Looking

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Highway Construction

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OOKING to the future of highway building in the United States in the coming year, we find that most mspective work has been given direcon and impetus by the National Indusal Recovery Act. A large part of the mds made available under the \$400,000,m appropriation for public works highays will be used during 1934. Predicted creases in motor vehicles indicate more mple funds for road building from motor ehicle and motor fuel taxes. However, ew and pressing needs to meet changing raffic conditions indicate that a very large mount of work in road building must be complished to keep abreast of actual

raffic requirements. Realized needs are being met through the NIRA proisions that immediate attention be given to gaps in the ighway system where Federal-aid roads pass through nunicipalities and where added highway facilities are leeded on secondary roads to provide feeder connecions to the main highways. The filling in of all gaps in he Federal-aid highway system without delay was given be impetus of first priority under the regulations dopted for the construction of public works highways. In line with this tendency, money for public works ighways has been apportioned so that not more than per cent of a state's share is to be expended on the 'ederal-aid system outside of municipalities, not less han 25 per cent on extensions of Federal-aid roads into ad through municipalities, and not more than 25 per ent on secondary or feeder roads.

The present status of public works highway projects Steffected by progress reports of December 16 shows hat in the whole country projects advertised for confact represented 57 per cent of the \$400,000,000 appronation made under Section 204 of the National Indus-Pal Recovery Act. The speed with which projects we been placed under construction since last August dicates that the funds available will all be under conact within a few months. In fact, some states already ave put to work practically all of their allotment of



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highway funds. New York State, on the same date, had under way 94 per cent of its allotment; Ohio, 73 per cent; and Pennsylvania, 74 per cent. At that time, 130,500 men were employed on 2,635 projects under construction. Projects already completed under the public works highway program totaled 365, involving an expenditure of \$9,552,000.

All possible speed consistent with safety of public funds has been encouraged by the Bureau of Public Roads in the beginning and prosecution of construction work. Procedure has been reduced to a minimum by provisions such as the reduction of required time of advertisement for

bids to two weeks, advertising work for bids immediately upon the approval of the project by the district engineers, abbreviated plans on secondary road projects following closely the existing highway, and the completion of plans for day labor work within a reasonable time after the beginning of construction.

While a few states lag somewhat in their progress, the program as a whole is advancing definitely toward completion, and the planning work of the State and Federal road building agencies is largely done. Once construction work is in progress, the planning and administrative agencies stand ready for new tasks. The peak of construction activities will come early this summer and by fall the entire program should be well advanced toward completion. As the work is completed, it is necessary to have new projects planned and ready to begin if the desired level of employment is to be maintained.

While much has been accomplished in highway development in past years, many things remain yet to be done. Included among the developments that will be in progress during the coming year are projects such as the elimination of traffic hazards, the filling in of gaps in the highway system, the improvement of through roads in cities and of feeder roads that provide access both to rural and urban industries, the coordination of all forms of transportation, and many

Changes in vehicles affect the roads over which the vehicles operate both as to the efficiency of the highways as traffic arteries, and also as to safety for vehicles and pedestrians. Chief among the developments in vehicles is the increase in speed. Higher vehicle speeds have made it necessary to redesign many features of our highways to eliminate traffic hazards and to meet other requirements of increased speed. The elimination of traffic hazards was directed in the National Industrial Recovery Act on projects such as the widening of narrow roadways and bridges, the separation of grades at crossings, the reconstruction of existing railroad grade crossings, the building of footpaths, the replacement of unsafe bridges, the construction of routes to avoid congested areas, or any other construction which will provide safer traffic facilities or definitely eliminate exist-

Scope of Federal-Aid Work Widened

ing hazards to pedestrian or vehicle traffic.

The entrance of the Government into new fields of highway improvement in city street construction and the building of secondary roads is a significant departure from Federal highway policies established in past years. It accents the necessity of state-wide planning of highway facilities. The high percentage of traffic that is of municipal origin and also the traffic on city streets contribute in a large measure to the annual highway income and major routes within cities should be brought up to adequate standards. In the planning of secondary roads, a proper relation must be maintained between such roads and the major highway system, and an annual income for their further improvement must be assured. There is also a distinct trend toward the control of secondary or feeder roads by the state highway departments. This simplification of highway administration has been stimulated by the requirements of the National Industrial Recovery Act.

A new and far-reaching development of the coming year will be the connection of highways with railroads as supplementary services. Railroads were built upon the presumption that highways would deliver freight to stations established along the route, an essential service in railroad operation. Changes in vehicles on the highways made possible a wider field of service and placed motor vehicles in competition with railroads in some cases. It seems probable that some unprofitable railroad mileage could be abandoned with profit and also some little-used highways. Coordination of highways not only with railroads but also with air and water facilities is contemplated in studies now in progress by Federal agencies.

MAINTENANCE WITH FEDERAL PUNDS

Highway maintenance under Federal-aid laws ways has been obligatory as necessary for the Din tion of the large investment in improved highways a means of keeping the highway departments active engaged as well-organized and smoothly-function agencies for public works in the relief of unemployn highway maintenance can readily be expanded cially on works that are in the nature of improvement In addition to the repair of road surfaces, there great need on all highways for such work as widen shoulders and the inside of curves, laying tile dis and cobble gutters, building guard walls and right way fences, and tree planting and other such lands work. New emphasis has been placed on the landso ing of a reasonable mileage of wide right-of-way for are no longer content to build roads and to neglect the appearance.

LABOR POLICY

The marked changes inaugurated in connection the employment of labor under the NIRA will contin in the work of the coming year. Most of the Feder aid work under construction is being accomplished contract as in past years. Under the regulation adopted to control the work, the use of day labor in directly by the highway authorities is permitted. isting county or municipal organizations may be utili but the responsibility for such day labor work m with the state highway departments. Labor used on classes of public works highways is obtained through local employment agencies designated by the Uni States Employment Service to prepare employment it for both skilled and unskilled labor. Minimum w rates are prescribed in all contracts for road consti tion and similar wage rates are used for day labor ployed directly by the highway authorities. A 30th week is provided for in construction agreements or a tracts with the use of the 130-hour month in spec cases.

Conclusion

The coming year will see a larger measure of eff to meet both municipal and rural highway needs. accomplish roadside beautification on wider rights way, to eliminate traffic hazards, to coordinate tra portation facilities, and to develop other new and new highway projects to the end that unemployment will relieved and the highway system of the country will consolidated and improved. The National Industrial Recovery Act has established new criteria for high work which have opened new fields for service.

Construction Lagging by \$14,000,000,000

The Federal Administration, through careful research, has determined that construction during 1934 and 1935 can absorb this vast sum in employment and the production of capital goods. Of this sum, the construction of express highways will use \$1,000,000,000; water and sewage works \$1,650,000,000; housing, \$4,533,000,000; public buildings, \$136,000,000; railways and terminals, \$2,000,000,000; and grade crossing elimination, \$2,400,000,000. The other items completing the total are educational facilities, recreational facilities, and industrial and commercial construction and modernization. In this study full recognition has been given to the fact that employment in the capital goods industries has declined 75 per cent and that stagnated construction has been a contributing factor to this decline in employment.