**1955 building plans point to favorable construction outlook**

Activity in the construction industry was not as great a source of strength to the Ninth district's economy during the first half of 1954 as it was in the second half of the year. The winter of 1953-1954 was mild, permitting higher-than-usual construction activity at the outset of 1954, but the expansion that followed during the spring was slow.

It was not until the latter half of the year that the volume of construction again advanced beyond the volume of the corresponding period of 1953. The expansion, which had gained considerable momentum before the onset of cold weather last fall, maintained building activity at a much higher level during the past winter than a year ago.

**Building permits—a forerunner of construction**

A relatively small volume of permits was issued in the first quarter of 1954 heralding the limited expansion in activity that took place during the spring in this district. In the second quarter, the volume of permits rose by more than the usual seasonal amount; and in all but two months of the last three quarters, the aggregate valuation exceeded the total of the corresponding months of 1953.

This trend continued into late fall and winter. From November through February, the dollar value of building permits totaled more than twice the dollar amount issued a year ago. This is tangible evidence that the construction industry has a large backlog of projects for the months that lie immediately ahead.

**Construction employment was high last winter**

Employment on construction projects in the Ninth district expanded slowly during spring and summer of 1954. It was not until August that construction employment began to approach the number of workers employed in the 1953 building season. As a result of the continued high activity during the past winter, employment in the construction field set a new record in those months.

**Residential building at high rate**

Residential building expanded significantly during the latter half of 1954 in this district. In some months, the amount of contracts awarded were 1 1/2 to 2 times the amount awarded in the corresponding months of the previous year. In larger cities the activity did not decline much during the winter. On cold days contractors carried on indoor work, finishing houses roughly-in before the start of winter, while on mild days they laid foundations and built frames for additional ones.

The growing demand for new houses in the summer of 1954 reflected an upgrading in the average family’s housing requirements. This demand became effective only after mortgages were offered on more liberal terms.

An increasing proportion of the demand for new houses has come from families who already own a house but want more space (especially more bedrooms) or more modern styling and conveniences. Many older houses are being modernized. In many small communities...
of this district, where a static population level has precluded an active market for new houses, the modernization of existing houses provides the basis for construction activity.

Almost without exception, builders are planning to construct at least as many houses in 1955 as they did in 1954. In some cities, they plan to construct houses in slightly higher-price brackets. Of course, builders carefully test the market in the late spring before proceeding with large scale operations.

**Large backlog of commercial projects**

One of the factors stimulating commercial construction in the district's larger metropolitan centers is the current suburban expansion. The building of retail stores and shopping centers is going strong. (See the February issue of the *Monthly Review* for more details on shopping center growth in the Twin Cities area.) The dollar amount of contracts awarded for all types of commercial building in the fourth quarter of 1954 and in the first two months of this year was many times the total awarded a year ago in most Ninth district states.

Many towns and cities share in the continuing high rate of store and office expansion. Several of the larger projects to be worked on this season are carried over from last year, but some new starts are planned, and still others are in the “talking stage.” As an illustration of this type of construction, at least half a dozen office buildings (costing in excess of $1 million each) for banks or insurance companies alone will be worked on this season in the Twin Cities area. In Billings, Montana, work will be carried to completion this summer on two bank buildings and an oil company building, each costing in excess of $1 million. In Billings, Montana, work will be carried to completion this summer on two bank buildings and an oil company building, each costing in excess of $1 million. These two localities have been among the most active in the district from the standpoint of commercial building.

From all appearances, commercial construction should be maintained at a high level through the 1955 construction season.

**Industrial building tapers off**

Industrial building has not continued as buoyantly as commercial building. Many manufacturers have completed their expansion programs. The amount of contracts awarded for industrial buildings in this district since the third quarter of 1954 has fallen far below the awards made in the corresponding months of a year ago.

Throughout the district many of the large refineries, pipelines, and mining projects undertaken during the past few years have been completed. Other projects now close to completion (such as the Anaconda aluminum plant in northwestern Montana or the White Pine copper project in Upper Michigan) will support, at best, greatly reduced construction activity this year.

**Utilities continue expansion**

Both gas and electric utility companies have been investing heavily in new facilities. The expansion programs for 1955 are even larger than those of 1954.

As indicated in the article dealing with electric utilities that appeared in February’s *Monthly Review*, electric companies generally are planning in terms of a continuing program of construction—more power lines, substations, and generating facilities—over a period of several years. Applications are under consideration at both Federal and state levels for natural gas distributing facilities to several Ninth district areas not now served, including parts of North Dakota, South Dakota, northern Minnesota and northwestern Wisconsin. If approved, these programs would entail substantial construction outlays.

**State and local governments spend heavily**

A large backlog of projects is scheduled by governmental units for construction this year. Federal government spending for resource development in this district—the largest item among which is the Missouri Basin development program—has been reduced.

The effect of this decline in construction has been largely offset, however, by increased expenditures of state and local governments. A larger highway program has been outlined. Cities are extending streets and utilities into newly developed suburbs. More public schools are being built in response to the growing shortage of school facilities created by the expanding school population.

Most major building projects of local governmental units are financed by borrowed money acquired through the sale of long-term bonds. One compilation of school bond sales of Ninth district communities indicated that at least $50 million was borrowed last year to finance the construction of schools—a greater amount than was borrowed for all other community purposes combined.

Typical projects called for bond issues of $200,000 to $500,000, though a number were much less, while others exceeded the million-dollar figure. By way of illustration: the Missoula County high school district, Montana, sold $2 1/4 million worth of bonds last July to finance construction activities, while at about the same time a school building project at Lead, South Dakota was financed by a $250,000 bond sale.

For “other-than-school” projects, at least $40 million was borrowed by Ninth district communities last year. Samples from last year’s issues illustrate some typical construction projects: $28,000 for street improvement at Calumet, Michigan; $285,000 for paving at Austin, Minnesota; and $200,000 for water and sewer system at Glasgow, Montana.

As far as this season is concerned, there seems to be no sign of slacking in state and municipal spending for construction.

In addition, a number of large defense projects are to be built in the district. Hospital and church buildings, too, are the object of a sustained high level of outlays. From the standpoint of public spending, therefore, construction activity is in for a strong year.

In summary, the large backlog of
projects outlined for the approaching building season places construction in the vanguard among numerous industries now moving toward an expanded level of activity. In the coming months this industry will provide a substantial share of the new jobs for a growing labor force.

farmers hold more grain, livestock, as...

DISTRICT FARM INCOME DECLINES IN 1954

MONEY paid to farmers for the sale of their crops and livestock is an important source of income for the Ninth district. For the year 1953, approximately 20 percent of all personal income within the district consisted of net income earned by farmers. Total cash income from farming operations is much larger, of course.

Many other persons derive their earnings indirectly from the flow of farm income by providing goods and services that are purchased by farmers. Thus, the trend of farm income is important to many more than farmers themselves. It not only constitutes the purchasing power of farmers, but it also affects the sales and the earnings of those who deal with farmers.

A decline in farm income also may affect the kind of things purchased by farmers. The reason is that spending for family necessities and for production needs tends to be maintained to a greater extent than spending for items that can be postponed or eliminated from the farm budget.

Where a farmer's operating capital is limited—and it usually is—changes in income can also influence production adjustments on the farm. For some farm operators at least, reduced income may tend to stimulate greater effort, resulting in higher output and more efficient production in order to maintain net income. In other instances, reduced income may limit the ability of some marginal operators to obtain needed credit to finance farm operations. This may tend to reduce efficiency under some conditions.

Three-year decline in district

The cash receipts of Ninth district farmers have declined over the past three years from $3,139 million in 1951 to $2,790 million in 1954. (See chart.) An analysis of these trends, and particularly of trends experienced during 1954, may provide a useful insight into the probable spending, borrowing, and production activities of farmers during the year ahead.

The U. S. Department of Agriculture has estimated that Ninth district farmers received 4 percent less total cash for their marketings during 1954 than they earned in the previous year. For the nation, total cash farm receipts were down 5 percent—from $31.4 billion in 1953 to $30.0 billion in 1954. In this regard District farmers fared slightly better than farmers in the nation generally.

Expenses down only slightly

Production expenses of farmers across the nation are estimated to be about 1 percent lower in 1954 than in the previous year. Ninth district farmers probably experienced a similar trend. Thus, with total income about 4 percent lower than a year ago, and with little offsetting decline in production expenses, the decline in net cash income of farmers was probably more than 4 percent in percentage terms. Roughly two-thirds of the gross income from farming was paid out to meet production expenses during the current year, according to national estimates.

The net realized income (includes allowance for noncash income) of U. S. farmers is estimated to be down about 10 percent—from $13.3 billion in 1953 to $12.0 billion last year. Since cash income of district farmers declined only 4 per-

Table 1—Selected Farm Income Comparisons For Ninth District States

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<tbody>
<tr>
<td>Cash Farm Receipts: '54 as % of '53</td>
<td>96</td>
<td>89</td>
<td>100</td>
<td>99</td>
</tr>
<tr>
<td>Percent of Income from Crops</td>
<td>30.5</td>
<td>67</td>
<td>34.3</td>
<td>57.5</td>
</tr>
<tr>
<td>Percent of Income from Livestock</td>
<td>67.5</td>
<td>33</td>
<td>65.7</td>
<td>42.5</td>
</tr>
<tr>
<td>Net Farm Income as % of Total Personal Income*</td>
<td>11.5</td>
<td>28.9</td>
<td>32.5</td>
<td>21.3</td>
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MONTHLY REVIEW March 1955 3
of food and other services provided directly from the farm. Many also obtain other income from work off the farm—either on other farms or working at nonfarm employment. When all such income is considered, the total 1954 income of persons living on U. S. farms was down about 3 percent. Since the number of people on farms dropped 3.5 percent, the total income per person on farms was slightly greater in 1954 than in 1953.

District farmers did, too

Ninth district farmers also added to their inventories during 1954. Table 1 shows the volume of livestock and major crops held on farms January 1, 1955, compared with January 1, 1954. Stocks of all grains except wheat, and numbers of all livestock except dairy cattle, were larger than a year ago on January 1. To the extent that district farmers added to their holdings of salable products during 1954, this represents additional income produced but not yet converted into cash.

State-by-state trends in farm income seem to reflect differences in production, crop conditions, and differences in price trends for various commodities. For instance, livestock income was generally more stable during 1954 (relative to 1953) than was crop income. Cattle prices improved during the year, even though marketings were larger than in 1953. Hog prices declined during the year because of much larger marketings. But for the entire year, both hog and cattle prices averaged about the same as in 1953.

In North Dakota, where cash farm receipts dropped 11 percent from 1953, most of the decline reflected lower income from the sale of crops. Reduced wheat acreage and a poor crop season were the major causes. Only a third of North Dakota's farm income came from livestock in 1954; two-thirds came from crop sales.

In Montana, where total income for the year was down only 1 percent, crop sales were up $19 million dollars during the first quarter of the year—compared with 1953—but were down $23 million in the fourth quarter based on the same comparison. Montana livestock receipts, on the other hand, varied only slightly from 1953. Montana farmers earned 43 percent of their income from livestock sales.

Cash receipts for the year were down 4 percent in Minnesota, and down less than 1 percent in South Dakota.

In all of the four states fully within the Ninth district—Montana, North and South Dakota, and Minnesota—farmers received substantially less income during the second half of 1954 than they received in the second half of 1953. During the January-March period, on the other hand, farm earnings in three of these states were substantially greater in 1954. Thus, district farm incomes during the latter part of 1954 show greater declines compared with 1953 than when full-year incomes are compared.
Building Industry is a Buoyant Factor in Ninth District Economy

The non-agricultural part of the district economy appears to be continuing in its recovery move. Bank debits were at new highs in February. Store sales were high. Lumber sales have been up sharply since the first of the year.

A strong seasonal increase in employment is expected this spring as the big construction industry flexes its muscles after the winter slowdown. Building permit data and reports on contracts awarded indicate an unusually strong construction program is in the making for 1955. This should help to absorb a large share of the rapidly growing labor force.

The district generally, but especially the farmer, can look forward to an increased tempo of work now that winter is almost gone and warm spring breezes will soon soften the garden soil and “green up” the fields and pastures. Following a winter that has been unusually mild and free from damaging storms, livestock are in relatively good condition, and farmers have on hand a near record amount of feed grains and hay for sale or future use.

An abundance of feed from 1954 crops has permitted district farmers to build up record numbers of cattle and calves. Dairy cow numbers were down slightly, but beef cow numbers were up 6 to 8 percent from a year ago in the several district states (as of January 1). This indicates a record calf crop is in prospect for 1955, which in turn means salable assets in the fall of the year.

The current agricultural scene, however, is not all optimistic. Prices received by farmers continue to drift downward, costs remain high, and farm credit—both short and long term—continues to grow larger. Farm debts, although higher than a year ago, are not considered excessive in relation to farm assets or earnings.

Employment is down in iron ore mining

Employment in the iron ore industry of the Lake Superior region this winter was at the lowest level it has been since the beginning of World War II despite a steady rise in steel production since last December.

The low employment in iron ore mining in this region is traced to two developments: first, preparations a year ago were made for the shipment of more ore than actually was shipped in the 1954 season, and, second, many steel producers have not as yet submitted contracts for this season's ore shipments.

Large stocks of ore were built-up last fall at lower lake ports and at steel mills. The growing demand for steel, especially from automobile manufacturers, has pushed up the output of steel which has reduced the stocks of ore at a faster pace.
rate than a year ago. According to Lake Superior Iron Ore Association figures, by the end of February stocks were 15 percent below those held at the same time last winter. Even so, at the current rate of steel production (above 90 percent of capacity) stocks are sufficient to feed furnaces through the greater part of June.

Uncertainty about the increase in ore shipments from Labrador and Venezuela makes it difficult to estimate the demand for Lake Superior ores this year. Currently, estimates differ widely, ranging from 65 million to 80 million gross tons.

Retail sales were down in February

Sales at Ninth district department, furniture, and general stores were down in February compared with those of a year ago. Sales were off more in agricultural and mining areas than in industrial and commercial centers. Cold and stormy weather, in contrast to the exceptionally mild temperatures prevailing last year, affected the percent change in sales. Furthermore, the current recovery in business has not extended to agricultural and mining areas.

District crop plans for 1955

Ninth district farmers expect to plant more corn, less durum wheat, and more of several other grains during 1955 than they did in 1954, according to the U.S. Department of Agriculture estimate of farmers' planting intentions as of March 1.

March 1 Planting Intentions As Percent of 1954 Acreage Planted to Selected Crops

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<tr>
<td>Corn 106 103 104 100</td>
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<tr>
<td>Spring Wheat:</td>
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<tr>
<td>Durum 200 65 80</td>
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<tr>
<td>Other Spring... 90 98 90</td>
</tr>
<tr>
<td>Oats 92 95 98 107</td>
</tr>
<tr>
<td>Barley 100 109 106 110</td>
</tr>
<tr>
<td>Soybeans 118 140 155</td>
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<tr>
<td>Flax 98 102 87</td>
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Although such intentions may change between now and planting time, the preceding table indicates the intended crop plantings for 1955, shown as a percentage of 1954 acreage.

Increased Durum Acreage Allowed

Wheat growers in counties that have produced Class II durum wheat (amber durum) within the past 10 years will be allowed to plant additional acreage to durum wheat during 1955 without being subject to the acreage restrictions under the wheat support program. The exemption of Class II durum from the rigid acreage restriction on all types of wheat comes as a result of the extremely low production of durum over the past few years. Durum production during 1954 was less than 6 million bushels, compared with a normal usage by the industry of around 35 million bushels. As a result of the small amount produced, durum prices have been far above support levels.

Producers have been warned against planting non-recommended durum varieties under the increased acreage program, since only those varieties which produce acceptable milling quality will command prices in contrast to an average of $33 million during the last two weeks of January.

Almost 60 percent of the $83 million deposit reduction reported by city banks represented the withdrawal of balances owned by banks. At the country banks, where such balances are proportionately much less important, withdrawals by banks accounted for $8 million of the $42 million total withdrawals. Time deposits at all district member banks grew by $1 million in February; this compares with time deposit growth of $5 million in February last year. The difference reflects a lower growth rate at the country banks this year.

Loan balances reported by both city and country member banks have increased by less, thus far in 1955, than was true in the comparable period last year. During the first two months this year, loan balances increased by $14 million; during the same months last year, the increase was $26 million.

Government securities worth $31 million were liquidated by district member banks in February; other securities were added to portfolios in the amount of $2 million. Most of the liquidation occurred at the city banks, as country bank investment balances fell by only $3 million for the month.

Borrowings by the city banks and country banks were higher at the end of the period than at the beginning by $19 million and $6 million respectively.
comparable to those now being offered for quality durums.

All counties in North Dakota, all counties except Lawrence County in South Dakota and a number of counties in Montana and Minnesota have been designated eligible for durum production during 1955. The only additional requirements are that land must be judged suitable for the production of Class II durum. The relaxation of acreage restriction, of course, applies only to acres planted to Class II durum wheat.

INDUSTRY SKETCH

Southeast Minnesota Iron Ores

Iron ores found in Minnesota's lake-and-bog dotted northern forests have long been famous. Not so well known, however, are iron ore deposits now mined in the southern part of the state.

In southeastern Minnesota scattered, small deposits of yellowish, "limonite" ore lie a few feet below gently rolling pastures and cornfields. Some of these deposits, contrasting sharply in both size and setting with those of the northern "ranges," are being mined currently in Fillmore County, 130 miles southeast of the Twin Cities.

Iron ore in Fillmore County is usually found in flat-lying beds, resting on layers of limestone or shale—much like that illustrated in the diagram below. These deposits are not thick but are surprisingly extensive in the southeastern Minnesota area, where their existence has been known for a long time. Lumps of iron oxide were dug up in wells by early settlers or turned up by their plows in the fields.

Fillmore County ores were first mined commercially under the stimulus of tight supply conditions of World War II. In 1941 the first experimental carload was shipped to an ore washing plant on the Cuyuna range for treatment. The following year mines were opened. About 280,000 tons of ore were shipped before operations ceased in 1943.

In 1947, the mines were reopened and have been in production each year since that time. Output has varied from 100,000 to 500,000 tons a year. Compared to other iron mining localities in the Ninth district, these amounts are not large. However, in some years, these figures have reached in volume nearly a third of the tonnage shipped from the Vermillion iron range (underground mining) in northern Minnesota.

From the standpoint of quality, Fillmore County ores fall short of average grades shipped from the northern part of the state. The marketed ore is classified as "high phosphorus, non-besserer," and as such, fails to command the price premiums associated both with low phosphorus content or with high iron content. Much of the ore is soft and porous.

Mines currently in operation are within a 15-mile radius of Spring Valley, where a small ore treating plant is located. Ores hauled to the plant by truck are crushed, screened, washed or otherwise treated to remove sandy portions from the limonite. (Limonite is composed essentially of iron oxide and water.)

Perhaps one-fourth of the ore's original mined bulk is washed away during treatment, and the marketable, finished ore that results

A TYPICAL IRON ORE DEPOSIT MIGHT LOOK LIKE THIS:

OVERBURDEN, 0-35' thick, is removed to get at ore.

IRON ORE may vary from 0-25' thick. One-fourth its bulk may be "sand."
averages about 49 percent iron. Average Lake Superior iron ore shipments, by way of contrast, are 50.5 percent iron.

The ore thus prepared is loaded on rail cars at the Spring Valley plant and shipped to a steel mill at Granite City, Illinois.

Apparently the deposits have collected and concentrated on or near surface of the land during an extremely long interval of time in the past when this area was the subject of slow, persistent "wearing away." In some places iron deposits have been carried rather deeply into underlying limestones by the seepage of ground waters.

According to the Minnesota Geological Survey, the total amount of ore scattered over the known area of distribution in southeastern Minnesota amounts to several millions of tons. However, the tonnage available to mining operations (found mostly in Fillmore County) amounts to much less than this.

Almost 2.5 million tons have been shipped to date, and reserves on tax roles (as of last May 1) were about 573,000 tons. This reserve figure is approximately at the same level it was in 1950, indicating that new reserves are developed from time to time.

Mining operations in Fillmore County will be resumed again this spring, side by side with farming enterprises, which are the economic mainstay of this important dairy and hog-raising region. Fillmore County farmers have produced as much as 150,000 tons of corn annually—rivaling the tonnage output of the iron mines in some years. Relatively speaking, the iron mines of Fillmore County are not of great importance or of long range significance. However, they are of interest both for the unique "crop" they yield in their farmland setting, and for their contrast with iron mining centers of northern Minnesota.

END

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**ECONOMIC BRIEFS**

**SIGNIFICANT HAPPENINGS IN THE NINTH DISTRICT**

1. **Plan shopping center at Gt. Falls**
   Plans have been announced for a $700,000 shopping center in Great Falls, Montana. The center will include at least four large stores, several shops and variety stores and (possibly) a number of offices. Over half the space has already been leased. Enough land was purchased at the site to allow for considerable later expansion.

2. **New refinery process dedicated**
   Carter Oil Company has added a 3,000-barrel-a-day "fluid coking" unit—the first of its kind—to the firm's Billings, Montana, refinery. Significance of the new process is that it will convert heavy residual oils into (1) light oils refinable into gasoline and heating fuels, and (2) finished coke that may have many non-fuel industrial uses. The unit at Billings is expected to increase Carter's daily gasoline output by 74,000 gallons.

3. **Minot air base work set**
   Contracts totaling $7 million for construction of an Air Force base at Minot (one of four new bases in the district) will be awarded about July 1. An additional $3 million in contracts will be awarded in August. Construction work is scheduled to begin July 10 and to be completed in the summer of 1956. An estimated 100 men will work on the project this summer, reaching a total of 500 to 600 workmen by the following summer.

4. **Co-op power unit expands**
   Dairyland Power Cooperative has started work on an $8.5 million expansion of its Alma steam station, located on the Mississippi River in Buffalo County, Wisconsin. The expansion, financed by a 30-year REA loan, includes new substation facilities, a building addition, and a 50,000 KW turbogenerator of the "reheat" type. It is estimated that the Alma station (biggest in the Dairyland system) will be ready to produce 110,000 KW by late fall of 1956. It is anticipated this will meet the growing requirements of the co-op's members for a 3- to 4-year period.

5. **Add to La Crosse plant**
   Some 55,000 square feet of new production space is scheduled for completion in May or June of this year at Trane Company's LaCrosse, Wisconsin, plant. Last year the company, a manufacturer of air conditioning and refrigeration equipment, completed an addition to its LaCrosse facilities of almost the same size (50,000 square feet).