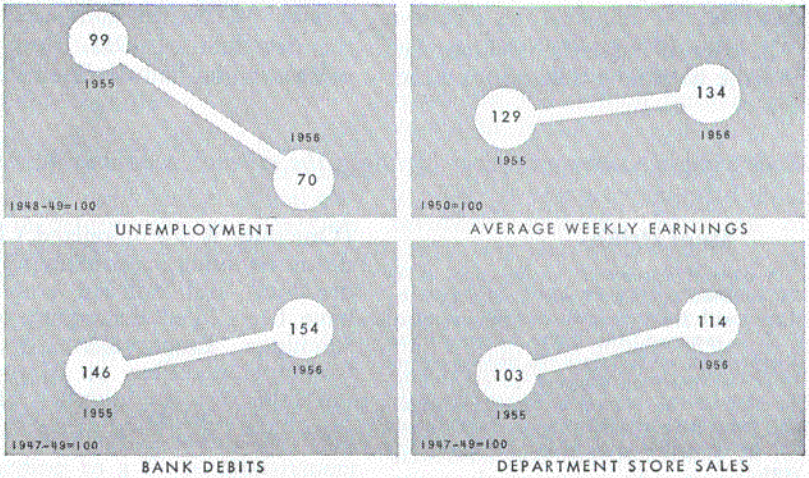
MONTHLY Review

FEDERAL RESERVE BANK OF MINNEAPOLIS

SERIAL NO. 19 JULY 31, 1956 VOL. 12

Current conditions . . . .

Early season drouth, steel strike display initial impact on district economy



Most of the latest available business barometers for the Ninth district show favorable readings in comparison with year-ago positions. In the face of this reassuring mid-season setting, drouth-cut crop prospects suggest that some change in economic climate may be in store for the region.

THE MOST SIGNIFICANT single economic development affecting the economy of the Ninth district was the projected drop in total 1956 crop production as estimated by the U. S. Department of Agriculture in early July. If these estimates prove reasonably correct, total new production of all grains will be approximately 17 percent below that of last year and the smallest of the past 10 years with the single exception of 1949. (July 1 crop estimates are preliminary, and subsequent conditions may show increases or decreases in various crops and in the totals.)

In contrast to the drouth-tinged west, crop conditions in the eastern part of the district have continued good with near-record supplies of corn, flax and soybeans in prospect. In the western part, roughly from the Missouri river to the Rocky Mountains, crop prospects are 'poor' to 'fair' because of rainfall deficiency in May and June. Wheat, which is the principal cash crop in the Ninth district, normally making up to 17 to 20 percent of the total cash farm income, will be about one-third less than last year's average crop. This means that there will be around $150 million less cash income in the wheat growing areas than was true last year. The new soil bank program will help to supplement farmers' income in the drier areas of western South Dakota, eastern Montana and northwestern North Dakota, but such payments will be small in relation to the returns from an average crop. However, the over-all effects of soil bank payments in the entire district will be significant.

The early season drouth, which fortunately was ended in most areas by late June or early July, seriously reduced the hay crop for 1956. Because of this and poor pastures, some early liquidation of cattle occurred, and the livestock-carrying capacity of these areas is reduced for this fall and winter. The extent of livestock marketings will, of course, depend on rainfall and weather during the remainder of the summer.

Another important recent development affecting the economy of the Ninth district is the nationwide steel

strike. This immediately affected some 31,000 miners, steel plant and transportation workers in Minnesota, mostly in the northeast where ore production, processing and handling are so important. A settlement of the dispute, reached at the end of July, promised that full-scale production in the idled industries should resume by the middle of August.

In spite of the strike development and the weather's deleterious affect on crop production, the economy of the district, according to most business indicators, continues to move along at a near-record clip. Over-all employment and bank debits were at record levels in early July. In fact, almost all of the area's business indicators for the first half of 1956 show a progressive increase month by month compared with the first half of 1955. Even farm prices, which had declined steadily since about 1951, registered an 11 percent advance from December of 1955 to June of 1956. Bank deposits in all member banks have held steady but bank loans increased month by month over the past 12-month period.

The length of the steel strike as well as the disposition of the weather over the next six weeks will be important factors in the district business picture for the balance of this year.

Following are summaries that highlight the current economic scene in the Ninth district:

Steel strike

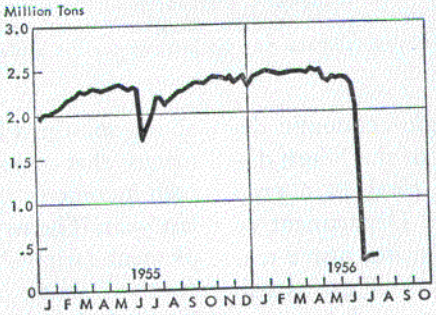
A general agreement on the steel strike was reached on July 27, with contracts to be signed with the individual companies before work is resumed. The following article was prepared for press before the general agreement was reached. Because of the shorter duration of the current strike, the unfavorable economic effect observed in 1952 will not be repeated to as great an extent this year.

THE STEEL STRIKE which began on July 1 immediately affected business activity in the iron-ore mining communities where the miners are on strike, and in the ore shipping centers along the Great Lakes. However, by the third week of July the effects of the strike in this district had not spread much beyond these communities.

In Minnesota, where most of the district's iron ore mining is centered, 19,700 individuals were employed in metal mining in June. By the third week in July the steel strike had idled about 31,000 workers in the state according to estimates made by the Minnesota Department of Employment Security. In addition to 19,000 miners, about 4,500 steel workers are out on strike, 4,150 construction workers have been idled, and 3000 railroad workers. Seamen idled on the ore boats are not included in this unemployment estimate.

On the Upper Michigan peninsula, 7,800 workers were employed in iron ore mining in June. Of this number 7,600 are out on strike. (One mine is not unionized.) In addition to miners approximately 200 ore-dock and railroad employees have been idled according to the Michigan Employment Security Commission office at Marquette. An indeterminate number of seamen have been idled at ports.

STEEL OUTPUT IN U. S., BY WEEKS 1955-56



In Wisconsin only a small number of workers are engaged in iron ore mining. According to the Industrial Commission of the state, 1,150 workers were employed in ore mining in the first quarter. With the opening of the shipping season on Lake Superior in April, employment increases seasonally, but in May only 4,500 workers were engaged in all types of mining in the state.

On July 13, 2,011 workers had been idled in the state according to the Wisconsin Industrial Commission. Of this number about 1,800 are in Superior and Ashland. The remainder are in the large metropolitan centers located in the southeastern part of the state.

Repairs are being made on ore boats idled by the strike. In Superior this type of work has offset part of the employment lost.

The construction industry has been the first to feel the effect of the strike, because structural steel was in short supply when the strike was called. In the latter half of July starts on some new projects were postponed, and the workers were laid off.

Industrial plants using steel had a 30-to-60 day supply when the strike was called. Many firms normally grant employees a vacation in July and shut down the plant. Others adopted this procedure this year. Vacation periods have delayed the effect of the strike. As plants have reopened, the work week has been revised downward and the recruiting of additional workers has declined.

The loss of income resulting from the strike has been substantial in communities where iron mining is the principal basic industry. The Minnesota Department of Employment Security has estimated the loss of wages at $12 million per month to workers on strike or idled by the strike in the state. On the Upper Michigan peninsula the loss of wages (based on the same per

capita loss as in Minnesota) is over $3 million per month. Here too the loss is significant to the peninsula economics. In Wisconsin the loss of income has been small due to the relatively few workers unemployed. Furthermore, the repairing of ore boats at Superior has reduced the loss of income.

Generally, retail sales begin to decline after workers are unemployed for a few weeks. However, in the week ending July 14 department store sales in Duluth and Superior were 8 percent above the corresponding week a year ago, reflecting a volume of sales comparable to preceding weeks.

When workers are laid off temporarily, there is a greater change in type than in the amount of purchases made by them and their families. For example, resourceful 'do-it-yourselvers' buy materials for repair and modernization of their homes. Often bank credit is used to finance these projects. At the same time these families tend to tighten their belts and eliminate unnecessary purchases of consumer items and services.

Effects of 1952 strike

A review of economic effects of the steel strike in 1952 may provide some insight into the possible future effects of the current strike. That strike extended from June 2 to July 25, over seven and one-half weeks.

Department store sales in the first week of July began to decline significantly in the ore mining and ore shipping centers. July sales in northeastern Minnesota were down 6 percent from the preceding year, whereas in the state as a whole they were up 6 percent. On the Upper Michigan peninsula sales fell off by about 3 percent. In northern Wisconsin, with the exception of Superior and Ashland, no dip in sales occurred.

As the strike extended into the fifth week, most financial institutions were granting temporary moratoriums on instalment and mortgage loans to families that had depleted their savings. Later on, adjustments in monthly payments were made for many families after work had been resumed.

The serious economic effects of that strike developed in the second month, multiplying rapidly after the sixth week. Many families had exhausted their resources and were forced to obtain aid from the county welfare boards.

Hence, the duration of the 1956 strike, which cannot at this time be foreseen, will be the critical element in determining its impact on the Ninth district economy.

Department store sales up in June

RETAILERS in this district, as in other parts of the nation, enjoyed excellent business in June. According to a U. S. Department of Commerce report, the nation's merchants sold more merchandise, on a seasonally adjusted basis, in June than in any other month in history.

Adjusted district department store sales were 2 percent above May 1956 and 11 percent above those for June 1955. The index stood at 114 percent of the 1947-49 base period, the highest figure for the first half of this year. All areas in the district, with the exception of the drouth-stricken areas in western South Dakota, southwestern North Dakota, and eastern Montana, shared in the brisk sales.

Ninth district crop production down

THE USDA'S July 1 estimate indicates a sharp cutback in district crop production for 1956. A reduction of 17 percent in total district crop output is indicated. This July estimate is a long way from being a final report on yield, of course. But it clearly shows the impact of weather and crop conditions that have been generally less favorable this far in the growing season. The district wheat estimate totaled only 184 million bushels on July 1, compared with a production of 263 million bushels in 1955 and an average output of roughly 262 million bushels for the district.

For oats, hit especially hard in many areas by the early hot weather and dryness, an estimated 268 million bushels were indicated on July 1 — down nearly a third from the 366 million bushels harvested in 1955.

Flax, soybeans and corn, maturing later in the year, enjoyed more favorable estimates, equal to or above last year's harvest.

Significant in many western areas of the district is the short hay crop this spring. The ability of ranchers and farmers to carry cattle through the winter will be curtailed by the meagre crop. Although general and scattered rain reached many of the severe drouth areas of eastern Montana and the western Dakotas early in July, it came too late to affect the skimpy hay yields in those areas. Continued moisture would help bring corn along. But with subsoils extremely dry, there is little reserve moisture to carry crops along if timely rains are lacking. Further dry periods would have their full affect on crop yields.

While weather developments in the near future will have an important effect in determining this year's crop output for district farmers, it is clear that in many fields of small grains, yields were cut beyond full recovery by the early heat and dryness. Later seedings and seedings on spring plowing seem to be faring noticeably better than early seedings and those on fall plowing.

There are some brighter areas in the crop picture. Rust damage to wheat has not been nearly so threatening as in previous years. And crop yields in the eastern Dakotas (including most of North Dakota) and Minnesota appear to be excellent.

Fewer cattle on feed

COMPARED WITH a year ago, 10 percent fewer cattle were on feed in the 13 major feeding states. In the two Ninth district states, Minnesota and South Dakota, numbers on feed were down more than the average. Minnesota numbers on feed were down 11 percent; South Dakota, with a smaller total number on feed, had 33 percent fewer.

Cattle marketings during April-June this year were up 8 percent over a year ago, the USDA's crop-reporting service estimates. At the same time the number of cattle moving into feedlots was only 5 percent greater, accounting for part of the net decline.

Five months of district farm income

NINTH DISTRICT farm operators took in more cash income during the first five months of 1956 than during the same 1955 months —more by plus 2 percent. This was a greater increase than for the nation as a whole, for which the five-month income was down minus 1 percent.

By individual district states, the percentage change in five-month totals of cash received by farmers for their marketings was:

Minnesota	+ 5%
North Dakota	0%
South Dakota	—12%
Montana	+13%
District	+ 2%
U. S.	— 1%

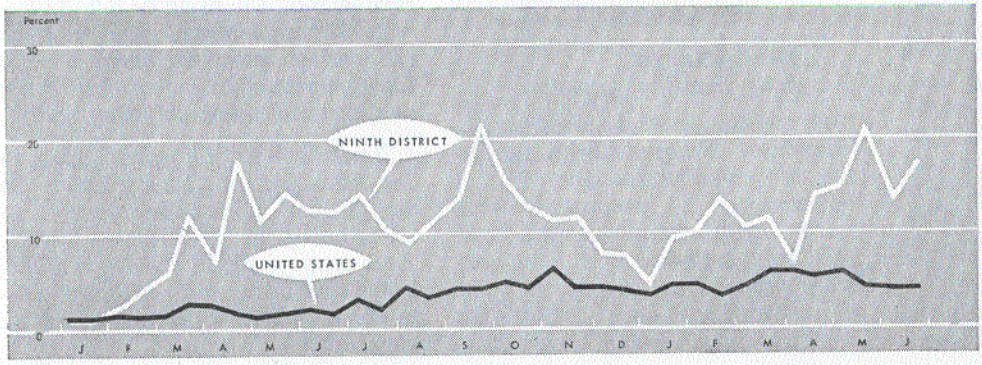
For the entire nation, cash receipts of farmers for the first half of 1956 were almost the same as 1955. Somewhat lower prices for farm products were largely offset by a greater volume of sales. Net realized farm income, as estimated by the Department of Agriculture, was at the annual rate of $11.6 billion during the first half of the year, which is about the same as in 1955. END

Member banks add more loans in June

IN JUNE, the daily volume of borrowings from the Federal Reserve Bank by Ninth district member banks averaged $60 million. This amount represents approximately 15 percent of total required reserves for all district member banks. The ratio of borrowings at the Federal Reserve to required reserves for all member banks in the nation during June was less than 5 percent.* (See chart at bottom of page.)

*Owing to differences in reserve requirements for different classes of banks and deposits, it is possible that the ratio of borrowings to total deposits at different banks may be the same while the ratio of borrowings to required reserves is different. However, both ratios were approximately three times larger in the Ninth district than in the nation as a whole during June.

Since early last year a substantially higher fraction of required reserves has been consistently provided by Federal Reserve Bank loans in the Ninth district than in the nation as a whole. Particularly worthy of note is the fact that this relationship persisted after April 13, 1956, when the discount rate was elevated to 3 percent in the Ninth district—a quarter of one percent higher than the discount rate in all but one of the other districts. Thus, Federal Reserve Bank loans continued to be a relatively more important source of member bank reserves in the district than in the rest of the nation, even after the cost of such accommodations became higher here than elsewhere.



RATIO OF BORROWINGS FROM THE FEDERAL RESERVE BANK to REQUIRED RESERVES at MEMBER BANKS

(ratios are plotted semi-monthly and based on daily average figures)

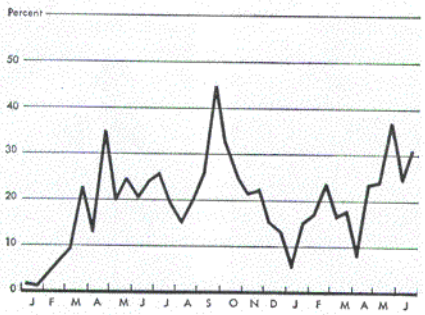
Reflecting the fact that borrowing is a more important source of funds for the city banks than for the country banks is the small chart which shows the ratio of borrowings at the Federal Reserve by district reserve city banks to total required reserves for *all* district reserve city banks.

The condition of district member banks on the last Wednesday of June, as disclosed by statements submitted to the Federal Reserve, indicates a continued expansion of loans. In 10 of the 12 months of the year ended June 27, 1956, loans increased at district member banks. The net increase in loans during that period was $231 million or 14.4 percent.

Investments valued at $31 million were liquidated during June; securities were liquidated, net, in 8 of the 12 months ended June 27. Aggregate decline in the value of securities held in the period was $176 million. 'Cash and due from banks' fell by $20 million in the same period.

RATIO OF BORROWINGS TO REQUIRED RESERVES

By Reserve City Banks at the Federal Reserve Bank of Minneapolis



Deposits of district member banks at the end of June were $8 million higher than a year earlier. This change reflects an increase of $27 million in time deposits and a decrease of $19 million in demand deposits. The time deposit gain amounted to only a little more than half the gain recorded for the previous year.

At the 20 city banks which report their condition weekly to the Federal Reserve and which account for the bulk of the borrowing at the Reserve bank, deposits declined by $35 million during the year ended June 27. Balances owing to banks fell $7 million while other demand deposits fell $32 million. Time deposits rose $4 million. Loans at these banks grew by $117 million or 15 percent during the same period.

Also during the same period these banks liquidated investments amounting to $121 million. Of this amount, $92 million was composed of U.S. bills, certificates and notes—securities generally regarded as 'secondary reserves.'

From the statistics described it appears that district member banks, particularly city banks, have employed borrowing, together with the liquidation of investments (secondary reserves) and cash assets, to care for an unusually vigorous demand for loans. END

District farmers 'debit' soil bank

THE MUCH-DISCUSSED Soil Bank is now legislative fact and operating practice on many farms of the Ninth Federal Reserve district. The Agricultural Act of 1956 made many features of the plan operative for 1956. Contract and compliance deadlines for soil bank participation were largely over by July 31.

County Agricultural Stabilization Committee offices have been notably busy with inquiries and contracts during July. Since many district farmers apparently have seen fit to participate in the program, some observations about the operation of the law and the kinds of participation by farmers can be helpful in understanding the impact of this program on the Ninth district economy.

The Soil Bank as written into 1956 legislation contains two main features — an acreage reserve, designed to cut back production of basic commodities (corn, wheat, cotton, tobacco, rice and peanuts) on a current, year-to-year basis; and a conservation reserve, designed to take crop land out of production over a longer period of from 3 to 15 years.

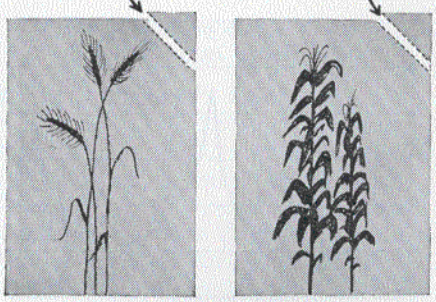
County ASC offices were given considerable latitude in the administration of programs for their counties, resulting in some differences from area to area. Such differences often reflect differences in local conditions.

It should also be noted that the soil bank legislation is just one part of the over-all 1956 Agricultural Act. It does not replace any features of the present farm program. Price supports, acreage allotments, payments for soil conservation practices and other features are continued largely as before. In fact, compliance with present acreage allotments are one of the requirements for participating in the soil bank program.

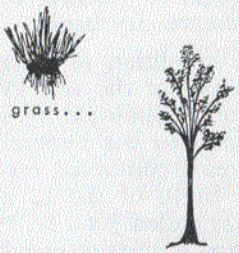
For the 1956 crop season three types of soil bank payments will be made to farmers under the Soil Bank — (1) for underplanting of basic crops (corn and wheat for Ninth district farmers), (2) for

THE SOIL BANK PLAN, IF SUCCESSFUL, WOULD SEEK TO DO THESE THINGS IN THE NINTH DISTRICT:

(1) Remove land from production



(2) Convert some present crop land to growing of.....



plowing down, clipping, or otherwise destroying crops prior to July 31, and (3) for crops damaged by hail, drouth or other natural causes.

Payments on wheat and corn differ. Underplantings of wheat are based on the regular acreage allotments already in force. Corn underplantings, however, are figured according to a 'corn base acreage' which is 17.8 percent larger than the present acreage allotment for corn. The corn base acreage relates to a 51-million-acre total for the nation's commercial corn producing area, compared with just 43 million acres of corn acreage allotments under the price support program.

Farmers who underplanted their spring wheat acreage in anticipation of the soil bank program or because of adverse weather will be paid on the basis of a 'normal' yield at $1.20 per bushel. This normal yield is computed by the local ASC, in most cases reflecting the county or township average.

The underplanted acreage must have either been left unplanted, or had crops plowed down, mowed or otherwise destroyed in an amount equal to the acreage reserve. In other words, acres placed in the acreage reserve cannot be used to harvest other crops, for forage, or for grazing during 1956. One exception to this rule has been made: under some conditions land in acreage reserve may be grazed in officially designated drouth emergency areas.

Wheat farmers whose crops have been destroyed by drouth, hail or by other natural causes could apply for payments based on appraised actual yield of the particular fields involved (but not to exceed a normal yield). Yield appraisals are made by the county ASC. Minimum payments for such damage to spring wheat are set at $6 per acre. For winter wheat underplanted last fall because of adverse weather conditions the minimum payment is $4 per acre.

Farmers were allowed to place a maximum of 50 acres or one-half of their wheat allotment — whichever is larger — in acreage reserve. The smallest amount that could be placed in the program is 5 acres or 10 percent of their wheat allotment, whichever is larger.

Most payments to wheat growers in 1956 will probably be on drouth- or hail-damaged acreage, since few who had their allotment fully planted would find it profitable to plow or clip growing wheat.

The soil bank program for corn differs in an important way in that the underplanting of corn is figured from a so-called 'corn base acreage' that is 17.8 percent larger than the corn acreage allotment on most farms. As a result, farmers who were already in compliance on their corn acreage allotments were automatically about 15 percent underplanted with regard to the Soil Bank. Farmers in this circumstance could then plow down or clip crop land equal to 15 percent of their corn base and place this land in acreage reserve—to receive payment at 90 cents per bushel on an estimated normal yield of corn. Yield estimates are made by the local ASC. Clipped oats could be chopped or left on the field where alfalfa seedings were involved. Even good stands of oats could be profitably destroyed on this basis in most areas — since the payment for underplantings of corn would be greater than the value of oats raised.

Many farmers apparently took advantage of this practice, especially since the oat crop was poor in many areas this spring. In addition, corn that had been damaged by hail, drowning out, or other natural causes could also be destroyed to receive payment under the crop-damage provision of the program. Such payments were usually based on the appraised yield of damaged corn at the time the crop was clipped or plowed down, with appraisals made by the local ASC.

Few farmers who had already overplanted their corn acreage allotment found it profitable to get into the program, since growing corn would likely produce a crop

more valuable than the amount of soil bank payment.

As a result of the new program and new acreage base, corn producers were left with three ways in which to qualify for the maximum price support on corn at $1.50 per bushel (national average). Under the acreage allotment program, producers planting within their acreage allotments naturally qualify for the maximum support price.

Farmers already in compliance could, in addition, underplant or destroy an additional acreage equal to 15 percent (or more, if they had planted less than their corn allotment) of their corn base acreage. They could get soil bank payments on the land placed in reserve as well as maximum support price for corn on allotted acres. In addition, farmers who planted their full corn base acreage could also get the maximum support price if they took an acreage equal to 15 percent (or more) of their corn base entirely out of production and placed these acres in the conservation reserve program. Since the conservation reserve is a longer-term program, this feature of the program is not expected to be used extensively in 1956.

Payments to participating farmers for placing land in acreage reserve will be made in the form of certificates issued by the Commodity Credit Corporation. Corn and wheat certificates (also rice) will be redeemable either in cash or in an appropriate amount of the commodity involved. Farmers will be reimbursed in certificates through their county ASC as soon as their compliance is checked by the ASC. Payment in grain, however, will not be available before the end of the 1956 harvest.

Only the farmers to whom certificates are issued can redeem them in grain. However, the certificates are negotiable. They can be endorsed to merchants, bankers, or to others who can then redeem them in cash.

The so-called conservation reserve also becomes operative in 1956, although general use of this program is not expected to start until this fall after present crops are harvested. This program will pay farmers for diverting crop land, including tame hay and rotation pasture, out of production into long-term conservation uses. Contracts under this program may run for not less than 3 and up to 15 years. Land may be planted to trees, permanent protective cover, used for water storage or for other approved conservation practices.

Payments under the conservation reserve will be of two types. Payment to cover part of the cost of establishing the particular conservation practice will be made up to about 80 percent of the cost involved. Then an annual 'fair and reasonable' payment will be made for the acreage placed in conservation reserve. Annual payments will consider such things as the value of the land taken out of production and the necessary incentive to encourage participation.

Under the conservation reserve program, payments up to $450 million are authorized in any one year by the new law. The Secretary of Agriculture is authorized to enter into contracts with producers during the period 1956-1960, and the practices involved must be established by not later than 1969 (by 1974 for tree cover).

More detailed plans for operation of the conservation reserve program are being prepared. Administration and supervision at the local level will be largely through the local ASC.

It seems clear that the income of district farmers will be bolstered substantially by the acreage reserve program in 1956. Participation in the program almost automatically assumes that farmers expect to benefit financially from it. Soil bank payments in the range of as high as $50 per acre in the corn producing areas of the district are common. These payments are being made largely on land that had been planted to other crops (now destroyed) where farmers were already in acreage compliance. Farmers who had overplanted their corn acreage are staying out of the program in most cases. Because the oat crop has been poor in many of the corn areas, such acres placed in the reserve will result in a substantially larger income than would have been received this year without the program.

Payments on crop damage resulting from drouth and hail will also be substantial, although considerably below the amounts per acre paid on underplanted acreage. The minimum of $6 per acre on crops damaged by natural causes is not so liberal as to turn such losses into a profitable operation, but the payment helps significantly in paying bills and meeting other necessary operating costs.

The program will also reduce total crop production somewhat below what it would have been without the program this year. The reduction will come from taking land, which otherwise would have been harvested, out of production, either by plowing or clipping. Crop-damaged areas may be destroyed where some yield might have been obtained had not the program been in effect. In general, however, the crops destroyed will tend to be on the poorer-yielding fields, so that total crop reduction will probably be less than the proportionate number of acres involved would imply. In future years, it can be expected that many farmers will seek to maintain their total output by greater use of fertilizers, use of summer fallow, plowing down green manure crops and other practices which will offset to some extent the effect of acres taken out of production.

Whether the soil bank program actually will accomplish what is intended obviously remains to be seen. The 1956 program will probably not be a good test of what can be accomplished, since it got under way too late to allow adequate planning either by producers or administrators.

The acreage reserve program is designed to take land out of the

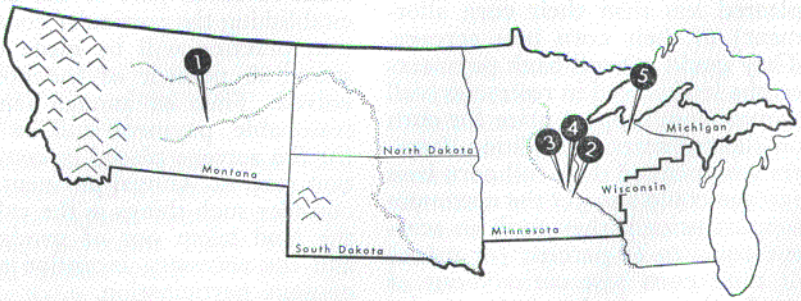
production of basic crops without diverting this acreage to other crops (as has been the case under the present acreage allotment program). Payment by certificate enables farmers to obtain grain as 'payment in kind' for the acres held out of production. This may also make it possible to move some surplus grains out of storage—but the extent to which grain as payment will be called for is not as yet known.

The conservation reserve is designed to take land out of crop production permanently. In many cases it may involve land not well adapted to crop production. Conceivably, the plan could encourage the re-seeding of marginal wheat land in the Great Plains and mountain states, seeding them back to range grass and permanent pasture. But here again the effect of the program can only be determined by experience. END

A detailed analysis, documenting trends in the housing and mortgage market in the Ninth district, will be made available in the near future as a supplement to the **Monthly Review.** It will be sent to all now receiving the **Monthly Review.** Others interested in obtaining copies after publication may request them from the Research Department.

ECONOMIC *Briefs*

SIGNIFICANT HAPPENINGS IN THE NINTH DISTRICT



1 - Montana oil discoveries

Flush production from several oil strikes at a depth of about 6000 feet continued to mark the Wolf Springs oil field in northeastern Yellowstone county as Montana's most promising new discovery. Initial tests (through ¼-inch chokes) scored flow rates ranging from about 300 to 800 barrels a day, with an additional yield of 256 barrels a day from a second formation at one test well.

The discoveries are near the recently-completed Powder river pipeline which carries crude oil from the Northwest Sumatra field, also in Yellowstone county, to Billings and Laurel. Most leases in the new field are held by Atlantic Refining Co. or Carter Oil Co.

2 - Plan area oil marketing growth

Recent negotiations of Sinclair Oil Corp., leading toward increased marketing activity in this region, include the purchase of a 38 percent interest in Minnesota's largest refinery (Great Northern Oil Co.) at Pine Bend. The $25 million refinery, owned by the Southern Production Co., was completed last fall. It has a crude-oil capacity of about 25,000 barrels a day.

Sinclair's total plan for the purchase of oil and gas properties from Southern will call for an outlay of $107 million.

3 - Air conditioning co. moves East

U. S. Air Conditioning Corp. closed its Minneapolis operation on July 13 and moved to Philadelphia, Pa. to occupy a 102,000-square-foot plant bought there last winter. Thirty-five of the 350 Minneapolis workers were transferred to Philadelphia.

4 - NSP to triple 1946 capacity

The construction this fall of a sixth, $24 million, 150,000-kilowatt generating unit at Northern States Power Company's High Bridge plant in St. Paul is the next step in the firm's expansion program. The new unit will make the High Bridge operation, with a capacity of almost half a million kilowatts, NSP's largest generating plant.

The utility firm has announced expansion projects that will increase its capacity to 1,457,000 kilowatts in the near future—a 10-year expansion from 559,040 kilowatts in 1946. The over-all cost of this outlay for new facilities has been $335 million. Expansion planned for the next four years will cost another $178 million.

5 - Hunt on for Wisconsin iron ore

Jones & Laughlin Steel Corp. of Pittsburgh has started an exploration program of 1,500 acres of land it has optioned in Wisconsin's Ashland county. Options, which terminate at the end of 1957, were negotiated for purchase of some of the properties and for leases of others if exploration work indicates iron ore bodies in economic quantities.