

## 1975: A target for highways

In a land abounding in gadgets, probably none has had more impact on American living habits than the automobile. Automobiles, however, do not run on gasoline alone. Decisions to purchase automobiles imply decisions to purchase highways. However, determining the optimal level of highway expenditures is less simple than allocating resources to automobile production. The application of the free market principle to highways, though theoretically possible, involves considerable difficulties and inefficiencies. For example, should a toll booth be placed at street and highway intersections to assure a benefit-cost connection which would channel a desirable level of investment and maintenance expenditures to the various pieces of roadway? Because of such difficulties, the major responsibility for highways in this country has been assumed by the various levels of government.

Providing for highways has traditionally been a state and local government concern. This is still true, but the federal government has, in the last five years, considerably expanded its role in highway finance through its role in the National System of Defense and Interstate Highways. The total cost of the system is planned at \$41 billion, or nearly \$1 million per mile. To appreciate the magnitude of this expenditure, it might be recalled that economic assistance to Europe

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under the Marshall Plan amounted to \$10.7 billion. How does this new highway system fit into the

general highway structure?

There are really a number of highway systems in this country, such as federal-aid, state, county, and township. The federal-aid system has two major components: (1) The primary system, approximately 265,000 miles of roads connecting all principal cities, county seats, ports, manufacturing areas, and other traffic generating areas. A portion of the federal-aid primary system in urban areas has been singled out for special assistance since 1946 because of the problems of urban traffic congestion. (2) The secondary system, some 590,000 miles, including important feeder roads which connect farms, factories, distribution outlets, and smaller communities of the nation with the primary system. The primary network generally comprises the main state trunkline roads, while the secondary system is commonly known as the "farm to market" roads. Federal aid for these two systems (often referred to as the ABC program) amounts to approximately 50 percent of the costs of engineering, construction, and rightof-way acquisition. Maintenance and policing are, however, supported entirely by state and local governments. An apportionment formula based on land area, road mileage and population is used to determine the amount of aid given to each state. Adjustments are made for those states, primarily in the West, which contain large areas of federally-owned lands. The federal government, primarily through the Bureau of Public Roads in the Department of Commerce, maintains some elements of control over standards.

#### From 1944 to 1975

In 1944 Congress authorized the selection, pri-

marily out of the federal-aid primary system routes, of a special network of roads, not to exceed 40,000 miles in length, which would be located so as "to connect by routes, as direct as practicable, the principal metropolitan areas, cities and industrial centers, to serve the national defense, and to connect at suitable border points with routes of continental importance in the Dominion of Canada and the Republic of Mexico." The result was the National System of Interstate Highways, later renamed the National System of Defense and Interstate Highways. Thus, the Interstate System routes are included in and comprise key sections of the federal-aid primary system. In 1956 the authorized length was extended to 42,000 miles.

Chart 1 shows the designated routes of the system. Most of the mileage is concentrated in areas of high population density, where traffic volume is heaviest. If revenues are available, the system will be completed by 1972, and it is being designed to carry the kinds and volume of traffic expected for 1975, when it will carry an estimated 20 percent of all highway traffic.

Not until 1952 were funds authorized specifically for the Interstate System, and then to the rather small extent of \$25 million annually. In 1954 the authorization was increased to \$175 million annually, and the federal contribution to the system increased from 50 to 60 percent.

## A new approach

A marked enlargement of the program came with the Federal-Aid Highway Act of 1956. In important respects, this law made a distinct break with the traditional federal approach to highway financing: (1) Grants were to be made to the states over a 13-year period for the Interstate System, with the federal contribution covering 90 percent of the total cost of planning and placement. (2) The funds for the program were to be obtained by earmarking highway-user taxes, and were to be placed in a special trust fund. Through a requirement that the fund remain solvent at all times, the project was put on a build-as-you-pay

TABLE 1. ROAD-USER COSTS FOR PASSENGER CARS IN RURAL AREAS<sup>1</sup>

Cat Flaments C	Four-Lane Divided Highways ents per vehicle mile a	Two-Lane Highways 60 miles per hour:
Cost Elements C		
Fuel	2.73	3.65
Tires	0.56	0.84
Oil	0.52	0.52
Maintenance & re	pairs 1.20	1.20
Depreciation	1.50	1.50
Total	6.51	7.71
Time		?
Comfort and conv	venience?	?

Source: American Association of State Highway Officials, Road User Benefit Analysis for Highway Improvements, 1960.

10.3% gradient class.

In addition to the reduction in operating costs, a significant advantage of a highway such as is being built under the Interstate program is the reduction in the number of stops which must be made. Estimates of the extra cost per vehicle stop with an approach speed of 60 miles per hour show that each stop costs a total of 2.03 cents for fuel, tires and brakes, and other operating costs.

Of course, not all traffic on the Interstate System will encounter the conditions presented in these examples, but they do illustrate the important fact that the reduction in operating costs on newer highway systems is substantial. To these savings should be added the savings in travel time and convenience, which are often major economic and psychological costs.

The reduction in fatalities and injuries is quite spectacular. This reduction is in large part due to limited access onto the highways, a development cited as "the most important single factor in accident reduction ever developed." The differential effects of access control is illustrated in Chart 2. It is estimated that the savings in accident costs per vehicle mile of travel on interstate highways with full control of access is about 0.7 cents, a reduction from 1 cent per mile to 0.3 cents per mile.

The substantial savings in lives and dollars, however, do not solve the problem of financing

this \$41 billion program. To gain some appreciation of the maze of relevant factors, it might be interesting to imagine yourself as a member of "A Citizens' Commission to Finance the Interstate Highways."

## How would you handle it?

As a basic premise, you would probably want the beneficiaries of the program to pay for the costs. This would approximate the free market solution, and would likewise present an indication as to whether the program was economically justifiable. You would soon discover, however, that the techniques available to draw revenues from beneficiaries of the highway are rather crude instruments. Similarly, the assignment of benefits to specific groups of people is a monumental task.

Your initial impulse might be to raise revenue by means of the gasoline tax, but it is obvious to you that this tax takes no account of differential weights between vehicles which cause differential wear to the highways. In order to attack this problem, you may decide to establish an additional graduated tax on vehicles, based on their estimated wear and tear to the roadway. A number of individuals and groups will immediately bring to your attention, however, that you are taxing vehicle owners who never use the Interstate System, or who use only a portion of the system to any extent. Why, you will be asked, should they be required to pay an equal amount to all sections of the highway system-north and south, east and west, urban and rural?

You would undoubtedly ask how much of the benefits of the system should be assigned to national defense, as this purpose is emphasized in the original act. And how should revenues to support the defense purpose be allocated, especially since much of the defense hardware is conveyed by private carriers? If the vertical clearance on bridges is raised to accommodate larger and higher loads, especially for items such as missiles which are normally carried by private carriers under contract to the Defense Department, to

whom should the benefits be assigned? The higher clearances, of course, also benefit other highway users who have no direct connection with defense movements.

Even if you were able to solve all of these problems to your satisfaction, you would have to determine the effect of the program upon other means of transportation, e. g., the railroads and airlines. What especially will be the effect of these new throughways upon existing and planned transportation facilities in highly urbanized areas? Will the program withdraw sustenance from existing or proposed rapid transit systems? A similar problem even exists within the highway sector: if highway users substitute the newer expressways for other road mileage, at what level of repair and improvement should these alternative systems be maintained?

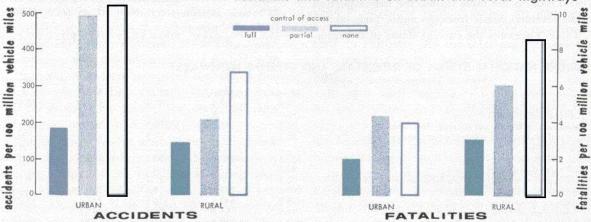
This recitation could be greatly extended, but enough has been said to at least indicate the problems which your "Citizens' Committee" would face—considerations of revenue adequacy, of administrative feasibility, of equity.

#### From speculation to decision

To the officials with the burden of decision, these have not been just speculative problems. What has been their solution? Prior to the 1956

Act, all federal excises on motor vehicles, motor fuels, and related products had been included in general revenue. There was no explicit connection between federal aid granted and excise revenues received. The Act increased these revenues, directed them to a highway trust fund, tied expenditures to these available sources of finance, and directed that the ABC program also be financed from the fund. These revenues were of several kinds: (1) The federal motor fuel tax was increased from 2 cents to 3 cents per gallon, and the entire proceeds from the tax were to be placed in the trust fund. A 1959 amendment provided for a temporary increase to 4 cents tax per gallon on gasoline and diesel fuel from October 1, 1959 to July 1, 1961. (2) The 8 per cent tax on the manufacturer's sales price on buses, trucks, and trailers (excluding house trailers) was increased to 10 percent, with half of the total revenue being earmarked for highways. An additional tax is to be applied between 1961 and 1964, when the motor fuels tax lapses. (3) The tax on auto tires was increased from 5 cents to 8 cents per pound, the entire proceeds being slated for highways. (4) Revenues from the existing 9 cents per pound tax on tubes, a new 3 cents per pound tax on motor vehicle retread rubber, and a new use tax on motor vehicles of over 26,000 lbs., gross weight, were all

Chart 2-Effect of access control on accidents and fatalities on urban and rural highways



added to the fund resources.

The President's special highway program message delivered to Congress in February of this year requested that the present gas tax of 4 cents per gallon be retained and that increases in other taxes be made in the following manner:

Tax	Present	Proposed
Diesel fuel	\$ .041	\$ .07
Trucks over 26,000 lbs.	1.502	5.00
Highway tires	.083	.10
Inner tubes	.093	.10
Tread rubber	.033	.10

<sup>1</sup> Per gallon

These tax increases are based on the preliminary results of special studies being carried out by the Bureau of Public Roads which indicate that larger, heavier vehicles are responsible for higher rates of highway wear and tear than lighter vehicles. The final results of these studies will be available in the near future, and further changes in tax rates may be made at that time.

The greater portion of the revenue for the expanded program is derived from taxes in effect when the program went into effect. For example, a light passenger car with average use would have paid an annual tax of \$12.82 in the period immediately prior to the Act, and \$19.69 thereafter—\$6.87 being the additional tax. Table 2 presents the receipts from these various taxes for fiscal year 1960. As the table shows, the major portion of the revenues comes from the motor fuels tax.

Table 3 presents the current status of the Inter-

TABLE 2. TAX REVENUE, AFTER REFUNDS, OF HIGHWAY TRUST FUND, FISCAL YEAR 1960

	Millions of			
	dollars	% of total		
Motor-fuel taxes	\$2,043.8	80.5		
Trucks, buses and trailers	141.9	5.6		
Tires, tubes and tread rubber	315.6	12,4		
Vehicle use	37.7	1.5		
Total tax revenues	\$2,539.0	100.0		

state program for the United States and states in the Ninth district, summarizing the status of the program as of March 31, 1961.

Several relevant considerations should be emphasized. In some cases, highways already in existence at the time of the program met the proposed standards, and thus "completion" had already been accomplished. Furthermore, difficulties of construction in urban areas and in areas of rough terrain are not comparable in all states. As a result, the completion of a certain percentage of total designated mileage is not a true indication of the ultimate timing of the completed program, nor of the total cost. Estimates prepared by the Bureau of Public Roads and the state highway departments indicate that the following amounts, in millions of dollars, are necessary to complete the system in the United States and in Ninth district states between January 1, 1961 and October 1, 1972, when the system is slated for completion:

	Minn.	Mont.	N.D.	S.D.	U.S.
Amounts already available	\$122.9	\$109.5	\$ 35.4	\$ 54.7	\$ 7,446.8
To be appropriated	665.1	240.6	113,7	168.9	25,461.9
Total cost of com- pleting the system	\$788.0	\$350.1	\$149.0	\$223.6	\$32,908.7

TABLE 3. NATIONAL SYSTEM OF INTERSTATE AND DEFENSE HIGHWAYS

(Status of Improvement as of March	31, 1961)				
	Minn.	Mont.	N.D.	S. D.	U.S.
Total mileage open to traffic	79.8	92.5	197.0	115.8	10,597.0
% of total designated mileage	8.9	7.8	34,7	17.1	26.1
Completed to full or acceptable standards	26.6	92.5	137.7	59.3	5,307.5
Improved to standards adequate for present traffic	53.2	************	59.3	56.5	3,021.9
Total facilities		*********			2,267.6
Total underway	382.5	443.0	50.8	279.4	14,785.8
% of total designated mileage	42.6	37.6	8.9	41,2	36.4
Work in progress with interstate funds under construction	82.9	71.9	31.3	93.7	4,377.5
Engineering or right-of-way	299.6	371.1	19.5	185.7	10,408.3
Remaining mileage	435.8	643.5	320.1	282.4	15,229.7
% remaining of total designated mileage	48.5	54.6	56.4	41.7	37.5
Total designated system mileage	898.1	1,179.0	567.9	677.6	40.612.5

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<sup>2</sup> Per 1,000 lbs.

<sup>3</sup> Per pound

# conditions ...

Rainfall over much of the district during early June was extremely light and spotty. This plus generally high temperatures materially reduced crop prospects over much of eastern Montana, the Dakotas, and western and northern Minnesota. What was needed during the latter half of June was widespread soaking rains to make up the deficiencies of early June, and subsoil moisture shortages resulting from the winter drouth, if normal crops were to be produced in 1961. Ranges, too, had become dry and water for livestock was becoming short in some areas. Accelerated cattle marketing from the driest areas was developing, but the extent of this movement will depend on the duration of the drouth period.

In recent weeks, district employment has experienced a relatively strong seasonal improvement, with the unemployment rate in the Twin Cities metropolitan area dropping to about 5 percent in May. The workweek moved up to 40.2 hours compared to 39.8 hours for the United States as a whole. Bank debits, retail sales and construction figures in recent weeks all point toward modest further gains in the recovery which got underway earlier this spring. Even district lumbering, which has been chronically depressed for many months, has recently been exhibiting signs of revival, with some employment improvement. Construction contract awards have been running well above year ago levels since the first of the year, indicating substantial construction activity ahead.

The iron ore mining areas, however, continue in the economic doldrums, with shipments down sharply. Shipments to June 1 this spring were down 71 percent from the same period a year earlier. Altogether, only about 50 to 55 million tons of iron ore may move this year from Lake

Superior ports, compared with 66 million tons last year and 81 million tons in 1957.

Bank deposit growth from year ago levels was noted at both country and city district banks. Greatest increases occurred at the city banks, where an increase of 6 percent in net demand deposits and a 22 percent gain in time deposits was recorded as of June 1. On the other hand, only a moderate demand for loans has developed at city banks with a resultant improvement in overall bank liquidity. Loan deposit ratios dropped from 63.7 percent a year ago to about 57.8 percent currently. In contrast to improved liquidity positions at the city banks, country bank liquidity has remained about the same, reflecting a growth in loan demand parallel to deposit growth.

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

## CONSTRUCTION ACTIVITY EXPANDS

Construction activity in the nation declined comparatively little during the recent general economic recession. Furthermore, the extended siege of inclement weather during the first quarter of this year had little adverse effect on activity. Only in February did the total expenditures for new construction fall slightly below the year ago total.

In both April and May the total expenditures for construction rose more than seasonally. In May, the seasonally adjusted annual rate was \$56.5 billion, \$1.1 billion higher than in April and higher than in any month since August 1959.

In private construction, expenditures for residential building, seasonally adjusted, declined in 1960, reached a low in February of this year, and then rose for three successive months. In April and

May, this type of building in the nation accounted for practically all of the increase. The expenditures made for both new dwelling units and for alterations on existing houses rose more than seasonally but still did not equal year ago totals. The building of non-housekeeping units, primarily motels and hotels, in April and May was approximately a third higher than a year ago. In addition, private construction for industrial, commercial and other business purposes held up well in 1960. Although this type of building, on a seasonally adjusted basis, has declined slightly each month since last February, the expenditures were still significantly above year ago totals.

The seasonally adjusted expenditures for public construction in the nation, less than half of those made for private construction, rose in both April and May in most major categories. The largest increase in public construction occurred in highways, where the value of highway construction from March to April rose by 47 percent and from April to May by 54 percent, President Kennedy ordered the release of \$818 million in Federal funds in May that normally would not have become available until July 1. He took similar action last February when he ordered the release of \$718 million in highway funds not scheduled to be available until April 1. This action has tended to speed up the Interstate and other highway programs.

In the Ninth district, construction activity held up well during the first quarter but unfavorable weather conditions caused a sharp decline in April. For example, seasonally adjusted employment in this industry fell by 6 percent from March to April. Preliminary figures indicate that construction activity again expanded sharply in late April and early May.

Residential building has also played a significant role in the expansion of construction activity in the Ninth district. About a third more dwelling units were authorized by building permits during the first quarter of this year than last year. During April, the seasonal expansion in home building was less than usual and the number of units authorized by permit only equaled those of a year ago. Consequently, the first four months of home building activity indicate a moderate expansion, but no evidence of an upsurge which would result in a building boom.

In home building the trend, in smaller cities as well as in large metropolitan centers of this district, has continued strongly toward multiple units. In the first four months of this year, the number of single family units authorized in the district by permit was down 10 percent from last year, while the number of multiple units authorized in duplexes, triplexes and apartment houses was more than double that of last year's total.

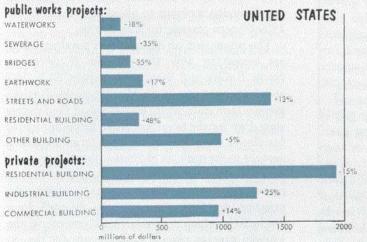
In the nonresidential field, the dollar valuation of building permits issued during the first four months of this year was down 13 percent from the corresponding period of last year. The total valuation on permits issued for commercial and industrial building indicates that this type of construction is moving ahead. The total on permits issued for commercial building, which is a large segment of the nonresidential field, was one-fifth larger than a year ago and for industrial building was up 15 percent. On the other hand, the total dollar amount of permits issued for other types of construction, such as churches, hospitals, public and private schools and other institutional buildings, was down nearly a third from last year.

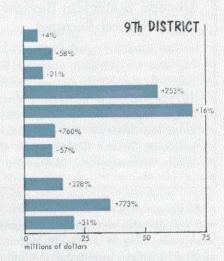
The amount of large construction contracts awarded since the first of the year provides some insight into the strength of construction activity during the coming months. The accompanying chart lists the awards made in the first five months of 1960 and 1961 in the United States and in the Ninth district.

In the United States, the amount of contract awards approximately equaled those of a year ago, while in the Ninth district the amount awarded during the first five months was 63 percent larger than a year ago. This may indicate a continuation of, or even a significant rise in, the current volume of construction in coming months. In the

## Construction contract awards, January through May 1961







United States, the total amount of contracts awarded for private construction was down about 4 percent, although industrial and commercial awards increased; in the Ninth district, private construction increased in residential and industrial building, while commercial building awards fell off. In public construction, large increases in awards were made for sewerage, irrigation and drainage projects, and for residential buildings of a public nature, such as homes for the aged.

## LOCAL BANKING DEVELOPMENTS

The end of May liquidity picture at district member banks in the cities compares favorably with that of a year ago. At the country banks, however, a loan-deposit ratio of 51 percent is little changed from last year, despite a 4 percent gain in total deposits. The city bank ratio of 57.8 percent in May compares with the postwar record, registered exactly twelve months earlier, of 63.7 percent; in addition, the ratio of governments due in less than a year to total deposits rose from 2.2 percent on June 8, 1960 to 6.5 percent on June 7, 1961 at the city banks.

The weakness of bank loans, displayed at city banks elsewhere, continued in evidence at district city banks recently. In the four weeks ended June 7, total loans declined \$11 million and commercial loans \$13 million. In the same weeks of last year the respective figures were plus \$3 million and plus \$7 million. Since December commercial loans are down \$4 million in contrast to a plus \$52 million in the same weeks last year. Total loans are up \$2 million compared to plus \$28 million last year.

Total deposits at district city banks were down \$38 million between December and June 7; last year the comparable period decline was \$67 million. These figures reflect a plus \$47 million this year for time deposits and a minus \$4 million for the period last year. In the last four weeks, total deposits fell \$5 million against a plus \$4 million last year. Governments due in less than a year rose \$9 million while intermediates and longs fell \$12 million. The seasonal deposit upswing has yet to materialize. The low point of weekly average demand deposits for 1961 was \$1.225 billion in the week ended March 29, but in the weeks ended May 31 and June 7 demand deposits averaged just \$1.230 billion and \$1.272 billion, respectively. Last year the low point for city demand deposits was registered on March 30 and amounted to \$1.149 billion.

## Decade Statistical Review Available on Request

The Decade Statistical Review, presenting data for principal statistical series relating to the Ninth district for the years 1951 to 1960, is now ready for distribution. Single copies are available on request from the Monthly Review, Research Department, Federal Reserve Bank of Minneapolis, Minneapolis 2, Minnesota.

At the country member banks the low point of average demand deposits was registered in the week ended May 31 at \$1.774 billion with a level of \$1.832 billion registered the following week. Low point last year was \$1.737 billion in the week ended May 25. Borrowings at the Federal Reserve Bank of Minneapolis remained negligible in May and federal funds bought (net) were not much greater than in April.

## FEED GRAIN PROGRAM ACCEPTANCE HIGH

The final signup results of the 1961 feed grain program, as reported by the U.S. Department of Agriculture, show that 26,687,682 corn and sorghum acres are to be diverted from planting and placed into soil conserving uses on 1,172,165 farms. The 26.7 million acres to be taken out of corn and grain sorghum production this year constitute about 26 percent of the United States total 1959-60 average plantings of 102.3 million acres for these two crops. However, the question of the extent to which this acreage will reduce production remains to be answered.

The report which includes activity through June 1, the final date for putting acreage under the program, shows that complying farmers have signed up 20.1 million acres from their 48.9 million 1959-60 average corn acreage. The 20.1 million corn acres to be put into conserving uses this year represent 24 percent of 1959-60 average plantings of 83.6 million acres. On farms signed up, corn acreage diversion amounts to about 41 percent of the 1959-60 corn acreage for these farms.

The proportion of the corn and sorghum farmers complying with the program in Montana, North Dakota and South Dakota was 58.4, 74.7 and 49.3, respectively. In Minnesota, the district's leading corn state, about 50 percent of the farmers signed up for the program; these farms accounted for almost two-thirds of the 1959-60 average corn acreage in the state, an indication that the program was advantageous to larger farm units. Over 35 percent of the corn acres on farms entering the program in Minnesota are to be diverted from production, which amounts to 22 percent of the 1959-60 average planted corn acreage for the entire state.

## 1961 CORN PROGRAM ACCEPTANCE, DISTRICT STATES AND THE U.S.

	Minn.			Mont.	U.S.
Corn acreage on farms complying with the pro- gram relative to average 1959-60 planted corn acreage on all farms	64.3	77.5	58,8	K M	58.0
Corn acreage to be diverted in 1961 on farms complying with the pro- gram relative to 1959-60 planted corn acreage on all farms	22.7	30.7	19.8	28.0	24.0
Percent of corn acreage to be diverted in 1961 on farms complying with the program	35.4	39.6	33.7	47.5	41.1

According to the USDA, in the six states which accounted for more than half of the nation's corn acreage and for almost 2.5 billion bushels of production in 1960, over 70 percent of the corn acreage is on participating farms. In Missouri, corn acreage on farms signed into the program is slightly less than 85 percent of the state's 1959-60 average plantings; in Nebraska, more than 81 percent; in Kansas, more than 75 percent; in Iowa, slightly less than 69 percent; in Minnesota, more than 64 percent; and in Illinois, slightly less than 62 percent.

Grain sorghum farmers have signed to put 6.6 million acres in conserving practices. This is over 35 percent of U. S. average sorghum plantings of 18.7 million acres for grain. Grain sorghum farms signed up represent almost 85 percent of the national plantings with an average diversion of almost 42 percent per farm. In the four major grain sorghum producing states, base sorghum acreage on farms under the program accounts for 93 percent of the Nebraska average acreage, 86 percent in Kansas, 85 percent in Texas, and 73 percent in Oklahoma.

For all farms signed, possible advance payments under provisions permitting about half of the payments to be made this spring come to about \$339.8 million for the United States as a whole. While the potential total payments under the program are not being determined for the initial reports, USDA officials estimate that total payments will probably be more than double the value of the advance payments.

The 1961 feed grain program provides payments to farmers in the form of certificates for

placing corn and grain sorghum acreage in conserving uses. Producers may receive grain or the cash equivalent of grain for their certificates. Diversion of corn and grain sorghum acreage to soil building practices this year is expected to achieve a better balance between production and utilization of these grains, according to the USDA.

The report shows that certificates covering about \$265.3 million worth of grain were issued to United States farmers through June 2 under advance payment provisions. Of the \$265.3 million worth of certificates issued, farmers have received about \$241 million in cashable sight drafts from county Agricultural Stabilization and Conservation (ASC) offices. In these cases, the Commodity Credit Corporation pays farmers in cashable sight drafts, then acts as their agent in marketing the quantity of grain covered under the certificates.

The value of advance payment certificates received and cashed by farmers in Minnesota, Montana and the Dakotas amounted to \$27 million. This amount is equal to 1 percent of the 1960 total cash receipts from farm marketings. It is possible that the final payment will exceed the amount of the advanced payment.



## HIGHWAYS . .

Continued from page 6

#### Conclusion

It would be desirable to build our highway system at a time when the economy is in a slack period, but such timing would be haphazard and the lack of highway facilities can become a serious bottleneck to a growing economy. The Interstate System, by a selection of the more important roadways, presents a means of providing adequate highways at the more crucial points.

One of the most serious difficulties associated with highway expenditures is the fact that they should ideally be constructed at the points where needs are greatest. Surveys of traffic volume and congestion are useful, but are far from the perfect means for the allocation of expenditures. Several proposals have been made in recent years for the more extensive application of the pricing system to highway construction and repair. A pricing system has been used for determining levels of high-

way supply, e.g., by means of toll roads, and its use has also been suggested for the purpose of restricting demand, especially on crowded roadways. In any case, estimates of the demand for highway use are needed on particular stretches of roadway. Otherwise, a misallocation of resources will occur within the highway system, even though—as an aggregate—highway "supply" might well equal highway "demand."

Since this article was written, Congress has approved the revenue recommendations proposed by the President, except that the tax on trucks over 26,000 lbs. was increased to 3 dollars per 1,000 lbs. The Congressional bill also diverted all of the 10 percent manufacturers' excise tax on trucks, buses and trailers from general revenues into the highway trust fund. Half of this tax is now directed to the fund and the other half will be diverted to it starting July 1, 1962. All of the other tax enactments will take effect as of July 1 this year and continue until October 1, 1972.

-CHARLES J. LIBERA

