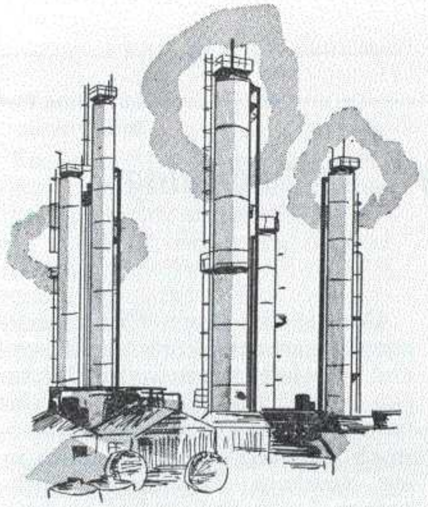
Although dryness has affected many Ninth district farms this season, they are nevertheless in a somewhat more favorable economic position than many areas of the nation. District farmers have relatively large supplies of both roughage and grain feeds. This suggests that they will be able to maintain crop and livestock income comparatively well in the months ahead. END

Ninth District Business Indexes

(Adjusted for Seasonal Variation—1947-49 = 100)

	Sept. '54	Aug. '54	Sept. '53	Sept. '52
Bank Debits—93 Cities	128	134	122	121
Bank Debits—Farming Centers	124	128	117	116
Ninth District Dept. Store Sales	101p	105	100	98
City Department Store Sales	107	110	105	101
Country Department Store Sales	91p	96	92	93
Ninth District Dept. Store Stocks	123p	119	122	112
City Department Store Stocks	126p	119	126	114
Country Department Store Stocks	119p	119	117	110
Lumber Sales at Retail Yards (Bd. Ft.)	86p	100	85	93
Miscellaneous Carloadings	103	98	113	118
Total Carloadings (excl. Misc.)	73	79	97	105
Farm Prices (Minn. unadj.)	79	84	87	98

p—preliminary



Tioga Plant Inaugurates

Gas Processing at Dakota Oil Fields

BRIGHT silver towers pointing skyward over the fields near Tioga, North Dakota, represent the "first instalment" of an industry new to this prairie region. The structure is a *natural gasoline plant* built by Signal Oil & Gas company that is just now beginning to process gases from North Dakota's big Beaver Lodge and Tioga oil fields. In the future, other plants of this type can be expected to develop throughout the vast Williston basin area, wherever an oil-and-gas mixture is produced in volume enough to assure an economic scale of plant operations.

Natural gasoline plants are quite common in older oil producing regions of the U. S. They are far more numerous than refineries and smaller in size. This is because most plants are constructed at or near the producing fields where they process more-or-less "local" oil-field gases.

A single large oil field may support more than one plant. For example, the 80,000-acre Kelly-Snyder oil field in west Texas has four such plants. In the Ninth district there is one plant at Cut Bank, Montana, and there are several in nearby Wyoming and Canada, but the Tioga plant is the first in the Williston basin.

Oil gases are raw materials

Just what does a natural gasoline plant do? A brief look at the raw materials and proposed output of the Tioga plant (which will not reach full operation for several months) will illustrate typical functions of such an installation.

At Tioga, the operation begins some 8,500 feet underground, where a steaming-hot mixture of petroleum liquids, gases and other materials lies highly compressed in the pore space of a hundred-foot-thick layer of limestone rock. This is the oil producing zone now being tapped by several hundred wells spread over nearly 27,000 acres of prairie land in Burke and Williams counties. When this underground oil reaches the surface, however, the locked-in gases and vapors bubble out. More than a thousand cubic feet of gas are obtained from each barrel of oil brought up.

The gaseous mixture thus liberated is called "wet gas." After being separated from the oil by special equipment at each well, it is then collected through a 125-mile system of pipelines and brought into Signal's natural gasoline plant. The essential function of the plant is to separate the constituents of "wet gas" into marketable products—a task it performs in a continuous, unseen way inside its seemingly endless pipes and tall towers.

Five product groups derived

The assortment of ingredients to be found in Tioga's "wet gas" is shown in the diagram below. Physical differences among these constituents, such as density and boiling point, enable the plant to separate them into five different product groups, also indicated below.

Briefly, the main uses for the five product groups are as follows:

Methane and ethane, lightest of the hydrocarbons, are lumped together with some inert gases and form so-called "dry gas." This is the familiar "natural gas"—destined to be sold to a utility which will transport it to population centers for use as a home and industrial fuel.

Next, two heavier hydrocarbons, propane and butane, are separately extracted—each to be bottled in pressure drums and tanks and offered on the rapidly growing rural markets for "LP gas" fuels.

The heaviest hydrocarbons, chiefly pentane, are collected in a group that gives the plant its name, *natural gasoline*. This group is a liquid about the density of automotive fuels, and is generally sold to refineries to be blended with refinery-made gasoline.

Elemental sulfur, with many well-known industrial applications, is derived from hydrogen sulfide gas.

The foregoing are the important commercial products that shortly will be produced and shipped from the new plant at Tioga. With some thirty employees and a projected capital investment of $15 million, the Signal plant is one more step in realizing the promise of greater industrialization stemming from oil discoveries in this region. END

Diagram of Natural Gasoline Plant Process

Input

Wet gas, a mixture of these materials, . . .

Pentane +
Butane
Propane
Ethane
Methane
Inert gas
Hydrogen sulfide

= **40 million cubic feet daily** ⇨

Output

. . . is processed into these five product groups:

Natural gasoline
Butane
Propane
=150,000 gal./day (three product total)

Dry natural gas =30 million cu. ft./day

Sulfur =40 tons/day

CURRENT

TOPICS ☆ *Business* ☆ *Banking* ☆ *Farming*

High Level Farm Output Adds Strength to District Economy

■ The Thanksgiving season is just around the corner and people in the Ninth district have much for which to be thankful in 1954.

Severe drouth passed us by this year and this district has produced its third largest total crop in history in spite of the severe rust epidemic in spring wheat.

Fortunately, the district's farms and ranches are currently heavily stocked with livestock and there is plenty of grass and feed to carry them through the winter.

A large volume of grain and livestock marketings means that processing, distributing, transporting and financing agencies will be busy in the months ahead.

Farm prices, although down from a year ago, have exhibited a considerable sidewise movement in recent months for most products.

Credit-wise, farmers in most parts of the district are in a better position than a year ago. Farm loans are fewer and interest rates are no higher. Bankers report relatively few collection problems.

In the non-agricultural aspects of the district economy there are also several signs of strength. For example, construction activity has been excellent thus far in 1954 and the current volume of new building permits and contracts awarded indicate strength in the months ahead. Total bank debits and department store sales for the first 9 months of 1954 have approximated those of last year. Lumber sales have been running strong — better than a year earlier. The employment picture has been improving in recent weeks.

Although it may still be a bit early to look at the district economy in retrospect for 1954, it does appear safe to say that the adjustment that has occurred has been a mild one, except in a few strictly manufacturing and mining areas. On the other hand, there has been no general upsurge in the economy —not with farm prices on the down side and with unemployment at higher levels than in recent years.

BUSINESS

► *Total store sales steady despite declines in some areas*

Department store sales in the Ninth district during September were 1 percent larger than a year ago, and for the first 9 months were approximately equal to sales in the corresponding period of 1953.

Thus, while district averages show an apparent stability, they nevertheless conceal more noticeable changes from area to area within the district. In the largest metropolitan area, Minneapolis and St. Paul—which accounts for approximately 60 percent of total district department store sales—greater stability of income and an increased emphasis on promotional selling have enabled stores to maintain sales above year ago levels.

The seasonally adjusted index of city department store sales for September was 2 percent larger than a year earlier. For the first 9 months of this year city store sales were approximately equal to sales during the similiar period of 1953. It is this which accounts for the favorable district showing.

Outside the Twin Cities, however, department store sales in several areas have not maintained year-ago levels. An exception to this would be the predominately livestock and feed grain area comprising southern Minnesota, southeastern South Dakota and western Montana. Spending in this area has been well maintained by favorable livestock and crop conditions.

Throughout the remainder of the district a combination of factors has contributed to curtailed sales. In North Dakota and the Red River Valley of Minnesota unfavorable experience in production of cash grain crops has been reflected in department store sales.

In western Montana, labor stoppages at metal ore mines and plants cut into September store sales; while in northeastern Minnesota, reduced iron ore activity was responsible for a poorer showing.

BANKING

► *Loans increase, deposits decline at district member banks during September*

Loans of district member banks were increased by $29 million in September; this was the largest monthly increase so far in 1954 and exactly offset a decline of $29 million in August. Relatively, North and South Dakota banks added most to their loans, showing gains of 6% and 5% respectively in contrast to the district average loan increase of 2%. Three quarters of the addition to district member bank loans took place at the country banks.

Member bank deposits showed a small decline as net withdrawals of $58 million at the city banks exceeded a deposit gain of $51 million at the country banks. This deposit reduction of $7 million at district member banks in September contrasts with a gain of $53 million in September last year.

FARMING

► *Wheat Supports to flex downward*

For the first time since 1942, wheat farmers will have wheat prices supported at less than 90 percent of parity. Beginning in 1955, the support probably will be 82½ percent of parity. This will approximate $2.06 per bushel nationally, which would be about 18c per bushel less than the 1954 support.

Farmers have again voted quotas on 1955 wheat production which means they can't exceed the wheat acreage allotment without severe price penalties—approximately $1.12 per bushel on the excess production.

If the farmer is "out of compliance" on wheat or any other basic crop, he is not eligible for price support on wheat or the other crops. In addition, a farmer must be "in compliance" to be eligible for the ACP payments, if any are made.

► *Dairymen add to herds*

At least two circumstances not directly related to dairy prices have encouraged farmers to add cows to dairy herds in the specialized dairy areas of Wisconsin and Minnesota.

First, most dairy farms in this district have relatively large supplies of hay and other feeds available this fall. They have enough feed to handle some additional livestock.

Secondly, the alternative value of dairy young stock and cullable cows in the herd is low because of the low prices at which beef of this quality is selling on the market.

As a result of these two factors, many dairy operators feel that they are better able to keep milking additional cows, taking advantage of the additional feed supplies which they have on hand rather than selling surplus stock at the low prices available.

In the less specialized areas of Minnesota and the Dakotas, dairy animals seem to be in demand as an outlet for surplus labor on the farms that has little other productive use especially during the winter seasons and to bolster income. Even in some of the ranching areas a few milk cows are being added so that milk, butter, and cream may be produced for the family and the necessity for buying it in town eliminated. END

Employment's Second Postwar Dip

Developing out of inventory liquidations of late 1953, slackened employment began a stronger showing during third quarter 1954

THE level of employment* nationally has dipped twice since the end of World War II. Paralleling the national experience, dips in this district came in 1949 and near the end of 1953. The expansion in employment that regularly appears in spring and early summer months was smaller in 1954 than in past years, especially in the eastern half of the district. As a result, employment remained below the 1953 level. However, a strong third-quarter rise has brought the total number employed closer to the figure of a year ago.

The 1949 decline followed a marked rise in employment from 1946 through 1948. During this period, the rise in employment exceeded even that of the war years. The growth in employment was terminated mainly by a falling off in consumer buying, especially of soft goods, which led to liquidation of inventories and cutbacks in production. A lower level of employment then prevailed through the first part of 1950.

After the United States entered the Korean conflict in 1950, employment again rose quickly and continued to rise through most of 1953 in all district states except Upper Michigan. In Upper Michigan, there was a sharp drop in employment during 1952, much of which was regained in 1953.

The second slump in employment began in the fall of 1953. Consumer buying of durable goods tapered off in the summer of that year. Liquidation of inventories and cutbacks in production followed. Furthermore, the substantial reduction in federal government expenditures for national security (almost $10 billion since the second quarter of 1953) left its impact on the economy of this region.

Western half of district fared better

In the recent employment slump, the western half of this district has fared better than the eastern half. In Montana, North Dakota and South Dakota, employment in the first quarter of this year set a new record, topping the previous high in the corresponding 1953 period. However, in the second and third quarters, the usual seasonal expansion in employment was smaller than in past years. As a result, the number of workers employed fell below the 1953 level, although in each of the three states the number employed was down scarcely 1 percent.

In the eastern half of the district (Minnesota, northwestern Wisconsin, and Upper Michigan), employment began to slump in the fall of 1953. In the first half of this year, it slowly fell below the number employed in the corresponding months of 1953. In Minnesota, employment in June was down by about 4.5 per cent and on the Upper Michigan peninsula by about 7.5 percent.

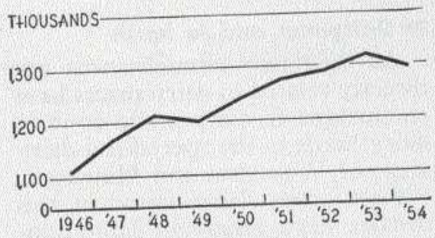
The drop in employment for the eastern half of the district during the first half of 1954 was somewhat larger than the average for the na-

*Unless specifically modified, the term, "employment," used in this article refers to nonfarm employment.

tion. In June, the nation's employment was down 3.5 percent from a year ago.

Some improvement in the employment picture was observed for the third quarter when a strong seasonal increase brought employment closer to the 1953 level. For example, employment in Minnesota during September was down about 3 percent, whereas in June it was down 4.5 percent; and on the Upper Michigan peninsula in August it was down only 6 percent as compared with 7.5 percent in June.

TOTAL NON-AGRICULTURAL EMPLOYMENT IN THE NINTH DISTRICT, 1946 - 1954*



Source: State Divisions of Employment.
*Wisconsin figures not included. 1954 figure based on first 8 months.

Manufacturing hardest hit

Certain industries have been affected by stiffer competition growing out of recent economic developments. Of the various industries, manufacturing suffered the largest contraction in employment. Noticeably fewer workers have been employed this year in the manufacturing of durable consumer goods, of ordnance, and of other defense equipment in the eastern half of this district.

In Minnesota, manufacturing employment during August was down 9.5 percent from a year ago. This decrease represents a reduction of almost 23,000 workers. For Upper Michigan, the comparable decrease was 11.3 percent. Since manufacturing is a small industry on the peninsula, the reduction amounted to only 2,500 workers.

In the western half of the district where manufacturing consists largely of food processing, the decline in such employment over the 12-month period ending August 1954 was small.

The output of industrial plants has not fallen off as much as the contraction in employment would indicate. Greater gains in labor efficiency have been made this year than in former years, as is revealed by estimates of output per man hour. As a result, employment has slumped more than many other business indicators.

For the nation, the number of production workers in manufacturing plants declined from 13.9 million in July, 1953 to 12.2 million in July, 1954—a decrease of 12 percent. Furthermore, average weekly hours declined from 40.3 to 39.4—a decrease of 2 percent. As a result of the decline in both workers and hours, this aggregate number of production hours was reduced by 13.8 percent. In the same period, according to the index of industrial production, factory output decreased only 10 per cent. Thus, output per man hour rose by almost 5 percent over this 12-month period.

In the more industrialized eastern half of the district the amount of electrical energy consumed by manufacturing plants held at year-ago levels almost to mid-1954. This fact indicates that first-of-the-year cutbacks in employment did not appreciably affect the operation of machines and, hence, the output of goods. However, a steady decline in energy used by these plants during the summer months indicates that additional layoffs during that period were accompanied by a smaller output of products.

Less labor employed in mining

The decline in the nation's steel production has been reflected in a lower demand for iron ore from the Lake Superior region. The mining of ore has receded from the feverish peak of activity attained in 1953. Shipments from the Lake Superior region at the end of September totaled 50.6 million tons as compared with 79.0 million tons shipped in the same period of last year.

The smaller demand for iron ore has reduced employment in this industry. During the summer months, when mining operations were in full swing, the number of workers engaged in this type of work was as much as 15 percent below the number employed a year ago. August mine employment was some 3,000 workers under a year ago in Minnesota, and down about 1,800 workers in Upper Michigan.

In North and South Dakota, oil drilling has not sustained employment in the mining category, and figures revealed a 100- to 200-worker decrease in each state.

Railroads trim labor force

In the transportation industry, fewer workers have been employed this year due to a reduction in the shipment of defense materials and equipment, and of some consumer goods, and to the conversion from steam to diesel locomotives which has reduced railway operating and maintenance crews. In the four full states within this district, employment on railroads in the past summer was down 9,000 workers compared with the number employed a year ago. In Minnesota alone, the employment on railroads decreased by 6,500 workers. The reduction of operating and maintenance crews has affected, in particular, employment in cities with railroad shops.

Construction expenditures up but employment down

Large expenditures for construction were made in this district during spring and summer. For the first eight months, contract awards for residential building were 17 per cent higher than a year ago, while those for other types of structures were up as much as 46 per cent. In spite of this, employment on construction sites in the district during the same period averaged some 2,400 workers less than a year ago.

One explanation is that some very large contracts have been for installation work—such as generators at dams—requiring small amounts of labor on site. Labor disputes were a minor cause.

Consequently, the construction industry generally has not absorbed the slack in the labor market in this district as it appears to have in some other regions of the nation. END

Population and Prosperity

THE failure of population growth in the Ninth district to keep pace with the national trend has been a source of some disturbance to those who are concerned with the economic welfare of our area. Since the beginning of World War II the population of the United States has leaped forward by 20 percent while the number of people in the Ninth district has increased by less than 6 percent.

Fewer people are residing in North Dakota today than in 1940 while in South Dakota the population is almost unchanged. Minnesota and Montana have seen population grow by slightly less than 10 percent during these years. In short, the proportion of the national population within the confines of the district has been falling.

But adjustments such as this one are a necessary condition of economic progress since—in a free market society—resources tend to flow where their productivity (earnings) will be highest. In terms of workers, this tendency means that population will shift from areas of low pay to areas of high pay, thereby minimizing geographic differentials in rates of pay.

Because agriculture dominates the economy of our district and because this industry is among those which have enjoyed the greatest burst of labor saving innovations during recent years, the demand for workers in this area was *relatively* diminished with a consequent tendency for wages to fall—unless human resources flowed to other parts of the economy, which they did.

Tractors and fertilizers, so to speak, were substituted for human effort on our farms with the result that the number of people required to satisfy the nation's demand for agricultural commodities was reduced drastically. A third fewer agricultural workers than in 1939 now produce enough to satisfy the nation's tremendously expanded demand for farm products.

One reason for the high living standards enjoyed in the United States is that population is mobile, free to locate where it can be employed to best advantage. In other parts of the world where national boundaries enclose much smaller geographic areas and limit the free movement of population, such adjustments cannot be made easily and living standards suffer.

It is fortunate that the technological revolution in agriculture occurred at a time when the need for workers in the commercial and industrial areas of the country was so great. This made the adjustments much less painful to the people displaced from the farms.

Worthy of note is the fact that population gained the least since World War II in those district states which depend most heavily on agriculture, North and South Dakota. The proportion of total income payments derived from agriculture in these states during 1953 was estimated at 28.9 percent and 32.5 percent respectively by the U. S. Department of Commerce. This contrasts with ratios of 11.5 percent and 21.3 percent in Minnesota and Montana, respectively, and 5.3 percent for the U. S.

More interesting is a comparison of population change with changes in the level of per capita income payments in these states since 1940. Obviously, income per head is a much better measure of economic welfare than total income.

■ According to estimates just released by the U.S. Bureau of Census, population of Ninth district states increased as follows between the time of the 1950 census and mid-1954: Minnesota 3.9%, Montana 5.9%, North Dakota 2.6%, South Dakota 1.5%. These gains compare with an increase of 6.3% for the United States as a whole.

An inspection of the table reveals that income per person improved the most in the Dakotas where population gained the least. In Minnesota and Montana, where population grew by almost 10 percent, income per head failed to match the Dakota gain but approximated the U. S. average gain.

1953 Population and Per Capita Income as Percent of 1940

	Population	Income per Capita
United States	120%	297%
Minnesota	109%	303%
Montana	110%	294%
North Dakota	93%	350%
South Dakota	100%	360%

The statistics must be viewed with caution because such considerations as the proportion of non-producers (children, etc.) in the respective populations influence comparability; but it's fairly clear that the export of human resources from the district since 1940 has not been associated with economic distress. On the contrary, it appears that the outflow was associated with a substantial income gain for those who remained behind.

The growth of non-agricultural enterprises in the district undoubtedly retarded the population outflow since 1940 as workers were absorbed by construction, manufacturing, mining, trade and other district enterprises which are now carried on in larger volume than was true 15 years ago.

But the more rapid growth of such enterprises outside the district, especially in the war years, provided a tremendous inducement for some of our expanding population to emigrate.

In the future as in the past, economic considerations such as distance to markets, taxes, and natural resources, will dominate population trends in the district. While the future course of population in the district cannot be foretold, a *relative* outflow of population should not necessarily be regarded with misgiving because in the absence of such adjustments the goal of maximum productivity for the whole economy could not be met. END

ECONOMIC *Briefs*

SIGNIFICANT HAPPENINGS IN THE NINTH DISTRICT

1 - Rush tiber dam work in Montana

By October, earth fill placement on the Tiber dam in northern Montana neared the half-way mark, while concrete placement was nine-tenths completed. Construction crews totaling about 500 men were working two 9-hour shifts a day, seven days a week, in an effort to raise the dam above the danger mark before flood stage on the Marias river next spring. Over $6 million will be spent on the project during the current fiscal year.

2 - Garrison dam nears full height

With continued good construction weather, the earthen embankment at Garrison dam in central North Dakota may reach full height before final freeze-up. The embankment, in progress for the past eight years, will back up the Missouri river for 200 miles.

More than 2,500 persons are now at work on the dam. Cost of the large "Pick-Sloan plan" structure will total over $300 million.

Hydro-electric power from one 80,000 KW generator is still scheduled for next spring. Ultimate planned output: 400,000 KW.

3 - Refinery start ups N. D. crude price

Standard Oil Company of Indiana's refinery at Mandan, North Dakota, was dedicated in early October to become the state's largest industrial plant, employing about 250 persons. The refinery, with a capacity of 30,000 barrels of crude oil a day, cost $25 million. The company has another $12 million invested in pipelines in the state.

Shortly after the refinery opening, the price of crude oil at North Dakota's major oil fields was advanced to $2.50 per barrel, still well below the Midcontinent price of $2.90 per barrel.

4 - Minneapolis hospital to suburbs

Asbury Methodist hospital of Minneapolis agreed to purchase a 42-acre tract in the suburb of St. Louis Park for $70,000. There it will construct a 200-250 bed hospital costing $4-5 million. A second Minneapolis hospital is considering joining in the plan. Construction is not expected to begin until late next year.

5 - Loop building changes underway

A New York real estate firm, Webb & Knapp, plans to spend $1 million to modernize the interior of the former Andrus building in the Minneapolis loop. Remodeling of the lower part of the 10-story building at a cost of $500,000 is just being completed and has provided new store and office space.

The company also purchased extensive properties across Nicollet avenue from the remodelled building, part of which may be torn down to make room for a new store building for J. C. Penney Company (work scheduled for 1956) and the remainder of which will undergo improvements. This project represents a $6 million investment, including land.

6 - Cudahy plant shuts down

The Cudahy Packing company branch plant at Newport, across the Mississippi river from South St. Paul, closed October 8. This was one of several plants throughout the country shut down by the firm in an effort to eliminate "unprofitable operations."

Closing of the plant put more than 1,100 employees out of work, only a small part of whom could be absorbed by the two larger packing plants at South St. Paul. Because of the unemployment problem, intensive efforts are being made to interest another packing company in taking over the facilities at Newport.

Since the Cudahy plant did most of its cattle buying direct, closing of the plant is not expected to affect sales at the South St. Paul stockyards.

7 - University builds at Duluth

Construction will begin this fall on a new student service center at the Duluth branch of the University of Minnesota. A contract for nearly $1.4 million has been awarded starting work on the building. In addition, dormitory units to house 64 students will be built at a cost $303,000.

8 - Mackinac bridge base nears end

Work on the $96 million Mackinac Straits bridge is proceeding on schedule, and the six key piers which will support the central suspension span of the five-mile bridge should be completed before winter. More than 600 men have been working two 10-hour shifts on the foundations. Of the total bridge cost, about $26 million is allocated to this substructure.