People Pulling Minnesota Out of the Mud

Approve Construction of Trunk Highway System of 7,000 Miles

By EARL CHRISTMAS

PULLING Minnesota out of the mud is the new job undertaken by the people of that state. And it's going to be a real accomplishment. This doesn't mean that Minnesota roads are worse than those of other states. It does mean they are going to be a whole lot better.

Establishing a state trunk highway system of 7,000 miles, approved in the form of a constitutional amendment at the recent general election, Minnesota has launched into a program designed to place it in first rank among states with good roads.

The Minnesota program, known as the Babcock plan, contemplates improvement and maintenance of this vast trunk system of arterial roads by the state through a license tax on automobiles.

Removing from counties and townships the burden of building and maintaining these arterial highways, the plan will release, according to highway engineers, enough local funds to build 21,850 miles of graveled connecting roads in ten years. In other words, at the end of ten years, Minnesota can have under the amendment, 28,850 miles of improved highways, constructed without increasing road taxes and with only the additional funds from the state license tax on automobiles.

The Babcock plan—so called from its author, C. M. Babcock, commissioner of highways in Minnesota—isn't just a plan. It is an accomplished fact.

The Minnesota legislature approved the project with but ten dissenting votes in the two houses. Submission of the bill to the people as an amendment to the state constitution was necessary, however, to enable the state to engage in building roads and to enable it to use funds from a license tax on automobiles for this purpose.

Though state good roads projects frequently fall by the wayside in general elections, the Minnesota project was approved by a large majority, almost three persons voting for it to one who opposed it. It remains only for the legislature to pass a law under this authorization providing for the license tax.

An average of $18 a car has been suggested as the license fee to be charged. With a registration of 300,000 motor vehicles, this will provide revenue of more than $5,000,000 a year, enough to build and maintain the trunk highway system of 7,000 miles. This, however, will be determined by the legislature.

Owners of motor vehicles, though their fees will be increased, will get back their money threefold in saving in the cost of operation of their cars. At least, that was the promise of the state highway department, and the motorists were the most enthusiastic boosters for the project. The license tax, which is to be graduated to the size of the car, is to be in lieu of other taxes on automobiles.

Though it required the formality of a constitutional amendment to legalize it, the Babcock plan long ago started to function.

Already, 3,000 miles of permanent grading has been done on this 7,000-mile system. Two thousand miles of road have been gravel surfaced. More than a hundred miles have been paved, and two-thirds of the bridges and culverts have been put in. County officials in Minnesota were sure the people of Minnesota wanted good roads. So sure were they, that the counties in the last two years went ahead and improved vast stretches of road at their own expense, confident they would be reimbursed under a provision of the bill arranging for this in case the amendment passed. Minnesota counties in the last two years, according to estimates by the state highway department, have spent $16,000,000 in permanent road improvements, subject to refund under the amendment.

That's how much faith Minnesota counties had in the Babcock plan and the people of Minnesota.

During the present year, in spite of high prices of materials, Minnesota counties have done 1,800 miles of permanent grading, said J. H. Mullen, deputy commissioner of highways. Graveling accomplished during the year, he put at 1,100 miles of roads, and paving at 100 miles. But two other states in the union—Illinois and Pennsylvania — can compare with that record.

Plans for all this work have been drawn up by the state highway department, and the work has been done under the direction of the department.

The state highway department, under Commissioner Babcock, has assumed the job of traffic director for the state.

Ever since 1916, the department has been studying the traffic on Minnesota roads. Mr. Babcock and his engineers found out what roads carried the heaviest burdens. He took a statewide traffic census, and repeated it from year to year. Then on the basis of these findings, he started to work mapping out a state trunk highway system, seeking to put on this system the main, or arterial roads—roads that carried not merely local, but inter-county or state traffic.

For months, behind closed doors, the engineers worked. They wanted the establishment of the routes to be free from every consideration of politics or local interests, and those seeking to intercede for various localities found only locked doors at the highway department.

C. M BABCOCK

Commissioner of highways in Minnesota, who fathered the new highway program.

Finally the routes were established, and so successful had been the arrangement that but ten votes could be mustered against the plan in both houses of the legislature.

Not all the 7,000 miles of the trunk system are to be paved—not by any means. The highway department of Minnesota is going at its job like a traffic director. Only those portions requiring hard roads, as shown by the traffic census, taken from time to time, will be paved. Others will be improved with macadam or gravel surfaced, depending on the volume of traffic. The engineers can tell by a glance at their surveys which roads are unable to bear the traffic to which they are subjected.

A traffic census in 1920, taken during the last two weeks in August, was much more extensive than previous observations. Observers were stationed on 179 main roads. They registered an average daily traffic of 76,799 vehicles on these roads. Of this number only 6,259 were horse drawn. The census revealed a tremendous increase in traffic. In two years, from 1918 to 1920, traffic on some thirty roads under observation increased approximately 50 per cent.

Startling increases were made on some roads. On the road from Wadena to Staples, the count was 182 in 1918, and this year, it was 509. The road from Willmar to Atwater jumped from 268 to 738, and the road from the Twin Cities to Elk River, from 554 to 1,268, as the daily average of vehicles. And the same percentages of gain obtained on many other roads.

Maintenance tests demonstrate, according to the highway engineers, that dirt roads, to be maintained economically, will carry not more than 150 vehicles a day, and gravel surfaced roads not more than 400. In many cases the danger point had been passed, the Minnesota census showed. One road, leading into St. Paul, carried a daily traffic of 1,645 vehicles, and numerous roads carried more than a thousand daily. Building and maintaining roads by the state is a new departure.

"Keeping up these arterial roads is just as much a state obligation as any state institution," said Mr. Babcock. "The main roads of a state are used not merely by the people who live in that county; they are used by people traveling from county to county and state to state.

"For instance, you may have a comparatively poor county, and a road leading through it to some city. A large commercial traffic develops on that road. It isn't fair for the county to be forced to maintain that road. The state ought to do it.

"Another thing—the census we have taken, showing the great volume of automobile traffic, shows that the principle is right. We are making the automobile pay for the good roads, but saving in cost of operation will repay the owners of the cars many times.

"In the past, the counties of Minnesota have spent 80 per cent of their road money in maintaining these main highways, bearing largely county-to-county, or state, traffic. They have neglected the more local, or connecting roads. In many cases, they have spent all their money on these main roads.

"The counties now will be free to use all their funds on the feeder roads. The past year, the county road and bridge fund, made up from all the counties, totaled $8,700,000. All of this can now be diverted to the local or feeder roads, instead of four-fifths of it being spent in the arterial roads. Then there is $1,700,000 in state aid to the counties from a one mill tax levied under a provision in the constitution.

"Then there is Federal aid to Minnesota of $2,800,000 a year, which will be allotted to the counties not for use on the trunk system, but on the local roads. This year, incidentally, the counties matched this by raising not equal amounts, but in many cases funds four times as great. So, Minnesota counties will have from $8,000,000 to $10,0000,000 more money for their local roads, hitherto almost neglected. By the end of ten years, we can have an improved road leading up to the door of every farm in Minnesota. These funds alone will build them.

"Such a plan as this is invaluable in a state like Minnesota. We have a great expanse of territory and very rich counties and some poor counties. Four counties have more than 50 per cent of the valuation of the state. We haven't kept up in the past with the growth of the state. Now we propose to improve the roads to meet traffic needs, putting them in good traveling condition throughout the state first, and then making more permanent improvements as we proceed.

"Our big trouble in the past is that we have been building roads something like the village used to put in sidewalks. Now we propose to connect up all the main highways of the state in one great trunk system.

"In other words we are going to build the trunk first; meanwhile, the counties, building upon this trunk, can make their improvements effective. If they spend no more money than they now spend, in ten years we can have 28,000 miles of improved highways."

The Babcock amendment authorizes the legislature to issue bonds, but this will not be necessary. The license tax will provide sufficient money to build and maintain the 7,000-mile trunk system.

New Cars Add to Wear of Road

THAT the present interest in the construction of new highways should not divert attention from properly maintaining highways already improved is a point which the Bureau of Public Roads, United States Department of Agriculture, has had occasion to emphasize many times in recent months, particularly in view of the enormous increase in motor vehicle traffic which is taking place.

The bureau recently completed a compilation of statistics from all the states of the Union showing that there was a total of 7,565,446 registered motor cars (including motorcycles and trucks) in the United States in 1919. This is an increase of 23 per cent, or 1,418,829 motor cars over 1918. Such figures indicate that the country's highways are being used far more than in the past, it is pointed out, and in consequence added attention must be given to the repair problem. The increase in the number of cars for 1919 over 1918 represents about 10 per cent more cars than the total number registered in the entire United States for 1913.

Additional use of roads and streets has, of course, been accompanied by additional revenue paid to state and local governments in the form of license fees, which in nearly all states are devoted to highway needs. The registration and license fees for automobiles, trucks, and motorcycles in use in 1919 totaled $64,697,255.58—an increase of 20 per cent over 1918. The total revenues for New York and Pennsylvania the past year were about double the revenues received for all motor vehicle registrations and licenses in the entire United States in 1912.

Certain of the states, notably Maryland, have experienced difficulty in securing road-building materials owing to labor shortage, hampered transportation facilities, and so on. Maryland has had to make a special appeal to the Interstate Commerce Commission for aid in getting enough material shipped in properly to care for road repairs.