

REPORT TO THE CONGRESS

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Questionable Basis For Approving Certain Auxiliary Route Segments Of The Interstate Highway System

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Federal Highway Administration Department of Transportation

BY THE COMPTROLLER GENERAL OF THE UNITED STATES

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JULY31,1970

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To the President of the Senate and the Speaker of the House of Representatives

This is our report on the questionable basis for approving certain auxiliary route segments of the Interstate Highway System The Federal Highway Administration, an agency of the Department of Transportation, is responsible for administering the interstate highway program

Our review was made pursuant to the Budget and Accounting Act, 1921 (31 U S C 53), and the Accounting and Auditing Act of 1950 (31 U S C 67)

Copies of this report are being sent to the Director, Office of Management and Budget, the Secretary of Transportation, and the Administrator, Federal Highway Administration

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Comptroller General of the United States

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ABBREVIATIONS

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- FHWA Federal Highway Administration
- GAO General Accounting Office

-1 x 5 -1 x COMPTROLLER GENERAL'S REPORT TO THE CONGRESS QUESTIONABLE BASIS FOR APPROVING CERTAIN AUXILIARY ROUTE SEGMENTS OF THE INTERSTATE HIGHWAY SYSTEM Federal Highway Administration Department of Transportation B-163714

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WHY THE REVIEW WAS MADE

The Interstate Highway System connects as directly as practicable the principal metropolitan areas, cities, and industrial centers and also connects, at suitable points, with important continental routes in Canada and Mexico

Initially the system was limited to 40,000 miles In 1956 and 1968, an additional 1,000 miles and 1,500 miles, respectively, were authorized.

By January 1, 1970, about 70 percent of the system was open to traffic, another 11 percent was under construction, engineering or right-of-way activities were under way on 15 percent, and 4 percent remained in preliminary status. Since 1956 about \$38.8 billion of Federal-aid funds have been set aside for these projects Federal funds generally cover 90 percent of the costs.

The Federal Highway Administration used a numerical rating system as a basis for comparing the relative merits of state requests for the additional mileage authorized in 1956 and in 1968 and for selecting final route locations for the mileage allocations

However, during the interval between the first mileage increase in 1956 and the General Accounting Office (GAO) review, the Federal Highway Administration allocated mileage to the States for certain auxiliary route segments on a case-by-case basis rather than on the basis of a rating system to rank State requests as to merit and significance in terms of unfulfilled route needs. An auxiliary route is a radial, circumferential, or spur route serving principally an urban area

GAO wished to see if this allocation of mileage on a case-by-case basis was in consonance with the basic concept of the Interstate System and provided the benefits normally associated with the system.

FINDINGS AND CONCLUSIONS

The approval of seven interstate mileage segments resulted in 48 5 miles being added to the Interstate System which were not subjected to the numerical rating system. (See p. 9)

Six of the segments appeared to provide general benefits within the concept of the Interstate System. (See p = 9.)

GAO believes that one segment--a 13 2-mile, four-lane highway--does not provide general benefits because it will benefit primarily a steel plant near a small rural Illinois community

The Federal Highway Administration estimates that this spur route will cost \$47 l million of which the Federal Government will pay \$39 million. Apparently, the primary purpose in constructing the spur route (I-180) was to meet a commitment made by the State to the steel company to provide a four-lane highway connecting the plant to the Interstate System as consideration for the company selecting that site for a new plant. (See p 11)

The Federal Highway Administration's decision to approve this spur route seems especially inappropriate since, at various times prior to its approval, other routes were not approved although they appeared to be more justified in terms of traffic and national significance. (See p. 26)

GAO believes that a numerical rating system would have highlighted that this spur route was not in consonance with the nationwide character of the Interstate Highway System and would not have qualified as an addition to the system (See p. 26)

RECOMMENDATIONS OR SUGGESTIONS

The Secretary of Transportation should require the Federal Highway Administration to discontinue approving requests for auxiliary interstate mileage on a case-by-case basis and require it to use a numerical rating system to rank requests on the basis of priorities reflecting the current objectives of the Interstate System The use of such a system would provide more assurance that (1) the States are afforded an equal opportunity to compete for any additional interstate mileage, (2) mileage is allocated on the basis of the most important needs of the Interstate System, and (3) officials have a means of comparing the relative merits of all State requests for mileage. (See p. 27.)

AGENCY ACTIONS AND UNRESOLVED ISSUES

The Department of Transportation agreed that the States should be able to compete equally for interstate mileage and that allocations should serve the most important needs. However, the Department believes that a rigidly applied system of numerical ratings cannot adequately measure the relative merits of competing applications, particularly where an urgent need arises for adjustments or additions to specific short-route segments (See p 24.) GAO is not proposing that a numerical rating system be applied so rigidly that Federal-aid highway program officials would be precluded from exercising judgment when the circumstances warrant GAO believes, however, that, to exercise judgment effectively, these officials must have available a means of clearly identifying various alternatives when dealing with problems of the magnitude encountered in interstate mileage allocations. (See p. 25)

MATTERS FOR CONSIDERATION BY THE CONGRESS

GAO is issuing this report to the Congress for its consideration when additional interstate mileage or other similar programs are authorized and to inform the Congress of the desirability of the use by the Federal Highway Administration of a numerical rating system to rank all the various requests for mileage for auxiliary interstate routes on the basis of priorities reflecting the current objectives of the Interstate System

CHAPTER 1

INTRODUCTION

The General Accounting Office has examined into the manner in which certain segments of the interstate mileage have been allocated to the States by the Federal Highway Administration (FHWA), Department of Transportation.

Our review was directed toward evaluating the allocation of mileage for 16 auxiliary interstate routes, which were approved on a case-by-case basis, from the standpoint of whether these routes were in consonance with the basic concept of the Interstate System and provided the general benefits normally associated with the system. The scope of our review is described in chapter 5 of this report.

FHWA is the principal agency of the Federal Government responsible for matters relating to highways. Accordingly, the allocation of interstate mileage is one of the primary responsibilities of FHWA in its administration of the Federal-aid highway program.

The development of the criteria used by FHWA to designate highways as part of the Interstate System dates back to the 1930's. At the request of the Congress, FHWA, in a report submitted to the Congress in 1939, demonstrated and documented a need for a system of interregional superhighways with connections through and around cities. Through joint efforts of FHWA and the National Interregional Highway Committee, appointed by the President, a report titled "Interregional Highways" was submitted to the Congress in 1944.

The 1944 report recommended a network of 33,900 miles of superhighways and stated that an additional 5,000 miles of auxiliary urban routes would be needed. Acting on the basis of these reports, the Congress enacted the Federal-Aid Highway Act of 1944, which provided for the designation of a National System of Interstate Highways limited to 40,000 miles. The system was to be so located 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.

By 1945 the States had proposed 43,000 miles of main routes for inclusion in the system. The criteria used by the States as the basis for proposing these routes included consideration of (1) cities and rural population, (2) manufacturing and agricultural production, (3) concentrations of motor-vehicle ownership and traffic, and (4) national defense. Additional criteria for selection of the routes in urban areas included consideration of the need for through and circumferential routes and their relation to land use, urban planning, and civil defense. These criteria were essentially the same as those included in the report, "Interregional Highways."

On August 2, 1947, FHWA announced the selection of the general locations of the main routes of the Interstate System. The mileage allocated for these routes totaled 37,700 miles, including 2,900 miles in urban areas. The criteria followed by FHWA in selecting these routes was directed to the relative importance of (1) cities of various size as well as principal metropolitan areas, (2) distribution of the rural and the total population, (3) manufacturing and agricultural activities, (4) concentration of motor-vehicle ownership and traffic volume, (5) national defense, including military establishments and war industry, and (6) principal topographic features.

On April 15, 1955, the then Commissioner of Public Roads submitted a statement titled "Criteria for Selection of Interstate System Routes" to the Subcommittee on Roads, Senate Committee on Public Works. The statement described the criteria expected to be used in selecting the remaining 2,300 miles of interstate routes, particularly additions in and around urban areas. The statement pointed out that the States were then studying their needs for additional interstate mileage in and around urban areas.

The Commissioner stated that the criteria used in selecting the 37,700 miles would be used to the extent applicable in allocating the remaining 2,300 miles of the system to the various States and that particular consideration would be given to the problems associated with urban highway systems.

On June 9, 1955, FHWA advised its field offices that allocation of the remaining 2,300 miles would be made on the basis of this criteria by designating additional routes for which the general location and approximate mileage were known. On September 15, 1955, after evaluating the requests by the States, FHWA allocated the entire 2,300 miles to the various States thus completing the allocation of mileage for the 40,000-mile interstate network authorized by the 1944 act.

The Federal-Aid Highway Act of 1956 authorized an additional 1,000 miles to be added to the Interstate System. Also, in mid-1957, 1,435 miles became available for reallocation to the States because more direct routes than anticipated were selected for the initial 40,000 miles authorized. On October 18, 1957, FHWA announced that, of the additional 2,435 miles of interstate highway available for allocation to the States, 2,102 miles had been allocated and that the remaining 333 miles would be held in reserve to meet changing system requirements and to avoid exceeding the statutory limitation on mileage pending establishment of final locations.

In allocating the 2,102 miles to the States, FHWA considered four basic factors--national defense, system integration, industry, and population. In addition, FHWA established a numerical rating system to amplify the basic factors. Under this system, each route segment was numerically rated on the basis of the four factors and a composite rating for each segment was determined. The 2,102 miles were then allocated on the basis of the relative importance of the requested routes as established by the composite numerical ratings.

The Federal-Aid Highway Act of 1968, approved August 23, 1968, authorized an additional 1,500 miles for the Interstate System. On December 13, 1968, after evaluating and ranking the State requests for a total of 11,100 miles,

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FHWA allocated 1,472.5 miles to the States.1 Again FHWA employed a composite numerical rating system, which had been refined to consider not only the four basic factors mentioned above but also the expressed intent of the Congress relating to gaps in the system; cities with a population of over 100,000 and State capitals not served by the system; missing segments of beltways, radials, and connectors; and missing segments in areas of present and potential heavy defense and nondefense traffic.

In addition to the mileage allocations discussed above, FHWA has allocated mileage for 16 auxiliary interstate routes to the States. An auxiliary route is defined by FHWA as a radial, circumferential, or spur route which principally serves an urban area. The mileage for these routes was allocated to the States from mileage which (1) had initially been retained for reserve by FHWA, (2) had been returned by the States from prior allocations because of changes in route locations and more direct final routings, or (3) had been authorized by Public Law 90-238, approved January 2, 1968 -- commonly known as the Howard Amendment -which authorized additional mileage for modifying or revising the Interstate System.² The basis for allocating mileage for auxiliary routes differed from that used to allocate original mileage in that the allocation was made on a caseby-case basis.

¹Shortly thereafter, FHWA allocated, as adjustments to previously established routes, the remaining 27.5 miles of the 1,500-mile authorization, plus a small amount of mileage which was available from prior authorizations.

²The Howard Amendment authorized 200 miles which can be used by the Secretary of Transportation in making modifications or revisions to the system. Pursuant to this amendment, a nonessential route, or segment of a route, must be withdrawn from the system before another route or segment can be added. The cost to the Federal Government of the replacement route cannot exceed the estimated Federal share of the cost of the withdrawn route, even though the replacement route may be longer and more costly than the withdrawn route.

By January 1, 1970, all the available interstate mileage had been allocated to the States and about 70 percent of the total system was open to traffic. Another 11 percent was under construction, and engineering or right-ofway activities were under way on 15 percent. Only 4 percent of the system mileage remained in preliminary status. Since 1956 the States have obligated about \$38.8 billion of Federal-aid funds for interstate highways projects. Federal funds are generally provided to the States to cover 90 percent of interstate highway project costs.

The principal officials of the Federal Government responsible for the administration of the Federal-aid highway program during the period covered by our review are listed as appendix III.

CHAPTER 2

QUESTIONABLE BASIS FOR APPROVING CERTAIN

AUXILIARY ROUTE SEGMENTS OF

THE INTERSTATE HIGHWAY SYSTEM

In the interval between the first Interstate System mileage increase in 1956 and the time of our review, FHWA apparently chose not to follow its numerical rating procedure in approving interstate mileage for certain auxiliary During this period, FHWA allocated, on a case-byroutes. case basis, 113 miles for 16 different interstate auxiliary routes. Although mileage for nine of these segments was allocated in this manner because of Howard Amendment requirements or because previously approved routes in the same States were redesignated, the allocation of mileage for the remaining seven segments resulted in a total of 48.5 miles being added to the Interstate System without being subject to a numerical rating system for ranking the various State requests for interstate mileage on the basis of their relative merits. A listing of these seven auxillary routes is included as appendix II.

FHWA's approval of auxiliary route segments on a caseby-case basis in those instances which were not required by the Howard Amendment, or were not redesignations of previously approved routes, was made contrary to its previously established practice of approving interstate mileage allocations only after systematically rating, evaluating, and comparing the relative merits and needs of all State requests. In view of the nationwide character of the Interstate System, we believe that, in the method used to allocate auxiliary route segments, the needs of all States should have been considered in order to provide assurance that the most critical needs of the Interstate System were fulfilled.

For the most part, the segments that were approved on a case-by-case basis are located in populous areas or furnish access to such areas from nearby through routes and, therefore, appear to provide general benefits within the

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concept of the Interstate System. However, one segment --Spur Route I-180--a 13.2-mile, four-lane highway--was approved for construction during this period and cannot, in our opinion, be considered to provide the general benefits normally associated with interstate highways because it will primarily benefit a steel plant located near the small rural community of Hennepin, Illinois. FHWA estimates that the total cost of this spur route will be \$47.1 million-the Federal share of which is \$39 million. The approval of this spur route is particularly significant when taking into consideration the fact that, at various times prior to its approval of I-180, FHWA refused to approve auxiliary routes for urban areas such as Tucson, Arizona: Greensboro, North Carolina; and Tacoma, Washington, apparently on the basis that the then available mileage was being held in reserve for adjustments to previously approved routes.

In our opinion, the information presented below relating to the approval of I-180 illustrates the problems which can arise when interstate mileage is allocated on a caseby-case basis without the benefit of a numerical rating system for ranking requests for mileage on the basis of relative merits.

APPROVAL AND CONSTRUCTION OF INTERSTATE SPUR ROUTE 1-180

FHWA's general policy with regard to the designation of routes provides, in part, that:

"In each system, [interstate, primary, and secondary] routes should be designated in descending order of importance irrespective of current status of improvement, considering existing and potential traffic, the advancement of economic and social values, the conservation and development of natural resources, the promotion of desirable land utilization and other pertinent criteria *** Where systems are being expanded, no route deserves acceptance until all routes of higher importance have already been designated or selected for concurrent designation." (Underscoring supplied.)

On January 25, 1967, FHWA approved Federal participation in the cost of constructing the addition to the Interstate System known as Spur Route I-180. FHWA defines an interstate spur route as a segment of highway with one terminus connected to another interstate route and the other terminus connected to a route of other than interstate character. This particular 13.2-mile interstate spur route is a controlled access four-lane divided highway which begins at a junction with I-80 east of Princeton, Illinois, (see photograph of interchange on p. 12) and proceeds south for about 9 miles to a junction with Illinois Route 29. The route then turns eastward across the Illinois River, proceeds about 4 miles, and ends at a junction with Illinois Route 71 at the main entrance to a steel plant located at Hennepin, a small rural community with a population of about 1,000. (See photograph on p. 13 and map on p. 15.)

The primary purpose of constructing this spur route was apparently to fulfill a commitment made by the State of Illinois to a steel company to provide a four-lane highway to connect the steel plant to the Interstate System as consideration for the company's selecting the Hennepin site for its new plant. No other interstate spur route has been constructed primarily to serve a private manufacturing company, and no other interstate spur route serves an area with such a small population.

In November 1969 Spur Route I-180 was open to traffic. Estimates of the construction costs--compiled by FHWA as of November 1969--indicate that the total cost of I-180 will be about \$47.1 million, or an average of about \$3.6 million per mile, and that the Federal share of the costs will be about \$39 million.

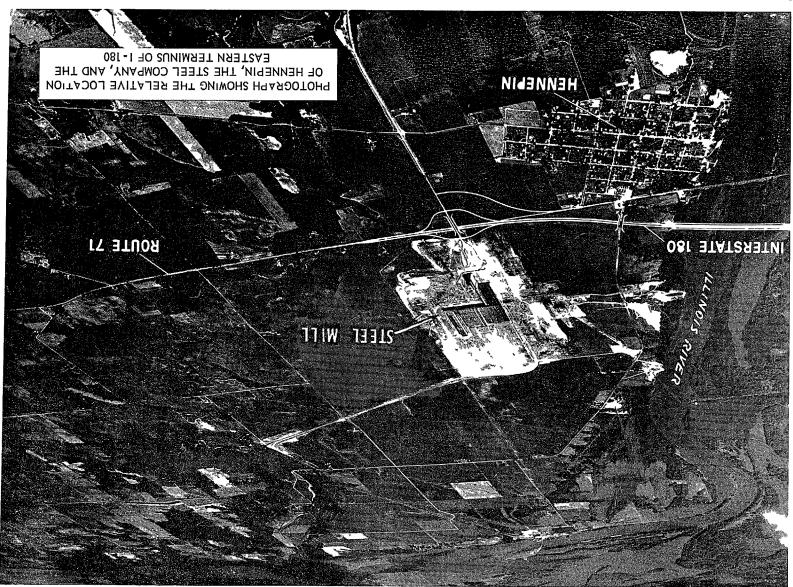
Events leading to the designation of I-180 as an interstate spur route

Early in 1965 one of the nation's larger steel producers was considering several sites for a new plant. One of the sites was near Hennepin, Illinois.

During a meeting with State officials in March 1965, the steel company advised the State that the only reason it was considering the Hennepin site as a possible location



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Source Federal Highway Administration

for its plant was because an existing east-west interstate route (I-80), about 9 miles north of Hennepin, would enable the company to more effectively deliver its products to market. To overcome the location disadvantages of the Hennepin site, the company stated that it would be necessary for a four-lane highway to be provided from its proposed plant site to an interchange on I-80.

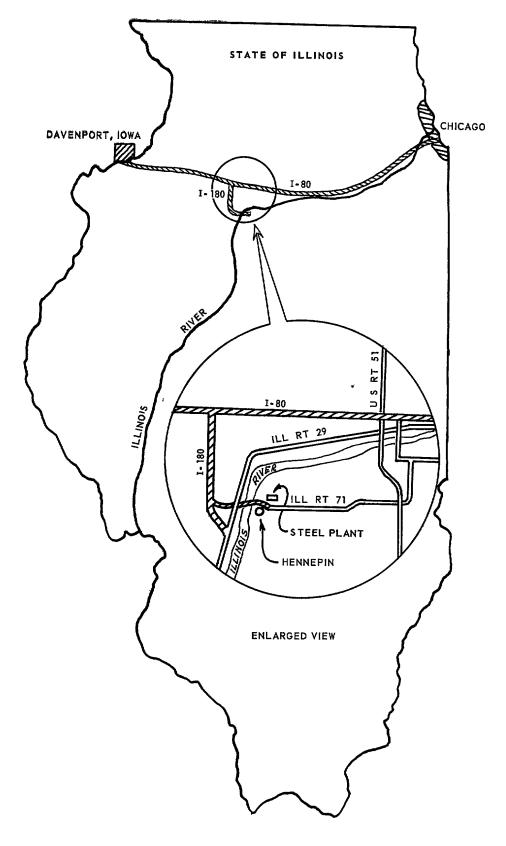
In April 1965 company representatives met with State officials and requested certain minimum highway improvements as a condition for constructing a new steel plant near Hennepin. These improvements related to a so-called "box" of highways around the plant, which consisted of I-80 on the north, Illinois Route 29 on the west, Illinois Route 71 on the south, and U.S. Route 51 on the east. (See map on p. 15.) The improvements requested by the steel company called for (1) the construction of a four-lane highway to provide access from the plant site to I-80, (2) an immediate upgrading of Illinois Route 71 to four lanes along the southern boundary of the steel plant and west to the proposed four-lane highway designed to provide access to I-80, which upgrading included another bridge across the Illinois River and (3) a long-range plan to provide a fourlane highway in the U.S. 51 corridor. The State advised the company that, on the basis of the small amount of additional traffic that would be generated by the steel plant, it saw no immediate need for a four-lane highway to provide access from the plant site to I-80.

By letter dated April 19, 1965, however, the State advised the company that the construction of a new bridge and a four-lane highway to connect the plant site with I-80 would be accomplished by the State, if financially possible. With respect to funding problems, the State commented:

"At present, as you know, these funds must come from the general revenue fund of the State. The Governor's budget has already been prepared and the budget message delivered to the State Legislature. This was not a part of the Governor's budget and, therefore, would require considerable additional money if the commitment for the entire project were made at this time."

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MAP OF HIGHWAYS AROUND THE STEEL PLANT



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"We are assuming, of course, that an announcement will be forthcoming discussing the intentions of your company. This will provide us with the necessary information to prevail upon the Legislature to pass a bill providing the entire \$19,250,000 needed for the entire project."

Shortly thereafter, the company announced that it had selected Hennepin as the site for its new plant.

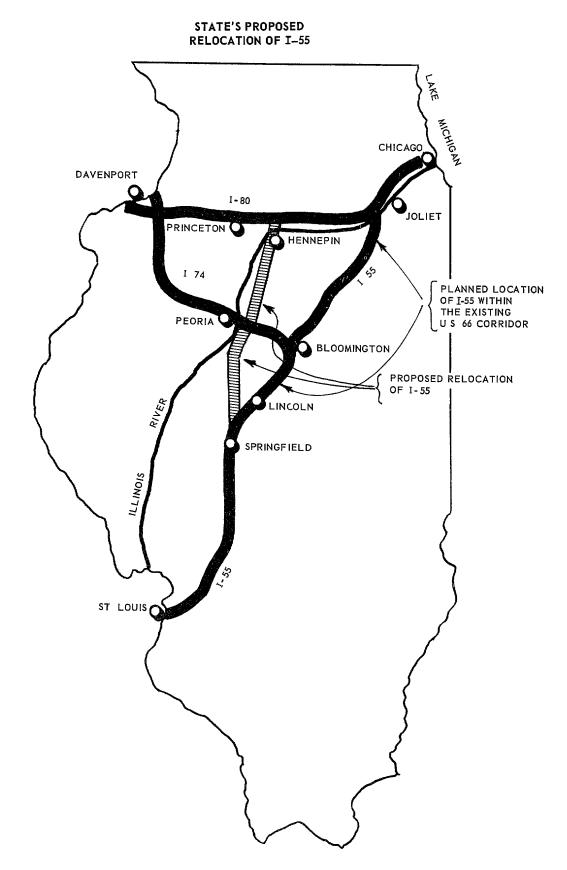
Although the State indicated that it intended to request funds from the legislature, the State submitted a request to the FHWA division engineer in August 1965 for permission to relocate a segment of the planned Interstate Route I-55 from its originally approved location to a new location in the vicinity of Hennepin. (See map on p. 17.)

In transmitting the State's request to FHWA headquarters on August 13, 1965, the Regional Federal Highway Administrator stated that the basic function of I-55 was to provide traffic service from St. Louis to Chicago and the existing U.S. 66 corridor appeared to provide the most direct route. He pointed out that the proposed realignment was 24 miles longer than the U.S. 66 corridor.

The steel company also objected to the relocation of the I-55 segment because the relocated portion would bisect the steel company's property. Accordingly, on August 25, 1965, the company advised the State that it was of the opinion that an understanding had already been reached with State officials as to the type of highway improvements which would overcome some of the locational disadvantages of locating its plant in Hennepin.

On August 26, 1965, the Regional Federal Highway Administrator advised the FHWA headquarters that the State's justification for relocating I-55 to a new corridor was rather vague and recommended that I-55 be retained in the U.S. 66 corridor.

During the next 16 months, FHWA headquarters and field personnel considered various alternatives to the State's



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proposal to relocate a portion of I-55. The alternatives considered during this period as a possible means of providing access to I-80 from the Hennepin area included (1) the use of Federal-aid funds authorized for use on the primary highway system to upgrade existing primary routes, (2) the use of Federal-aid primary funds to construct a new highway between I-80 and the Hennepin area and (3) the use of Federal-aid-interstate funds to construct an interstate spur from I-80 to the steel plant.

By January 1967 the steel plant was under construction and the State became concerned about fulfilling its commitment to the steel company to provide a four-lane highway from the steel plant to a junction on I-80. To expedite action on its request to relocate a segment of the planned I-55 so as to provide this access, the State requested a meeting with FHWA headquarters officials.

During this meeting on January 13, 1967, FHWA headquarters officials advised the State that, unless additional support could be supplied, FHWA could not favorably consider relocating I-55 from its presently approved location. However, FHWA officials proposed that the State give consideration to a compromise solution. Under the compromise proposed. FHWA would approve the construction of an interstate spur route from a point on I-80 to a terminus in the vicinity of Hennepin, upon a commitment from the State that it would improve (presumably to four lanes), as other Federalaid and State funds become available, an access-controlled route in the area of Illinois Route 29 from the proposed interstate spur south to Chillicothe, Illinois--where Route 29 was already four lanes--or possibly to a connection with another Federal-aid primary route in the vicinity of Peoria.

<u>Problems encountered as a result of accelerated</u> construction schedule to meet steel plant needs

Completion of the 13.2-mile spur route was originally scheduled for March 1968 to coincide with the scheduled completion of a portion of the steel plant. The steel company in March 1967 advised the State that it would be seriously handicapped if access to I-80, the east-west interstate through route, was not furnished by March 1968. Representatives of the steel company told the State that, if the access to I-80 were not furnished, its Hennepin plant would not be competitive with plants located in Indiana in terms of delivery of products to the Chicago market, and they expressed hope that the State, in cooperation with FHWA, would expedite construction of the link to I-80. The March 1968 deadline required that construction be accomplished on a highly accelerated schedule.

Although the State, with FHWA's approval, attempted to expedite construction of the project, a number of problems, apparently caused by the accelerated construction schedule, were encountered during the construction of I-180. These problems resulted in delays in construction and negated, to a certain extent, the benefits expected to result from accelerated construction. For example, we noted instances of construction delays occasioned by (1) contractors not being provided final right-of-way plans, (2) contractors being unable to gain access to required right-ofway, and (3) a redesign of the interchange at the eastern terminus of I-180 at the request of the steel company.

EXAMPLES OF PROPOSED AUXILIARY ROUTES TO POPULATION CENTERS NOT APPROVED BY FHWA

In June 1963 FHWA headquarters issued a directive to FHWA officials at the regional and State levels advising them that additional mileage was not available for allocation to new routes or for extension of existing routes of the then-authorized 41,000-mile Interstate System and that there would be no advantage or need for any State to submit proposals for new routes at that time. Notwithstanding this directive, between June 1963 and January 1967--the date when the 13.2-mile spur route to the steel plant in Hennepin, Illinois, was approved--several States requested additional mileage allocations for auxiliary routes and seven of these requests, including Spur Route I-180, were approved.

During this same period, however, a number of State requests for auxiliary route mileage were not approved apparently on the basis that the remaining unallocated mileage was being held in reserve for adjustments to previously approved routes.

We believe that, without a numerical rating system to rank requests for auxiliary mileage during this period, the various States may not have had an equal opportunity to compete for the mileage available. In this regard, we believe that the mileage requests discussed below appear to have had considerable merit in terms of traffic and national significance especially when compared with the merits of Spur Route I-180.

<u>Arizona</u>

On August 31, 1965, Arizona requested approval for modifying a 1.5-mile spur route from Interstate Route I-10 to downtown Tucson (1960 population was about 213,000) for the purpose of providing the city better access to the Interstate System and lessening traffic congestion.

FHWA advised the State on September 23, 1965, that approval could not be granted because of the 41,000-mile statutory Interstate System limitation but that the request

would be placed on file for consideration, on a nationwide basis, if and when additional mileage became available.

Subsequent to the authorization of an additional 1,500 miles of interstate highway by the Federal-Aid Highway Act of 1968, the State again requested approval for modifying the spur route. However, the request was not approved by FHWA.

North Carolina

On June 19, 1963, North Carolina requested additional interstate mileage for several metropolitan areas because of problems with high volumes of traffic. The request for mileage included urban auxiliary routes which amounted to 3.1 miles for Asheville (population 69,000), 3.5 miles for Greensboro (population 123,000), and 25.4 miles for Fayetteville (population 75,000). In addition, a 10-mile belt loop for Durham and a connecting 17.6-mile spur from the belt to Raleigh were requested. (The 1960 population of the Raleigh-Durham area was about 280,000.) FHWA advised the State that its request would be retained for consideration in any future expansion of the Interstate System.

- Spurs for the Asheville, Greensboro, and Fayetteville areas had not, at the time of our review, been granted, but interstate service to the Raleigh area had been provided by system additions authorized by the Federal-Aid Highway Act of 1968.

<u>Washington</u>

On December 29, 1966, Washington requested approval of a 1.5-mile spur into Tacoma (1960 population of about 148,000) from I-5 to prevent congestion on I-5. In addition, the spur route was to provide interstate service for a large volume of interstate traffic which originated in the central business district; the industrial district; and nearby marine, rail, and truck terminal points.

FHWA advised the State on February 17, 1967, that its request was being placed on file for consideration if and when additional mileage for the Interstate System became available. On October 28, 1968, the State submitted a revised proposal which was designed to provide interstate service to the commercial and industrial area and to divert some of the traffic from existing routes. Although the revised proposal was considered by FHWA in its allocation of the 1,500 miles authorized in 1968, the route was not approved.

CHAPTER 3

AGENCY COMMENTS

In a letter dated March 17, 1969, the Assistant Secretary for Administration, Department of Transportation, responded to certain questions we had raised concerning the justification for and the circumstances surrounding FHWA's decision to add Spur Route I-180 to the Interstate System. The Assistant Secretary advised us that FHWA had found that its decision to add I-180 to the Interstate System was a proper administrative action within the criteria established for the selection of the Interstate System.

In this regard, he stated that, although the Hennepin area was rural in character when the route was approved in January 1967, FHWA found the area to be rapidly changing into what was expected to become a major industrial center and felt that the construction of the steel plant would, within the 20-year statutory period, be the impetus for the generation of traffic volume which would justify an interstate highway to serve the area.

We cannot agree that FHWA's forecast that the Hennepin area would become a major industrial center within the next 20 years was sufficient justification for approving the construction of a \$47.1 million spur route to serve this area.

According to section 103(d), title 23, United States Code, the Interstate System was designed to connect by routes as direct as practicable, the principal metropolitan areas, cities, and industrial centers. Over the years FHWA has apparently construed this statutory requirement to mean that the Interstate System will link those densely populated urban areas and industrial centers of national importance which are already in existence.

No other auxiliary route has been approved on the basis that the area which it was to serve had the potential to become an industrial center or the potential to become a metropolitan area. The nature and character of the Interstate System is to serve existing needs rather than speculative needs. Moreover, it should be noted that in 1967 FHWA approved the construction of I-180 to serve one steel plant and a town with less than 1,000 people on the basis of expected industrial growth, while in 1968 FHWA could not justify approving an interstate extension of I-180 southward to the vicinity of Peoria--an area with existing industries and a population in excess of 200,000--because it did not have a sufficiently high priority when compared with other State requests for mileage. In this regard, FHWA-after using a numerical rating system and ranking, in the order of priorities, the State requests for mileage from the 1,500 miles added to the Interstate System in 1968--refused to approve this connection on the basis that other proposed route segments had a higher priority in terms of overall system needs.

The Assistant Secretary also stated that, contrary to other areas referred to in our report, the Hennepin area was undergoing a rapid and radical change in character from rural to industrial and there was a resulting urgency in upgrading the area's rural highways. In our opinion, the "urgent need" was not caused by a "rapid change in character from rural to industrial" but by a commitment of the State of Illinois to the steel company that a four-lane highway would be provided to connect the steel company's plant with the Interstate System. Moreover, although the upgrading of rural highways in the area may have been necessary, the use of interstate funds and mileage for this purpose does not seem to be appropriate, particularly since there are other Federal-aid funds available for this purpose.

In our draft report, we proposed that, to ensure that all States have an equal opportunity to compete for interstate mileage, the Secretary of Transportation direct FHWA to discontinue allocating Interstate System mileage on a case-by-case basis and that all future allocations of mileage for interstate routes be subject to FHWA's numerical rating system which ranks requests on the basis of priorities which are designed to reflect the most important needs of the Interstate System.

By letter dated February 16, 1970 (see app. I), the Assistant Secretary for Administration agreed that the States should be afforded an equal opportunity to compete for interstate mileage and that this mileage should be allocated to serve the most important needs. However, he was of the opinion that no rigidly applied system of numerical ratings could adequately measure the relative merits of competing State applications for interstate mileage, particularly where an urgent need arises for adjustments to additions to specific short-route segments.

We agree that a numerical rating system may not encompass every factor which may have a bearing on the relative merits of various State requests for additional interstate mileage. We are not proposing that a numerical rating system be applied so rigidly as to preclude officials responsible for managing the Federal-aid highway program from exercising their judgment when the circumstances warrant. We believe, however, that, to effectively exercise such judgments, these officials must have available to them a means of clearly identifying various alternatives so that, when dealing with the problems of the magnitude encountered in interstate mileage allocations, they will have a proper framework for more informed management decisions.

CHAPTER 4

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

FHWA's decision to approve a 13.2-mile interstate spur route in a rural section of Illinois which appears to be primarily for the purpose of providing a steel company direct access to the Interstate System was inappropriate, especially when other routes which appear to have been more justified in terms of traffic and national significance at the time were not approved. We believe that a numerical rating system would have highlighted the fact that this spur route is not in consonance with the nationwide character of the Interstate Highway System, especially when compared with other proposed or existing auxiliary routes, and would not have qualified as an addition to the Interstate System.

FHWA's approval of certain auxiliary route segments on a case-by-case basis without using a numerical rating system for ranking the various State requests for mileage on the basis of their relative merit was contrary to its own established practice of approving additions to the Interstate System only after systematically rating, evaluating, and comparing the relative needs of all the States. Approval on a case-by-case basis provided little assurance that the States would have equal opportunity to compete for available interstate mileage.

In view of the nationwide character of the Interstate System, we believe that the method used to allocate auxiliary route segments should have considered the needs of all the States to provide assurance that the most critical needs of the Interstate System were relieved. In addition, the States whose requests for additional mileage were not previously approved should be assured of an equal opportunity to compete for any additional interstate mileage which may become available in the future.

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Accordingly, it is incumbent upon FHWA to ensure that future allocations of interstate mileage that may become available are made only after a careful comparison of all proposed routes rather than on a case-by-case basis.

RECOMMENDATION

To provide more assurance that (1) the various States are afforded an equal opportunity to compete for any additional interstate mileage which may become available, (2) the mileage is allocated on the basis of the most important needs of the Interstate System, and (3) responsible officials have a means of comparing the relative merits of all State requests for mileage, we recommend that the Secretary of Transportation require that FHWA's practice of approving requests for interstate mileage for auxiliary routes on a case-by-case basis be discontinued and that a numerical rating system be used to rank requests for such mileage on the basis of priorities which reflect the current objectives of the Interstate System.

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CHAPTER 5

SCOPE OF REVIEW

Our review included an examination into (1) Federal highway legislation and regulations governing the authorization and allocation of Interstate System mileage and (2) the development of criteria, policies, and procedures used by FHWA as a basis for allocating interstate mileage to the States and the application of such in selected cases. Our review included also an analysis of FHWA and State highway department records regarding the justification, approval, and construction of Spur Route I-180 in the State of Illinois. Our work was performed in Washington, D.C., at FHWA headquarters and in Springfield, Illinois, at the FHWA division office and at the Illinois State Highway Department.

APPENDIXES

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APPENDIX I Page 1



OFFICE OF THE SECRETARY OF TRANSPORTATION WASHINGTON, D C 20590

ASSISTANT SECRETARY FOR ADMINISTRATION

February 16, 1970

Mr. Bernard Sacks
Assistant Director
Civil Division
U. S. General Accounting Office
Washington, D. C. 20548

Dear Mr. Sacks

This is in reply to your request for our comments on your draft report to Congress entitled "Review of Allocation of Auxiliary Interstate Routes on Basis of Individual State Requests."

As indicated in your report, the major allocations of Interstate mileage (42,500 miles) generally have been on the basis of the relative importance of the routes. However, you indicate that FHWA has allocated about 113 miles for certain auxiliary routes on an individual State basis without considering the needs of all States.

Your report recommends that we direct FHWA to discontinue approving Interstate mileage on a case-by-case basis and that all future allocations of such mileage be subject to a numerical rating system.

It should be noted that many of the 16 cases cited in your report (see attached list), were approved because of statutory requirements or were redesignations of routes in the same States.

We feel that the States should be afforded an equal opportunity to compete for Interstate mileage and that this mileage should be allocated to serve the most important needs. Nevertheless, we feel that no rigidly-applied system of numerical rankings can adequately measure the relative merits of competing applications for Interstate mileage, particularly where an urgent need arises for adjustments or additions to specific short route segments. APPENDIX I Page 2

While the relative merits of competing applications should be considered in such cases, consistent with the mileage available, we feel that final judgments must be left to the discretion of those officials entrusted by statute with the responsibility of managing the Federal-aid highway program. Additional Interstate mileage will be allocated accordingly.

We appreciate the opportunity afforded us to comment on your draft report.

Sincerely,

Ålan L Dean

Attachment

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LISTING OF SEVEN AUXILIARY ROUTE SEGMENTS APPROVED BY

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FHWA ON A CASE-BY-CASE BASIS

<u>State</u>	Route desig- nation	<u>Mileage</u>	Date approved by FHWA	Description of route	Estimated population of area <u>served</u>
Wisconsin	I-794	3.74	7-24-64	Spur route from I-94 to the city of Milwaukee This spur was designed as a par- tial solution to Milwau- kee's traffic and economic growth patterns.	741,000
Missouri	I-155	25.10	8-28-64	Spur route from I-55 near Hayti, Missouri, to the Missouri-Tennessee State line near Dyersburg, Ten- nessee. This spur includes a bridge over the Missis- sippi River and affords the only crossing for a 150- mile stretch of the river.	25,000
Louisiana	I-310 ^a	3.13	10-13-64	Spur route from I-10 in New Orleans along the Missis- sippi riverfront to Pont- chartrain Expressway	628,000
Texas	1-345	1.33	10-15-64	Spur route from I-45 and I-20 in the city of Dallas northerly to a connection with U.S. 75	680,000
Florida	I-395	1 17	10-15-64	Spur route in the city of Miami from junction with I-95 easterly to MacArthur Causeway	355,000
Illinois	I -1 80	13.15	1-25-67	Spur route from I-80 near Princeton, Illinois, to a private steel company near Hennepin	869
Texas	I-110	0.91	3-28-67	Spur route from I-10 in El Paso southerly to the Cordova Port of Entry	277,000
Total mile age	-	<u>48.53</u>			

^aThis spur route was subsequently deleted from the Interstate System.

OFFICIALS OF THE FEDERAL GOVERNMENT

RESPONSIBLE FOR THE ADMINISTRATION OF

THE FEDERAL-AID HIGHWAY PROGRAM

	Tenure of office			
	Fre	om	To	2
SECRETARY OF TRANSPORTATION (note a). John A. Volpe Alan S. Boyd	-	1969 1967		
SECRETARY OF COMMERCE (note b): Alexander B. Trowbridge (acting) John T. Connor	•	1967 1965		
FEDERAL HIGHWAY ADMINISTRATOR (note a): Francıs C. Turner Lowell K. Brıdwell		1969 1967		
DIRECTOR OF PUBLIC ROADS (note c). Ralph R. Bartelsmeyer Francis C. Turner Rex M. Whitton	Jan.	1969 1967 1961		1969

^aPosition created by the Department of Transportation Act (Public Law 89-670).

^bAll functions, powers, and duties of the Secretary of Commerce under certain laws and provisions of law related generally to highways were transferred to and vested in the Secretary of Transportation by the Department of Transportation Act.

^CTitle changed from Federal Highway Administrator, Department of Commerce, in April 1967.

US GAO Wash, DC