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EXPRESS HIGHWAY POLITICS, 1939-1956

DISSERTATION

Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy in the Graduate School of The Ohio State University

By

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* * * * *

The Ohio State University

1973

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PREFACE

In 1956 Congress approved legislation which provided for a marked acceleration in the rate of constructing the American highway system. Quite correctly, most attention focused on the authorized increase in the pace of completing the National System of Interstate and Defense Highways. In later years, this network of new freeways had significant consequences for a number of facets of American life. Engineers ordered wide paths sliced through slums or urban centers and lopped the sides from mountain ranges. The Interstate system also extended immeasurably the scale of travel open to Americans. At the same time, expenditures for highway building boosted the economy during most of the ensuing years of construction.

Such results alone, however, do not provide the sole justification for historical analysis of express highway politics. For that matter, this study is not primarily a narrative of the impact of road building on social configurations or the landscape. These matters are documented richly in a number of works. Rather, I undertook this study with a view toward better comprehending the major themes in recent American history. In the initial stages of research,
I focused on the relationship of road construction to urban renewal planning and the debate over the significance of highway building for economic growth. I learned subsequently that conflict over the apportionment of highway funds or route location was related to several key tensions in American life. Nevertheless, the main focus of this study has been on the day to day problems and hopes of highway-minded groups and the manner in which their experiences shaped their goals and more distant visions or contributed to the political structures which they left behind.

The scholarship and social criticism of many people have shaped my consciousness. Most of the faculty under whom I studied at Roosevelt University and The Ohio State University contributed to my struggle toward becoming a historian. To name some of them may offend unnecessarily others whose names I would carelessly omit.

Several people assisted me in special ways. The archivists and librarians at the institutions listed in my bibliography always were helpful. K. Austin Kerr, my advisor, offered freely so many fresh ideas and then served as a model for commitment to intellectual integrity. More important, perhaps, he was tolerant while I tried to learn. Professor John C. Burnham made immensely useful suggestions for the research and writing of this dissertation. In addition, his tingling criticism taught me a good deal about the proper spirit of professional interaction. Of course, my
parents were supportive and understanding throughout. Marsha Shapiro Rose, my wife, also was supportive; and she contributed more to my analysis of highway politics than my reputation as an historian, such as it may be, will permit me to confess. Marsha was patient too.
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PAPERS


FIELDS OF STUDY

Major Field: History

American Political History--Twentieth Century.
  Professor K. Austin Kerr

American Social and Economic History.
  Professors Mary E. Young and John C. Burnham

American Social Thought.
  Professor Robert H. Bremner

American Urban History--Twentieth Century.

British History--Nineteenth and Twentieth Century.
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Transportation is a key element in the social and economic organization of any industrially developed society. So much is this the case, in fact, that some economic historians have argued that the course of the industrial revolution, at least in America, depended on the construction of transportation links. And even more generally, a relatively complete transportation network has been important in the diffusion of new values throughout the nation.

Quite obviously, highways are a part of the transportation system. And throughout the twentieth century, they have played an increasingly important and perhaps critical part. Certainly the presence of several million miles of paved roads has facilitated the decentralization of urban areas and the depopulation of rural ones. Within the cities, proximity to certain highways has raised or lowered property values. In many places streets have served as the focal points for the urban milieu and occasionally they have acted as the boundaries for group life. Road building has also served as a staple item in the repertoire of acceptable
measures to curb unemployment.

Surprisingly, scholars have exhibited little interest in highway promotion activities. There are only a few studies of early twentieth century road building politics and virtually no systematic assessment of more recent developments. The authors of these studies have touched only briefly on aspects of Congressional intent regarding road building legislation or on problems of highway finance. For that matter, there has been little examination of highway affairs from an historical point of view.

In recent years, of course, social critics have focused on the consequences of expressway construction. Much of this literature is written tendentiously. For the most part, critics have sought to explain highway building, especially construction of the Interstate, as not much more than an attempt by a collection of road-related groups to destroy rustic charm and urban communities and impose unnecessary highways on a foolish public.

The popular view of road construction is even more jaundiced. Nearly everyone welcomes a new highway, especially if it will facilitate their movement about. In large part, however, they believe that its construction resulted from an unsavory alliance of real estate operators, politicians and contractors who are interested primarily in raiding the Treasury.

Actually the development of the American highway system
since the late 1930's has involved much more than the liquidation of a few financing problems or winning some friends in Congress or the state legislature. In good measure, the American road network was an expression of the largely local efforts of many groups to secure social, economic and ideological goals through the construction of highways. This broad complex of interests was especially important to the development of the Interstate Highway System.

Toward the latter part of the Great Depression, Americans faced several serious problems. Urban decay continued with little significant attention from anyone. Depending on one's point of view, urban deterioration was an eyesore or a source of economic loss and social disintegration. Severe traffic congestion was a second problem, as more and more autos, buses and trucks crowded onto narrow rural and urban roads, slowing vehicular movement to a near halt. In addition, there was the immense difficulty of finding employment for the millions still without work. At the same time, the nation commenced preparation for war; yet many parts of the highway network were not adequate for regular civilian use. By 1939 the concept of a national expressway system had emerged as a response to these problems. Most of the prewar difficulties lingered through the Second World War and then into the 1950's, yet there was little diminution in the widespread conviction that expressways could assist with their resolution anyway.
Nonetheless, a growing interest in freeway development was not a sufficient basis for building the system. In 1944, Congress authorized construction of the Interstate network, but it did not approve special funding for it until 1952. To that point, Interstate construction had limped along on whatever funds officials were willing to siphon from the other highway networks. Moreover, the 1952 authorization amounted to $25 million, just enough for a few freeway miles in some large city. It was not until 1956 that Congress and highway-minded groups would commit themselves to provide the financing required to complete the 41,000 mile Interstate System within a thirteen year period.

Intense political conflict among highway-related groups and government agencies was largely responsible for the delay. Part of the debate, quite simply, was over financing. In such matters, arguments tended to run along lines of self-interest. But highway politics revolved around more than a division of the spoils. Quite diverse approaches to economic growth, highway transport or urban development blocked an expanded road building program. Debate was bitter and unrelieved between proponents of federal direction of the economy or road affairs and those who advocated private or local initiatives. Frequently this debate overlapped with another basis of disagreement. Those who supported community standards of road construction and design often clashed with practitioners of the more general values of
efficiency. Attachment to professional or bureaucratic norms formed the basis for additional disputes. For a good many years, moreover, highway organization leaders divided between those who entertained a dynamic or expansive vision of the future and others, more reluctant, who were happy to manage a relatively static system.

Divisions within the highway industry and the patterns of conflict resolution were one aspect of the lines of tension in recent American politics. America was a divided nation. Economics was at the root of some of the strife as groups struggled fiercely for a greater share of the nation's income. But a circumscribed perception of social responsibilities often was at the heart of many disputes. Defining their goals as fundamental and non-negotiable, groups pursued narrow objectives with little concern for the external consequences of their actions. In turn, this approach to the nation's problems was the result of divisions along fairly rigid occupational lines. Diverse training and needs as well as the unique daily concerns of professional, bureaucratic or commercial organizations shaped distinct behavior and attitudes toward external events. Under these circumstances, there was not much space available for intergroup maneuver or concession. Indeed, political conflict was the prevailing theme in recent American history.

This study leads in several directions. In the first place, I am interested in examining the historical
development of the American highway industry. My larger interest is in an exploration of the development of fairly distinct behavior and beliefs in professional and business life and an assessment of the patterns of group interaction and conflict accommodation. Finally, this study will develop the themes of continuity and change within the fields of urban and road transportation history as well as in recent American history generally. Hopefully, my analysis will serve as a worthwhile background for more intensive examinations of other industries and other facets of the post-war experience. What I have in mind, ultimately, is a recreation of some of the patterns of American political life.
HIGHWAY CONSTRUCTION AND POLITICAL CONFLICT

America was a difficult place in which to live toward the end of the 1930's. Urban deterioration certainly comprised a large part of this problem. Most cities were in deplorable physical condition. Slum dwellings, often housing recent migrants to the city, surrounded the central area of almost every urban center. Property values in adjacent districts and the central business districts plummeted. Partially in response to these conditions wealthier residents took flight to the city's periphery, leaving behind a tangle of decaying buildings and unrented space. To move a small distance however, meant that the conditions from which the family had fled were only a short time away. All the while, the old neighborhood continued to rot while downtown sales and property values declined further. This process reduced the city's tax base, rendering the provision of rehabilitative services progressively more difficult. Automobile and industrial smog and the occasional flooding of polluted rivers added to the intolerable state of affairs.

The American highway network was also in poor condition.
There were millions of miles of roads in the United States, many of which had been recently constructed to a high level of engineering standards. Yet the bulk of traffic traveled over a relatively small percentage of the highway network, and these roads were inadequate to the vast demand. Highways and bridges were frequently too narrow or insufficiently reinforced for crowded, high-speed traffic. Vehicular movement on such highways was slow, costly and often deadly. Easy access to the roadway from business establishments and homes tended further to slow traffic or increase hazards. Short curves were an additional source of danger and delay. As the nation readied for war, highway deficiencies were a source of special concern.

The inadequacy of the highway system was a factor in urban deterioration. While roads near downtown sections were usually the oldest and least prepared for dense traffic movements, urban traffic generally headed in the direction of the central city area, where it regularly became clogged. Under these circumstances, a trip downtown was a harrowing or exhausting journey, and irritating if there was no place to park. As a result of these conditions, downtown sales continued to decline while the value of property adjacent to old roads fell even further. The widening of near downtown streets could alleviate these conditions, but only for a short time. In the meanwhile, new or remodeled roads near the city's outskirts facilitated the outward movement of
A third problem overlay traffic or urban deterioration. Nearly ten years of strenuous effort by government and private industry had not overcome the Great Depression. Millions still were unemployed or working for minimum pay at jobs well below their skill level. The least fortunate among them usually populated the most dilapidated parts of the city, or so it seemed.

Such, in brief, was the generally acknowledged condition of depression era America. But Americans did not intend to permit urban decay or traffic congestion to continue. There was a general agreement that more highway construction, particularly of wide, rapid flow freeways and express roads, could alleviate these problems considerably.

It was at about this point that the near consensus ended, however. Most highway-minded groups entertained narrow perceptions of the role of road construction. Broadly speaking, there were four major viewpoints involved in the discussion of highway policy during this period, each supported by fairly large coalitions. They were: an urban interest, composed principally of city planners sometimes allied with local business elites; President Roosevelt and some of his cohorts concerned principally with using highways as public works to alleviate unemployment; the users, mainly commercial, interested in expediting traffic; and, finally, a defense viewpoint, concerned with highway policy
as an integral part of military preparedness. Highway engineers joined the city group occasionally, although most of them preferred to direct the bulk of their attention to speeding traffic flow. Spokesmen for these concerns interacted in a variety of ways. The net result, at the onset of America's declaration of war upon the Axis, was an ambivalent, sometimes inconsistent, and seemingly incoherent national policy toward highways, especially express highways.

PLANNERS AND A REMODELED CITY

By the late 1930's professional city planners had emerged in American society capable of emphasizing in policy discussions a shared belief in the importance of giving long range, elite guidance to city development. Their common concern was to devise rational plans for the orderly usage of land to control city and metropolitan growth. Some were more concerned with the aesthetics of the urban environment than others; some were conscious of a need to direct the distribution of population so as to channel types of social integration; still others emphasized the maximization of commercial and industrial growth in their thinking. In any case, many planners perceived of freeways as useful, if only partial tools of urban reconstruction.

Land use and its relationship to intracity transportation seemed the overriding concern among planners who were addressing a national constituency. For the most part, they
perceived express highway construction as an important, though subordinate, feature of their plans. As they saw it, new roads would service reconstituted cities. One of the most important American planners, Harland Bartholomew, devoted his efforts to a solution of urban problems which proceeded along these lines.

Bartholomew had extensive experience in city planning. He had served as Planning Director of the St. Louis Regional Planning Association and his firm, Harland Bartholomew and Associates, had completed plans for the renovation of a number of cities. In addition, Bartholomew was active in national planning organizations. To a great degree, his views were fairly close to those of most city planners.¹

The uninhibited growth of American cities appalled Bartholomew. The economic losses resulting from the lack of controlled development were large, he told a convention of street car operators. But these were insignificant when compared to the losses which would be incurred if outward movement from the cities was not checked. Bartholomew advocated several methods for the control of urban expansion. He suggested the creation of regional governments which, in turn, would prepare comprehensive plans for area-wide growth. The employment of economic levers was a second technique to direct the city toward "a more orderly and sound development." Bartholomew argued that the Federal Housing Authority officials could, if they wished, encourage more desirable
land use. He was less optimistic, however, about being able to coordinate mortgage company lending policies or the results of such action.²

Street and transportation planning, according to Bartholomew, also were useful instruments for creating a compact city. Since most people preferred to live within a thirty minute travel range from downtown, Bartholomew argued that it was possible to arrange local transportation routes so that they could assist in the construction of "a sound, stable and orderly city structure." In addition, the trend toward urban decentralization could be retarded through the application of improved traffic control methods and the separation of intersections, especially near the central business district.³

The blighted neighborhoods which remained after a large portion of the population had moved from them also concerned Bartholomew. It was imperative to create an environment conducive to a stable urban population, he told the National Conference on Planning, and the most appropriate unit for encouraging this setting was the neighborhood in which shopping and service establishments were coordinated with single and multiple family dwellings. Bartholomew added that there was little possibility of erecting comprehensively planned urban areas if neighborhoods were not planned in relationship to other types of areas. All of this rebuilding had to take place within the confines of a well-planned street and
Bartholomew was not alone among planners who envisioned using streets and highways as a key device in controlling urban growth. Another was Harold S. Buttenheim, the publisher of the American City magazine, and one of the most important figures in city planning circles. At one time or another, Buttenheim had been a member of the National Municipal League, the Study Director of the Urbanism Committee of the National Resources Committee, and an officer of the nation's leading planning groups. Buttenheim sought to direct the long-term development of the city, at least in part, through the efficacious use of street planning.

As a planner, Buttenheim envisioned an urban environment in which land was utilized along orderly and rational lines. Consequently, the irregular land use policies of most cities were inadequate and distressing to Buttenheim. In the center of the city, he noted, commercial activities were congested and neighborhood residents lived in squalid conditions. In other sections of the city, moreover, there was an ad hoc and inefficient mixture of homes and businesses through which were interpolated open space or apartments and homes.

The source of this jumbled development, Buttenheim argued, was not just individual avarice but inadequate public land policies. He recommended control by regional agencies of future housing developments, slum clearance, zoning, and,
in order to reduce speculation in idle land, a tax on land-value increments. But the key device available to city governments for controlling urban growth was a street plan. Buttenheim claimed that the street system was vital to any plan for directing the nature and efficiency of urban development. In those cities in which there were no intervening physical barriers, he asserted that commercial and manufacturing enterprises tended to scatter through residential areas indiscriminately. On the other hand, if a city was built around a street system which was specialized according to traffic use, then "the street plan itself more or less automatically exclude[d] business and industrial uses from residential areas and confine[d] them to the main traffic arteries." The character of a neighborhood followed from the application of this principle. Where the goal was to develop a section of small, family-owned residences, the streets should be narrow and without sidewalks. Parkways and non-commercial boulevards also were effective promoters of residential development. On the other hand, the creation of business districts required wide streets with less distance between intersections as well as minimum grades and access to railroad terminals. Buttenheim and other city planners also advocated a program of excess condemnation for highway rights of way as an important adjunct to the use of streets to control urban
development. Following the widening of a street or the construction of a new road, useless fragments of land often remained. If excess condemnation were permitted, Buttenheim promised that the remaining parcel could be sold to the public or adjoining owners who would be able to add it to their property.⁹

A second function of excess condemnation was more aesthetic. Buttenheim was of the view that if a city constructed a road or park, the adjacent area should enrich rather than detract from "the desired effect." In order to achieve this goal, he recommended the condemnation of surrounding territory and its resale with "restrictions to maintain desirable standards."¹⁰

Recouping the costs of construction was another anticipated benefit of excess condemnation. The rights-of-way for urban highway construction were costly; but, with the completion of the new road, the value of nearby property often increased. Buttenheim urged public agencies to take full advantage of that increase by purchasing land at current market values for resale after completion of the highway. The advantages were obvious; the profit on the sale would partially or even fully cover the cost of the road, and might even produce some income for the city.¹¹

Buttenheim also believed that excess condemnation might prove to be a useful device for eradicating slum properties. The taking of extra land as part of a project could, in fact,
result in the redevelopment of those sections. Excess con­demnation was, nonetheless, not approved by the courts who, according to Buttenheim, refused to adopt a liberal view of the public's welfare.  

Wilfred Owen, a research economist employed by the Highway Research Board, suggested a popular variant of these schemes. Owen was conscious of the perceived problems of American cities, including the flight of residents from de­clining neighborhoods, the expenses incurred by cities in the provision of services to these areas, and the subsequent withdrawal of wealthier families to the suburbs. Inadequate zoning which permitted businesses to locate near private dwellings exacerbated these difficulties. The result was indiscriminate population dispersion which could not be ser­viced by mass transit, a reliance upon automobiles for mo­bility, and a subsequent increase in downtown congestion. Owen recognized that a reduction of these difficulties re­quired a reconsideration of the urban complex as a whole. Nonetheless, he took the view that the creation of suffi­cient off-street parking in the central district, with a link to an express highway system, would make a contribution toward reducing the magnitude of the problem.  

Local planning groups, sometimes allied with business groups, sought to remodel their cities along lines roughly similar to those sketched by Bartholomew, Buttenheim and Owen. Civic leaders shared with the first group of planners
a sense of concern about decentralization and declining property values and accepted the propriety and possibility of controlling these changes. Unlike the national planners, however, they directed the thrust of their remedial efforts primarily toward the central business districts.

The Urban Land Institute, an independent creation of the National Association of Real Estate Boards, pointed out that the central business district was the home of the nation's financial and commercial organizations. Institute leaders expressed the fear that if this area was permitted to deteriorate further, then "'much of what we now prize as civilization'" would not endure. The President of the Institute, Walter S. Schmidt, developed this theme in a report on Cincinnati.

Schmidt had been associated with business and city improvement schemes in Cincinnati for many years. As he saw it, one of the city's most important tasks was to protect "the enormous social and economic investments bound up in the central business district..." and "build new ones." To this end, he recommended that the City Council appropriate funds to hire experts who would update Cincinnati's master plan. Schmidt urged a vigorous program of smoke abatement, a long-range housing program, and the construction of a freeway around the central business district as items central to the plan. As part of the downtown renewal effort, Schmidt called upon the city to ban traffic from the CBD; commuters
could park their autos in city lots at the periphery of the central area.\textsuperscript{15}

Planners and civic leaders in other cities accepted more or less the urgency and logic of the Urban Land Institute's program. The relationship, of course, was not causative but circular and cumulative. The problems addressed were universal; they borrowed frequently from one another in an effort to find some cure for the decline of their cities.

Most of the common urban difficulties facing Americans were also present in Chicago. The General manager of the Chicago Regional Planning Association, Robert Kingery, reported that the population surrounding the city's downtown had declined more than 260,000 during the period 1910 to 1930. An equal number of people had departed during the past ten years, he thought, causing a considerable loss of trade to downtown merchants. Kingery asserted that continued decentralization and the decline of sales in downtown stores posed a threat to "much of the entire economic future of Chicago...."\textsuperscript{16}

According to Kingery, construction of a freeway system was the key to Chicago's revival. The Regional Planning Association of Chicago had designed an express road network for the area during the 1920's, but a lack of funds and other impediments had blocked construction. When these obstacles were overcome, Kingery planned to locate many of the intracity roads through "decadent areas" where a few
buildings had been demolished already. In this way, he promised, the road would not harm and might very well enhance the values of decaying sections, helping "to restore them to a tax paying condition." Kingery assumed further that recreational facilities would be provided near the expressways. Although highways would not create the parks, they would "inspire" the appropriate zoning and park officials to do so.¹⁷

During the years immediately preceding American entry into World War II, public and private planning officials as well as downtown business leaders groped toward a solution of the urban dilemma. There were differences of emphasis among them. A few thought in terms of region-wide plans and multiple programs while others opted for a downtown-first policy and emphasized freeway construction. Nonetheless, national and local planners rejected a policy of drift in favor of regulation and direction of urban development. All of the groups interested in urban decay or traffic problems did not endorse this strategy.

ROAD ENGINEERS AND TRAFFIC EFFICIENCY

A few highway engineers were convinced of the potentially beneficial relationship between freeway construction and urban rejuvenation. They often claimed that one of the sources of decentralization and central business district (CBD) decay was inefficient traffic movement. As a
result, some engineers advanced plans for urban expressways and off-street parking as viable methods of relieving crowded downtown streets and hence making them more attractive places near which to conduct business. Unlike the planners and downtown business leaders, however, they rejected plans for the overt management of the city's future.

Members of the American Road Builders' Association Committee on Elevated Highways, a group composed primarily of city and state road and traffic engineers, focused their attention on developing more adequate traffic facilities in America's urban centers. If these were not supplied, the Committee claimed, then cities would face stagnating business, declining property values, a reduction of revenues, and "the infiltration of death and decay." Yet Elevated Highway Committee members rejected what they perceived as the planners and architects' dreams of "Cities of Tomorrow." Committee members also opposed attaching a highway project to "any great scheme of slum clearance, or...unmoral scheme of landgrabbing." The solution to urban difficulties, they concluded, was largely one of improving traffic flow.18

The employment of roads for urban renewal purposes, however indirect, actually was the expression of a minority view among highway officials. Most state highway engineers urged an even tighter definition of highway construction. They could accept the argument that express roads or even mass transit were valuable tools for urban redevelopment.
In their own work, nonetheless, most state highway engineers aimed almost exclusively at expediting sluggish traffic movement.

America's highway system was inadequate for the demands placed upon it. Even roads only a few years old soon were out of date. Part of the problem was inadequate standards of design, but the major factor in the daily traffic tangles and increased accident rate was the multiplication of traffic. If left to themselves, engineers promised to solve the highway dilemma through the application of the principles of traffic efficiency.

Highway engineers frequently justified a proposed route according to indices of economic benefit. One of the more popular measures of a road's utility was the solvency ratio, or the amount of a highway's earnings divided by the costs of construction, maintenance, and interest on bonded indebtedness. A road's earnings were a calculation of the savings to bus, auto, or truck operators of fuel and other expenses occasioned by the use of one proposed road rather than another. The various potential earnings over the anticipated costs provided a series of ratios which, ideally, pointed to the most profitable route between predetermined control points.

Several operating assumptions followed from the commitment to efficiency criteria for road building. The first, clearly related to the emphasis upon a profit calculation,
was the notion that highways had to be self-supporting. Road officials argued that the beneficiaries of major highways, in most cases the users, should pay the costs of the roads through a tax on gasoline. This principle, which had been adopted by the State of Oregon in 1919, was supported by the American Association of State Highway Officials, (AASHO) the national organization of state highway officers; by 1938 every state used it.19

The preference for judging roads according to efficiency criteria also affected design standards. It was evident in the call for freeways and express highways, which were major roads to which access was controlled legally. They were a response to unhindered commercial and residential construction along the right-of-way. Highway officials urged the limitation of access as a means of retarding obsolescence which was a consequence of these roadside encroachments. They believed that failure to control access impaired the efficient movement of traffic. A road constructed without access control, they claimed, soon was "just another street."20 In this sense, road officials viewed the limited-access design as a means of protecting the highway investment.

The emphasis of state highway officials upon traffic efficiency in road construction had consequences for their views of plans for urban or downtown redevelopment. Since the value of expressways was the rapid movement of traffic,
state road officials tended to oppose employing them for other purposes. The Michigan State Highway Commissioner urged the construction of freeways in "larger cities and the industrial sections...where the traffic volume is greatest," but insisted that these roads follow "existing highways with heavy concentrations of traffic." 21

There was some disagreement among state highway officials over the location of a road in order to serve urban traffic most effectively. The Michigan Highway Commissioner held that an intracity location and freeway standards were most satisfactory while another argued in favor of placing express roads outside of urban areas. Of course, he expected that they would be located sufficiently near to population centers to "draw traffic" from them. This setting was necessary because of the "delays and losses" entailed by urban congestion. 22 In one form or another, road engineers were committed to building express highways according to perceived traffic criteria and not as part of any larger plan for urban redevelopment.

The aspirations of engineers working from a state or county perspective and the hopes of downtown business groups and city planners were not necessarily antithetical. In Chicago, for example, officials of the County Highway Department and the city's Housing Authority and Water Filtration Division had determined to employ the proposed expressway to redevelop "a run-down area...through which the
Moreover, this decision involved little loss of self-interest. The Chicago route still adhered to the traffic patterns which engineers felt obligated to follow. Since in most cases this meant a radial route to the city's periphery coupled to an "inner belt" around the business district, downtown oriented groups were satisfied as well. The assistant engineer of Cook County (Illinois) was thus able to boast that "the locations of these routes were determined by a study of existing population centers, by existing flows of traffic, and by available rights-of-way."24

HIGHWAY USERS AND TRAFFIC CONGESTION

Organized highway users were not as flexible in their approach to road construction as road engineers and planners. The National Highway Users Conference, organized in 1932 as a coalition of commercial road users, motor vehicle manufacturers, and suppliers, described itself as "a fact-finding, information giving and coordinating agency...." They defined their task as one of acting "in behalf of the development of highway transportation in the public interest." The Users Conference disclaimed any direct involvement in highway promotion, however, and only served "as a meeting ground for the discussion and development of policies of taxation and regulation...."25 For the most part, Conference members examined questions of highway policy from a
national perspective. Since the coalition was so diverse however, policy statements tended to emphasize areas of broad agreement among commercial road operators. To a great degree, their combined views of highway construction policy were quite similar to those of the state highway engineers.

Conference members affirmed a benefit theory of highway taxation. According to this approach, each class of a road's users should contribute to its costs in proportion to the benefits they derived from driving upon it. Their basic point was that the major highways should be financed from the state gasoline tax while access roads as well as those of paramount national importance were to be paid for from property and general tax revenues.26

Highway user groups also were virtually unanimous in their opposition to the diversion of motor fuel tax revenues to non-highway purposes. From their point of view, gasoline taxes were "special charges...for the use of public highways." As such, they should not be made available for education, welfare or other purposes unrelated to road construction. Users complained that as a result of continuing diversion, main trunk roads had not been constructed and that the strategic network, a system of roads designated by the Army as important militarily was obsolete. They claimed that if diversion was eliminated, the nation could improve its strategic system without additional federal highway expenditures.27
Users commitment to the concepts of beneficiary payment and non-diversion shaped their attitudes toward urban highway construction. Insofar as they were concerned, roads were constructed for the expansion of commerce. Chester Gray, the Executive Director of the National Highway Users Conference, admitted that there was congestion in the urban areas and, as a result, some express highways had to be built. But he warned against the development of freeways or other intraurban roads except where they were justified by surveys of traffic density. As a matter of fact, Gray opposed concentrating limited highway funds on urban expressways and streets. There still was a need, he declared, to construct more farm to market roads. Whether they opted for the construction of urban express highways or emphasized upgrading of the rural road system, highway users did not intend to finance urban redevelopment projects or approve designs and routings which did not assist directly in the resolution of traffic problems.

THE BUREAU OF PUBLIC ROADS

The conflict between highway users, engineers and planners over road location was primarily between supporters of contending emphases of the proper role of highways. Engineers and users preferred a highway system which served existing social and economic institutions while planners and a few downtown business groups placed a greater priority on
roads as a device which would direct and only secondarily serve these interests. Officials of the Bureau of Public Roads (BPR), the federal government's road building agency, attempted to combine these positions. In the process, Bureau officials also sought to determine American highway and urban renewal policy.

The Bureau of Public Roads had administered the federal-aid road program since its inception in 1916. During most of those years, Bureau officials had emphasized orderly road building and efficient traffic flow in their highway programming. In later years, at least, high-level Bureau officers also exhibited great interest in urban decay and the relationship of highway building to city renewal. The Chief of the Bureau, Thomas H. MacDonald, embodied both of these tendencies.

MacDonald took charge of the Bureau in 1919. In good measure, his views were similar to those of many highway engineers. During his many years at the BPR, MacDonald never failed to support fairly strict calculations of road benefit and expense. By the mid-1930's, in fact, he had launched the Bureau and state road departments into an extensive program of highway planning and traffic-flow surveys. They were undertaken with a view toward relieving the daily traffic mess. At the same time, MacDonald was concerned about the dismal state of urban America. As an active member of national planning organizations, he tended to
favor broad plans for urban renewal. MacDonald was convinced that a stepped-up road building program would greatly reduce the magnitude of traffic as well as urban problems.

MacDonald and his top staff formulated what they called a master plan for highway development. It included plans for the rehabilitation of main roads and the construction of a national expressway system. As MacDonald and his colleagues envisioned it, the implementation of their plan would remedy traffic congestion and assist with city renewal.

The condition of the American highway system dissatisfied BPR officials greatly. They pointed out that narrow roadways, parked vehicles, frequent intersections and an ever increasing number of cars and trucks restricted traffic within the cities. Congestion was a particular problem in the central business districts, they claimed, where poor city planning had not allowed sufficient area for traffic circulation. In turn, dense traffic was one of the sources for the decline of downtown property values.

MacDonald and his aides also claimed that much of the rural road system was inadequate for the demands placed upon it. According to their traffic-survey data, portions of the rural highway system were out of date for rapid truck and auto traffic while unlimited access from roadside establishments impeded traffic flow even on newer highways. Irregular traffic movement was a problem especially on roads located close to cities.
MacDonald realized that realignment and widening could take care of many of these road and traffic problems. In some cases, it might be necessary to add lanes. Nonetheless, these repairs, once completed, would bring such roads to serviceable standards for many years.\textsuperscript{31}

But urban renewal and the intense traffic on some roads required more than realignment or other improvements. Such remodeling was useful to facilitate a limited amount of additional traffic. MacDonald argued that the construction of express highways was a prerequisite to the restoration of American cities and the improvement of traffic conditions. Accordingly, MacDonald and other Bureau engineers sketched a national express road system nearly 30,000 miles in length and entitled the Interregional Highway System. Most of this new highway would be constructed in rural areas where it would comprise less than one percent of the nation's rural road mileage and accommodate at least 12 percent of the daily rural traffic.\textsuperscript{32}

MacDonald's Interregional System had an urban traffic component as well. He recommended the construction of radial and circumferential expressways which would attach, at some point, to the rural portions of the Interregional network. Within the larger cities, this system would include radial as well as several circular roads. Their purpose was to speed traffic around the CBD and, of greater importance, improve the distribution of traffic to other roads.
more directly in line with its desired destination.  

MacDonald's master plan for highway improvements also included plans for urban redevelopment. In addition to serving traffic, the urban Interregional would assist with the renewal of American cities. In the first place, construction of the new roads could lead to the demolition of buildings in the poorest condition. Rather than locating roads through downtown, with its high right-of-way prices, Bureau officials preferred to place them "within the ring of decadent property surrounding the central business area." In addition, the radial roads would serve as the skeleton around which remodeled city plans would be developed.

The range of approaches to highway construction ran from the planners' subordination of them under city-wide land use requirements to the highway users and road engineers preoccupation with highway construction as a continuation of their commercial and professional activities. The Bureau of Public Roads, in effect, occupied both positions by opting for the construction of major arteries which served simultaneously as a framework for urban remodeling and traffic flow. Aspects of these disparate approaches to highway construction policy were present in the contest over the role of road building in the relief of unemployment.

ROAD CONSTRUCTION AND UNEMPLOYMENT

Highway construction had been a staple in federal and
State efforts to relieve unemployment. President Hoover had approved substantial spending for road work as a relief measure, and President Roosevelt took much the same view of the matter. Under his direction, federal spending for highway construction achieved record levels. The President was not trying simply to spend the economy back into shape; he did not believe that tactic would work anyway. What Roosevelt had in mind was a more subtle form of public spending whereby he could achieve greater control of the economy.

Toward the end of the 1930's, Roosevelt was not so certain about the utility of highway building for reducing unemployment. Early in 1938, he notified Congress that road work and other public Works programs were not as well suited to lowering unemployment as other methods. The President added, nonetheless, that public works still could "be contracted or expanded" in accordance with the government's income.

Over the next few months, Roosevelt changed his view of road building as an economy-bolstering measure repeatedly. In mid-April, as part of a renewed emphasis upon government spending to stimulate a sagging economy, Roosevelt asked Congress to vote an additional $1 billion for road work to begin within the year. He reversed himself less than a month later, ordering Budget Bureau Director Daniel W. Bell to contact Senators Kenneth K. McKellar and Carl Hayden, the ranking Democrats on the Post Offices and Post Roads
Committee, and "get the total as low as possible." Roosevelt also told Bell to secure elimination of a section in the pending road bill granting the Secretary of Agriculture the right to contract for future highway construction. Under existing federal highway legislation, approval by the Agriculture Secretary of a state highway project was a contractual obligation of the federal government for its share of the expense. In reality, this arrangement delegated control of federal highway spending to the Chief of the Bureau of Public Roads.

FDR viewed highway construction as an element of these budgetary manipulations. The President referred to traffic needs and transcontinental expressways occasionally and even to roads for urban reconstruction purposes, but generally he subordinated these goals to macro-economic considerations. After years of massive public works projects, none of which had boosted the economy to self-sufficiency, Roosevelt was ambivalent toward government spending as a counter-cyclical tactic. Yet in another sense, his changing views reflected a coherent desire to control public works spending in the interest of economic stability and the reduction of unemployment. Roosevelt's effort to relieve the Secretary of Agriculture of his contractual authority, a provision which reduced Presidential flexibility in the economy, was another expression of his intent.

Most highway-minded groups did not share Roosevelt's
perception of road building as an adjunct to macro-economic strategy. Highway groups feared that enlarged federal spending for road construction lessened their influence over road and traffic management and would force an increase in taxes as well. The key point in their critique of New Deal road building, however, was that it did not solve traffic problems.

Employment practices were the point of departure for criticism of New Deal road building. In particular, highway-related organizations disliked New Deal road construction projects, with their vast employment rolls. They complained that New Deal highway construction relied on manual labor excessively or chose route coordinates in accord with surveys of the number of unemployed, rather than traffic surveys. As a result, much money was expended while achieving only minimal returns. BPR officials criticized a proposed national tollway system in these terms while friends of a national toll system saw it as a source of useful employment.38

But opponents of New Deal highway programs claimed that they did not object to employing relief workers on road building projects. They noted that Germany had virtually ended unemployment since commencing work on the auto bahen, and promised that a similar project in the United States would create employment for millions of people. For that matter, MacDonald and other BPR officers argued that their
proposed expressway system would engender much employment.\textsuperscript{39}

What these critics had in mind was a substitution of traffic movements for work relief as the test of a project's suitability. According to MacDonald, this sort of criteria would not eliminate highway work as a source of employment. If MacDonald or the Road Builders had their way, however, express highway construction would serve as a form of work relief only to the extent that traffic needs overlapped with pockets of unemployment.\textsuperscript{40} In effect, they wanted to overturn national relief priorities.

Groups interested in highway construction also objected to New Deal road programs on the grounds that they threatened traditional prerogatives. BPR officials and state highway department engineers were especially sensitive to such matters. They did not intend to relinquish control of route selection, road design or access to revenues voluntarily in favor of another federal road agency.

According to many state highway officials, New Deal highway building as well as schemes for transcontinental roads posed a threat to the integrity of their departments. The Superintendent of the New York Department of Public Works, Fred S. Greene, wrote MacDonald that a proposed toll superhighway system was a "crackpot" idea. One of the most objectionable features of such proposals, he thought, was that they by-passed the Bureau and the state road departments. In much the same sense, Wilfred Owen complained that
hugh New Deal highway projects often "underbid" the matching requirements of the regular federal-aid road program which the BPR administered.41

ROADS FOR NATIONAL DEFENSE

There was far less disagreement over the military aspects of the American highway program. In fact, military and civilian views of road building grew from a long period of cooperation between Bureau of Public Roads' officials and officers in the Department of War. In 1921, as part of the Bureau's efforts to designate the federal-aid highway system, the Department of War and Bureau leaders undertook a survey of routes which were important for national defense. This survey culminated in the mapping of the strategic network; a 78,780 mile road system which War Department officers considered to be of primary military significance. The entire mileage was included in the federal-aid system. During the ensuing years, officials of the two agencies maintained a close liaison on highway matters. In 1938, at the request of the Department of Agriculture (i.e., MacDonald) and leaders of the American Association of State Highway Officials, these ties were formalized into the Highway Committee of the War Plans Division under Brig. General George V. Strong. The Committee again reviewed the strategic network and agreed upon some modifications and expansion of the system. Despite the amendments to the original routes, the
goal of highway engineer-military cooperation remained that of updating the nation's road network so that it could fulfill the exigencies of national defense.\(^2\)

These long-standing and generally satisfactory contacts between highway and military officials rested, in part, upon the acknowledged dominance of Bureau engineers. At the time of the 1921 study, War Department officers had agreed that Bureau and state road engineers were to exercise authority over route location and construction priority. For its part, the military consented not to make route recommendations in other than "the most critical areas."\(^3\)

The close relationship between Bureau and War Department officials rested upon more than formal ties of an agreement to submit to the BPR's domination. Their shared approach to highway development was an important factor in the maintenance of these cordial relations. Generally, the view of military and civilian leaders coincided; roads which were sufficient for commercial purposes were adequate for national defense.\(^4\)

The notion that defense highway needs were about the same as those of truck and auto operators helped mould civilian and military attitudes toward the construction of express highways. War Department and Bureau officials rejected schemes for concentrating their energy on the construction of a limited number of transcontinental and superroads. In mid-June, 1938, for example, the Assistant
Secretary for War, Louis A. Johnson, refused Department support for a proposed transcontinental highway scheme, asserting that the existing road system was sufficient for national defense purposes. Even after preparations for war had begun, and with many group leaders linking the construction of expressways to national defense, Army officers argued that a highway system which was adapted to civilian needs offered "more protection per dollar" than a few superhighways. Federal highway officials looked at road building and defense readiness in much the same way. One of Public Roads' top officials, Herbert S. Fairbank, told a group of state highway engineers that industrial traffic was more demanding on the roads than military traffic. According to Fairbank, a network of local roads in sound condition was of greater traffic significance than several superhighways.45

The central thrust of BPR-military cooperation, then, was to prepare plans for the unified development of a multi-purpose highway network capable of providing high-level traffic service to military as well as civilian road users. In later June, 1940, the Federal Works Administrator, John M. Carmody, asked Roosevelt to authorize MacDonald to work with military and civilian agencies on a survey of national defense highway facilities. MacDonald and General Strong, the head of the Highway Committee of the War Plans Division, had completed much of the work already, and so Carmody promised that the report could be completed rapidly. Carmody also
suggested to Roosevelt that he secure an amendment to a pending highway bill permitting the Federal Works Administrator (i.e., the Commissioner of Public Roads) to spend federal-aid road funds on a priority basis as requested by defense agencies. This arrangement was in contrast to the usual system whereby funds were distributed to states according to a fixed formula. The President sent Carmody's amendment to Senator Kenneth McKellar immediately and granted permission to MacDonald to participate in the highway study.46

A few days later, Senator McKellar notified Roosevelt that an amendment had been made a part of the pending highway bill. About the same time, MacDonald and the study groups returned an interim report on highway construction priorities. They claimed that the strategic network required over 2,000 high-capacity bridges, wider shoulders and the replacement of pavements. In addition, they recommended the construction of 3,000 miles of access roads into air bases, naval stations, depots and training fields. But MacDonald and the other officials who carried out the review concluded that the streets and roads which served the nation's industrial establishments formed the weakest portion of the highway system.47

In reality, these findings were not very different from MacDonald's calculation of road deficiencies for civilian traffic. As he had pointed out to a meeting of state
highway officials, the minimum structural specifications for military and civilian traffic were the same. In effect, military officials, MacDonald and other civilian agency leaders had collaborated to identify commercial and civilian traffic flow requirements with those of the military. Moreover, the McKellar Amendment simply facilitated the concentration of attention on those roads, many of which constituted the key links in MacDonald's master plan for highway construction.

Commissioner MacDonald and military officials actually were engaged in a two-front road building effort. Their immediate problem was to remedy the physical defects on many miles of roadways, bridges and shoulders. The second and more important struggle was to prepare the nation for war. In this sense, Bureau and defense officials entertained a far wider definition of highway readiness than smooth and strong road surfaces for military maneuvers. They hoped to accelerate the transportation of materials to factories which were "geared for war" and, in the long-run, "build the nation to a state of internationally recognized preparedness." By mid-1940, a number of military and civilian highway officials had elevated road building into the realm of foreign policy.

The President took a much more limited approach to the relationship of highways and national defense. He defined road construction largely in terms of the physical aspects
of conducting a war. Late in February, 1941, he considered imposing a limit on highway work to those roads which were needed for access to military installations and new industrial plants. In mid-November, however, Congress approved a bill which provided funds for, among other things, access roads, the strategic system (on a 75-25%, federal-state sharing basis), and off-street parking. Roosevelt "felt constrained" to approve the bill because of the provisions for access roads, but he vitiated the other sections by ordering the Federal Works Administrator to limit construction to projects "essential to national defense as certified by the appropriate defense agencies." Roosevelt's order ended most highway construction until September, 1945, when President Harry S. Truman dropped war-time controls.50

AMERICAN HIGHWAY POLITICS, 1939-1941

Depression era Americans faced a number of harsh problems. They had endured nearly a decade of unemployment and even more years of urban decay and snarled traffic. Toward the end of the decade, many Americans also were concerned about the state of their country's preparations for war. Nearly everyone agreed that additional roads, particularly express highways, would reduce the dimensions of these problems considerably. A vast highway building program promised many jobs, improved traffic flow for military and commercial users, slum clearance and perhaps a framework for remodeling
entire cities.

Yet agreement ended at about this point, as road-minded groups debated the proper course of highway construction. President Roosevelt perceived of road building largely as a tool for manipulating the economy; highway users and engineers approved of road work for employment relief so long as traffic was served first. Members of this group also objected to routings which favored urban renewal rather than traffic objectives. In addition, there was little consensus as to the scope of highway construction sufficient for war.

Important issues were at the source of these disputes and deadlock. To a great degree, quite distinct professional and commercially-based notions of highway or urban efficiency were at stake. Competing views of land use also separated groups interested in highway building. The interest of state highway officials in preserving their autonomy added a special dimension to these conflicts. Only the military-BPR relationship was relatively satisfactory to participants.

Several other tensions further fragmented highway politics. President Roosevelt tended to examine highway plans in a fairly broad context, assessing their significance in terms of his ability to direct national economic trends. Most road user groups and road department officials, including Thomas H. MacDonald, viewed spending for road construction in more local or narrow terms. They approved of
highway work as a relief measure so long as it did not disrupt power relationships within their industry, threaten funds, or require undesirable routings.

A diverse sense of confidence in their ability to control the future served as an even more fundamental gap between contending parties. For the most part, planners wished to manage what was extant and, hopefully, erect more amenable communities within the existing material arrangements. They assumed the feasibility of controlling urban life and directing it into acceptable channels, but rarely projected their thinking along more expansive lines. Organizations associated with road construction, on the other hand, sustained a slightly more dynamic vision of the future. They assumed that the purchase and deployment of an ever-increasing number of cars and trucks and wished to hitch highway construction to that expansion. Engineers warned of even more crowded roads unless more funds were allocated to them, but they never seemed to doubt their ability to overcome that challenge. As a matter of fact, road users were such enthusiastic proponents of highway construction and so confident of economic growth that they were willing to finance a large portion of the expenses.

Roosevelt's order to halt unnecessary highway building did not smother these conflicts. Each of the groups took advantage of the freeze to plan for the resumption of construction at the end of the war. In large measure, their
prewar experiences shaped wartime plans and visions of postwar America.
FOOTNOTES


4 Ibid., pp. 244-245, 247.


6 Ibid., pp. 214-216, 258.

7 Ibid., pp. 258-259.

8 Ibid.

9 Ibid., p. 236.

10 Ibid.

11 Ibid.

12 Ibid., pp. 235-236.


17 Ibid., pp. 45-47. Kingery's proposed city-county expressway system included direct links to the central business district from the suburbs. See map on p. 46 in Ibid.


The state tax on gasoline averaged 3.96 cents per gallon and ranged from 7 to 2 cents; the Federal government charged 1.5 cents per gallon.

States (Trenton, New Jersey: Office of the Secretary, 1938), p. 73.


24Ibid.


Diversion amounted to 16% of state collected motor fuel taxes and 15% of all state highway user taxes (e.g., licenses, etc.) in 1939. See U.S. Federal Works Agency,


30 Ibid., pp. 104, 197.

31 Ibid., pp. 107-108.


33 Toll Roads and Free Roads, p. 97.


37. FDR to the Secretary of the Interior, The Director of the Budget, April 1, 1939, OF 129, FDR Library.


Wallace and Woodring claimed that the 1921 study was made by the War Department at the request of the Department of Agriculture whereas Gen. Ford stated that it was a joint study but does not mention who initiated it.

Wallace and Woodring to the President; Dearing, American Highway Policy, p. 140; MacDonald, "National Road Building Through the Cooperation of the States and the Federal Government," pp. 54, 56.


For claims of civilians that expressways were important in the defense effort, see Charles Upham, "Roads First Need of a Mobile Defense," Florida Public Works, 17 (September, 1940), p. 4; summary of telegram from William Green, President of the AFL and summary of remarks of E. Donald Sterner, New Jersey State Highway Commissioner, to the 1941 ARBA Convention in "A Report on Roads," Commercial Car Journal (March, 1941), pp. 92, 94.

Carmody to the President; Franklin D. Roosevelt to John M. Carmody, June 21, 1940; Franklin D. Roosevelt to Senator Kenneth McKellar, June 21, 1940, both in OF 1E, FDR Library.

Senator Kenneth McKellar to the President, June 25, 1940, OF 1E; John M. Carmody to the President, July 9, 1940, OF 3710, both in FDR Library.


50 FDR to the National Resources Planning Board, February 20, 1941, Record Group 187, Records of the National Resources Planning Board, File 732, National Archives. (cited hereafter as RG 187, NRPB, NA). The National Resources Board was retitled the National Resources Planning Board after July, 1939. FDR to John M. Carmody, November 25, 1941; Harry S. Truman to General Phillip Fleming, September 6, 1945, OF 129, Truman Papers, Truman Library.
CHAPTER III

PLANNING FOR POSTWAR AMERICA

The problems of urban decay, employment, and transportation—among the basics of life—continued into the war period. During the next four or five years, they just got worse. Unattended throughout the war, housing and public facilities in most cities deteriorated badly. Intense crowding added to the rate of decay in areas near war plants. Gasoline rationing restricted highway travel and reduced crowding somewhat. But roads near defense plants, never built for such intense use, often backed up for miles. Other roads fell into disrepair as overloaded trucks, poor design and military practice, including tank maneuvers, gouged holes in the pavement. Floods often tore away whole sections of roadway. Of course, unemployment came to an end as men and women found jobs in war production and the military. Nonetheless, there was a widely endorsed assumption that full-employment was a temporary phenomenon. As a result, the threat of depression-era unemployment lines hung in the dialogue as if it was a reality.

As in the past, there was a diverse array of suggestions
for dealing with these problems. The war period permitted the unfolding of imagination and insight into the nature of urban life, the sources of economic dislocation or traffic stagnation. In large part, however, these proposals followed familiar lines. Most plans included new expressways as a method of expediting traffic, creating jobs or renovating the city. As in the past, there was little agreement on the desirable relationship between road building and the solution of these problems. State road officials and highway users sketched more efficient traffic arteries according to measurements of driver intent; national and city planners outlined new roads as part of a balanced transport network, regional governments or, at a minimum, a revised downtown. For his part, President Roosevelt wanted roads on which returning military personnel could labor.

Planning for the eventual elimination of these problems and political conflict between competing groups were the dominant themes in urban and highway affairs during the war. In 1944, the Senate and House took up the matter. The Congress felt obligated to take the views of local, rural users into account, but major highway users received the greatest consideration. They received a substantial increase in federal road aid as well as an initial commitment to expressway construction, although the latter was not funded directly. On the other hand, planners were not included in highway policy formulation. As a result, the old alliance of local
and interstate users, engineers and other interests shared control of the American highway system. This arrangement largely determined the pattern of American highway construction and urban redevelopment for the next 12 years.

THE INITIAL COMMITMENT TO POSTWAR PLANNING

Americans at several levels of public and private responsibility commenced preparations for the postwar period almost immediately after the opening of hostilities in Europe. During these preliminary stages, they directed attention almost exclusively to postwar unemployment and the importance of highway and public works construction for creating work after the war. In November, 1939, President Roosevelt ordered members of the National Resources Planning Board to direct their attention to plans for postwar activities largely out of a fear that the economy would repeat the dismal collapse following World War I. Early in 1941, the President appointed an advisory committee to the Federal Works Administrator with directions to prepare highway construction plans for the absorption of the unemployed.¹

Congressman and federal officials also approached highway planning largely in terms of postwar employment needs. Representative Wilburn Cartwright, the Chairman of the House Roads Committee, told the 1941 Road Builders' Convention that construction should focus on roads of immediate military utility. In the meantime, he called for the preparation of
plans for production-sustaining, public-works projects during the eventual transition back to a peace-time economy. Commissioner MacDonald had much the same thing in mind, informing the National Conference on Planning that his agency's long-term goals would have to be deferred in favor of the national defense program. But he recommended that Congress appropriate $12 million for the preparation of plans for post-emergency highway construction.²

Leaders of private organizations were equally interested in preparing plans for future highway construction as part of a work relief program. At the same time, they expected that postwar-road building would assist traffic movement. Pyke Johnson, the President of the Automotive Safety Foundation, a subsidiary of the Automobile Manufacturers Association, urged interested groups to plan readily available, worthwhile projects for the postwar period. These programs would be required, he thought, for the "army of men" who would seek employment after the war.³

Congress responded to these demands in November, 1941, with the Defense Highway Act. The Act granted $10 million, to be matched by the states, for surveying and planning work on the strategic network as well as intracity routes. The Public Roads Administration (formerly the Bureau of Public Roads) estimated that the sum of $10 million for planning would prove sufficient for up to $500 million worth of highway building.⁴
By the time the United States entered the war officially, a number of Americans had reached a consensus of the importance of planning for the postwar period. And there was a nearly universal agreement that these plans should lead to the creation of timely, efficient projects, capable of providing work for the unemployed. Yet this interest in postwar preparedness did not produce agreement upon other goals. What did emerge, as early as 1941, were some coherent, though diverse plans for the social and economic restructuring of postwar America.

THE PLANNING COMMUNITY AND VISIONS OF POSTWAR AMERICA

In 1939, President Roosevelt had established the National Resources Planning Board (NRPB) within the Executive Office of the President. In terms of personnel and goals, it was largely a continuation of the National Resources Committee. The central purpose of the Board was to advise the President on long-term planning from a national point of view. The Board prepared reports for Roosevelt on national resource development and, after 1939, it submitted six-year public works programs as well as assessments of the significance of government construction programs for business conditions. In general, Board members sought to develop plans to raise the standard of living from one-third to one-half, creating an economy of abundance, stability, and cooperation for government, industry and labor. The postwar plans of
Wilfred Owen, a consultant to the Board, were a part of this perspective.\(^5\)

Owen argued that an efficient transportation network (by which he meant the integration of water, air and surface facilities) was a necessary component of a high level of economic prosperity and urban reorganization. In order to create such a transport system, however, it would be necessary to make several changes in federal transportation policy, especially financing and overall direction. As he saw it, a rigorous application of user charges upon those who benefited from public transportation facilities, particularly roads was the key to this broader restructuring.\(^6\)

User charges offered several advantages for American highway development and industrial growth. In the first place, they reflected more or less the extent of road use. Besides, the charge to vehicle operators, in the form of a tax on gasoline had, in fact, provided the required money for a continuing and relatively stable highway program. This predictability was especially important since there was no reserve highway fund and highway construction was dependent on pay-as-you-go financing.\(^7\)

Owen claimed that user charges also tended to limit the number of extravagant highway projects. When the beneficiaries know they must finance new roads, a certain amount of caution was introduced into their calculations. Owen promised, moreover, that the selection of highway projects
according to economic criteria would reduce "political con-
siderations" and promote "a proper utilization of re-
sources." 8

The introduction of user charges also would affect the
choice of one form of transportation over another. The ac-
tual cost of shipping would be apparent in the prices
charged, tending to promote "a more rational selection of
alternative transportation methods...." The reduction of
transport inequality, accompanied by the introduction of in-
expensive transportation service would, at least in part,
result in the employment of America's resources on a more
efficient and rational basis. 9

Owen defined a sound transport system as a precondition
for industrial prosperity. He also saw transport, espe-
cially highways, as a device for shaping community and re-
gional development. He accepted explicitly the view of the
American Society of Planning Officials that no highway should
be constructed unless it was part of an overall plan for an
area. In general, transportation networks had to be sub-
ordinated to a city's future land-use pattern. Moreover,
the intraurban highway network, similar to its national
counterpart, had to be integrated with the transportation
system generally. Owen worried that if roads were con-
structed without reference to an urban plan, then the high-
way engineers were without guidance and their work tended
"to dictate what the plan shall be." 10
Owen claimed that certain practices of the state governments prevented the implementation of his urban redevelopment and transportation designs. Some states distributed a large portion of their user revenues to local jurisdictions while others gave nothing. A few had no knowledge of the disposition of their grants. Frequently, state highway expenditures did not reflect traffic conditions and large sums were "lavished" on roads with relatively low average-daily-traffic while congested metropolitan arteries were denied funds. For that matter, local projects frequently bore little relationship to a rural road network and the completed work, as a consequence, did not benefit the motor vehicle owner.¹¹

Owen also criticized the inefficiency of New Deal road building programs. He admitted that the records of the Works Progress Administration, a New Deal road building and public works agency, were not adequate for a comprehensive assessment of its highway projects. It was clear to him, nonetheless, that WPA's emphasis upon employment had hindered the achievement of a high output. Low morale, the dissipation of funds on roads not part of any system as well as a centralized control not responsive to local conditions further impeded performance.¹²

Owen feared that road construction would continue in this manner after the war, perpetuating an inadequate highway system. In order to head off such a result, he posited
a complex program of road construction which would lift im-
pediments to an expanding economy, promote efficient trans-
portation and guide urban redevelopment. Part of his plan
included the immediate funding and acquisition of rights-of-
way, direct grants to the cities for road construction and
increased use of the freeway design on major highways. But
the central portion of Owen's postwar planning revolved
around the creation of a federal land use and transportation
agency, capable of guiding the most expeditious deployment
of transportation facilities and coordinating transport with
non-transport goals. Owen admired the cooperative efforts
of the Department of Agriculture and Public Roads Adminis-
tration in the area of rural land planning. He warned that
without such integrated planning, the result too often was
poor service, a low return on invested funds and "an unsat-
isfactory use of land resources...."

Members of the planning community endorsed the major
themes in Owen's program. This group included professional
planners as well as business leaders interested in the
fruits of planning and attuned temperamentally to national
direction of economic growth. If they had their way, post-
war American transportation, especially highway transport
and road construction, would serve the larger needs of a
stable social and economic order.

The Advisory Committee for the Transportation Study,
a NRPB study group composed of leading planning and business
officials, sought to impose some degree of rationality on the nation's transport system. The duplication and waste of uncoordinated transportation facilities appalled the members of the Advisory Committee. They agreed that the major problem of American transportation was not an inadequate supply, but the promotion by the federal government of even more transport resources. User charges, a federal transport agency and other measures were partial answers to these problems. At some point, however, it might be necessary for the federal government to own or lease railroad properties in much the same manner that it operated highway, air and water facilities.¹⁴

Officials of the National Resources Planning Board went along with most of these schemes, though they placed greater emphasis on the creation of a federal transport agency. They wrote President Roosevelt that consolidated direction was necessary for economical transportation. In addition, a federal transportation agency would mould its goals to conform with the larger needs of the postwar economy. Ultimately it was possible, they concluded, to construct a transport system which was consistent with "the unfolding promise of American life."¹⁵

Planners who were thinking along national lines entertained similar visions of American road transport in the postwar period. The Director of the American Society of Planning Officials, Walter Blucher, urged the preparation
of plans for the coordinated reconstruction of American cities. This restructuring would include an expressway system as one component of a larger plan for urban remodeling. In the near future, he hoped, it would be possible to rebuild American cities completely.16

There was a fair degree of unanimity within the planning community about the scope and direction of reform during the postwar period. In large measure, planners sought methods for achieving a high level of economic activity as part of the renovation of American social life and urban conditions. As in the prewar period, planners with a national constituency devised programs for the comprehensive management of transport and urban-based social institutions. During the war years, moreover, many planners shifted to a dynamic view of the potential of the American political economy. They were beginning to believe that it was possible to enjoy maximum economic growth consistent with traditional planning goals of a stable and satisfying environment.17

THE NATIONAL INTERREGIONAL HIGHWAY COMMITTEE

Grand designs for postwar reconstruction were popular with some civil engineers and politicians as well as with planners. In April, 1941, President Roosevelt appointed an Interregional Highway Committee and charged its members to plan a national highway system which would relieve traffic and unemployment in the postwar period. After several years
of intermittent deliberations, they produced a plan for a national, express highway system which would serve traffic needs, provide employment and assist with the reconstruction of the nation's cities.

The seven members of the Interregional Committee were a combination of planners, state highway engineers and old-fashioned 'political' appointees. The President recommended George D. Kennedy in order to assist him in his race for Michigan Highway Commissioner, a post which one of FDR's assistants, James Rowe, Jr., believed controlled the State Government of Michigan. At the request of Senator Lister Hill, FDR appointed Bibb Graves, who was campaigning for the governorship of Alabama. FDR's selection for Chairman, Commissioner MacDonald and the Federal Works Administrator, John Carmody, suggested Rexford G. Tugwell, the Chairman of the New York City Planning Commission and formerly the head of the Resettlement Administration. Among his other duties, Tugwell had been responsible for the Roosevelt Administration's experiment in planned communities. They also recommended Harland Bartholomew, Frederic A. Delano, the Chairman of the NRPB and a long-time member of national planning organizations, and Charles Purcell, the State Highway Engineer of California. Carmody subsequently asked the President to appoint a military man to the Committee, but he refused, urging consultation with an appropriate representative of the War Department if the Committee desired more information.
Curiously, FDR "lost" the list of names on his desk and the appointments were not announced until after Kennedy's election.  

All in all, the Committee produced a document which combined engineering and planning goals. In order to produce such a result, they had to outline an expressway system which, somehow, would do more than serve traffic. In this sense, it was an extension of MacDonald's master plan, itself the product of planning and simple road building aims. Members agreed quite early in their deliberations that a national highway system of approximately the length and design described in MacDonald's 1939 plan was desirable. The Committee also favored the view that an expressway system should connect urban centers, provide high-level of traffic service to congested areas and assist with the rebuilding of downtown and the obstruction of "undue decentralization."  

The Committee's final report, delayed by the exigencies of war until January, 1944, preached this diverse set of aims. Their general traffic goals included the usual commitment to efficient motor-vehicle service through the creation of a compact expressway system. The Committee selected a system of about 34,000 miles, promising that this would be sufficient to serve the manufacturing and agricultural centers which made the largest proportional contribution to national productivity. Committee members also affirmed the engineer's preference for the location of roads close to
traffic producing areas, especially the CBD. According to most traffic surveys, the downtown area was the destination of a large proportion of urban traffic. At the same time, construction of a few urban circumferential routes would distribute traffic to more convenient arteries or expedite its flow around and away from the city.21

Members of the Interregional Committee justified the expenses of a national expressway system according to the standard principles of traffic engineering. They claimed that construction of a satisfactory highway system would require the expenditure of at least $3 billion each year, with about $700 million of that amount earmarked for work on the Interregional express network. They calculated this figure on the assumption that the Interregional would serve 20 percent of the nation's traffic and then added more money in light of the greater need for building it than other roads plus its superior earnings. It was the Committee's opinion, moreover, that two-thirds of the Interregional funds should be spent on urban expressways while a quarter of a billion or so was devoted to work on rural portions of the system. Finally, committee members endorsed the principle of limited access as a technique for preserving the investment in the Interregional as well as for its superior traffic-handling qualities.22

The Interregional group developed some plans for expressways as part of a revitalized city. In the main,
however, they added little with which city planners and many road engineers did not agree already. Certainly their analysis of the sources of urban decay was much the same. They claimed that the deteriorated condition of the cities was a function of rapid urbanization on top of obsolete neighborhood and dwelling arrangements. Decentralization followed this process, resulting in declining property values and a loss to the city of much needed taxes.23

MacDonald and other members of the Interregional Committee believed that expressways could play a vital part in reversing this process. They argued that express highways, if properly located and designed, could exert a strong influence on the growth of the city. The circumferential routes were important, for example, as barriers to outward movement. Over a number of years, outer belts would encourage more uniform patterns of settlement. The Committee also endorsed limited access as a technique for discouraging settlement along the right-of-way, thus hindering further decentralization. Finally, Committee members believed that if a land use authority were permitted to locate roads in relation to other urban institutions, it would promote more rational development.24

The Committee affirmed several other principles which were widely held by planners and engineers. As always, traffic and land use requirements were to determine the precise location of the new routes; areas of anticipated
postwar unemployment were not to serve as a guiding factor. MacDonald was particularly adamant about this point, arguing that postwar road construction was necessary and not contingent upon unemployment. Nevertheless, the Committee and MacDonald noted that there was a "remarkable correlation" between the location of the Interregional System and areas of projected unemployment.25

In many respects, MacDonald and the other Interregional Committee members chose simply to combine widely-approved notions of road construction and land use with a judgement as to the most efficient length for Interregional Highway System development. About the only significant feature to emerge from their study was a popularization of the notion that urban circumferential roads could serve a population-retaining as well as a traffic-distributing function. But even that conclusion was largely an extension of the almost unanimously held view that highways were useful for directing land use. For that matter, the Committee's decisions did not really abate the conflict between engineers and planners. MacDonald and his colleagues combined both points of view, announcing their desire to make expressways a part of the city's planned growth while hoping that they would be located with reference to areas of traffic generation.26 In large part, then, the Committee's immense plans for postwar reconstruction rested on the always tenuous assumption that planners and engineers would share power and agree on common
goals.

Yet members of the Interregional Committee did make an important contribution to postwar planning thought. They gathered into one place most of the preliminary data and a good many of the arguments for construction of an American freeway system. At the same time, their portrait of free-flowing traffic and a remodeled city was a significant component in an emerging vision of a broadly restructured and revitalized society. Economic and social planning plus an elaborate highway construction program would remedy, somehow, the nation's ills.

THE URBAN VIEW OF POSTWAR AMERICA

The postwar plans of many city-based groups often paralleled these wide-ranging designs. Local business groups and urban planners in a number of cities outlined programs for the renovation of urban transportation and the remolding of their city's physical features and even its social order. In practice, the real difference between the visions of city-level groups and those of national level planners such as the members of the NRPB amounted to the scope of their contemplated projects. National planners thought in terms of regional and occasionally nation-wide restoration; their urban counterparts tended to emphasize the economic revitalization of the central city area. Nonetheless, both groups described their programs in terms of accelerating the
pace of economic growth, renewing the city and transport efficiency. At the least, they hoped to reduce the impact of another depression with its burdensome and unproductive relief problems. Moreover, federal sponsorship was an important component of everyone's plans, especially when they included costly express roads.

The City of Cincinnati undertook one of the most complete studies of expressway-linked redevelopment. The City Council voted a $100 thousand appropriation for a review of Cincinnati's master plan by a reconstituted Planning Commission of over thirty persons in addition to Ladislas Segoe and Tracy B. Auger, nationally known planners. Segoe and Augur called for the organization of transportation lines into corridors. Between these corridors they planned relatively small residential areas with their own shopping centers, post offices, schools and parks. They hoped that each neighborhood would eventually obtain "'the desirable environmental and social conditions'" found generally in cities of 50,000 to 100,000 inhabitants. Nonetheless, these sub-communities would retain access to metropolitan institutions. For the original downtown area, Segoe and Augur outlined two interregional routes at the confluence of which they proposed a redevelopment project including a convention and recreation center, high-rise apartments and a harbor for small boats. Planners in Cincinnati confessed, however, that their ability to commence construction on these
projects depended largely upon federal assistance.\textsuperscript{27}

Cleveland enjoyed an equally active postwar highway and regional planning program. The Cleveland City Council granted its planning Commission the power, subject to a two-thirds veto, to determine the extent to which projects conformed to the city plan. The Commission also enjoyed authority to prepare a five-year, city-improvement program as well as the right to sketch general goals for the metropolitan area.\textsuperscript{28}

By the middle of the war years, planners and business groups in several cities and their counterparts in federal agencies were outlining expensive plans for urban restoration and growth. In Cincinnati and a few other cities, they went a bit further, devising an elaborate scheme for reconstructing the urban social fabric. Of course, limited funds and data precluded extensive planning in such cities as Youngstown, Ohio.\textsuperscript{29} Yet the dominant effort among a wide strata of Americans was in the direction, where possible, of physical and perhaps social regeneration, with expressways playing a central role in the rebuilding process.

**ROAD USERS AND THE POSTWAR HIGHWAY PROGRAM**

Express highway construction was a central feature of most plans for postwar reconstruction. Yet the commitment to road building as one phase of postwar social and economic reconstruction was far from universal. Organized highway
users were willing to pay for a good many of the roads which everyone else wanted, but these had to be constructed to engineering specifications alone. For the most part, road users continued their prewar practice of prescribing narrow, commercial goals for highway building, refusing to participate directly in the resolution of urban problems or the implementation of macro-economic policy.

As early as 1943, national and state road users were urging the state highway departments to acquire rights-of-way promptly and to prepare for construction when the war ended. Road users presumed that highway building would play a key part in the relief of any postwar unemployment. If insufficient preparation delayed construction, however, then the federal government would enter the highway construction field directly. A Spokesman for the National Highway Users Conference warned that a repetition of the New Deal road program would lead to "a grandiose, money spending unemployment relief program..." which would fail to give "a dollar's return for a dollar spent."30

Road users also applied this fairly constricted definition of postwar preparedness to the old problem of the diversion of gasoline tax revenues to non-highway activities. Too many states had operated their road building programs without any conception of overall requirements. As a result, they had permitted the dispersion of funds to infrequently used roads or to other unsound programs. This made
the gasoline tax into a "selective sales tax" at luxury rates rather than a benefit tax similar to social security. According to leaders of the road-transport industry, the misuse of gasoline tax funds as a fundamental issue which, in the long run, posed a threat to "our highway system and highway transportation itself...."\textsuperscript{31}

Many highway users perceived of the redevelopment of urban areas through the efficacious routing of express roads as another form of unwarranted diversion. Insofar as they were concerned, the demand from urban centers for a larger share of gasoline taxes was little more than an attempt to shift the financial burden of local streets from property owners to motorists. Users admitted that cities were entitled to a share of the highway fund, but the money had to be spent on major arteries which were part of a long-term, scientifically planned state highway system. It also was imperative that the state road departments exercise direction over the funds, or, as in the past, they would be channeled to purposes unrelated to street construction.\textsuperscript{32}

Provided these conditions were fulfilled, most road users were willing to finance the construction and maintenance of a large, postwar road building program. There were, nonetheless, several limitations upon even this generosity. Highway construction would have to be placed on a current, or pay-as-you-go basis, rather than built with deficit financing. And in the interest of national defense and
welfare, the federal government was obligated to contribute from general revenues to the support of the Interregional System. 33

In most respects, the range of road users plans for postwar highway construction had not strayed far from their traditional goals. They supported a narrow program of concentrated road building in the interest of rapid vehicular movement. And if possible, they wanted the federal government to finance the expensive express roads while they supported the costs of state highway construction. Highway engineers approached the postwar period with many of the same goals in mind.

HIGHWAY ENGINEERS, EFFICIENCY AND POWER

During the war, the state road departments could construct only those roads certified by defense agencies as essential to the national defense. Encouraged by MacDonald and other Public Roads' officials, many state engineers took advantage of the interlude by outlining extensive work on the Interregional System. By December, 1943, for example, engineers in the Ohio Department of Highways had blueprinted the construction of interregional roads from Painesville, Ohio to Cleveland's lake front and from Cincinnati to Dayton. About the same time, Kentucky Highway Department engineers had begun to plan for an express road located in the Covington-Cincinnati area while the Michigan Highway officials
sketched the John C. Lodge and Crosstown Expressways in Detroit.34

The postwar plans of the state highway departments often were large in conception and occasionally of innovative design. Nonetheless, they rested upon a foundation of traditional road engineering formulae. Road engineers defended limited access in terms of preserving the motorist's investment against the encroachments of abutting property owners and justified new routes as part of an effort to increase user benefits. There was, in addition, a firm commitment to scheduling improvements according to a priority determined by total traffic movements and, in the interest of cost and efficiency, a continuing demand for federal funding of rights-of-way.35

The fact of the matter was that despite their encompassing nature, the postwar plans of the state road engineers were not a great deal more than future projections of traditional highway work. The Director of the Connecticut Highway Department's Bureau of Planning Studies, Roy E. Jorgensen noted that while the state contemplated over $250 million in road construction, especially in urban areas, there was "nothing new" in their plans.36 Of course, highway projects portended latent social consequences. The self-conscious and immediate interest of most state highway engineers, however, was pure and simple traffic movement with its attendant economic benefits. In their minds, achieving
those results was only a question of the application of sound engineering techniques.

Throughout the war period, Americans produced a variety of proposals for the relief of long-troublesome problems. These plans ranged from the comprehensive reordering of social and economic relationships suggested by some planners and business leaders to the construction of a few high-speed expressways under the direction of the state road departments. While planners believed they could rebuild America with some degree of central direction and proper expressway location, engineers and road users hoped only to speed-up traffic by applying basic engineering principles. They defined national restoration as a more rapid flow of cars and trucks and, therefore, wished to construct roads according to indices of traffic movement. Postwar road legislation emerged from this rich stream of creative social thought and political conflict.

THE AASHO ROAD BILL

Leaders of the American Association of State Highway Officials submitted a postwar road construction bill to Congress in April, 1943. Traditionally AASHO road bills had served as the basis for Road Committee hearings and federal highway legislation. For the most part, AASHO officers sought to fashion a bill which would win sufficient Congressional support while fulfilling their long-standing ambition
for fast-moving traffic and expanded authority for themselves. At no point, however, did they link road construction to wider issues of national transportation efficiency or urban renewal. In its essence, their bill provided increased federal funding of highway construction and devised new areas of influence for road department engineers. They wanted an authorization of $1 billion a year for 3-years following the war, federal assumption of a greater share of road building expenses, apportionment of funds more in line with population distribution and permission to construct urban parking lots with federal aid funds. AASHO officials also urged federal acquisition of highway rights-of-way, at state instigation, followed by a return of the property to highway department control. In this way, road engineers could acquire land more promptly, avoiding time-wasting and irritating delays. As separate items, they called for the inclusion of rural and urban road networks on the federal-aid system and construction by the state highway departments of a MacDonald's 40,000 mile Interregional Highway System. 37

But the AASHO bill did not satisfy the road-building ambitions of a number of people. Farm-road enthusiasts, for example, wanted an even greater share of federal highway funds and increased control of local-road standards. Leaders of the National Association of County Roads Officials demanded elimination of MacDonald's authority to determine farm-to-market highway standards. County engineers as well
as some state road department officials in the southeast claimed that the PRA's standards were too costly, limiting the number of miles they could construct. It was true, of course, that MacDonald had opposed increasing the authority of local-road building units, largely on the grounds that they were incompetent and inefficient. For that matter, he also disapproved of the construction of low-grade roads, arguing that within a few years they were not suitable for modern traffic service and necessitated excessive maintenance.

Rural and sectional interests attacked the urban and expressway features in the AASHO bill as well. They asserted that enlarged attention to those road systems reduced allocations for rural, local roads. Southern and Western spokesmen calculated that shifting to the population-heavy formula in the AASHO bill would reduce their allocations considerably. They made such claims despite the fact that the state highway officials' bill made more money available for each road system and section of the country than ever before.

State highway department engineers in the Northeast also objected to portions of the AASHO bill. Led by Spencer Miller, Jr. and William Cox, the Highway Commissioners of New Jersey and Connecticut respectively, they sought increased funds for their states, maintenance of the old 50-50, federal-state sharing principle and elimination of
the federal tax on gasoline. The state legislatures could reimpose an equivalent rate of taxation if they wished.  

Cox and Miller rested their complaints against the federal gas tax and the AASHO apportionment formula on usual engineering criteria and a sense of self-preservation. In good measure, their critique also served regional traffic and road interests. As they saw it, auto taxes should be distributed on the bases of traffic needs and road earnings. Since the federal government removed large amounts of gas tax revenues from their region, distributing them to other sections of the nation, states in the Northeast could reimpose the tax and construct more highway mileage. It was no longer reasonable, they complained, to subsidize "overbuilt" sections of the highway system. On the other hand, their call for an equal sharing of expenses was an exercise in protecting their interests. Cox felt hard-pressed to maintain his autonomy on a 50-50 sharing basis. He feared that if the states contributed only 25 percent, as the AASHO leadership planned, then the state highway officials were "'licked' from the start."  

The AASHO leadership recognized the existence of widespread opposition to their bill, but they had little inclination to accommodate the dissident groups. Brady Gentry, the President of AASHO and head of the Texas Highway Department, suggested only that the members of their Executive Committee dine with the new state highway officials
prior to the next convention of highway officials. Such a step would prove useful, he thought, as a way of outflanking Cox and Miller's "open revolt." The incoming President of AASHO, Samuel C. Hadden of Indiana, was even less forthcoming. He expressed regrets that the organization was not united, yet concluded that "we must accept this situation as we find it." Nonetheless, Hadden was much concerned with Congressional reaction to their bill, hoping to ascertain members' sentiments in order to determine "what measures must be adopted to meet the situation successfully." 42

MacDonald and other top-level PRA officials attempted to moderate the dispute over the AASHO bill, but they exhibited a far greater degree of flexibility. They pursued a three-level strategy, each aimed at pacifying elements of their constituency while forwarding their own perception of a worthwhile, postwar-highway program. PRA leaders attempted to meet the complaints of farm-road groups by promising that in return for acquiescence to the AASHO bill, rural road standards would be lowered covertly. Their approach to the objections raised by Cox and Miller was more complex. In their public comments and correspondence with state highway officials, MacDonald and his assistants endorsed most of the AASHO bill, criticizing Cox for his lack of political sensitivity in attempting to modify it dramatically. But PRA leaders entertained a much broader view of the postwar road-construction scene. Working through Federal Works
Administrator Philip B. Fleming, they called upon President Roosevelt to endorse a population formula for urban highway apportionments. More important, they asked him to assume the initiative in promoting the designation and construction of the Interregional Highway System along the lines suggested by MacDonald and members of the Interregional Highway Committee.43

Criticism from their colleagues and MacDonald did not dissuade Cox and Miller. In April, 1944, they submitted a highway bill to Congress which embodied the key points in their fight with the members of the AASHO Executive Committee. Basically, they wanted increased assistance for express roads, the virtual elimination of support for rural highways and a significant reduction in the level of federal support for road construction.44

Cox and Miller also sought political aid from the President arguing that the AASHO bill was unfair to states with the largest traffic problems. But Roosevelt refused to intervene directly in the battle. About all he was willing to do was recommend retention of the old formula for rural areas while urban allocations would be devised as a proportion of population.45

Roosevelt's scheme left quite a few critical questions unanswered, including the percentage of funds to be allocated to each system and the net authorization level. At this point, then, the lines were drawn tightly between the
competing groups, with virtually no direction from the President. Given the intensity of feelings about a number of issues, this void posed a threat to the postwar highway program.

Members of the Senate and House Roads Committees, and in particular Senator Carl Hayden of Arizona, attempted to coordinate the conflict. The stakes were greater than the precise sum to be allocated to rural, urban and express roads, although the significance of that question should not be underestimated. At issue, basically, was the direction of America's postwar social and economic life.

CONGRESS AND THE FEDERAL-AID HIGHWAY ACT OF 1944

Senator Hayden had been interested in highway affairs for many years. He had sponsored most of the bi-annual road bills over the past decade or so, fought New Deal toll road proposals, and co-sponsored a federal anti-diversion act. As a high-ranking member of the Senate Committee on Post Offices and Post Roads, Hayden was also in close contact with Commissioner MacDonald. He maintained this high level of interest throughout the war years, requesting private agencies to prepare reports on future highway development.

As the manager of the state highway officials' bill, Hayden had to locate a formula for postwar highway construction which satisfied key groups. In August, 1944, he conferred with representatives of a number of user, farm and
other organizations, including the American Automobile Association, the Chamber of Commerce of the United States and the Automotive Safety Foundation. The meetings were confidential and the results were not released until days later, following an executive session of the Senate Committee on Post Offices and Post Roads. Their decision reflected a fairly close adherence to the views of organized highway users, road engineers, farm and to some extent sectional interests, but omitted the more general plans for urban renewal and national transportation efficiency advanced by members of the planning community. Among other things, Committee members voted to reduce road authorizations substantially, giving the largest sum to the original federal-aid system and permitting urban and rural network supporters to divide the remainder evenly. They also changed the federal-state sharing ratio to 60-40. As it turned out, designation of an Interregional Highway System was one of the few important items to emerge from the Committee's deliberations largely unaltered.47

Leaders of the Farm Bureau Federation, the Petroleum Industries Tax Committee and large highway user groups were not satisfied with the Committee's decisions, however. For several months, highway users had complained that if the federal highway act was so large as to require increased state funds to match, then they would have to labor under increased state gasoline taxes. From their perspective, any federal
road authorization seemed excessive if taxes had to be raised.48

Hayden's Committee and then the full Senate responded to the criticism from all angles with amendments to delete and modify. In good part, however, the finished bill still followed the reasoning of state highway engineers and major road user groups, with ample provision for farm-road construction. At this point, the remains of the Hayden-AASHO bill provided $450 million per year for highway construction of all kinds, less than half the amount urged by AASHO leaders. Senator Richard Russell of Georgia pushed these principles a bit further with an amendment from the floor eliminating federal financing of rights-of-way. Especially in congested urban centers, rights-of-way comprised a considerable portion of highway construction expenses. Finally, the Senate accepted Senator Byrd's amendment returning the federal-state sharing ratio to the original 50-50 basis, and then halted an attempt to substitute county for state highway department authority on rural roads.49

Members of the House Roads Committee, under the Chairmanship of Rep. J. Will Robinson of Utah, responded to many of the same pressures from road engineers, farm and interstate highway users. As a result, there were few important differences between the respective bills. Late in November, the House narrowed the gap further, changing the federal-state sharing ratio to 50-50 and accepting the Senate's
definition of an urban area for apportionment purposes. Finally, House members approved Rep. Jennings Randolph's amendment to delete a section allowing MacDonald to condemn rights-of-way in excess of the width necessary for an adequate road surface. Their action was aimed at the maximization of road construction as opposed to aesthetic and urban renewal considerations, and considerably limited MacDonald's ability to employ expressways as part of a wider program of city renovation.

There were few differences remaining between the Senate and House versions of the 1944 road bill by the time members of the Conference Committee convened. They resolved these easily, accepting a $500 million authorization for a 3-year period, compromised federal responsibility for rights-of-way expenses at one-third and adopted an allocation formula based on the usual criteria for the original federal road system and a population formula for the urban and rural networks. As a further concession to farm groups, the Conference members ordered the PRA to cooperate with local road officials in the selection of farm-system routes. Once again, the expressway provision emerged unchanged, although the conferees agreed to alter its name to the National System of Interstate Highways, the title suggested by members of the House Roads Committee. They did not fund the Interstate directly, however, allowing state road engineers to develop it as they wished.
The Senate and House passed the Conference Committee's report quickly and on December 20, 1944, President Roosevelt signed the Federal-Aid Highway Act of 1944 into law. There were a few new provisions in the 1944 Act: Now there were four federal networks, each with its own constituency and apportionment formula; and the federal government assumed part of the expenses of purchasing rights-of-way. Including the new provisions, however, most of the Act was, simply, an extension of traditional federal aid highway practices.

As far back as the late 1930's and extending through the war years, Americans produced thousands of lengthy suggestions for the reform of many institutions. They devoted much thought to the rehabilitation of their cities and the relief of traffic problems as well. In some way, full employment and national prosperity would follow from the introduction of their proposals. Yet all of this planning and the conflict which surrounded it did not alter fundamentally the outlines of American highway, transportation or urban policy. For that matter, most of their schemes never really escaped their prewar forms.

City planners, economists and some business leaders posited a broad reform program in which highway building played an important role. They looked forward to the construction of express highways as part of a systematic reconstruction of the cities, possibly affecting the resocializa-
tion of much of urban America in the process. Many of them also endorsed elaborate plans for refashioning the nation's transportation system, hoping to control highway spending as a first step toward promoting more efficient transportation generally. At some point, the transportation system would fall under the direction of a federal Department of Transportation which would coordinate all shipping facilities in a way which would maximize the advantages of each.

Highway users and their allies examined these proposals from a fairly narrow point of view. They rejected motions to employ road construction and rights-of-way for purposes of urban redesign, preferring to build additional highway mileage at minimum cost to themselves. Certainly they did not intend to modify efficiency-oriented highway designs and routings and help to finance costly renewal projects. On the other hand, road users usually approved plans for more efficient transportation, so long as they did not curtail critical highway building or encourage competition from other sources.

The planning community proved to be the weakest group politically in each of these disputes. Their proposals for reviving urban America and controlling the transportation system with expressways were popular at the local level, but had only a few friends in Congress. At points in the past, President Roosevelt had been interested in such revitalization plans, but he was too preoccupied with the war to offer
consistent leadership. After the destruction of the NRPB in 1943, moreover, urban and transport reform enjoyed few spokesmen with the resources and energy to marshal consistent support for them at the national level. While there was intense conflict between users and engineers over tax and apportionment matters, all of them could unite in opposition to anything approaching diversion of gasoline taxes to non-highway purposes or appearing to intrude on their internal affairs. Congress' virtual acceptance of this thesis, then, amounted to a declaration that pure and simple traffic efficiency would remain as the goal of federal road building efforts after the war.

But wartime plans did not always lead to conflict. Some areas of general agreement among competing groups also emerged from the prospects and experiences of depression and war, including some reasonably compatible views of government-business relations. There existed a widespread approval of the notion that the federal government was obligated to invest funds in programs designed and administered by relatively autonomous, domain conscious local and state organizations. For many years, groups within the highway field had demanded control of road construction while the federal government simply refunded gasoline taxes or retired from this area altogether. Planners tended to support this view as well, giving little serious consideration to the fact that local autonomy might subvert comprehensive
planning.

National and local planners as well as highway users and road engineers also were united in their commitment to an expanding postwar economy. While some Americans still were fearful of a return to depression economics, most perceived of the war period as an opportunity to affect certain changes which would permit, if not invite, a break from the static economics of the depression to a dynamic or expanding postwar economy. They took the position that the government had an obligation to finance highway construction and aid traffic movement as facilitating factors of economic growth. Senator Hayden, for example, told the Senate that prosperity after the war depended on the construction of an adequate highway system.52

Autonomy, prosperity, and narrowly defined road construction were related to one another in a sort of triadic faith. There was a widespread assumption that with sufficient funds, though not so much as to over-tax road users, traditional highway building agencies could construct roads from which would flow a high degree of primary and secondary economic activity. Such success would obviate the return of road building by WPA-like agencies whose projects, it was said, were not only inefficiently built but which, when completed, did little to facilitate other forms of economic activity. Such a definition of postwar prosperity, in addition, did not pose a threat to the domination of road construction
by existing agencies. Basically, these arrangements determined the outlines of American highway politics during the course of the next ten years or so.
FOOTNOTES

1Scott, American City Planning, p. 361; Rosenman, Papers of FDR, X, p. 13; FDR to Bartholomew, April 14, 1941, OF 4388, FDR Library.


7Ibid.

7Ibid.


12Ibid., p. 269.


14NRPB, Transportation and National Policy, pp. 3, 9, 16.


17Scott, American City Planning, p. 398, develops this theme with reference to local planners.

18Memorandum from E.M.W., February 6, 1941; Memo for files, March 31, 1941, both in OF 1E; James Rowe, Jr., to the President, April 11, 1941; Public Letter from FDR to John M. Carmody, April 14, 1941, both in OF 4388, and all in FDR Library; FDR to John M. Carmody, August 29, 1941, in National Interregional Highway Committee, Minutes of the Second Meeting, September 8, 1941, RG 187, Records of the NRPB, File 732, N.A.
Ibid.  

Interregional Highways, pp. 11, 20-21, 40.  

Ibid., pp. 61, 64-65.  

Ibid., pp. 4, 126.  

Ibid., pp. 53-54.  

Ibid., pp. 64, 70, 87-88.  


Mayor's Advisory Committee on Planning Organization, Report to the Hon. Frank J. Lausche, Mayor of the City of Cleveland (Cleveland, 1942), p. 2, as paraphrased in Ibid., p. 397; see also R. C. Chaney, "Cleveland Freeways a Major Problem: Metropolitan Cleveland selected as a major objective in reconditioning the State's system by the Ohio Department of Highways under Director Hal G. Sours," Roads and Streets, 86 (June, 1943), pp. 42, 44.  

John D. Carney to Thomas H. MacDonald, February 8, 1944, RG 30, BPR CCF 1912-50, File 481 Corresp. 1943-44, FRC.

Ibid., pp. 65, 67.

Ibid., pp. 71-72.

Ibid., p. 65.

Public Law 295, 77th Congress, section 9 and Public Law 146, 78th Congress, section 3 provided for federal assistance to the states for highway planning. For urging of the PRA see Interregional Highways, p. 110. For highway department plans see Hal G. Sours to C. E. Swain, April 6, 1943; Report by I. W. Hall on FAPS Rt. No. 152, April 14, 1948; Frank B. Johnson to Harold E. Hilts, June 22, 1944; Thomas H. MacDonald to Harry L. Linch, December 14, 1944, all in RG 30, BPR CCF 1912-50, File 481 Ohio FAS, FRC.


The AASHO bill, H. R. 2426, was printed in U.S. Congress, House, Committee on Roads, Hearings, Federal Aid For Post-War Highway Construction, Vol. 1, 78th Congress, 2d Session, 1944, pp. 1-3.

Sen. Tom Stewart to H. E. Sargent, December 17, 1943, File 740.1.1 General 1944; Resolution from the Directors of the Southeastern Association of State Highway Officials to the Resolutions Committee, American Association of State Highway Officials, circa November, 1944, File 016 General 1944, both in RG 30, BPR CCF 1912-50, FRC.

Resolution of Chambers of Commerce of Salina and Pratt, Kansas, n.d.; Rep. Thomas D. Winter to Dear Colleague, June 14, 1944, both in RG 30, BPR CCF 1912-50, File 740.1.1 1944-45, FRC; Impressions gained from material in BPR files, FRC.


William J. Cox, Edward W. Stares, Spencer Miller, Jr., Harvey Schermerhorn and John N. Shroyer to Franklin D. Roosevelt, April 14, 1944; William J. Cox to Herbert S. Fairbank, May 17, 1944; Spencer Miller, Jr., to Thomas H. MacDonald, May 23, 1944; William J. Cox to Robert Moses, December 14, 1943, all in RG 30 BPR CCF 1912-50, File 740.1.1, 1944 General, FRC.

Letter from Brady Gentry, dated October 14, 1943, in File 740.1.1 1943; Samuel C. Hadden to Thomas H. MacDonald, December 21, 1943 and December 29, 1943, File 016 General, both in RG 30, BPR CCF 1912-50, FRC.
The AHONAS formula provided approximately 60% of a proposed authorization of $2 billion to the states according to the ratio which motor vehicle registrations in those counties with portions of the interregional system bore to all counties with portions of the interregional. Twenty percent was allocated on the basis of the 1921 formula and the remainder was granted to each state in the proportion of its motor vehicle registrations to all motor vehicle registrations. Compare H.R. 4628, introduced by Cong. Elmer H. Wene of New Jersey to H.R. 2426. The former appears in U.S. Congress, House, Committee on Roads, Hearings, Federal Aid For Post-War Highway Construction, Vol. II, 78th Congress, 2d Session, 1944, pp. 1049-1051.

Originally the AHONAS group supported H.R. 4170, which would have allocated funds on the basis of postwar employment needs as a fair measure of the nation's road building requirements. See the remarks of Spencer Miller, Jr., to the House Committee on Roads in Ibid., p. 1054.
Texas Good Roads Association, Highway Highlights, July 15, 1944; Hal H. Hale to Members of the Executive Committee, AASHO, September 13, 1944, both in RG 30 BPR CCF 1912-50, File 740.1.1, General 1944, FRC; Impressions gained from review of Bureau files, FRC, and published material.


Senator Vandenberg's motion to reconsider Russell's amendment was defeated 47-8.

H.R. 4915 in Post-War Federal-Aid Highway Act Of 1944, pp. 8-11; Congressional Record, pp. 8506, 8509-11, 8530.


Congressional Record, Vol. 90, Part 6, pp. 7676, 7682.
CHAPTER IV

THE POLITICS OF TRAFFIC EFFICIENCY

Economic growth in the postwar period exceeded wartime hopes dramatically. The years after 1945 were especially prosperous for members of the road transportation and highway construction industries. Automobile sales were strong and, in response, engineers constructed thousands of miles of roadway. All the while, truck operators increased the size of their fleets and sought new techniques for carrying ever larger loads more rapidly.

Yet prosperity did not solve the problems of the industry; it accelerated them. Before the war, poor roads and heavy concentrations of traffic along key routes had produced a costly and dangerous situation. After 1941, road construction was nearly halted and existing surfaces were allowed to fall into disrepair. For the next few years, there was a vast increase in auto and truck movements, and these fell most heavily on routes which were overcrowded already. By 1950, traffic conditions were worse than almost anyone had imagined. Human and economic losses were high as drivers crowded one-another for space on narrow roads.
At the same time, inflation and more expensive construction standards consumed a fair amount of the revenues available for additional road building.

Highway users and road engineers had an answer ready for these problems: Eliminate diversion, drop the federal gasoline tax, and concentrate construction funds on the most heavily traveled routes. There was little new in those demands. But after the war, they were couched in the lexicon of engineering surveys and more precise traffic studies. Users promised that adherence to this data would alleviate the traffic crisis. For good measure, taxes could be reduced as well.

Nearly everyone recognized that traffic conditions were miserable. But sophisticated traffic and accident reports were not sufficient to overcome the objections of competing commercial groups or the efforts of President Truman to control the economy. At the same time, local road users refused to relinquish funds to other highway networks. As they saw it, they were entitled to more money and augmented control over its expenditure. For that matter, President Truman and his advisers were unwilling to reduce user charges and simultaneously raise highway authorization levels. Congressional views of the federal highway program reflected this virtual deadlock. In large measure, the 1950 Highway Act recapitulated the themes upon which major groups had agreed in 1944.
Automobile and truck traffic increased at a phenomenal rate during the decade or so after World War II. There was, in general, a virtual doubling of every type of vehicle. At the end of the war, there were approximately 31 million registered motor vehicles of which automobiles comprised nearly 27 million. By 1955, registrations had jumped to better than 62 million, including more than 10 million trucks.¹

No area of the country escaped this vast expansion. During the 10 years following the war, drivers in Michigan purchased 1.5 million new cars and trucks. The multiplication was even greater in California, where registrations increased more than 3 million. Even in sparsely settled New Mexico, registrations jumped 150 percent, rising from 136 thousand in 1946 to around 340 thousand in 1955. All the while, the number of vehicle miles actually driven increased at a comparable rate.²

Engineers constructed many thousands of miles of high-quality roads, hoping to accommodate the huge traffic increase. While it was true that construction was slow right after the war, it increased rapidly thereafter. By 1948, in fact, engineers were building major-traffic roads, including express and toll systems, at a record pace.³

But increased construction levels and improved design standards still were not capable of coping adequately with
postwar traffic conditions. Factors outside of highway de-
partment control limited construction severely. Certainly
inflation and material shortages hobbled efforts to build
more mileage. State and local road officials tripled ex-
penditures for highway building, but rising prices consumed
a good part of the additional outlay. Costs for many items
were about double their prewar level, and even higher for
the very expensive structural components necessary for urban
expressways. For a few years after the war, shortages de-
layed construction and during the Korean conflict, a govern-
ment order to conserve steel slowed road building further.

The traffic upsurge, rising costs and shortages had
their greatest impact on congested urban roads and along
crowded, inter-urban arteries. As it was, traffic had been
slow and unsafe on many of these routes long before the war.
Since they were the costliest roads to construct, it was
even more difficult to remain in step with the increased
traffic. State engineers had to labor for seven years and
spend $1 billion to construct 6,500 Interstate miles while
19,000 miles of farm roads, built in one year, cost only
$232 million. Highway officials worried that at that rate,
it would require twenty years to finish the Interstate in
Colorado and Ohio and nearly thirty years to complete it in
California.
Highway-related organizations quickly developed a variety of programs to remedy road and traffic problems. For the most part, their proposals emerged from professional and business needs and generally were far from innovative. They prescribed a comfortable program which adhered closely to traditional, functionally-defined precepts for proper road building. Their plans included some time-tested techniques and rested on reliable, user-engineer assumptions about road transport economics. As they saw it, the key to the relief of congestion was to concentrate highway construction activities on routes recording the heaviest vehicle movements. Focused road building would insure a more rapid and efficient traffic flow at lower cost to them.

The daily operating policies of a large portion of the highway industry flowed from these fairly broad goals. In terms of day-to-day legislative maneuvering, users and their allies wanted to block the diversion of gas taxes to non-highway purposes, secure increased national support for the Interstate System and eliminate the federal gasoline tax. As part of this overall package, they endorsed the sale of state road bonds. Most of this program had been at the heart of user politics for years. By the late 1940's, however, the core of efficiency-oriented road building rested on the apotheosis of engineering reports or, as they were
sometimes known, planning surveys. Implemented according to engineering specifications, they promised a number of benefits, including the construction of roads where they were needed most, the reduction of congestion and lower taxes.

Engineering reports frequently were undertaken by such agencies as the Automotive Safety Foundation, following a formal request from a state legislature. Usually the state highway departments and Public Roads Administration split expenses. The largest objective of engineering reports was to examine the state's current and potential economy and collate the results with the highway system. Investigators sought to assess the significance of manufacturing, agricultural, geographical and even tourist and resort business for the state's long-term economic development. An explicit assumption underlying this phase of the study was that the state's economy depended, to a great extent, on road transportation.

The center of such studies was an assessment of the "scientifically collected and analyzed..." data of highway mileage, design, traffic volume and patterns of driver origins and destinations as well as vehicular weights and sizes. The study groups sorted out this information and then linked it to a survey of highway taxation practices and the state's economy. From all of this material, they produced documents designed to provide what was described as a more equitable division of limited highway income to the various road
systems. The ASF coupled its revised allocation formula to a reclassification of the state's highway network into priority categories of maintenance and construction.\(^7\)

Road users and engineers hoped that revised revenue formulae and priority construction schedules would promote highway building in several ways, including an allocation of expenses according to benefit and construction in the most crowded places first. In other words, the survey would indicate which roads were of value for access to home or farm and which were major highways, important for defense and interstate transportation. In the case of local roads, property owners would assume financial responsibility while the major highways, theoretically of value to almost everyone, would receive a grant from the general fund. The surveys also indicated the hierarchy of maintenance and construction, directing road building toward the accomplishment of "first things first."\(^8\)

Some state highway department engineers promoted smaller scale versions of the engineering surveys. Yet their central purpose remained one of searching for a more systematic programming of highway construction by securing agreement to a formula for priority building and payment in relation to benefit. Highway officials employed several approaches, but the nucleus of most of them included a reworking of the old sufficiency ratio into a quantification of state-wide highway needs. One popular technique was to measure the
potential benefits to motorists divided by construction costs of alternative routings, using the results to rank the order of construction. Sometimes engineers used a slightly more complicated version of this index, assessing road deficiencies as the difference between current conditions and savings to motorists caused by improvements and divided by the costs of construction. A Public Roads' engineer was of the opinion that a ratio of two-to-one or less on this scale was fairly low while the ratio of highest priority projects would exceed five-to-one. The Arizona Highway Department employed a variant of these approaches, proceeding to modernize their state's road network according to a simple listing of the condition of highway sections. The problem with this method was integrating the important elements of road building into a comprehensible picture and then rating them "on an equal and impartial basis."

Engineering surveys of one kind or another enjoyed the support of users and other segments of the highway-construction field around the country. Frequently highway users sponsored and participated in the surveys. A 33-member Ohio Highway Study Committee, including truckers, construction contractors and elected officials, invited the Automotive Safety Foundation to survey the state's road and street difficulties. By late 1948, user groups in a number of states were planning to ask the next session of their state legislature to include them in the development of long-range
plans for "programmed highway progress." In the meanwhile, large-scale studies were underway or completed in Washington, Michigan, Nebraska, Kansas, Oregon and California.10

The planning surveys and other traffic measuring devices were more than exercises in engineering and management techniques. Basically, they were a political response by large-volume users, automobile manufacturers, highway engineers and some legislators to postwar, highway-building arrangements. G. Donald Kennedy, an ASF official and former head of the Michigan Highway Department, reported that the California Assembly had been inundated with diverse and expensive demands for highway construction. Similar conflicts were occurring in other states as well, where urban and rural and occasionally two or more urban areas competed for highway improvement funds. Survey sponsors believed that their results offered a method of overcoming these problems. They intended to transfer the essentially normative conclusions of the surveys into legislation which would obviate political debate and delay, rearrange funding practices, and dictate highway construction priorities along lines more palatable to them. For example, Kennedy thought the investigations would remove "guesswork and political pressure" from the determination of highway-building priorities and, simultaneously reduce the diversion and dispersion of highway funds. State highway officials held out many of the same hopes for the studies, adding that, ideally, they would
assist against "pressure groups" attempting to have "pets" placed in the highway budget. In a sense, the purpose of highway engineering surveys was to serve as the basis for the authority to build "first things first."

In reality, the highway planning surveys and the many variants of the sufficiency ratio were sophisticated attempts to gather support for the traditional designs of road users and engineers. Highway officials admitted that benefit measurements of one kind or another were not recent to transportation studies. They had been in general use for years. As always, then, the surveys had to serve two political functions. They were supposed to win "public understanding" for their conclusions and provide important data to government officials attempting to withstand the "sharpening demands" of the vastly increased number of motor vehicle operators.

TAXES, DIVERSION AND BONDS

Establishing the engineering surveys as the framework for highway construction was only one phase of a more general effort to revise old arrangements. Many users and engineers also sought to eliminate the federal gasoline tax without losing federal responsibility for major road systems and, at the same time, restrict state gasoline revenues to highway work. They were willing to supplement their revenues, when necessary, with income from the sale of bonds.
If all went well, they might secure more timely highway building, expedite traffic, safeguard cherished principles and prerogatives and lower expenses considerably.

In August, 1947, more than 400 state and local road users, including for-hire truckers, petroleum distributors, private shippers and automobile owners' associations, petitioned Congress for repeal of the federal taxes on gasoline and vehicle sales. They asserted that these taxes were inequitable since support of governmental activities became a product of the number of miles driven. Federal excises amounted to duplicate taxation. But elimination of federal taxes was not intended to preclude a continuation of financial support for road construction. Users claimed that benefits to the nation's welfare, defense, commerce and mail delivery justified a more general source of funds.\textsuperscript{13}

The federal gas tax was a salient issue in the minds of motor vehicle operators, not just another tax which might be lowered to their advantage. They believed that continued imposition of it violated sound taxing principles and threatened state sovereignty. Besides, they were easy to collect and so might be raised. The Director of the National Highway Users Conference, Arthur C. Butler, urged representatives of member organizations gathered for a private meeting late in 1949 to contact members of Congress about the importance of repealing the taxes. It was a question, added one participant, of "'now or never.'"\textsuperscript{14}
While lobbying Congress for the elimination of the federal imposts, users pressured their state legislators for a halt to diversion. Rising construction costs, the growth of traffic and a limit on users willingness to pay higher gasoline taxes made it imperative to seal every leak. One popular approach was to secure state anti-diversion statutes. Yet Butler was of the opinion that these were "frail reed[s] in the protection of user taxes. Prohibiting diversion by securing amendments to state constitutions offered a more viable form of protection. Butler reported that 19 states had adopted anti-diversion amendments as of late 1948. In the meanwhile, user groups in Maryland, New Mexico and Wyoming as well as those in a number of other states planned to present their legislatures with anti-diversion or "Good Roads' amendments in the near future. But even amendments to state constitutions could not insure the safety of their funds. Butler urged users to exercise vigilance after securing amendments, citing an effort in Massachusetts to include mass transit as a gas tax recipient and drawing nearly $2 million a year for its support.15

Quite frequently, proponents of focused highway building and an end to diversion combined these thrusts into the creation of state highway trust systems. In 1947, for instance, California commenced operation of the Highway Users Tax Fund. All gasoline taxes were paid into it and disbursements were limited to highway construction work. Since
an anti-diversion amendment prohibited the expenditure of funds except for highway purposes, the amendments also operated as a primitive trust system.¹⁶

Bond financing comprised another aspect of the effort to accelerate highway construction. State and local governments sold a great many highway bonds during the 1920's and 1930's, though their popularity declined rapidly near the end of that period. Beginning in 1945, however, bonded indebtedness rose swiftly, as municipal, county and state governments sought new sources of revenue for road building. In many cases, governments pledged their gasoline tax revenues or their general credit as security for the bond issues.

Public Roads' officials were especially excited about the resort to bonds. In their view, bond revenue would permit the rapid construction of additional express roads when sufficient income was not available from regular sources. Lawrence I. Hewes, the head of PRA's western operations wrote MacDonald that many cities lacked adequate financial resources for express roads. At the same time, they had achieved the limits of permissible indebtedness. Hewes thought that if a projected urban expressway project appeared solvent, it could be financed by dedicating the city's gasoline taxes, at increased rates, to the repayment of the bond issue. G. P. St. Clair, the PRA's Chief of Financial and Administrative Research, asserted that bond issues promised an optimal level of construction, assuring completion of the
Interstate network within a relatively short period of time. Such plans, incidentally, usually did not contravene debt ceilings.\(^{17}\)

State and federal highway officials also hoped that the financing of expressways by revenue bonds would undermine the toll road movement. In March, 1947, Joseph Barnett, the Chief of the Urban Division of the PRA, completed a draft of legislation authorizing bond sales which, he believed, the agency could offer to highway administrators as "an alternative" to toll facilities. About a year later, Herbert Fairbank, one of PRA's top officials, also portrayed bond-financed road building to a meeting of road users and engineers as an "attractive alternative" to tollways. By the end of the year, Fairbank had become so enamoured of the idea that he ordered St. Clair to draft legislation offering federal aid for highway-bond issues.\(^{18}\)

The postwar traffic relief program of many road user groups and highway engineers revolved around the application of several principles. At the state level, members of this group hoped to eliminate the dispersion of gasoline taxes to little used roads and prohibit the expenditure of highway revenues on non-highway projects. In some states they secured trust funds for the safety of user taxes. In either event, they justified these efforts in terms of a benefit theory of taxation.

Their program for the federal highway system amounted
to a nationalization of these views. The federal government collected a good deal more in gas taxes than it spent for road building; and it made large grants for the construction of infrequently used roads. Many road users and their allies wanted to cut local roads from a place at the Federal Treasury. Since everyone presumably benefited from the Interstate and other key roads, they argued that the federal government should drop its tax on gasoline and fund national roads from general revenues. Moreover, users expected a considerable increase in the level of Interstate support.

If this program were successful, its promoters anticipated a reduction of congestion and a highway network more attractive than the expanding toll system. Taxes also would be reduced considerably. In the meantime, bonds and a stricter adherence to engineering surveys would substitute for additional levies on motor vehicle operators. Bond income also postponed some difficult questions about the vitality of the state highway departments in the event of a major federal withdrawal from highway support. Not everyone was impressed with survey data and the immediate problems of road users.

THE TRUMAN ADMINISTRATION

Engineers and road users were not able to gain the support of President Truman and his advisors for their program of concentrated, tax-free road building. They continued to
support a more limited federal investment in highways and refused to drop the tax on gasoline. While they shared most of the users assumptions about the importance of more efficient and safer traffic flow, they had larger objectives in mind.

Truman and his top advisors were pursuing a program which subordinated highways to larger economic considerations. Faced with shortages and rising prices in many industries, especially home construction, the primary thrust of Truman's highway policy was to control construction in the interest of counter-cyclical economic management. This strategy involved two layers of activity. First, Truman sought to limit highway construction in order to hold down the consumption and price of scarce building materials. His Reconversion Director, John R. Steelman, froze federal aid for highway construction for a 56 day period beginning August 6, 1946. Truman set less stringent limits in mid-October, ordering Federal Works Administrator Fleming to encourage state and local to postpone public works construction by using his "good offices." As part of this strategy, Truman asked MacDonald to work with local officials in an attempt to restrain local highway building. Although supplies were a little more plentiful by 1948, Truman's top administrators continued to restrain highway building. The Budget Bureau Director, James E. Webb, secured an agreement with the Fleming limiting the proposed 1948 Highway Act to
two years rather than the three-year period permitted in the 1944 Act. Webb explained to Truman that the purpose of the reduction was to secure "reasonable budgetary control."¹⁹

The second leg of Truman's economic strategy was to reduce inflation by holding spending for highway construction at the 1944 level. Robinson Newcomb, a member of the Council of Economic Advisors, explained the President's program to Spencer Miller, Jr., the head of the New Jersey Highway Department. Since the national government collected more from users than it spent for road construction, the net effect of the federal aid highway program was to reduce inflationary pressures. Newcomb argued against an increase in federal road spending except in areas of high unemployment. Construction also was permissible on roads in such poor condition that postponing repairs would force users to incur higher operating costs or require a greater future expenditure by the government. In the meanwhile, members of the Council of Economic Advisors recommended holding spending in the 1948 Highway Act to the 1944 level of $500 million.²⁰

Truman administration officials shared a number of assumptions with large road users and highway engineers about the desirability of certain results emerging from road construction. Both supported more efficient highway design and special attention for the Interstate System and urban highway problems.²¹ They separated widely, however, over the meaning of highway work for the remainder of the economy.
Users and engineers usually urged the formulation of highway policy with reference to the immediate economic and political requirements of their industry. President Truman entertained a much wider perspective on road construction. He defined highway expenditures as only one portion of a much larger economic aggregate which he was attempting to manage. In this sense at least, Truman maintained the Rooseveltian tradition.

THE FARM ROAD CONTROVERSY

Many farm groups and local road users as well as county engineers rejected the major users' emphasis on traffic counts and the President's efforts to control the economy as satisfactory criteria for highway programming. As in the past, moreover, the objected to federal determination of construction standards. The thrust of their highway plans was in the direction of increased federal spending for local road building coupled with a reduction of national controls.

Farm organizations carried the burden of this attack. They asserted that traffic density was not the only basis for the construction of a highway. Access to the farm, for production, was of equal importance. The Farm Bureau and the Grange, a national organization of farmers, also were critical of federal determination of road construction standards, claiming that these had been placed at levels so high as to preclude the building of adequate and inexpensive
farm-to-market mileage. The real need was not expressways, wrote the Executive Vice President of the North Carolina Farm Bureau, but roads adequate to "get our rural people out of the mud." 22

The satisfactory resolution of these difficulties, claimed another Farm Bureau leader, rested with state and local as opposed to federal determination of highway building standards. The Master of the Grange carried this view somewhat further, asserting that local road officials ought to converse with the "public minded citizens" of every jurisdiction about problems of maintenance, specifications and engineering. The results in most of the areas which had instituted this interaction were quite pleasing, he averred. As an additional benefit, citizens assumed a greater interest in highway problems. 23

Farm and local road sentiment found expression in Congress. Complaining that MacDonald's standards were excessive, Senators Milton R. Young of North Dakota and John C. Stennis of Mississippi co-sponsored, in 1949, a bill to authorize the expenditure of $100 million annually for constructing and rebuilding local, rural roads. They also hoped to create a Rural Roads Division within the PRA, staffed by persons familiar with rural highway building, and were willing to grant the state highway department and local government officials the right to select all-weather standards without the Commissioner's approval. MacDonald
would retain control of location, although Young looked forward to some point in the near future when only the state highway department's approval of rural roads would be necessary. Nonetheless, Young did not think any legislation would be necessary if the bill and hearings induced the PRA to modify its policy.24

Federal and state road officials rejected rural claims. They objected to any formula which promised greater attention to local roads and opposed efforts to reduce their influence over local highway affairs. As always, they counter-attacked in the name of traffic efficiency and adherence to engineering principles.

The head of New Jersey's Highway Department, Spencer Miller, Jr., wrote Stennis that unless his bill mandated a more scientific determination of highway requirements, it was not satisfactory. As it stood, Miller feared that the Stennis bill would endanger the existing allocation formula, itself the product of the "most objective evaluation of road needs thus far established." For that matter, Miller claimed that a separate PRA Rural Division, as proposed by Stennis and Young, would endanger the "efficient allocation of all funds...," encourage "waste and inefficiency" by inviting bids from any local authority and destroy Public Roads' responsibility for construction standards.25

Hal Hale, the Executive-Director of AASHO, assessed the Stennis-Young bill in much the same traffic-efficiency
terms. He wrote Senator George W. Malone of Nevada that the Congress had to choose between support of the approximately 600,000 miles which served the greatest part of the nation's traffic and assistance to an additional 2 million miles carrying the remainder. And unless local governments could guarantee financing of repairs during their "economic life," then federal aid to the increased mileage was a "highly questionable policy." Consistent with this view, members of the AASHO Executive Committee, including MacDonald, recommended deferring consideration of the bill pending a PRA study of the relationship between the American highway system and local road finance and construction. Barring a study, they requested permission to add amendments which would foster more efficient and better organized highway administration.26

Public Roads Administration officials sought to coordinate the conflict. They asked users to temper their demands for concentrated construction, held out the prospect of more rural road mileage to farm groups and spoke to everyone about efficient traffic movement. In one way or another they had used these arguments for more than ten years. For example, Fairbank asserted that the application of revenues to a limited number of roads, or to the Interstate alone, might result in some waste. Not every section of the Interstate was of greater value than a neighboring highway. On the other hand, a PRA official told farm-to-market road
proponents that his agency's attitude toward the Stennis-
Young bill would rest upon considerations of a balance among
the three systems as well as an assessment of the ability of
local and state governments to fund and undertake a rural-
road building program.27

The distinguishing feature of this debate was not rural
or urban residence but differences based upon perceived com­
cmercial self-interest and distinct professional values. To
a limited extent, a conflict between the advocates of popu­
lar and professional determination of engineering questions
also separated them. The engineering surveys of the state
highway networks, with their concomitant rations and other
measurements, were part of an attempt by many sectors of the
highway industry to devise a rational response to concen­
trated highway problems. Advocates of federal assistance
to an enlarged rural-local system, on the other hand tended
to accept notions of efficiency and commercial success.
Since the average daily traffic counts were of little value
to them, however, they turned to other symbols with which
to justify greater federal attention to their highway prob­
lems.

Stennis and Young delayed their bill, pending the out­
come of MacDonald's study. By early 1950, then, members of
the highway construction and road transportation industries
again were locked in political conflict. Interstate truck­
ing groups and many road engineers emphasized concentrated,
tax-free highway building; local operators and farm groups preferred greater attention to their favorite roads, but with federal controls removed; and the President, a friend of the truckers in principle, opted for a strict limit on federal road expenditures in the interest of economic management.

Leading state highway officials wrote a federal-aid highway bill for 1950 which took some of these perspectives into account. They increased funds for every road network, including a separate authorization of $210 million a year for the Interstate System based on a population formula. While loosening control of local-road building somewhat, they added in a few items which had lingered about engineering circles since 1943, including 75-25, federal-state expense sharing and authority for road officials to transfer funds from one system to another. In its entirety, however, the AASHO leadership's bill emphasized the construction of heavy-duty roads and a deeply-felt desire to maintain control of funds and highway construction.28

But the AASHO bill did not satisfy competing highway groups. Highway users objected to significant portions of it, wishing to retain a significant voice in the disbursement of highway funds while securing elimination of the federal gasoline tax. The National Highway Users Conference's Research Counsel, Dawes Brisbane, warned a meeting of the American Road Builders' Association of "the peril" to the
state highway departments of changing the federal-state sharing ratio to a 75-25 basis. At some point, he argued, the federal government would overshadow the state agencies to the detriment of their sovereignty. Brisbane also was concerned about the impact of the relatively large grant on the national economy. He admitted that the sum of money involved was not great and conceded the importance of an accelerated road program for highway users, yet he feared that increased spending would endanger the national economy ultimately.29

These concerns were voiced in other quarters as well, sometimes in more dramatic form. The Manager of the U.S. Chamber of Commerce's Transportation and Communication Department, Harold F. Hammond, claimed that a shift in the federal-state sharing posed a threat to highway department authority and would move the road program toward "the left fork...of nationalized highways...." Another consequence of such a shift, he argued, would be to transfer lobbying for highway revenues to Washington where "political pressures" would replace "local needs" as the test of a program's value. Besides, an increase in federal assistance for highway construction raised the probability of increased federal taxation of gasoline.30

Representative Will M. Whittington of Mississippi, the Chairman of the House Public Works Committee, sponsored a modified version of the AASHO bill which went a good
distance toward meeting these conflicting points of view. On balance, however, he treated farm groups best of all. Whittington endorsed the engineers' proposed bond-issue program, approved their request for increased federal assumption of Interstate construction and rights-of-way costs and accepted the more widely-held view that Interstate allocations should be placed on a population basis. The Chairman also incorporated road users' concern about federal spending by cutting the authorization substantially, though the Interstate suffered the largest loss. On the other hand, farm-road groups received most of the items they had sought, including permission for state highway department officials to transfer up to one-fourth of their federal-aid funds to rural-local roads as well as some additional aids to farm-highway construction.31

The full Public Works Committee altered the Chairman's recommendations slightly, making concessions to the opportunities of national highway users, Chamber of Commerce spokesmen and state highway engineers. They deleted the permissive transfer provision and dropped the extra assistance Whittington had promised rural-road builders. Nonetheless, road users and Budget Bureau officials could not persuade Committee members to return federal-state expense sharing to a 50-50 basis.32

While fairly vigorous debate had surrounded the bill, few amendments were introduced on the floor. Congressman
J. Harry McGregor of Ohio, a proponent of greater federal assistance to local roads, moved to strike Interstate system funds entirely. From the other direction, Rep. Kenneth Keating of New York led a small group of the area's Representatives in an effort to reduce the highway authorization by 20 percent. This move was in the interest, he claimed, of a balanced budget and the residents of the Northeast who did not receive a fair proportion of federal aid. Both motions failed and on May 19, the House passed the Whittington bill.33

About the same time, the Senate Roads Subcommittee, chaired by John J. McClellan of Arkansas, commenced consideration of a road bill which promised even greater benefits to the major contending parties. Subcommittee members earmarked $100 million for the Interstate, raised federal support for rights of way to 50 percent and approved the sale of state bonds to which federal road money was pledged. Those features met the key specifications of interstate road-user groups and state road engineers. The Subcommittee also voted to grant farm to market and local road supporters most of the features which Senators Stennis and Young had promised to them in 1949, including greater control of standards and the right to receive up to 25 percent of the other networks' funds. In order to finance all of this road building, however, the Subcommittee had to plan for an authorization of $650 million per year, a sum considerably higher than the
level approved by the House. 34

Evaluations of the Senate bill varied according to the degree to which competing groups thought it would forward their commercial and professional goals. State highway and Bureau of Public Roads officials applauded the inclusion of the section permitting the sale of bonds to which future federal aid was pledged. Not only would the sale of bonds accelerate the pace of road construction, but it would reduce operators' expenses, induce greater safety and offer a "possible deterrent to the construction of toll facilities." 35

Urban officials and top officers of the American Automobile Association endorsed the resort to bonds for many of the same reasons. Russell Singer, the Vice-President of the AAA argued that bond financing was "the answer" to increased toll road construction. The Milwaukee Common Council resolved in favor of bonds in order to advance the rate of highway building. And Glen C. Richards, the Superintendent of Public Works in Detroit, promised the Senate Roads Subcommittee that bond financing would cut 10 years from the construction time of two Interstate roads in his city. 36

Yet members of these same groups still were not satisfied with the McClellan bill. For example, Singer objected to the increased level of federal-highway expenditures, fearing that increased federal-road aid would lead eventually to a direct linkage between federal gasoline taxes
and federal highway expenditures. In the interest of the national defense, economic growth and expeditious highway construction, on the other hand, Singer urged the national government to assume a larger share of highway building costs. State highway officials also requested the federal government to finance a larger part of construction expenses, rejecting the view that a shift in the federal-state sharing ratio posed a threat to their autonomy. Samuel Hadden, a former President of AASHO and head of the Indiana Highway Department, claimed that he would approve not only of a 75-25 but even of a 90-10 federal-state sharing arrangement. All he wanted was 10 percent of the expense and "at least 50 percent of the authority."

Bureau of Public Roads, Budget Bureau and Office of Management and Budget officials joined the attack on the Subcommittee bill, focusing their critique on those aspects of it which limited the construction of roads in the most crowded areas or threatened control of the budget. Similar to other highway-minded groups, however, leaders of these agencies could not always reach agreement on the most desirable method for achieving common aims. BPR officers argued that Interstate System allocations should be placed on a population basis strictly while Budget Bureau officials were willing to settle for a small addition to the Interstate authorization, allowing disbursements to follow the traditional land, population and road mileage formula. Budget
Bureau and Office of Budget and Management officials also rejected an increase above the usual 50-50, federal-state expense sharing formula on the grounds that a shift in favor of increased federal aid would affect fiscal management adversely. As part of their strategy for achieving budgetary control, they insisted that MacDonald and other BPR leaders endorse the 50-50 ratio in their public statements. Finally, BOB officers followed a similar line of reasoning in disapproving of the sale of state-highway bonds to which federal aid was pledged.38

Most of these complaints had little impact on the Senate version of the highway bill. The full Senate Public Works Committee, under Senator Dennis Chavez of New Mexico, reported a highway bill which largely disregarded the views of government officials, national road users and state highway engineers. For the most part, Committee members incorporated the sentiments of farm and rural highway groups as well as county road officials, funding rural highways at a higher level and allowing greater participation by local groups in determining standards and other matters. The much-desired bond feature was one of the few items of value to major users and their allies which emerged largely intact from the Committee's deliberations. But authority to retire bonds with federal-aid funds was extended from the states along to the cities and other subdivisions, diluting the authority of the state road departments over highway
programming and finance. 39

Senators from states whose roads were the most crowded attempted to alter the Committee bill along lines more favorable to their motoring constituents. Led by Senator John C. Lodge of Massachusetts, they sponsored an amendment apportioning Interstate funds on a population basis. Senators Paul Douglas of Illinois and Robert Hendrickson of New Jersey co-sponsored an amendment to slice $125 million from the Committee's authorization for the rural system. Voting largely according to a calculation of maximum financial benefit for their states, the Senate turned down both amendments by fairly sizeable margins. 40

Suddenly, Members of the Senate Public Works Committee reversed themselves and recommended further cuts in highway spending. Their action followed receipt of a public letter from President Truman, dated August 17, urging a reduction in highway spending in the interest of a balanced budget and increased military expenditures for the Korean war. At one point, Sen. Chavez acknowledged that war costs justified this reduction, but he reminded his colleagues that the authorization level on which Truman insisted was identical to his prewar budget figure. Chavez added that advocates of economy in and out of Congress were calling for such a reduction. The Senate followed Truman's lead, voting to reduce the authorization substantially, though not to the level demanded by him. The major savings resulted from the
elimination of the Interstate authorization on the grounds that it received funds from the primary and urban networks.41

There were few differences remaining for members of the Senate-House Conference Committee to negotiate about. They agreed to raise the authorization for the primary and secondary systems to the House-approved level and concurred in the Senate's decision to delete funds for the Interstate System. By these actions, the conferees restored the 1944 ratios between the federal highway networks. Finally, the conferees modified somewhat the Senate's relatively generous handling of farm to market road problems but went along with its decision to allow state and local authorities to retire bonds with federal-aid funds.42 In the end, debate and political conflict since 1946 had forced few changes in federal highway policy.

The Federal-Aid Highway Act of 1950 reaffirmed the 1944 bargain between competing highway-minded groups. They could not impose their point of view unilaterally or threaten the salient prerogatives of competitors. Although there was some tampering with the control and specifications of farm to market road construction, the apportionment ratio was left intact. The agreement to retain the existing ratio also blocked a separate authorization for the Interstate System, leaving its supporters to construct such expressway
mileage as they were able with funds drawn from other networks. In effect, road users, highway engineers, the Congress and President Truman preferred to face growing traffic jams rather than pay higher taxes, risk a diminution of authority over highway programming or upset the federal budget a bit more. Enactment of the 1950 Highway Act, then, meant that the established groups in highway politics could continue to disperse funds to their favorite road system more or less according to traditional preferences.

The deadlock in highway policy-making, even in the face of the immense traffic problems confronting road users, was part of a long-term conflict over the direction of highway development extending back to New Deal days. While everyone defined road transport as a vital component of economic prosperity, a static view of the nation's highway construction potential continued to inform road-policy formulation. Farm to market and nation-wide road users as well as state highway engineers continued to seek funds for additional rural or expressway mileage by stripping authorizations from the other systems. Permissive transfer of funds by state highway officials was one phase of this strategy. For that matter, permissive transfer and other such techniques also served a continuing commitment to the reduction or elimination of the federal gasoline tax. At the same time, conflict between users, engineers and President Truman over the level of federal highway spending repeated familiar themes
in highway affairs. Even the rhetoric of political con-

flict, though updated, simply restated traditional points of

view. The U.S. Chamber of Commerce had long-supported fed-
eral spending on major highways and opposed assistance to
little-used local roads. As in the past, the Chamber en-
dorsed federal aid to the Interstate, primary and some sec-
ondary roads, but one of its spokesmen characterized aid to
rural-local roads as "just plain national socialism."43

But postwar highway politics was not entirely repeti-
tious of earlier events. In the first place, debate over
road building took place in a context of vastly increased
numbers of autos, trucks and buses and an immense jump in
highway construction expenses. These factors tended to
heighten the sense of urgency surrounding policy formulation.
Civil and traffic engineering techniques also were changed
slightly. They included sophisticated apparatus for the
analysis of numerous highway-related variables as well as an
improved understanding of the design and construction stand-
ards required for modern, high-speed traffic.

In terms of highway politics, however, these changes
were not significant. Conflicting groups drew on new data
or modified design standards largely as a method for rein-
forcing traditional preferences. Road users and engineers
riveted their attention on the solution of day-to-day com-
mercial and professional problems, employing new analytic
devices to serve those goals. Interstate truck operators
and state highway officials still believed that road construction should be made more efficient through the elimination of diversion and cutting local roads from the federal payroll while farm to market and local road users groups continued to press for federal assumption of a greater share of their road-expense burden. Only a threatened increase in fuel taxes or a projected toll-road could unite these groups.

Essentially this was the pattern of highway politics over the ensuing few years. During a part of that period, however, interstate road users and some like-minded groups launched Project Adequate Roads, a nationwide, coordinated effort to establish highway building along lines more compatible with their needs. Ultimately this initiative led to a repetition of some familiar political conflicts and further deadlock over the direction of the American highway program.
FOOTNOTES


2Ibid., pp. 25, 29, 31, 40-1.

3Ibid., p. 151.


The structural components of the Interstate System comprised 53 percent of the cost of all Interstate mileage and 50 percent of Federal Aid Primary mileage. These figures do not include the cost of rights-of-way which were most expensive in densely populated areas. See Department of Commerce, Highway Statistics 1955, p. 167.


See also Butler, "Road Blocks to Highway Progress," p. 44.


See also Livingston, "The Sufficiency Survey Method of Determining (sic) Priorities for Construction Programs," p. 42.
"A Petition to the Congress," p. 5; Arthur C. Butler to Harold Knutson, July 15, 1947; List of signatories to Petition to the Congress, all reprinted in Highway Highlights: Automotive Transportation in All Its Phases (August, 1947), pp. 5-7.

See also the Summary of Minutes of Joint Meeting, Board of Governors and Administrative Committee, National Highway Users Conference, December 14, 1949, Papers of Lou E. Holland, American Automobile Association, National Highway Users Conference 1949 File, Truman Library.

Knutson was Chairman of the House Committee on Ways and Means.


"Halt of All Federal-Aid Projects Until October 1 May Stymie Construction," Highway Highlights: Automotive Transportation in All Its Phases (August, 1946), p. 4; President Truman to Gen. Philip B. Fleming, October 12, 1946, OF 140; James E. Webb to the President, January 30, 1948, OF 129, both in Truman Library.
During the years 1945-1948, the federal government collected $1.3 billion from taxes on motor fuels and $1.68 billion from taxes on motor vehicles. During that same period, it spent $812 million on all roads including those constructed by the Bureau of Land Management and Corps of Engineers. But the PRA administered the highways of greatest importance to most users and state highway officials and it expended $795 million or approximately $505 million less than the Treasury collected from gasoline revenues alone. This relationship continued until 1956. See Department of Transportation, Highway Statistics, Summary to 1965, pp. 52-53, 169.


Farm Bureau leaders in a number of other states expressed similar views. See letters and testimony in Ibid.


AASHO leaders also hoped to boost the federal government's share of rights-of-way costs from one-third to one-half.

29Dawes E. Brisbane, Speech to a Special Forum of the American Road Builders' Association, November, 1949, partially reprinted in Highway Highlights: Automotive Transportation In All Its Phases (December, 1949), p. 3.


For the divergence of views, compare the testimony of Sidney L. Miller for the Chamber of Commerce with the remarks of Willard L. Manning, President of the National Rural Letter Carriers' Association and W. Ward Forman, the Chairman of the Roads Committee of the National Association of County Officials in Hearings on H.R. 7398 and H.R. 7941, Federal-Aid Highway Act Of 1950, pp. 52-526, 5-6, 536-40; U.S. Congressional Record, 81st Congress, 2d Session, 1950, XCVI, Part 6, 7336, 7338, 7344, 7349.

Keating's motion to recommit was defeated 113-24 and 140-18 while McGregor's motion to strike the Interstate lost 20-34 and 17-70. The vote on the Committee bill was 246-34, with 29 of the 34 dissenting votes cast by representatives from Massachusetts, Michigan, New Jersey, New York and Pennsylvania.


Remarks of Singer to a question and answer session of the NHUC's Third Transportation Congress, Proceedings of the Third Highway Transportation Congress, p. 40.

MacDonald had endorsed the provision allowing state road officials to transfer funds to the secondary network, until OBM officials ordered him to oppose it. See Eckhaus to Cawley.


40 U.S. Congressional Record, 81st Congress, 2d Session, 1950, XCVI, Part 9, 12692, 12704, 12788; Ibid., part 10, 12980-12982, 12984.

The vote on the Lodge amendment was 27-58-11; the Douglas-Hendrickson amendment fared about the same, losing 26-54-16. See part 10, 12980-12981, 12984.

Chavez warned his colleagues that, excluding Texas and California, the states west of the Mississippi and south of the Ohio would be "worse off" under the provisions of the Lodge amendment. Actually, Florida, Louisiana, Virginia and West Virginia would have gained, though by minor amounts, under a population formula. See part 9, 12726, 12728.


The vote to cut federal aid urban and secondary funds was 50-32-14 and 47-37-12 respectively. The vote to eliminate the Interstate authorization was not recorded. See Part 10, 12985-12986, 12993.


See also letter from Sen. John C. Stennis to Clarence R. Miles, August 15, 1950, U.S. Congressional Record, Part 9, 12794-12795 which first called this item to my attention.
CHAPTER V

PAR--PROJECT ADEQUATE ROADS: MANAGING THE HIGHWAY SYSTEM, 1951-1954

Many of the factors which had disturbed Americans after the war continued into the early 1950's. Unprecedented increases in population and generally rising real income buoyed some spirits but brought undesired consequences as well. There were shortages of some products and rising prices. The Korean conflict accelerated these movements. Fearful of inflation, shortages and an unbalanced budget, the government imposed restrictions on the manufacture and distribution of some products. But prices for what was available continued to rise. In the meanwhile, the war in Korea occupied the attention of the President and Congress, lessening their enthusiasm for costly social projects and time-consuming matters.

Prosperity, inflation, shortages and the unwillingness or inability of the federal government to cope with problems also affected the highway transportation and road construction industries. Traffic jams swelled during the early 1950's as more and more autos and trucks filled already
crowded roads. Congestion was particularly severe in urban areas and on busy, primary roads between major cities. At the same time, Korean war restrictions and rising prices limited the construction of high-capacity, express-highways. Freeway mileage did increase during the years 1950-1954, but price rises and government restrictions on road building retarded construction well-below the appetite of motorists.

Factors largely unique to highway construction also impeded freeway construction. Clearly old legislative arrangements were a significant limiting factor. The 1950 Highway Act had reaffirmed the 1944 formula. Presidential interest in a balanced budget and user preoccupation with fuel tax rates kept annual grants at a level which provided only a portion of the estimated expenses of constructing a sufficient highway network. The agreement among competing interests to fund the primary, secondary and urban systems along traditional lines further limited the scope of the 1950 Act. No money was allowed for the high-volume Interstate System in particular while a large portion of each year's allotment went to roads carrying relatively few vehicles. In the main, the authors of the 1950 Act could not find an apportionment formula satisfactory to all interested parties. Lacking sufficient strength to alter the balance, each group had to settle for whatever it could obtain.

But this arrangement did not serve the economic interests of urban and major interstate road users. Congestion
delayed deliveries and added to the rising costs of shipping. The United States Chamber of Commerce reported that in some New England cities, nearly 40 percent of trip time was consumed in traffic delays. Shippers and carriers also complained of the expenses of food spoilage, employers of workers arriving late for work and all of the inefficiency and tragedy of traffic accidents.¹

Highway users concluded that the old formulas were no longer acceptable. The sought dramatic action which would overturn established ratios and put highway building on a strict beneficiary basis. At last, low-density roads would be returned to local resources for support and the federal government would fund a stepped up rate of Interstate construction from general revenues.

National highway users and road engineers had promoted much the same sort of program for many years. Armed with traffic studies and beneficiary ratios, they had called upon the federal and state governments to revise apportionment and tax legislation in their favor. But this attempt to revise legislation contained several innovative features. Although they grumbled about it a great deal, major road organizations had not contested the 1944 Act seriously. Commencing late in 1951, however, many of them sought to link disparate groups into a common front with a view towards shattering the old alliances and forcing the establishment of a new tax and apportionment system; proponents of a
roughly similar approach joined their struggle. Their relative failure set the stage for other arrangements and a vastly increased road building program.²

PERCEIVING THE TRAFFIC PROBLEM

By mid-1951, leaders of the National Highway Users Conference, (NHUC) an organization whose membership included the nation's largest users and motor vehicle manufacturers, had concluded that recent federal and state highway legislation was inadequate. The same traffic, road and financial problems, they complained, continued to disrupt American highway transportation. Roads were congested and poorly paved; some states even lacked sufficient funds for basic remodeling and reconstruction work. Parking space also was in short supply. As a result, highway users daily faced traffic tangles, lower profits and more accidents.³

Generally speaking, leaders of road user groups agreed that financing, in one form or another, was the major factor delaying construction of sufficient highway mileage to accommodate the traffic deluge. Inflation plus the old evils of diversion and dispersion were the primary culprits. Arthur Butler, the Director of the NHUC, pointed out that governments expended more than $4 billion on highway construction in 1950. Yet as a result of grants to low-volume roads, diversion of taxes to non-highway purposes and inflation, many states were forced to reduce their construction
plans. All the while, restrictions on construction and repair during World War II and the Korean conflict had left existing roads in terrible condition.4

If the American highway system was not improved quickly, users predicted dreadful consequences for themselves. And in the long-run, traffic problems portended difficulties for the nation. In the first place, tight traffic cut into profits. Simply enough, traffic delays added to the costs of delivery and production. Farm products spoiled, fuel was wasted, employees delayed in the completion of their tasks and production slowed when congestion stalled traffic movements. Accidents were another type of traffic inefficiency.5

According to truck and auto association leaders, the construction of tollways was certain to continue if they could not remedy the traffic problem. While highway carriers enjoyed the improved traffic conditions on the developing toll system, they resented paying the toll. Feeling that they already were assessed for the support of roads, they tended to look-upon toll expenses as a surcharge. There also was some concern that the toll authorities would perpetuate themselves, devoting profits to the extension of their system rather than terminating charges on the original road.6

Since road users had not found a solution to the traffic crisis among themselves, there was a growing possibility of external interference with their affairs. Butler
conceded that congestion exacerbated tense relationships between different segments of the road transport field. If they had an opportunity to do so, competitive transport agencies would use intra-industry disagreements to promote anti-highway legislation. The possibility of federal intervention also frightened users. In an attempt to accommodate traffic, Butler claimed the federal government would nationalize the highway system, reducing state autonomy and saddling them with higher taxes. As it was, plans to increase the federal gasoline and auto excise taxes produced great public distress among users.7

PROJECT ADEQUATE ROADS

There was little new in this recital of complaints and worries. Rarely had road users and traffic engineers not been perturbed about rising expenses, diversion, dispersion, toll roads or a threatened loss of state autonomy. As a matter of fact, they had lobbied against most of these practices since the 1920's.

But after mid-1951 or so, there were significant differences in their sense of the problem's dimensions and their response to them. National road users recognized that highway and traffic problems had reached a critical state, jeopardizing the industry and nation if left unattended. According to Butler, the traffic situation was "more costly than we can stand." It was, he thought, a "near crisis."8
They also responded to the traffic mess differently. In the past, leaders of road user groups had concentrated the majority of their attention on state and local lobbying, limiting federal-level initiatives to bi-annual pleadings for the abolition of the gas tax coupled with greater support for major roads. In some respects, their federal highway program had been ritualistic. After 1950, however, National Highway User Conference members aligned with other dissatisfied groups in a concerted effort to overthrow long-standing formulas and replace them with the rules of beneficiary payment and focused road construction.

The formal vehicle for this new initiative was PAR—Project Adequate Roads. Officially launched late in 1951, PAR was a creature of NHUC leadership and an expression of their most salient concerns. As a result, their program stressed lower taxes and greater emphasis on highway building in the most crowded traffic corridors. All these things were possible, if road construction proceeded along lines suggested by the sufficiency rating. The sufficiency rating was the technical heart of PAR. In the view of its proponents, it was "an impartial, unbiased method" of dividing funds between different road networks. Rigorously applied in the manner suggested by highway users, the sufficiency rating would force the construction of "first things first."

It was relatively easy to develop a series of suffi-
ciency ratings. Engineers gave numerical ratings, adding up to a maximum of 100 points, to road sections for structural, traffic and safety conditions. Roads with the lowest scores would receive prior attention. ¹¹

Actually, initial assumptions and impressions were the decisive factors in the effective application of the sufficiency rating, not just impartial calculations of highway conditions. The assignment of a score to a road segment always was relative to a subjective standard of optimal performance. A rating of 100, for example, given to a section of highway rested upon the belief that it was perfect for the task assigned to it. Under different traffic conditions, the score might be considerably lower. Conversely, a road with the relatively low score of 35 would receive a higher grade if it were rated for different operating circumstances. ¹² And since traffic increases were concentrated on federal and state primary roads, this would insure lower scores and preferential treatment for them.

The founders of PAR included several other demands in their program. By and large, these were reiterations of orthodox proposals for achieving beneficiary principles. Once again, they called for the classification of roads according to service rendered, anti-diversion legislation, and focused road building. One of the few new items on the PAR agenda, a 10-year highway construction program, had been passing around industry circles for quite some time. ¹³
While most of these schemes were standard enough, PAR was more than a revised carrier for orthodox Highway User Conference building and financing schedules. No longer could interstate road users tolerate delays in dealing with the traffic crisis, especially the obstructions in Congress and the state legislatures caused by group wrangling for local needs. Leaders of Project Adequate Roads intended to force some changes in federal and state highway-building arrangements; and they created a flexible organizational structure fitted to that objective. NHUC members conceived of PAR as a national coalition of users, manufacturers and public officials as well as research organizations such as the Automotive Safety Foundation and Highway Research Board. According to Butler, PAR was a "National Committee for Highway Improvement" which would function as a coordinator and "clearing-house for information and ideas." Under the national PAR organization, the founders envisioned a series of relatively independent local and state PAR groups who would "bring Sufficiency Ratings into use..." for the efficient development of city and county-controlled roads. Organizers believed that this structure would enable PAR to serve as a channel into which the cumulative efforts of formerly independent and unilateral-acting groups would be focused.14

The organizational structure plus the scientific appearance of PAR's proposals, especially the sufficiency
rating, also were intended to attract wide support from competing highway groups. PAR was a voluntary organization which did not compel adherence to the details of its proposals or threaten the sovereignty of participants. Conference members assumed that PAR would appeal to technically-oriented organizations such as state highway departments and locally-directed user groups and officials. The task of the Highway User Conference leadership would be greatly simplified if the industry were united around some common goals. In the meantime, a vigorous, nationwide campaign by PAR members was intended to gain a program of concentrated road building across a 10-year time frame. At some point, Butler hoped that PAR would act "as the Nation's index finger...", directing attention to the areas of most critical highway need.

Within a few months, PAR grew into a fairly broad coalition. At the national level, it was more or less a continuation of the NHUC. Both were combinations of auto and truck manufacturing corporations as well as trade associations who spoke for fleet operators, commercial carriers and oil companies. The American Automobile Association, also a PAR member, was national representative for state and local automobile clubs. The Chamber of Commerce of the United States, on the other hand, was not a Conference member but was one of PAR's founding organizations. The Chamber's Transportation Specialist, Henry K. Evans, described PAR as a
continuation of the Progressive era good roads movement. Within a year, moreover, twenty PAR groups were active in state highway affairs.17

PAR owed much of its rapid growth to the popularity of its platform in user and engineering circles. Highway engineers located in the populous Northeastern states aligned with PAR immediately. They had been critical of federal road-aid distribution formulas for years, arguing for the repeal of federal gas taxes followed by its reimposition in the states. This stance was financially beneficial for them since the federal government returned a small percentage of the gas tax revenues it collected in the area back to them. State highway officials in the region expected, however, that the Treasury would continue to fund the construction of important national roads. As part of the PAR-road engineer alignment, the Chief Engineer of Connecticut, Roy Jorgensen, joined the NHUC as its Engineering Counsel. In practice, he advised Conference members on the significance of technical and administrative matters for their highway program and then devoted the remainder of his time to proselytizing in behalf of common objectives.18

PAR'S INITIAL FAILURE

While PAR was large and its goals immensely popular in some circles, it achieved little immediate success. It had not overcome the political strength of President Truman and
other groups who had always opposed concentrated, tax-free federal-highway building. President Truman still was worried about inflation. Even the arguments of the Secretary of the Army in favor of greater attention to the Interstate System failed to persuade him to press for more assistance to it. At the same time, proponents of increased aid to the farm-road network were determined to retain their share of federal appropriations. The head of the Texas Highway Department, DeWitt C. Greer, admitted that the farm to market system was more fully developed than the primary or urban networks. The solution to this inequality was not to reduce the secondary system, he argued, but to raise the roads in the other networks to its level.19

Such a solution certainly was acceptable to users; they just did not want to pay for it. They wanted to eliminate federal excises while securing financing for major roads from the Treasury. And even at the state level, where users tolerated increased tax rates, they did not wish to finance the low-use but expensive secondary highways. For budgetary reasons, however, Truman opposed a downward revision of the excise tax schedule.20

As a result of this deadlock, the 1952 Highway Act was a reenactment of 1950 highway-building arrangements. Despite recommendations to the contrary from President Truman, Congress added $50 million for expenditure on the primary, secondary and urban systems, but the apportionment of funds
among the networks was not altered. Roads of little traffic importance still enjoyed a large share of the federal highway dollar. For that matter, the PAR coalition also failed to block an increase in the federal gas tax, though the one-half cent per gallon jump was less than feared originally. Proponents of greater attention for the Interstate received $25 million in addition to whatever funds they could siphon from primary and urban road allocations. While this was the first time the Interstate received a direct grant, the sum involved was not adequate for more than a few miles of freeways in one or two large cities. On balance, major road users had not received a great deal for their efforts.

CONTINUING TRAFFIC PROBLEMS

In the meantime, the deluge of traffic continued unabated. By January, 1953, there were more than 53 million motor vehicles on the nation's highways and streets. According to BPR researchers, this was an "undreamed of" figure ten years earlier. State highway taxes had been raised in an attempt to build additional roads, but inflation and the rapidly increasing auto and truck population dropped per vehicle expenditures to one-half its 1946 level. Indeed, Americans had spent more than $70 billion on roads since 1910, and the better part of that sum had been expended since 1930. Yet even this huge sum was inadequate in the face of mounting traffic and inflation. In the meanwhile,
short-run factors such as shortages of structural steel and trained engineers delayed road building further.22

Most highway users and road engineers recognized the scope of the problem and feared dreadful consequences if it were not solved promptly. The delegates at an American Automobile Association meeting convened to consider the crisis concluded that congestion "threatened our entire economy."23 Although they agreed that congestion posed a serious barrier to commercial welfare, leaders of PAR and advocates of greater attention to the farm and urban networks could agree on little else. Still unresolved were such basic items as which roads deserved prior attention and who should finance an accelerated road construction program.

THE SECOND PAR CAMPAIGN

The worsening traffic situation heightened PAR members' sense of urgency about reaching an accord with opposition groups. But they were not prepared to alter their definition of appropriate tax and allocation formulas. If an accommodation were reached, it was to be on the basis of their terms. Essentially the strategy of PAR's managers was to impose a fairly strict set of beneficiary rules on the country's highway traffic.

As in the past, the PAR leadership participated in industry-wide conferences on road problems, coordinated
local-group endeavors, and continued an information dispensing service as part of their operations. Several considerations were involved in the decision to undertake such a large list of responsibilities. In the view of some truckers, the industry was engaged in a "two-front battle." On the one side, there was the struggle for acceptance of users' scientific approach to road building. On the other, there was the effort to inform the public of their views in order to build resistance against what were viewed as misleading attacks on highway users. This was the "propaganda front." In fact, these were artifically distinct phases of a single strategy aimed at winning intra-industry, general, and governmental support for PAR's goals.

Highway user groups pressed ahead with the same themes. As they saw it, unsolved financial matters were the source of their inability to cope with the traffic crisis. The conferees at the AAA meeting on road problems agreed that diversion of gas taxes to non-highway projects and dispersal of money to unimportant roads caused "accelerated obsolescence..." of highways carrying large quantities of traffic. It was not that sufficient funds did not exist or that the desire for better roads had declined, but a matter of revising outdated arrangements. The success of the toll roads, they argued, only illustrated the extent of motorists' desire for quality highways.

Other elements of the Adequate Roads movement
reiterated, once more, demands for reform of the federal highway program. State highway officials in the Northeast still were seeking the repeal of federal gas taxes. The governors and legislatures of quite a few states joined them. They spoke of inherent state rights and recited the history of federal aid to roads, trying to prove that the gas tax fell within the states' province. But the basis of their protest was identical to that of the engineers: The federal government collected more gas tax income in their states than it returned to them. If the national government vacated the gasoline taxation field, then they would reimpose the 2-cent tax and reap its full benefit. Some went a bit further, calling for the abolition of the Bureau of Public Roads or its reduction to a fact-gathering agency.26

AASHO executives and leaders of the Associated General Contractors of America, (AGC) a trade association of highway construction contractors, picked up portions of PAR's program. As early as 1948, representatives to the AASHO-AGC Joint Cooperative Committee had begun to discuss the extension of federal-aid legislation across a longer period of time. By 1950, they had agreed to promote a 10-year road building program as the only adequate response to the traffic mess. Members of the AASHO-AGC group supported PAR's gas tax program as well, claiming that an increase in the federal tax rate would limit the states' ability to raise their rates. AASHO officials had gone further on their own,
asking for the cancellation of all federal automotive excises.27

THE COLLAPSE OF PROJECT ADEQUATE ROADS

Project Adequate Roads had succeeded in uniting a relatively large number of groups around some common themes. Yet the coalition soon began to disintegrate. At first, it was a slow collapse, as peripheral groups went off in their own direction.

Late in 1952, the state highway officials and road builders broke from their past pledge to work for the elimination of the gas tax. Now they wanted the federal government to link its gasoline tax income to federal-aid highway construction. They argued that if the federal government was going to collect imposts on gasoline, then all or most of it should be employed for highway construction. Along these lines, the AASHO leadership proposed a yearly federal program of $900 million, approximately the sum the federal government was expected to collect in fuel taxes.28

A few governors and the members of many state legislatures extended the linkage argument to its ultimate point. They demanded that the federal government spend the gasoline and motor vehicle excise taxes on highway construction. On this basis, they demanded an annual highway appropriation of $2 billion. As a reflection of this growing interest in achieving full-linkage, several Congressmen introduced bills
to create a trust arrangement into which all auto taxes would be paid and from which federal-aid highway funds would be drawn. 29

The fact of the matter was that extensive public relations and many shared values had not distracted engineers, governors and road builders from a narrow definition of self-interest. Many state highway officials had begun to fear that the elimination of the federal gas tax would lead to a total cut in federal road-aid. And they were not convinced that the states would re-impose an equivalent tax. The result of these actions would be a severe diminution of highway construction and, in some cases, a virtual end to their professional existence.

Increased toll highway mileage was another important factor in the decision of state highway officials to demand more federal assistance. They perceived of toll roads as an invasion of their domain and a threat to departmental funds and well-being. Under those circumstances, their request for greater financial assistance from the federal government was a tactic for bolstering their competitive position vis-à-vis toll authorities.

This assessment of the situation was much the same throughout the country. The Director of Oklahoma's Highway Department argued that toll financing was the result of insufficient state funds. What was needed, he thought, was the return of a greater portion of federal user taxes to
the states. New Jersey's Commissioner of Highways argued along identical lines. He wrote Senator Edward Martin that the state highway departments suffered when toll authorities were established. The most suitable responses to traffic increases were greater effort and more money.30

The Chief Highway Engineer of Delaware rejected PAR's program on financial grounds as well, claiming that they would lose money if it were adopted. He wrote the new Commissioner of the BPR, Francis V. duPont, that if every state reimposed a tax equal to the federal rate, it would produce no more than $178 million annually. From his point of view, that revenue level was not significant when contrasted with an estimated cost of $32 to $60 billion to bring the federal-aid networks up to desirable standards.31

One of the nation's best-known highway officials, Robert Moses rejected PAR's program in terms of a more expansive interpretation of national highway needs. Moses told a gathering of the Detroit Economic Club that the demand for the elimination of the gas tax represented an indifference to highway developments in the poorer states. He claimed that a majority of the states would not reimpose the tax, resulting in a net reduction in funds for road building, the elimination of unifying leadership, and an end to a national highway system. In the meantime, he continued, the richer states would profit from the revised arrangements. What the leaders of this movement were really saying, argued
Moses, was "to hell with the rest of the country."  

But highway engineers were only marginal to the PAR movement. They were a useful group for their expertise and reputation as impartial professionals but not important politically. The real strength of the movement rested on the thousands of truckers and their ubiquitous trade associations, many of whom were active in state legislatures and competent practitioners before regulatory bodies. When PAR failed to unite members of this group, it was reduced to its nucleus of road users and manufacturers. And when PAR members could not secure support from the Eisenhower Administration, they had few options but to change paths.

The American Trucking Associations (ATA) was a coalition of state and local trucking groups and a member of PAR and the National Highway Users Conference. ATA members tended to split on issues according to the region they served, dividing further between fleet owners and common carriers. In addition, most truckers operated in only a few states. As a result, ATA members had traditionally opted for state control of road construction and were unenthusiastic about efforts to impose national weight and size regulations. While they had welcomed Interstate Commerce Commission regulation in 1935, as a way of controlling competition, they wished no further intrusions into their control of company matters or influence with the states. 

Some of the larger members of the industry looked at
federal and state regulation differently. This group included David Beck of the Teamsters union, Roy A. Freuhauf, the head of one of the nation's largest truck manufacturers and Burge N. Seymour, one of the leaders of the American Trucking Associations. The significant difference between the Freuhauf, Seymour, Beck group and many ATA members was the scope of their respective business operations and their assessment of the regulations best-suited to serve commercial needs. As Beck, Seymour, and Freuhauf saw it, the industry had matured to the point that it required the "guidance and support" of a single federal agency. It would be charged with road construction and the imposition of uniform size and weight regulations. While they did not object, in principle, to state regulation, they had concluded that the multitude state laws created difficulties which "complicated interstate operations." By mid-1953, then, the trucking industry was in fragments, unwilling to unite behind schemes to eliminate federal participation in the affairs or plans to return road construction to the states alone.

PAR had no greater impact on federal officials, many of whom had their own pet schemes for promoting highway construction. Officials at the Bureau of Public Roads perceived of PAR in much the same manner as the state highway officials; it was a threat to state road building. Commissioner duPont wrote to the Governor of Delaware in May,
1953, requesting him to refrain from signing an Assembly Resolution which asked the federal government to drop the tax on gasoline. If Delaware began to collect a fuel tax at the same rate, there would not be much change in its net revenues and in the process, some money might be diverted. Besides, the oil industry opposed the tax, and so there was no certainty that the legislature would reimpose it. Without a reimposed fuel tax, duPont claimed that "Delaware would be hot water."35

The PAR program did not win supporters from other members of the Eisenhower team. As of late October, 1953, they had not even formulated a highway policy. Yet the absence of formal policy did not mean that the Eisenhower people did not entertain some views of highway building or its relationship to economic growth and American transportation. The President and some of his top level officials were examining highway construction along with other public works as potential-government tools for counter-cyclical economic management. While they accepted the conventional view that congestion-free roads were important to the nation's productive efficiency, second-level Eisenhower administrators were considering alternative methods of promoting a more efficient and flexible transport system.36

In some measure, however, consideration of highway problems in other than very limited terms set members of the Administration apart from most road users. Both PAR
and its opponents defined problems and consequences in terms of their immediate impact on their segment of the industry. While they genuflected before the ideal of national transportation efficiency, the core concern of the state highway departments was self-preservation. And in their day-to-day operations, users were preoccupied with the fastest highway trip to their destination. The Administration accepted these business norms, but wanted to subordinate them to macro-economic management, with the budget was one of their favorite devices. In this sense as well, the Eisenhower administration continued the basic highway practices of the Roosevelt and Truman administrations.

At the end of September, 1953, Project Adequate Roads had exerted little appreciable influence within government councils or upon the highway construction-road transportation industry. They had won few additional adherents and lost important support for their program of concentrated, tax-exempt highway construction over a specific time period. Other than the universally-approved maxim that more money was required for additional highway mileage, users, government officials, local road proponents and highway contractors still disagreed about who should finance and benefit from new roads.

In some ways, PAR's campaign had even been counterproductive. Most state highway officials had accepted NHUC proposals for elimination of the gas tax followed by its
reinstitution at the state level. Yet by 1953, this policy no longer seemed wise. Confronted on one side with a vigorous campaign for the elimination of an important part of their income and on the other with growing toll mileage, a number of road commissioners affirmed complete linkage as a strategy for insuring more roads built under their direction. Representatives of construction contractors switched to an advocacy of linkage for similar reasons.

Late in 1953, some two years after it had begun, PAR leaders called their campaign to a halt and endorsed linkage between federal gasoline tax and highway expenditures. As far as NHUC leaders were concerned, they were not rejecting PAR's program but altering it to accord with political reality. They believed that the implementation of their proposals would have aided road construction, but that they were "unacceptable as a practical proposition." On the other hand, users were worried that their campaign might have been too successful. They wanted to repeal the tax on fuel, without losing federal aid; the proposal of some Governors to eliminate both was intolerable to them.³⁷

Although PAR members recognized the impossibility of succeeding with aspects of their program, they were not prepared to junk certain principles. The NHUC Board of Governors still professed a faith in beneficiary payment, claiming that the federal government was obligated to fund major roads from general revenues while property owners
finance land-service roads. But if such a program could not be secured, they were willing to accept a federal anti-diversion statute dedicating the gasoline tax to highway purposes.38

As in the past, then, highway users preferred to shift some of the financial burden of road construction to property owners and other tax groups. If this were not possible, they were willing to pay current tax rates provided most of the money was earmarked for major highways. On the other hand, users still objected to toll financing of express roads. The Chairman of the Board of ATA conceded that although toll roads afforded some relief to congestion, they only delayed achieving a more viable solution. In a sense, he continued, the existing toll roads were "monuments to... [their] failure" to find that solution.39

After two-years of intensive effort, the basic issues in American highway politics had not been resolved. PAR's campaign determined the parameters of debate, but it could not achieve an acceptable resolution. Industry as well as government still were divided over fundamental issues of finance and benefit while the functional impulses behind those separate perspectives remained strong. As a result, the dimensions of political conflict over the 1954 Highway Act were essentially what they had been in 1950, or 1944.
Traditionally state highway officials had offered a highway bill for consideration to the Senate and House Roads Committees. In turn, the administration and competing road groups would comment and then bargain for a greater share of the highway pie. President Dwight D. Eisenhower overturned this practice somewhat, offering his recommendations first. His immediate problem, however, was one of fashioning a bill which had some chance of success in Congress without violating his administration's basic commitments.

As a rule, government officials recognized their responsibility for economic management, favored a balanced budget and believed that the Interstate System was important for traffic efficiency. But there was a fairly wide range of views on the most desirable course for pursuing those goals. For whatever difference it made, they were incompatible anyway.

The President found equally little agreement among private organizations. Certainly PAR had not achieved much consensus among users and engineers over the perennial issues of who should finance and benefit from road construction. In addition, a good part of the highway industry and the government were divided over the role of government in economic life. Users liked government aids to the economy so long as their segment of it was not the wedge of
counter-cyclical efforts.

Faced with extensive divisions over most highway-related issues, President Eisenhower chose a holding strategy which was consistent with his notions of economic management, a sound budget and a gentle acceleration of Interstate construction. He asked Congress to continue a half-cent tax on gasoline due to expire April 1, 1954. This revenue was an important source of funds for accelerated work on the Interstate and necessary for budgetary reasons as well. The money would be used, he promised, to "push the good roads program...".\(^4\)

For the most part, however, Eisenhower's outline of a national highway program amounted only to a perpetuation of on-going arrangements. He recommended holding federal-aid expenditures to $575 million, about what they were spending anyway, and limiting authorizations to the usual 2-year period. Until his Intergovernmental Relations Committee reported to him on federal-state road policy, Eisenhower refused to offer fresh approaches.\(^4\)

But Eisenhower's limited plan did not meet the commercial needs of many highway users. As a result, PAR leaders decided to press for their original objectives. Once again, a number of state highway officials and some governors joined them. Members of both groups still hoped to remove the federal gasoline tax within a few years while retaining financial support for major roads. If that could not be achieved,
then they wanted continuation of the gasoline excise linked to highway purposes.

Outside of a general feeling among many users and engineers that large parts of Eisenhower's program were undesirable, there was little agreement about basic questions of who should finance and benefit from federal highway construction. At some point, too, they had to encounter the broader issues of the relationship of road building to economic growth and general welfare. For example, the National Chairman of PAR, Clement D. Johnson, wanted to drop most federal aid road construction, leaving the national government to shoulder about $200 million for the Interstate. Leaders of the AAA, on the other hand, were willing to accept a continuing federal donation to the nation's road systems, provided it absorbed 75 percent of Interstate costs.43

State highway officials were even more divided about the course of American highway policy. By and large, they wanted to expand current programs to a level of about $900 million a year, modifying details of apportionment and sharing. Yet they disagreed bitterly about funding and priority construction for the Interstate. The Executive Director of AASHO, Hal Hale, warned members that the feud threatened the "solidity of the Association..." as well as the continuation of the federal-aid program.44

In the meantime, there existed a more ethereal controversy over the meaning of highway construction for economic
growth and social order. Generally speaking, road users and engineers did not consider the relationship of highway building to counter-cyclical activity and social stability; their primary interest was in "continuing highway programs." But a number of government officials, especially the economists, tied road construction to economic and social goals directly. The government had an obligation to foster stability and growth, they argued, adding that an expanding economy was "the best assurance of harmonious social and economic adjustment."45

CONGRESS AND AMERICAN HIGHWAY POLITICS

Groups interested in highway construction were divided deeply by 1954. Everyone hated the costly traffic jams and few dissented from the view that increased road building, especially expressways, would relieve traffic greatly. Yet beyond that point, there were deep, nearly unbridgeable gaps between groups of competing highway users, engineers, road builders and the President. These conflicts had deadlocked Congress in the past, leaving its members to write essentially continuing legislation which did not solve the problem. PAR's two-year campaign had not really altered the political situation between groups. Faced with such rancor and dissatisfaction, members of the House and Senate Committees again chose the safest route, reporting bills which simply incorporated the deadlock by including a few items
for each contender. Since the range of views was so broad, however, it was impossible to solve the traffic crisis at the same time.46

The House Public Works Committee reported a bill which largely continued existing programs at increased funding levels. There was more money for proponents of every road system, including $180 million a year for farm roads and a whopping $200 million for the Interstate. In addition, Committee members modified the federal-state sharing ratio for Interstate building slightly and gave a little more weight to population in figuring Interstate apportionments. They even changed farm-to-market road building regulations a bit. In order to finance all that construction, however, they maintained the federal gas tax at its 2-cent a gallon level. In the political climate surrounding road legislation, Committee members had gone about as par as possible in modifying existing arrangements. The House took the same tack, approving the Committee bill without amendment.47

There were several attempts to alter portions of the House bill by securing changes in pending Senate road legislation. Dissent followed traditional lines. AAA spokesmen argued against tying the gas tax to the Interstate authorization on the grounds that it would constitute direct linkage while Farm Bureau leaders objected to it as an additional business expense not related to road use. On the other hand, Budget Bureau officials insisted on continuing the tax,
claiming that it did not create linkage and was necessary to balance the budget. In the meanwhile, they were dissatisfied with the 60-40, federal-state sharing provision, asserting that the usual 50-50 practice would promote more road building and set an undesirable precedent. The Budget Bureau's Assistant Director for Legislative Reference, Roger W. Jones, instructed his Congressional liaison to secure deletion of it from the Senate bill. 48

Members of the Senate Public Works Committee treated highway politics in much the same manner, allowing contending interests to enjoy relatively more rapid road construction without disturbing other practices. Again, the dominant motif of their report testified to the deadlock in highway politics. They raised the authorization level considerably, though they were not so generous with the Interstate as the House, and then divided up the money among the systems more or less according to traditional criteria. By and large, they altered only a few of the details of apportionment. But as part of a growing interest among government officials in stabilizing the economy with public works expenditures, they added a section allowing the President to advance by one year the effective date of the bill whenever he determined that unemployment warranted it. 49

The Committee bill encountered few obstacle in the Senate. Most of the attention on the floor centered on the recommended change of the Interstate allocation to a 50
percent population basis. Senator Chavez of New Mexico offered an amendment calling for a return to the traditional one-third population and two-thirds land and road mileage formula. But the Senate turned it down, voting largely according to a calculation of financial benefit for their states. Surprisingly, a few Senators from states whose authorizations would be reduced under a 50 percent population formula, including Hayden of Arizona, voted with the majority.50

Political conflict continued outside of Congress, as competing groups hoped to salvage some cherished practice from the upcoming Senate-House Conference Committee meeting. The Deputy Under Secretary of Commerce for Transportation, Charles L. Dearing, objected to the Senate's decision to increase funds for the original networks at the expense of the Interstate. Dearing also was dissatisfied with their decision to allow the Commissioner of the Bureau of Public Roads rather than the Secretary of Commerce to conduct another survey of highway finance. He claimed that this arrangement violated federal reorganization. Besides, it would deprive him of an opportunity to develop his fairly radical views on highway finance and transport regulation before Congress. Dearing contacted Roger Jones at the Budget Bureau who, in turn, brought the matter to the attention of Sherman Adams, Eisenhower's chief assistant. As a result of these discussions, one of their officials was ordered to
Many of the governors were distressed about the larger authorizations contained in both bills. Their reasoning was much the same as before: The states would have more money available for road building if the federal government dropped the two cent tax and the states reimposed it. As things stood, some states would be forced to raise their tax rates just to produce sufficient funds to match the federal grant. Governor Allen Shivers of Texas, for example, argued that when faced with a loss of federal funds, road engineers, highway contractors and auto association officials had responded by asking for a virtual dedication of the gas tax to road building. As a result, the states again confronted the "viciousness of a grant-in-aid..." which required them to increase their taxes.  

Confronted by such acrimony and debate, much of which involved important budgetary, tax and regulatory matters, members of the Conference Committee continued the federal road program more or less as it was. They split the difference between the authorization levels and settled a few other outstanding areas somewhere inbetween what each Chamber had approved. The debate over linking Interstate grants-in-aid to a continuation of the half-cent gas tax was moot since, in the intervening period, the Ways and Means Committee and the House had extended the excise in other legislation. On this basis, the House conference delegation
agreed to drop the matter. Finally, they retained the provision empowering the Commissioner of Public Roads to prepare a comprehensive study of highway finance, including toll roads, and denied authority to the President to advance authorization dates for employment purposes.53

Members of PAR had desired to establish a large coalition of formerly conflicting roads groups behind a program of focused, no-charge road building. In the absence of wide-support, however, PAR's promoters tried to bludgeon their program through Congress and the state legislatures. In either case, their goal was to break the pattern of post-war highway legislation and establish a road building program suited to the needs of interstate and major, in-state road users. Since they had been stressing these points as far back as New Deal days, the tactics and the concerted strength of their application were about all that was new.

PAR's strenuous efforts did not impress the forces which had for so many years blocked these reforms. Constituents of farm-to-market and municipal arteries opposed changes which would return roads to their custody. The state highway departments, traditionally the friends of users on road legislation, were frightened by advancing toll mileage and a threatened loss of support. Road builders were less concerned about toll roads, but worried about a loss of dependable financing. And despite differences in
their outlines of an ideal federal-state relationship in highway affairs, two Presidential administrations acted on similar assumptions about the links of road building to economic management.

Through the middle of 1954, perceptions of organizational and group interest had not altered appreciably. High-level federal administrators defined their obligation as one of economic stewardship; they bore responsibility for maintaining economic growth and stability. On the other hand, the perspective of most members of the highway industry of their responsibility for the economy or even unneeded road segments had not expanded over the years. Each pursued their interests divorced from other groups save for concessions which were warranted by insufficient legislative strength. If PAR members wanted greater attention paid to the Interstate, they had to finance the federal highway system. Since they were not prepared to spend more than 2-cents a gallon, there was not much chance of solving the traffic crisis.

Urban highway politics revolved around many of the same issues, though the stakes of the conflict were immeasurably higher. Road users and engineers promoted highway construction aimed at maximizing traffic flow while city planners designed new express roads as part of a revitalized urban center. At issue, basically, was the future direction of American social life.
FOOTNOTES


3Butler, "Our Highway Problem And Some Recommendations For Meeting It; "Summary Of Minutes Of Joint Meeting Board Of Governors And Administrative Committee, National Highway Users Conference.

5Butler, "Our Highway Problem And Some Recommendations For Meeting It."

6Ibid.

7Ibid.

8See also Report of the AAA Highway Committee, "The Highway Situation In The National Emergency."


PAR's first organizational meeting was held in Washington, D.C. and attended by representatives of close-to 100 interested organizations. See Arthur M. Hill to Lou Holland, October 24, 1951; Arthur C. Butler, "PAR - What It Is And What It Has Done," Remarks to AAA Highway Emergency Conference To Accelerate Urgently Needed Highway Improvements Throughout The Country, February 12, 1953, both in Holland Papers, American Automobile Association National Highway Users Conference, 1951 File, Truman Library.

10Remarks of Roy E. Jorgensen to a Joint Meeting of the Board of Governors and Administrative Committee of the National Highway Users Conference in Butler, "Our Highway Problem And Some Recommendations For Meeting It."

See also "ATA Convention Pinpoints Highway Problems," p. 64.

11Remarks of Jorgensen in Butler, "Our Highway Problem And Some Recommendations For Meeting It."

12Ibid.

Butler, "Our Highway Problem And Some Recommendations For Meeting It."

Ibid. An abbreviated statement of PAR's goals were reproduced in Summary of Minutes Of Joint Meeting Board Of Governors And Administrative Committee, National Highway Users Conference.


Butler, "Our Highway Problem And Some Recommendations For Meeting It."

Henry K. Evans, "Can We Afford Model T. Roads?" Commercial Car Journal (August, 1952), p. 120; Butler, "PAR - What It Is And What It Has Done."


23 Statement Adopted By Conferees At The AAA Highway Emergency Conference, February 13, 1953 and Recommended to the AAA Executive Committee, Holland Papers, American Automobile Association Miami Meeting, 1953 File, Truman Library.

24 Bresnahan, "Who Should Pay How Much Of Highway Costs?" p. 244 See also Butler, "PAR - What It Is and What It Has Done."


26 Impressions gained from an examination of journals and correspondence. See also U.S. Congress, House, Committee on Public Works, National Highway Study, Part 1, 83rd Cong., 1st Sess., 1953, p. 2.

27 Bulletin from AASHO-AGC Joint Cooperative Committee to Secretaries, Managers and Presidents of AGC Chapters; Members of Joint Cooperative Committee, AASHO-AGC; and Officials of State Highway Departments and Bureau of Public Roads, December 18, 1950, March 20, 1951, both in Papers of the American Association of State Highway Officials-Associated General Contractors of America, Incorporated, Joint Cooperative Committee (Washington: Associated General Contractors of America, Inc., 1950); Henry K. Evans, "The Great Highway Robbery - Or is It?" Commercial Car Journal (September, 1953), p. 110.

The President of AASHO, Charles M. Ziegler, spoke of

28 Evans, "The Great Highway Robbery - Or is It?" pp. 65, 106, 110.

29 See statement by Governor Hugh Gregg, of the State of New Hampshire to the Subcommittee on Roads of the House Committee on Public Works, June 10, 1953, in National Highway Study, Part II, pp. 242-243; State of Michigan, Senate Resolution No. 44, in Ibid., p. 244.

S. 219 and H.R. 3637 provided for the creation of a Highway Trust Fund.

30 Clarence A. Stoldt to Senator Edward Martin, June 6, 1953; Edward W. Kilpatrick to Senator Edward Martin, June 8, 1953, both in RG 46, Senate, Public Works Committee, 83rd Cong., File S. 796 Doc. 29, NA.

See also Charles M. Ziegler to Senator Edward Martin, June 22, 1953; Samuel O. Linzell to Senator Edward Martin, June 26, 1953, both in Ibid.

31 Richard A. Haber to Francis V. duPont, April 6, 1953, RG 30, BPR CODF 740.1.1 H.J. Res. 113 - General June-1955-April, Acc. No. 58A778, FRC.

AASHO estimated a total cost of $32 billion. See Ziegler's statement in National Highway Study, p. 203.


Some traditional friends of PAR's proposals also shifted during 1953 to an advocacy of linkage. See Evans, "The Great Highway Robbery-Or Is It?" p. 112.

33 Impressions gained from an examination of trucking industry journals.


Francis V. duPont to Governor Caleb Boggs, May 25, 1953, RG 30, BPR CODF 740.1.1 General April 1954-January 1953, Acc. No. 58A778, FRC.


The Deputy Under Secretary of Commerce for Transportation, Charles L. Dearing, had for many years been a proponent of toll roads as a method of forcing the fullest utilization of all transport modes. As late as October 1, 1953, however, the Office of the Under Secretary of Commerce for Transportation had not prepared a formal program for road construction.


Automobile industry officials avoided the gas tax issue and emphasized the importance of federal road spending for national purposes, coordination of highway construction and as a way of satisfying demand created by the industry's products. See James Cope to Clarence E. Manion, November 16, 1954, Records of the President's Commission on Intergovernmental Relations, Highways September - November 1953 File, Eisenhower Library.

See also Burton H. Behling, "Summation of Remarks to the National Conference on Highway Financing," in Ibid.

For the diversity of views among Eisenhower officials, see I. J. Lewis to Roger W. Jones, December 16, 1953, forwarded to Sherman Adams, and Office of the Under Secretary for Transportation, "Federal Highway Policy," both in OF 141-B, Eisenhower Library.

Public Papers of the Presidents of the United States; Dwight D. Eisenhower; Containing the Public Messages, Speeches, and Statements of the Presidents, 1954 (Washington, 1960), pp. 15, 18, 245.

Ibid., pp. 18, 176.

Minutes of Meeting of Study Committee on Federal Aid to Highways of the Commission on Intergovernmental Relations, February 15, 16, and 17, 1954, Records of the Presidents Commission on Intergovernmental Relations, Committees and Meetings Federal Aid to Highways 1953-May 1954 File; Russell E. Singer to Sherman Adams, January 29, 1954, GF 158 A-1, Both in Eisenhower Library.


See also Frank D. Merrill to Sherman Adams, January 30, 1954, OF 141-B; and views of William J. Cox, the former head of Connecticut's Highway Department in Minutes of Meeting of Study Committee on Federal Aid to Highways of the Commission on Intergovernmental Relations, January 18-19, 1954, Records of the President's Commission on Intergovernmental Relations, Committees and Meetings Federal Aid to Highways 1953-May 1954 File, both in Eisenhower Library.

The minutes of the second meeting list Clement D. Johnson, National Chairman of PAR, as a co-author of the report, but his name was not included in the original draft.


The administration also raised the budget argument, among others, in opposition to Senator Homer Ferguson's bill calling for an annual federal expenditure of $2.2 billion. See Joseph M. Dodge to I. Jack Martin, March 19, 1954, Martin Files, Highway Program File, Eisenhower Library.


American cities during the years following the conclusion of the Second World War suffered from most of their prewar problems. Time and inattention simply accelerated them along a circular and cumulative path. Declining property values and retail sales and the flight of business and residents to the city's outskirts continued, leaving behind an unsightly collection of decayed dwellings and unrented office space. Traffic congestion composed a particularly critical portion of the urban dilemma. As more trucks and autos poured onto narrow streets, traffic tangles grew longer, making the American city an even less desirable place to visit or conduct business.

Americans had recognized that their urban centers were in miserable condition prior to World War II. Business groups had prepared extensive plans for revitalizing their cities while members of the Roosevelt Administration devised grand strategies for new towns and the reorganization of the urban social order. In some way or other, expressways were an important part of these plans. Yet conflicts between
highway users, engineers, planners and members of the housing industry had deadlocked renewal efforts during the New Deal era, leaving the cities to foster and then decay further during the war.

The shape of urban renewal politics was pretty much the same after the war. There was a general feeling that urban centers ought to be rebuilt and traffic accelerated. It was agreed, too, that expressways could make a contribution to both processes. But as in the past, groups interested in these problems could not agree about which aspect of the urban dilemma deserved attention and whose interests reform should serve. Road engineers and highway users argued for the most efficient route placements for commercial purposes while urban planners wanted to use expressways to remodel and reorganize their cities. As in the past, these conflicting interests deadlocked at the national level. But after the war, the federal government assumed financial responsibility for expressway building as well as urban renewal, leaving local groups to determine the relationship between them. The absence of overall federal direction meant that the results of the struggle for power and influence at the local level determined the shape of the American city and contributed significantly to the quality of life in urban America.
Members of the urban planning profession shared several assumptions about the shape and development of the postwar American city. They believed that human development occurred along more desirable lines within the confines of a neighborhood setting; that postwar sprawl had disrupted urban social arrangements and lowered property values; and that the central business district, containing the most important and expensive parts of the city, was most in need of help. Finally, they assumed that all of this could be remade and revitalized, given the necessary political tools and financing. And as always, express highways would play a vital, though subordinate part in their plans.

Planners had been thinking in these terms for many years. During the war, in fact, they developed an impressive display of plans for the social and physical redevelopment of deteriorating cities. The core concept in most plans included the reconstruction of the downtown area and extensive freeway building. The freeways would speed traffic around downtown and, simultaneously, divide neighborhoods from one another. In some cases, they would even act as population barriers, promoting social integration while facilitating access to downtown.

A substantial portion of the planning community continued to think largely along these lines during the late
1940's. Urban planning specialists again suggested the delineation of certain districts for specific purposes. The city's transportation network, especially its express roads, would coordinate and tie these sub-areas to one another and concurrently serve as "a buffer" between those which were not compatible. At the same time, planners hoped that the expressway system could be subordinated to a comprehensive community design.¹

Some planners altered this area-wide approach in favor of placing a greater emphasis on reviving the central business district. Harland Bartholomew, for example, continued to stress downtown renewal. Bartholomew was still worried that unplanned development along the city's fringe would bring "economic strangulation" to most central city areas. Part of this haphazard growth could be arrested, he thought, through the imposition of city-wide controls on land use. Bartholomew also favored the construction of an expanded freeway system for reviving the central area, believing that properly located expressways would bring many commercial benefits. He told the 1949 Convention of the American Planning and Civic Association that express roads in St. Louis, one of the cities in which he had undertaken a good deal of work, would be aimed outward from the east side of downtown in order to stabilize central area property values and improve traffic flow. In planning the St. Louis express network, however, Bartholomew and his colleagues had
rejected strict traffic flow factors in favor of gaining benefits for the city's downtown.\textsuperscript{2}

Freeways were not universally popular with planners. A few members of the profession argued that they would accelerate decentralization, hastening the destruction of outlying areas without aiding the central areas very much. The Chairman of the University of California's City and Regional Planning Department and San Francisco's Planning Director, Thomas J. Kent, claimed that the dispersal of population would soon destroy all public works planning for the area. What the Bay area needed, he asserted, was a mass transit system, limiting expressways to the central sections of the city alone.\textsuperscript{3}

By the late 1940's, then, city planners had agreed to several core ideas. Decentralization was the source of urban disruption and decay. Somehow it would have to be reversed, while the remaining city, especially the central business district, was rebuilt. To some extent as well, freeway construction was to play a role in the redevelopment and re-centralizing process.

Commercial and manufacturing groups joined occasionally with city planners to promote urban renewal goals. For the most part, however, they preferred to concentrate the bulk of their attention on the central business districts of their cities. In any event, leaders of a number of business groups promoting revival programs included expressways as a
vital element in reconstituting the city. This was the pattern of attack in Pittsburgh.

For many years, Pittsburgh had been a dirty, decaying city. Neglect during the early 1940's left it in worse condition. Pittsburgh after the war was, in brief, a city in decline. Thick smoke, the repeated flooding of polluted rivers, a virtual absence of new industry or highways distressed many residents. Decentralization and declining property values, the more usual evidence of urban decay, further rendered it an undesirable city in which to reside and a less profitable place for the conduct of business. As a consequence, a number of large companies, which for many years had maintained their home-offices in Pittsburgh were planning, by 1945, to move elsewhere.4

During the war Pittsburgh's business and professional leaders determined to arrest these developments. Beginning in 1943, a coalition of executives at the head of Mellon family business enterprises, led by Richard K. Mellon, coalesced with professional planners and leading academicians to form the Allegheny Conference on Community Development. The Conference allied with the political machine of Mayor David Lawrence, drawing in the region's architects, engineers and planners for technical assistance. This united group devised a program which included smoke abatement, flood control and the physical restoration of the downtown. They posited each of these initiatives in terms
of its contribution to a comprehensive program aimed at reviving prosperity in the Golden Triangle, Pittsburgh's Central Business District and one of the most decayed portions of the city. According to coalition plans, moreover, a projected expressway network and series of parking lots were to be integrated within the overall scheme and subordinated to their larger objective. The coalition's long-term goal was the social and economic revival of Pittsburgh.

ROAD USERS, ENGINEERS AND URBAN TRAFFIC

Not all commercial groups looked at plans for express highways in terms of comprehensive or even central area reconstruction. Truckers, oil and bus company executives, and leaders of automobile user-groups entertained quite different notions about the role of express roads in urban affairs. In general, they focused on the traffic aspect of the nation's urban problems. As a result, their view of freeway development flowed along narrower lines than the city or region-wide visions of many business and planning groups. As users saw it, the purpose of highway construction was to expedite traffic flow through the city. Such an approach precluded formal consideration of freeway construction as part of a broader scheme for city renewal.

During the 1930's, organized road user groups had objected strenuously to attempts to link road building to activities unrelated to efficient commercial traffic movement.
Insofar as they were concerned, "roads were built for commerce...," not scenic touring or urban redevelopment. As a matter of fact, users had never consented to the earmarking of gasoline taxes for urban renewal or any other non-highway purpose, claiming it placed an unfair tax burden on motor vehicle operators. All that was needed to untangle stalled traffic, they argued, was for road building agencies to focus their gasoline tax revenues and engineering talent on a few key routes.⁶

In the postwar years, road-user groups pursued this highway-only approach even more vigorously. The multiplication of vehicles after the war, with its consequent crowding, delays, accidents and spiraling expenses, alarmed them greatly. As in the past, they demanded that road departments concentrate their efforts on major traffic arteries, buttressing their arguments with data from fairly sophisticated surveys of traffic conditions. About the same time, major road-user groups launched a series of intense campaigns for the implementation of these goals, including Project Adequate Roads which ran to the White House.⁷

But traffic surveys and intense lobbying and public relations techniques still pointed in a familiar direction. For that matter, these practices were little more than variations of standard user tactics. Traditionally highway-user groups had stressed the formation of coalitions and highway building according to a traffic count. As in the past,
highway-minded groups still hoped to persuade the government to construct express highways according to traffic needs, not the broader problems of the urban social order.

Traffic engineers and highway department officials examined road building activities from a similar perspective, viewing it as part of highway construction generally. The California Highway Department's chief right-of-way agent, Frank C. Balfour, asserted that since users financed American road building, they should receive primary consideration in the construction of urban expressways. Balfour was cognizant of urban decentralization, but he did not associate these changes with his department's plans. He was concerned essentially with the solution of traffic problems. According to Balfour, his department's task was to solve traffic problems by sorting vehicles into local and long-distance channels. In order to alleviate congestion fully, especially in the central business districts, Balfour thought the cities would also need "sky-scrapers in which to park.""8

But neither highway officials nor road engineers were committed solely to aiding traffic movements. Frequently they examined road-building as only one phase of the urban complex. In a few respects, in fact, their approach was similar to that of urban planning groups. Some engineers stressed the importance of freeways for retarding decentralization while others argued for new, limited access roads which would serve as a frame for downtown
redevelopment. Engineers also believed that a viable highway transport system was an important factor in determining a city's competitive position.\textsuperscript{9}

As a rule, however, the active social vision of engineers did not exceed an interest in the reduction of congestion. They devoted the preponderance of their professional efforts to coping with the traffic crisis alone. For the most part, they perceived their professional obligation as essentially one of solving present and estimated traffic needs. Such a definition of their role led engineers to conclude that attempts to influence land-use patterns fell outside the boundaries of highway department concern.\textsuperscript{10}

THOMAS H. MACDONALD, REMODELED ROADS AND A REVITALIZED CITY

Thomas MacDonald and several of the other top-level officials at the Public Roads Administration attempted to coordinate the conflict between planners and engineers. Indeed, this was not an easy task politically, since highway engineers composed their principal constituency. Nonetheless, PRA officials still believed that their goals were compatible with the interests of city planners and highway engineers. In the process of moderating their conflict, MacDonald and his colleagues hoped to establish themselves as the directors of urban resuscitation and American road building.

Their initiative developed slowly over time. Early in
1945, MacDonald asked the state highway officials to submit plans to him for Interstate construction. They were encouraged to consider the usual engineering criteria of expense, maintenance and motor vehicle usage as well as the development and conservation of "economic and social values." In other words, patterns of land user were to receive greater consideration in route selection "than the existing numerical volume" [of traffic].

In most cities, this arrangement was supposed to follow a standard pattern. First, engineers would place a belt road around the downtown, with adequate off-street parking nearby. Next, they would construct a series of arterial highways running to the city's outer edge.

Molded more or less in the shape of a hub, spokes and wheel, this design offered several social and traffic advantages. The inner belt would conduct traffic normally wishing to avoid the downtown around its edges, reducing CBD congestion, while motorists who entered the core could be channeled closest to their destinations. Parking lots would further reduce unnecessary street use. While the arterial routes were an additional asset to traffic movement, they would also link disparate sections of the city.

The head of the PRA's Western Division, Lawrence Hewes, developed this theme in terms of downtown redevelopment. Blight had penetrated many urban centers, he told a meeting of California's Commonwealth Club, promising the loss of
investments and perhaps bankruptcy for the city. Although
the automobile had accelerated decay and decentralization,
Hewes insisted that freeways could assist in the task of
city rebuilding and maintenance. Located with reference to
vitally needed downtown parking and extending past resi­
dential areas, the freeway promised access to the downtown
normally available only to outlying centers.\textsuperscript{14}

Hewes thought it was important to undertake urban re­
newal and expressway building as a coordinated effort, pref­
erably as part of the California's incipient slum clearance
program. As he pictured it, radial-express roads would pene­
trate areas with "obsolete buildings and lowered property
values...." If planners and engineers cooperated, they
would receive full-return from "cleaning up" those sec­
tions.\textsuperscript{15}

The postwar housing shortage forced MacDonald to post­
pone the implementation of these plans. The demand for
middle and low-priced housing far surpassed its availability
during the first few years after the war. According to one
observer, it was a "'national calamity.'" In any event,
Truman limited federal highway construction in order to con­
serve materials for home construction. As a result, MacDonald
had to restrict the range of his plans severely.\textsuperscript{16}

Paradoxically, the housing shortage presented Public
Roads officials with an opportunity to manage the federal
government's road building and urban renewal programs.
There were several bills pending before Congress to correct the housing shortage. MacDonald and Philip Fleming, the head of the Federal Works Administration, perceived the upcoming legislation as an opportunity to insinuate themselves in the urban renewal field, retain control of highway building and direct both toward a broader program of urban redesign.

Fleming complained to Truman that the contemplated legislation proposed only a narrow program of slum removal and replatting. In his opinion, such a limited approach reduced its chances of success. What was needed, he thought, was a multi-purpose program, using expressways as a frame for a renewed city. As he pictured it, the Public Roads Administration could continue its urban road program, eliminating "thousands of substandard houses..." and replatting "badly planned neighborhoods...." In the meanwhile, the FWA's Public Buildings Administration would continue to plan federal buildings as part of the civic center redevelopments taking place in many cities while the Bureau of Community Facilities loaned funds for planning other public buildings in the redeveloped sections.¹⁷

Truman admitted that the housing bill did not encompass all that was desirable. As it was, though, the housing legislation was having trouble in Congress, and Truman decided to press for a more limited bill in order to assure passage of it.¹⁸ As a result, the Housing Act of 1949 was limited
to housing and slum clearance, excluding expressways as an integral phase of the city rebuilding effort.

CITY REBUILDING AND EXPRESSWAY CONSTRUCTION, 1950

Truman's decision to opt for an urban program shorn of freeways was part of a deeper division in American society. As of mid-century, there were two contending approaches to America's urban and traffic problems. The first, supported in the main by city planners and downtown business groups, looked to expressway construction as a technique for both reviving their cities and speeding traffic. In planning expressway development, however, these groups were willing to downgrade the results of traffic movement studies in order to achieve a degree of social control or to create another lever to direct patterns of urban land use. They plotted route coordinates according to fairly broad visions of physical renovation, fast-moving traffic and downtown business revival. Some business and planning groups even hoped in their more optimistic moments that freeways would help to create more compact urban sub-communities. These island neighborhoods, in turn, would serve as the focal points for a more harmonious social order. The second approach, endorsed by organized road users and highway engineers, emphasized a highway and traffic solution pure and simple. Road users and highway engineers rejected proposals which aimed at tapping gas taxes for other purposes or setting
highways outside of major traffic corridors. In their day-to-day business and professional work, they concentrated almost exclusively on the advantages for vehicular movement of increased high-speed road mileage.

Congress embodied each of these visions in separate legislation. The city-planning impulse matured into the Housing Act of 1949 while the expressway program received increased funds every few years after the war as part of the regular federal-aid program. In 1952, moreover, road users and federal officials finally agreed to finance the Interstate system separately.

But federal funding did not materially affect the political battles between the proponents of competing visions of urban revival. The Housing Act did not obligate local governments to proceed along any particular renewal path. For that matter, the authors of postwar road-building acts largely excluded the advocates of guided city development and urban renewal from highway policy formulation. In effect, the federal government would finance the program of either city-wide planners or highway enthusiasts, depending on which faction exercised the greatest leverage on the local scene. This flexibility meant that, to a considerable extent, local political arrangements could influence the shape of the city's landscape and the future of urban social configurations.¹⁹
In New Haven, Connecticut, the proponents of city-wide planning predominated. By most of the usual standards of measure, New Haven was a disintegrating city. Professional and business groups were moving to the suburbs, or New York, and retail stores relocating from downtown to outlying shopping centers. Sears Roebuck vacated its New Haven store in 1952 for a suburban center, and another department store, Gamble-Desmond, collapsed that same year. Overvaluation of downtown property in order to maintain city revenues accelerated the destruction of economically marginal buildings, while tangled traffic and the Oak Street slum, a conglomeration of uncollected trash, poor housing and rats, rendered downtown New Haven an undesirable place to visit or conduct business. Like many American cities, post-World War II New Haven was in a state of "total crisis."  

A coalition of concerned groups directed New Haven's revival efforts. They included the Mayor, Richard C. Lee as the dominant force, city officials, planners drawn from Yale University and downtown business leaders. This coalition based its efforts, in part, on the achievements of its predecessors. Just before World War II, a planner on the Yale University faculty, Maurice Rotival, had prepared a plan to guide the city's growth. His overarching theme was that the eradication of urban decay depended on the control
of traffic flow. On the basis of this scheme, Rotival and Mayor Lee's City Plan Director, Norris Andrews, selected two downtown districts and six residential areas for renewal. They scheduled about 25 percent of the city for remodeling at one point or another.\textsuperscript{22}

In New Haven, express highways were supposed to serve varying functions according to the character of the renewal area. In residential sections, they were to pose a buffer against adjacent manufacturing or commercial districts. On the other hand, the Mayor and other renewal supporters assumed that freeways would permit more rapid access to the renewed downtown and greater efficiency of movement between industrial zones.\textsuperscript{23}

Freeway development in New Haven was only one phase of larger coalition plans. The New Haven group employed expressways, parking lots and street widening along with more conventional traffic control devices to promote comprehensive urban planning. While highways generally were constructed prior to renewal projects, the roads were located where they would present maximum advantage to renewal plans. In some instances, their insistence on certain routes led the Mayor and other civic leaders into considerable political conflict with the state road department. Nonetheless, the coalition's highway planning was consistent with their view that expressways, though critical to city-wide revival, were secondary to it. The central thrust of the coalition's
efforts was in the direction of resuscitating the urban area and creating viable urban communities; highway location decisions were predicated on that strategy. In brief, express highways were integrated within a broader vision of a remodeled New Haven.  

REBUILDING ST. PAUL

In many cities, however, the nexus between highway construction and urban planning was not so tightly drawn. As a result, the presumed needs of highway users, appeals from road engineers plus a belief that a new expressway could encourage business growth tended to dominate the minds of decision makers. This was the case in St. Paul, Minnesota, where route decisions were left largely in the hands of the State Highway Department.

St. Paul suffered from the usual superfluity of urban problems. Business was relocating away from the downtown and, while not necessarily related, retail sales in the central business district declined 15 percent during the decade after the war. Nonetheless, traffic congestion in the central city area increased dramatically. On the other hand, the average number of persons who traveled downtown each day rose only a small amount during the same period.

Groups interested in such matters agreed that a long-proposed expressway was vital to the city. Although everyone agreed as well that the route chosen would have to pass
near to an industrial section west of downtown, the University of Minnesota and the state capital, there was considerable political conflict over the precise location of the proposed road. State highway engineers argued in favor of a route located just to the south of the city's traffic sources. To some degree, their route also gouged through some residential areas. Relying on the usual multitude of traffic destination studies, state engineers appealed to cost and traffic efficiency motivations. They pointed out that their route hewed close to each of the important traffic generators and was the most direct route downtown, a fact significant in terms of time saving. The engineers also asserted that this path would afford greater traffic relief to nearby streets and, in the long run, would prove the least costly to construct.26

St. Paul's city planner, George Herrold, criticized the engineers' plan along the usual lines of planning thought, arguing that the Highway Department's route would have an undesirable impact on land use patterns. He pointed out that twenty-two railroad lines and regular boulevards already sub-divided the city into tiny settlements incapable of growing into desirable communities. As he saw it, the engineers' route would divide the city further.27 Herrold located an alternative route a bit to the north. For the most part, his highway corridor did not adhere to existing traffic patterns, but he felt that this was a virtue.
Herrold hoped that the construction of an expressway outside of existing traffic movements would, among other things, reduce traffic congestion and increase the utilization of undeveloped land inside of St. Paul.28

City officials opted for the highway engineers' southern route, weighing several factors in their decision. Herrold, a man in his mid-eighties, had cultivated few friends at City Hall and lacked the staff to collect sophisticated traffic data. More important, truckers and merchants based in the city's industrial section tended to favor the closer, southern route, as did commuters who resided at the city's western edge and preferred the promised time-saving feature of the engineers' location. Finally, the Highway Department reinforced its argument with a warning to city officials that the relatively smaller traffic service available from Herrold's route would preclude Department approval, meaning that the city would have to finance the northern route from local taxes.29 In the end, St. Paul's leaders chose to base their revival program around an express highway.

REBUILDING KANSAS CITY

Leaders in a number of other cities perceived expressways as the key to urban renewal and political survival. As in St. Paul, they assumed that the construction of a limited access road or two was prerequisite to a second-urban life. Although there were few viable alternatives to expressway
construction in some cities, groups of planners and businessmen in other places had devoted years of time to the production of imaginative, region-wide redevelopment schemes. Yet political and business leaders in a number of cities decided to overlook these plans in favor of an expressway-first solution to urban problems. So great was the enthusiasm for more roads that urban voters often approved large bond issues to finance their construction.

But the decision to promote expressways also meant that comprehensive plans were neglected. Such urban renewal projects as civic leaders promoted were placed according to the location of the freeway, neglecting any but economic values. In some cases, the highway dominated the city.

Generally speaking, urban renewal planning in Kansas City, Missouri followed this pattern. Toward the end of the Second World War, the Mayors of Kansas City and some neighboring municipalities plus the heads of local chambers of commerce created the Citizens Regional Planning Agency. Its purpose was "to fashion and guide the reaction of citizens toward intelligent, long-distance planning." The new organization also enjoyed the financial support of several hundred-local businesses. By the end of 1946, moreover, close to 4,000 area residents were more or less active in groups devoted to the analysis of city problems.30

In their day-to-day activities, the major point of Planning Agency work was the promotion of bond issues for
area-wide public works projects. Through its sub-agency, the Citizens Bond Committee, members of the Citizens Planning Agency in 1947 secured approval from the voters for sixteen projects worth more than $40 million. In later years, the Bond Committee endorsed other issues which the voters subsequently approved.\(^31\)

The focus of most of this construction was on the needs of the downtown business community. Surprisingly, property values in downtown Kansas City had not declined. The City Manager figured that even in the face of extensive competition from new shopping centers, the CBD still contained about the same percentage of assessed valuation as ten years earlier. The purpose of the expressways and other public works projects, therefore, was to maintain this ratio.\(^32\)

Portions of the city's urban renewal program also were subordinated to boosting CBD values. The Manager announced plans to demolish decaying buildings along the periphery of the downtown and construct parking garages in their place. They would induce, he hoped, the "fullest usefulness" of the expressway system.\(^33\)

But in principle, city leaders were not wedded to a program of aiding downtown solely by constructing expressways. Members of Kansas City's Planning Commission endorsed freeway building as a method of defining neighborhoods while the Manager, himself a professional city planner, spoke of highways as guiding and unifying forces for urban growth. Yet
he also considered a prosperous CBD the city's "most valuable privately owned asset" and thought that well-located expressways would allow downtown businessmen to "compete successfully with outlying shopping centers." In Kansas City, the promoters of faster traffic flow tended to predominate over those who supported a broader attack on urban problems.

EXPRESSWAYS AND URBAN RENEWAL POLITICS

The dominant theme in postwar urban politics was the economic growth and recovery of the city, with the elimination of traffic congestion a significant part of the picture. City planners, business leaders, road engineers, highway users and elected officials agreed in principle that their primary task was to eliminate decay, stimulate the local economy and expedite the movement of motor vehicles. Nearly everyone believed that, in some measure, express highways would help to secure these goals. They also concurred in the necessity of inviting political and economic assistance from external agencies.

Such debate as occurred was over the role that express highways would play in this revival. The range of alternatives ran from the planners' vision of expressways as part of a comprehensive scheme for city renovation to the engineer-road users' view which stressed highway construction according to standards of traffic efficiency. The virtual
absence of unifying federal leadership left the scope of
the renewal effort in the hands of whichever groups managed
to dominate city affairs. In St. Paul, for instance, users
and road engineers exercised the most influence with city
officials. In cities such as New Haven, however, the major
elements in the city's political life insisted on compre-
hensive renewal.

But disputes over urban redesign revolved around more
than freeway location or the size of a renewal project. At
issue, basically, were competing visions of the renewal pro-
cess and the nature of modern urban life. Planning-oriented
groups defined problems in city-wide terms, identifying the
prosperity of their firms or the implementation of profes­
sional standards with the welfare of the city or even of the
region. Many planners believed that it was possible and de­
sirable to direct the course of city growth by regulating
land use. They also sought to influence the bases of so­
cial interaction through the creation of new neighborhood
settings. In the largest sense, planning groups, like some
business groups, hoped to force the establishment of an ef­
ficiently operating city and a more harmonious social order,
based in part on the construction of express highways.

Most highway users and road engineers, on the other
hand, approached city renewal and highway construction from
a much narrower frame of reference. For the most part, they
preferred an efficient road system to an efficient city;
and they thought that highways should serve existing economic institutions, not redirect them. Members of this group did not stretch the parameters of their social concern to include the extra-industrial consequences of freeway construction. The ultimate source of division, then, was between those who favored unlimited economic development and the supporters of directed, systematic growth and social control.

Actually these divergent approaches to the renewal process only provided an intellectual milieu from which choices had to be made. The distribution of political power was the decisive factor in determining the city's social organization and growth pattern. At first, MacDonald and his staff attempted to impose what amounted to a combination program, promising urban renovation as part of their highway program. But President Truman refused to extend their authority, opting for narrower renewal and housing legislation. Moreover, Housing and Home Finance Agency officials imposed few inhibitions on the use of renewal funds and lacked the right to direct highway routings. By 1950, then, there was a virtual absence of national leadership in city rebuilding.

Under these circumstances, relationships established within the local political economy determined the nature of the renewal effort. Several overlapping factors produced the city-wide approach adopted in New Haven. Key members of the business community perceived urban problems on a fairly
large scale and identified the prosperity of their firms with the economic health of the entire city. Equally important, they were able to mobilize resources such as the staffs of the city and Yale University planning departments and attract financial assistance from the federal government. In addition, there was a powerful figure, Mayor Lee, who gave overall direction to New Haven's recovery. He functioned as coordinator of local programming and employed the prestige and influence of his office to attract funds and secure the cooperation of local business and professional groups.

This combination of public and private groups willing to work for city-wide renewal simply did not exist in most cities. In general, businessmen operated from a particularistic frame of reference; they were not comfortable with broad definitions of corporate prosperity. Downtown and industrial district merchants in St. Paul as well as the city's highway users considered highway building in terms of personal profit and convenience, perceiving no need to project themselves beyond that point to other urban issues. The local political situation also inhibited a coordinated effort in St. Paul. The city operated under a "weak" mayor system, making it difficult for any incumbent to impose a unitary urban plan on competing groups. Finally, business leaders in Kansas City hoped to bolster downtown prosperity by constructing expressways, parking lots and some unrelated public works projects. Although the City Manager understood
the wider consequences and possibilities of expressway-linked renewal, he preferred to go along with the business groups. Highway construction in cities such as St. Paul and Kansas City fulfilled Wilfred Owen's prediction that if the road engineers were permitted to build without reference to an urban plan, then their work would "dictate what the plan shall be."

American highway politics had been deadlocked at the national level for years. Major road users had launched strenuous campaigns, hoping to dislodge local roads from the federal payroll while securing tax free, expressway construction for themselves. For their part, local road advocates hoped to charge interstate road groups with an even greater share of farm-highway expenses. Broader questions of political stability and social vision permeated these debates, fracturing highway politics further. By 1954, President Eisenhower took his turn at loosening traffic and stabilizing the economic and social system.
FOOTNOTES


Ibid., p. 103.

Notes on Title I - Slum Clearance - Of Proposed Housing Bill, memo in RG 30, BPR CCF 1912-50, File 740.1.1 General 1948, FRC.

There had been a number of housing bills introduced in Congress since 1945 or so, and as early as November, 1947, Fleming was trying to find a place for his agency in them. See Material Proposed for Inclusion in the State of the Union Message of the President, Clark Clifford Papers, State of the Union January 7, 1948; Material from Government Departments, Agriculture to Federal Works File, Truman Library.

Harry S. Truman to General Philip B. Fleming, April 20, 1949, RG 30, BPR CCF 1912-50, File 740.1.1 General 1949-43, FRC.


Scott argues that Housing and Home Finance Agency officials "inevitably would exercise a certain pressure to improve the techniques of planning...." But inevitability is not an analysis or description of a historic sequence of events and, at any rate, the intervention, insofar as it took place during this period, was almost imperceptible. Compare Scott, American City Planning Since 1890, p. 466 with Wilson, Urban Renewal, pp. xv-xvi.


For the significance of Mayor Lee in New Haven's renewal see Polsby, Community Power and Political Theory, p. 71; Dahl, Who Governs? p. 117; Scott, American City Planning Since 1890, p. 530; and remarks of Martin Meyerson to the 1956 meeting of the American Institute of Planners as cited in Ibid., p. 529.

Talbot, The Mayor's Game, pp. 18-19.

Ibid., p. 19.


Ibid., pp. 46, 48.

Ibid., pp. 45-46.

Ibid., p. 45.

Ibid., pp. 40, 48.

Downtown merchants also were anxious for an express route on the assumption that it would increase business. See Ibid., p. 73.

Scott, American City Planning Since 1890, p. 434; Quoted in Citizens Regional Planning Council, Annual Report, by Lyman Field (March, 1951), p. 1 as cited in Scott, American City Planning Since 1890, p. 434.

Ibid., pp. 434-435.


There is some question about the accuracy of the Manager's figures. The City Planning Commission estimated
that downtown property comprised 18 percent in value of all property in Kansas City in 1945. The Manager claimed that there had been no decline in downtown values over the next ten years, arguing that the CBD contained 15.2 percent of the city's assessed valuation. Compare Ibid. and City Plan Commission. Kansas City, Missouri. *The Master Plan for Kansas City* (1947), p. 20.

33Cookingham, Comments to a Panel on Expressways and the Central Business District, p. 144.
Cookingham had been President of the American Society of Planning Officials, 1945-1946.


CHAPTER VII

THE EISENHOWER ADMINISTRATION AND AMERICAN HIGHWAY POLITICS, 1954-1955

I have always been enthusiastically for increased gasoline tax as long as the money was restricted to the use of roads, but where it is diverted like it is in some states where they use it for old age pensions, then we are unalterably opposed to it, but if it is used for roads, it is the most intelligent tax that can be assessed.

Andrew J. Sardoni, President of the American Automobile Association, July 12, 1955

America lives on wheels, and we have to provide the highways to keep America living on wheels and keep the kind and form of life that we want.

George M. Humphrey, May 2, 1955

The highway transportation industry had been divided for years. Farm groups, organized road users and state highway engineers had pressed one-another to pay more attention to their favorite road system. With equal fervor, they had attempted to shift the financial burden of highway construction to general revenues, road users and property owners.

But most of these activities had not altered the legislative status quo. Although the federal government had
raised allocations for highways, reaching a record-high level of $875 million in 1954, the apportionment formula had not been changed substantially. The percentage of aid going to each of the federal road networks ended up at about what it had been in 1944. Competing interests acceded to added attention for the high-volume Interstate System only when national-road users agreed to sponsor the entire federal aid program. After many years of debate and controversy, there still was virtually no consensus on basic issues of administration, finance and apportionment.

This was the situation confronting the Eisenhower administration in the Spring of 1954. Yet Eisenhower's key officials also were divided over fundamental issues in highway policy formulation. At that point, they were united only by a commitment to a balanced budget, a desire to pump more funds into the Interstate System, and a desire to use road construction as one of several tools for managing the economy.

Divisions within the administration had limited their early initiatives in the highway field. In their relations with Congress and proponents of highway-policy reform, members of the Eisenhower administration had endorsed traditional legislation, asking only for some peripheral modifications. For the moment, they chose to eschew major tampering with long-standing arrangements.

But the President and his advisers were not satisfied
with these arrangements. They recognized that the existing level of highway construction could not solve the traffic crisis. At the same time, they welcomed the prospect of a flexible highway building program, augmenting their ability to intervene in the economy. Ultimately they looked forward to an immense, self-financing road building project which was susceptible to counter-cyclical manipulation.

President Eisenhower took charge of government road planning, ordering his chief aides to prepare a report outlining a program for expediting highway construction. This venture soon broke down, however, as agency heads squabbled over the same issues. Eisenhower restarted government planning, but this time he asked General Lucius D. Clay to give it overall direction. When they were finished, Clay was assigned responsibility for overturning old alliances, building a new coalition and pushing legislation through Congress which would solve the traffic crisis. While Clay's bill was popular in some quarters, it never gained sufficient votes in Congress. In the end, the President failed to disrupt the pattern of coalition building which had dominated highway policy-making since the era of Franklin Roosevelt.

THE INITIAL SEARCH FOR A FEDERAL ROAD PROGRAM

Drift and division were the dominant themes in government highway planning during the first year or so of the Eisenhower Administration. While government officials
united around the notion that accelerated highway building could prevent a further downturn in the economy early in 1954, they could not agree on the substantive elements of future highway legislation. They waited for a Presidential commission to issue a report, hoping it would bring something new, and devoted the remainder of their time to pursuing pet schemes. For instance, Robert Murray, the Under Secretary of Commerce for Transportation, believed that state toll roads could meet the nation's traffic needs. On the other hand, Francis V. duPont, the Commissioner of the BPR, argued for 100 percent federal financing of the Interstate System. In the meanwhile, Bureau officials were promoting the establishment of an office of Under Secretary of Commerce for Highways. For years they had sought to develop a national highway system and a sub-cabinet level ranking seemed a propitious spot from which to nurture and direct this enterprise.

President Eisenhower attempted to reorganize government road planning, hoping to develop a revised highway program. At an April 12 White House meeting, he issued a broad outline of his views on federal road policy. Eisenhower wanted Sherman Adams, his chief assistant, and Arthur Burns, the head of the Council of Economic Advisers, to coordinate an inter-agency search for an accelerated highway construction program. For the most part, his vision of a national road program was an amalgam of highway construction verities.
The President thought that the federal government ought to devote greater attention to the Interstate System as well as to roads from airports into downtown and access roads to defense installations. His view of highway finance was equally conventional. While he would condone federal loan guarantees, an expanded road program could not upset the federal budget and should be able to finance itself at some point. 2

Several groups soon were busy developing plans. There was a general agreement among them that the traffic situation was intolerable from an economic standpoint and that additional highway mileage had to be constructed rapidly. The difficulty was in developing a mutually acceptable program for constructing additional highways. Government officials interpreted Eisenhower's instructions according to their needs and preferences. The old intergovernmental fissures reappeared quickly, as they divided over matters of finance, fund apportionment and the right to control construction.

In general, economists and those interested in long-range economic planning opted for some form of national direction of highway building. They believed that quick relief of traffic was necessary to prevent damage to the economy. At the same time, road construction was a useful device in their repertoire for controlling economic swings.

The head of the Public Works Planning Unit in the
Council of Economic Advisers, General John S. Bragdon, promoted a federal road program along national lines. He hoped to secure Burns' support for a policy of firm federal direction of a national highway program. As he envisioned it, the Secretaries of Defense, Commerce and the Treasury, sitting as a Board of Directors of a National Highway Authority, would assume responsibility for federal road construction. While he thought the new roads should finance themselves, he was not certain if tolls, bonds or federal financing was the best method. In any event, financing was a national obligation entirely, not something to be divided or left to local governments.³

Even in this rudimentary stage, Bragdon's proposal stood in contrast to the workings of the traditional federal highway program. It had emphasized supervision by the Bureau of Public Roads of locally initiated projects and no less than a 40 percent state contribution to the costs of construction. At best, Bragdon's plan downgraded the state highway departments to the level of administrative arms of the National Highway Authority.

There was a second stream of highway planning thought within the Administration. Although its proponents spoke of increased national responsibility for road building, they perceived federal intervention largely in terms of increased financial assistance. For the most part, they were satisfied with the existing distribution of authority, wishing
only to build more roads wherever they found congestion.

Sherman Adams was the leading proponent of this tradition. He assumed that it would cost about $15 billion to construct a viable highway network. A national road authority would finance construction, allowing a small subsidy for toll roads which were not fully solvent. In any case, Adams entertained few dramatic plans for revising federal road-building arrangements.

Adams turned to Bertram Tallamy and Robert Moses, leading New York road officials, for the details of an acceptable plan. In turn, they prepared a report which adhered to the outlines of Adams' views, raised additional revenues for themselves and insured local and state authority in the highway construction field. The Secretary of the Treasury would head a Continental Highway Finance Corporation with the Secretaries of Defense and Commerce serving alongside him as a Board of Directors. For the most part, they were charged with financing federal road building. Day-to-day operations would remain under the direction of BPR and state road engineers.

Bragdon criticized nearly every aspect of the Moses-Tallamy plan. He thought the use of the Bureau Commissioner as operating chief would constrain operations and objected to the involvement of local agencies in construction. He even rejected their request for a delay in legislation until early 1955, pending another report on traffic conditions and
financing. It would consist of just "more words," he claimed.

Everyone involved in highway-policy making within the federal government agreed that there was a critical shortage of high-volume roads. Yet less than two months after Eisenhower had ordered them to prepare plans for an accelerated federal highway program, key officials had entangled themselves in variations of the old disputes over finance and control. Much the same sort of conflicts were occurring in other federal agencies. The Chairman of the President's Commission on Intergovernmental Relations, Meyer Kestnbaum, favored no more than a modification of existing revenue and managerial arrangements. While some portion of the extra funds might come from tolls, Kestnbaum preferred to raise federal automotive taxes, leaving the states to play a large role in construction. Yet the members of the Highway Study Committee of Kestnbaum's group had voted recently for federal aid to toll roads. In the meanwhile, feelings were running strong even among members of the Highway Study Committee. So intense was the conflict there, in fact, that one of its members asked that the group reconvene in order to consider his views on the elimination of all federal aid.

It was becoming increasingly clear to the major participants that government agencies again were deadlocked over key issues. As early as May 11, Adams had warned that
it might require some "power plays" before the Committee on Intergovernmental Relations would approve the Moses-Tallamy plan. Adams also thought it would be difficult to secure the governors' approval of it.²

By mid-June, Burns and Bragdon recognized that they could not deliver a generally agreeable program to the President. Bragdon claimed that the difficulty in reaching a decision was an excess of participants in planning without anyone "following through." In his judgement, government highway planners still had not considered matters of finance or administration thoroughly. Burns was more disturbed by Kestnbaum's dissenting approach to a revised road program. Originally Eisenhower had relied upon his Intergovernmental Relations Committee to prepare a federal highway program. After reading Kestnbaum's views in a memo from Bragdon, Burns inquired simply: "Where do we go next?"³

RESTARTING THE SEARCH FOR A FEDERAL ROAD PROGRAM

Eisenhower did not allow this internecine debate to continue much longer. Once again, he ordered his staff to prepare plans for an accelerated highway program. This time, however, he left far less autonomy to them, erecting a fairly rigid structure for evaluation and decision making. The President acted at two levels. In a speech to the Governors' Conference on July 12 (delivered on his behalf by Vice President Richard M. Nixon), Eisenhower advertised
administration interest in stepping up the rate of highway construction and invited the Governors and interested groups to participate in planning.\textsuperscript{10} Awhile later, he appointed a steering committee under Gen. Lucius D. Clay, charging its members to receive proposals from highway groups and a newly designated federal Inter-Agency Committee.

Adams and Burns directed government planning following Eisenhower's speech to the governors, though Adams clearly was the dominant figure. This time, however, they did not await comments from executive agencies or Congress. The thrust of their efforts were in the direction of advancing the President's program expeditiously.\textsuperscript{11}

Three days after the Governor's Conference speech, they had arrived at some preliminary decisions. Basically, they assumed that the existing apportionment formula did not pay sufficient attention to traffic-dense roads. On the other hand, Adams was satisfied with existing administrative arrangement. As far as he was concerned, the BPR and state road departments could handle a stepped up road program. Finally, he thought that a committee of well-known people should survey the problem in a general way and prepare a report.\textsuperscript{12}

Burns recommended the details of Eisenhower's second step. He suggested the formation of a 5 to 9 member committee designated as the President's Advisory Committee on a National Highway Program and the creation of a Federal
Inter-Agency Committee. As he envisioned the operation of these groups, members of the Inter-Agency Committee would consider economic factors as well as highway requirements for a national road building program. They would then submit a plan for construction and financing to the President's Advisory Committee. At the same time, Burns expected the state highway officials, road users and a committee of the Governors' Conference to present plans to the President's Advisory Committee. Its task was to sort-out these proposals and prepare a report for the President for inclusion in the State of the Union Message. The Advisory Committee would then launch "an aggressive campaign..." for Congressional approval of its proposals.13

Eisenhower proceeded largely along these lines. In mid-August, he asked the Secretaries of Defense, Treasury and Commerce as well as the Director of the Budget Bureau and Chairman of the CEA to designate representatives to an Inter-Agency Committee. Eisenhower assigned Dr. Gabriel Hauge, one of his assistants, to serve as liason and named the Secretary of Commerce's designee to chair the Committee.14

About the same time, Eisenhower asked General Lucius D. Clay to serve as Chairman of the Advisory Committee. Just as Burns had outlined it, the Advisory Committee's task was to collate the views of the Inter-Agency Committee, state highway officials, governors and others into a
coherent proposal. As Clay understood it, the Committee was to have its report completed prior to the next session of Congress.15

The only remaining obstacle was naming the other members of the Advisory Committee. The President delegated that responsibility to Clay and Adams. By and large, they ignored suggestions from colleagues and drew-up a list of four additional members who were acceptable to each-other.16 To a great extent, they made their selections on the basis of experience within related industrial groups. But they were persons who also would assume a national, not just a regional or industry-wide perspective on highway policy formulation.17 According to Clay, consultants such as Robert Moses, an AASHO representative and a few others would represent "special interests."18 At any rate, another effort to modify the national highway program was underway by the end of August.

State highway officials, many governors and road users reacted positively to the President's offer to submit plans. Late in August, Robinson Newcomb reported "a meeting of minds" between some AASHO members and the governors. Newcomb noted that users groups such as the auto and trucking associations, which in the past had opposed the continued imposition of the federal gas tax or an expanded federal role in highway construction, also were in the process of reviewing their policies. In fact, Newcomb perceived
"a ferment" which had not been present "since the 20's."\textsuperscript{19}

Over the ensuing months, however, ebullience gave way to debate, conflict and a feeling of bitterness. Eisenhower's multiple committee system was capable of only partially ameliorating what were, in essence, fundamental differences of opinion. Complex committee structures could not alter long-standing disagreements over methods and sources of finance. For that matter, the Clay and Inter-Agency Committees could not determine a method of managing an expanded road network or apportioning roadway mileage. After awhile, they could not even cooperate with one-another.

TRAFFIC AND GROWTH: THE INTER-AGENCY COMMITTEE

Within government circles, conflict over substantive issues commenced almost immediately. Indeed, the parameters of debate were roughly what they had been prior to Eisenhower's reorganization of the search committees. Indeed, it was as if the President had never intervened.

The first meeting of the Inter-Agency Committee offered only another arena for the continuation of old conflicts. Informally Commissioner dePont had asked several state highway officials, including Bertram Tallamy of New York, to submit plans for a national highway authority. The completed report around the end of July. To a great degree, Tallamy and his colleagues extended the main features of the Moses-Tallamy report written for Sherman Adams several
months earlier. Both drafts proposed the creation of a highway authority which would provide federal financing of the Interstate System through the sale of revenue bonds. Repayment of the bonds was to be guaranteed through a dedication of the gasoline tax. In any event, the thrust of their proposals was to insure a continuation of the existing relationship between the BPR and state highway officials while augmenting their revenues.20

DuPont submitted this plan to the Inter-Agency Committee for study and Bragdon objected immediately. Again, his critique was virtually identical with his earlier negative appraisal of the Moses-Tallamy plan. The state highway officials proposal bestowed excessive authority on the states, he argued. It was important for the federal government to exercise control over route selection in order to assure preference for national rather than local interests. Bragdon also rejected their proposed linkage of bond repayment to gas taxes. Linkage limited the governments ability to execute the program and circumscribed the growth-inducing feature of highway construction.21 About the only item on which Bragdon and the Tallamy group concurred was that the highway authority should have the right of eminent domain where limited access was not a part of state law.

Bragdon made a counter-proposal to the Inter-Agency group. Although some of the details were different, he still emphasized federal control and financing. In
addition, Bragdon disregarded the BPR's interstate routes in favor of a rural express-highway system of about 26,000 miles. Cities would have responsibility for providing access routes out to it.22

DuPont objected to Bragdon's proposal vigorously. As part of their obligations under the 1954 Highway Act, the Bureau was in the process of surveying the feasibility of toll roads. But their preliminary estimates suggested that most of the self-supporting toll mileage had been constructed or programmed. Moreover, duPont noted that the Interstate carried a large percent of the nation's traffic and that most of the needed improvements were in urban areas. It seemed logical to him, then, that any plan adopted should stress the Interstate System and the urban aspect of highway development.23

The separation between government officials narrowed somewhat over the next few weeks. The top officers at the Treasury Department, including Secretary of the Treasury George M. Humphrey, were favorably disposed toward Bragdon's plan. They favored the sale of bonds, toll charges and an independent highway authority.24 The way they pictured it, these features promised a self-financing system capable of responding to economic fluctuations.

Finally officials at the Budget Bureau produced a proposal acceptable to Secretary Humphrey, Bragdon and the remaining members of the Council of Economic Advisers. In
brief, it combined Bragdon's national highway authority with the self-financing, flexible features on which Humphrey was insisting. The National Road Authority would organize and direct construction, leaving the state highway departments to provide administrative services. Income would be derived from the sale of bonds and repayable from toll charges and perhaps a supplement from the gas tax. Budgetary stability was assured by forbidding a federal guarantee of bond repayment and excluding the Authority's debts from the national debt. Their plan contained two checks on economic gyrations: Officers of the National Authority could alter the rate of construction in accord with economic conditions while the Secretary of the Treasury was allowed to approve the dates on which bonds were sold in line with the "requirements of monetary and fiscal policy."

Although officers of three departments had found some common ground, members of the Inter-Agency Committee still were divided sharply. There disagreement went beyond areas of finance and control, though they were vitally important, to a more fundamental conflict. Essentially the issue was whether to emphasize duPont's adulation of the traffic count in future highway programs or to concentrate on macro-economic growth and social order. Bureau engineers did not oppose an expansion of the economy; increased gasoline taxes to finance more highway construction were predicated on it. But as in the past, they riveted their attention on building
additional mileage along heavily travelled traffic corridors. For Bragdon and others, however accommodating traffic was just one phase of a broader interest in road construction. Bragdon described recent federal highway legislation as "only a start." He anticipated greatly increased employment opportunities and an acceleration of economic growth. Burns saw highway construction in much the same way. He argued that an expanded road program was a useful antirecessionary device, important for overall transportation efficiency, and vital to a steady rate of economic expansion. Secretary Humphrey took an even wider view of the road program, stressing not only economic growth but the perpetuation of the existing stratification system. In the first place, highways were a "physical asset" and additional mileage would "create more and more..." for the nation's citizens. Expanding the highway program was consistent with his approach to the distribution of wealth as well. Rather than subdivide the fruits of production, he told an audience of governors, it was preferable to "make another pie and everybody has a bigger piece..."26

At the end of November, intergovernmental relations again were severely strained over the development of an expanded highway program. So strained were relations between committee members that many of them had begun privately to send unrequested memos to General Clay. In some way, they hoped he would rescue the Committee from its deadlock and
impose a settlement favorable to their faction.

General Clay was virtually indifferent to their pleas, producing a second rift within the government. Most of the Inter-Agency members believed that, by virtue of the President's instructions, they had a right to prior examination of Clay's proposals. When this presumed right was not accorded to them, they felt bitter and resentful. Treasury Department officials went so far as to threaten not to support Clay's final recommendations if he would not cooperate with them.27

ROAD USERS AND FARMERS

In the meanwhile, the Clay Committee had to contend with conflict in the road transport field. The euphoria reported by Robinson Newcomb following Eisenhower's speech to the governors had degenerated, by October, into the usual bickering. Most of the disputes between truckers, farm operators, auto enthusiasts and road engineers had resumed unabated.28

The dimensions of the arguments were about what they had been for years. Members of every group recognized the quantum jump in traffic and relative inadequacy of the nation's highway system. Generally speaking, their disputes revolved around the traditional issues of who should finance, direct and benefit from American road construction.

Quite simply, farm leaders sought more highway mileage
at less expense to their constituents. At the same time, they wished to prevent a diminution of their influence in road building affairs. Leaders of the Grange liked the existing road program. They wished to continue the expense sharing ratio as it was and rejected a greatly accelerated program of Interstate construction as inflationary. If the Interstate were built, however, they believed the federal government should finance it entirely. As they pointed out, federal assumption of Interstate expenses would leave more funds available for the other networks. Since gasoline rather than property taxes composed the bulk of revenues available for road building, these views favored the construction of additional rural mileage at little expense to their members. Ultimately their goal was to extend "an all weather road to every farm worth farming."²⁹

Leaders of the American Automobile Association, the largest auto owners group in the nation, assessed a revised federal road program in an altogether different way. At least in principle, they remained dedicated to the reforms outlined in their Project Adequate Roads campaign. While they agreed with farm leaders that the federal government was responsible for most of the expenses of constructing the Interstate System, they took that position in order to accelerate expressway construction in urban areas. Furthermore, they still wanted to cut the construction costs of low-volume roads from the federal payroll, returning them
to local taxpayers for support. Representatives of the governors and Chamber of Commerce presented roughly similar views to Clay, although there was great variety in the proposals sent to him.30

THE CLAY REPORT

The Clay Committee faced a number of widely varied and generally irreconcilable differences on the proper approach to an expanded highway program. Interstate and urban highway users, secondary road proponents and state road engineers continued to debate fairly basic issues from traditional perspectives. All the while, contrary feelings about finance, management and the good society divided government officials. Since President Eisenhower had some prerequisites for a road program not wholly satisfactory to members of government and industry, he presented another obstacle. Finally, there was the dispute between General Clay and some members of the Inter-Agency Committee over the right of government officials to participate in decision-making. Indeed, almost any recommendation from the Clay Committee could incur the displeasure of an important component of government or industry.

But General Clay was not interested in fashioning a composite program. Basically, he wanted to follow the President's inclinations on road building. At the same time, he was conscious of the angry disputes which had split members
of the highway construction and road transportation industries over the years. As a result, Eisenhower's preferences plus the reality of the legislative potency of major road users shaped Clay's road program.

Essentially Clay hoped to accelerate the construction of key roads without effecting tax rates or the national debt. As he plotted it out, the government could finance a $2.5 billion a year Interstate program by selling bonds and dedicating the gas tax, at current levels, to their redemption. Remaining aspects of the federal road program, including management and the level of federal aid to farm and urban roads, remained about the same.  

Over the next few months, Clay filled in the details of his program. Again it adhered to the reasoning of the President and large road users. A national highway authority would handle financing while the Commissioner of the Bureau of Public Roads was charged with supervision of daily operations. The Authority would issue about $25 billion worth of bonds, retiring them over a 30-year period with funds from future federal-aid appropriations and occasional borrowing from the Treasury. As the program was finally sketched, revenue would be apportioned as a percent of local expenses to the nationwide price of finishing the system. Clay assumed that regular increments of traffic would pay for the roads with no increase in gasoline tax rates. In fact, there would be sufficient funds to repay toll roads which
would join the Interstate System. 32

Clay's report was mostly a pastiche of ordinary road building designs. In good measure, his recommendations were an assemblage of plans and hopes which had lingered about the meetings of engineers and users for a number of years. Already a few were in use at the state level. Even in its larger objectives, Clay had proposed a traditional road building program. He aimed clearly at serving national defense, boosting the economy and accelerating traffic. 33 About the only item missing was road construction as part of a plan for social renewal, but it had never been very popular at the national level anyway.

Clay's ultimate intent, simply enough, was to suggest a plan capable of winning support from key groups without sacrificing certain objectives. In terms of its basic program, Clay had combined the most salient objectives of President Eisenhower, interstate and urban road users. In the same vein, Clay confessed to an Inter-Agency meeting that he had not included direct federal aid to toll roads because such a proposal would be "'whipped' before it got started." 34

RESPONSE TO THE CLAY REPORT

For the most part, however, the support for which Clay had been searching did not materialize. While government officials and users liked aspects of the Clay program, they
had begun to criticize it before it was complete. Late in December, Hauge reported to Adams that Inter-Agency members wanted a "thorough go" at the Clay report. Within government circles, debate and disagreement continued much as before.

The ostensible issue was the contents of Eisenhower's letter transmitting the Clay report to Congress. Actually, they were rehashing the same issues. Bragdon and members of the Council of Economic Advisers still were interested in developing a highway program susceptible to counter-cyclical manipulations. Although they saw some merit in regularly selling bonds over a 10-year period as Clay planned, they desired a highway program with flexible methods of finance and adjustable rates of construction "built into" it. As part of their emphasis on a flexible program, CEA members were thinking in terms of manipulating tax, toll and bond rates as well as increasing the discretion of the national highway director.

Treasury Department officials critiqued Clay's plan from another angle. They were preoccupied with preventing the road program from disturbing the budget. Originally Secretary Humphrey had preferred toll financing, but General Clay had convinced him that the gasoline tax was capable of financing construction fully. Nonetheless, Clay had merely noted that the gas tax would equal expected expenses; he had not linked them together. Humphrey insisted upon linkage
as well as a clear-cut technique for directing gasoline tax receipts into the corporation. At the same time, Treasury officials asserted that if toll financing was decided upon, then in some manner the Treasury should receive a portion of the profits. Officials at the Budget Bureau argued these points along roughly similar lines.37

Organized road users entertained a much different approach to Clay's program. They approved heartily of accelerating highway construction and were willing to tolerate less appealing aspects of the program such as bond financing. But they "vigorously oppose[d]" paying reimbursement for new toll roads added to the system and were alarmed at the prospect of making compensation for older toll roads without requiring the elimination of the toll fee. As always, what they really wanted was a toll and tax free Interstate System coupled with the elimination of federal grants for the construction of low-volume roads.38

The Clay Committee had formally presented its report to President Eisenhower early in January, 1955. Not more than 2 weeks later, however, most of the differences which for years had blocked a program of concentrated road construction again were present. Still unresolved were such deeply divisive issues as which groups should finance and benefit from additions to the Interstate System. Even more fundamental disputes between advocates of centralized highway planning and proponents of a more fragmented approach also
interfered with the development of a national highway program. As it was, disputes within the Inter-Agency Committee had already delayed Eisenhower's message to Congress promised for January 27.39

General Clay remained adamant about the points at issue. He wanted a program capable of winning support without conceding major items of principle. He warned critical members of the Inter-Agency Committee that leaders of the AAA, AASHO and many of the governors opposed their plan for more extensive toll financing. There would be a "revolution" in several western states if formerly free roads began to assess a toll charge. Besides, Clay asserted that inclusion of other Inter-Agency proposals would jeopardize their program. On the other hand, Clay offered no relief to users who opposed continuation of the gas tax, dispersion of funds across secondary roads, or payments for toll highways placed on the Interstate.40

Clay insisted on going ahead with his program as it was. He was convinced that his Committee's report contained a formula capable of winning Presidential and user support for a greatly increased federal highway program. He had calculated that there were sufficient incentives in their proposal to gain an endorsement from most highway users; and Treasury officials were fairly satisfied with the promise that more road building would not harm the budget. Clay felt confident informing the Inter-Agency Committee that
if they would not affirm his financing proposals, then they should not forward any of his committee's proposals. With strong support from Sherman Adams, members of the Inter-Agency group decided that Eisenhower's message to Congress and a subsequent administration highway bill should follow the themes established in the Clay report. In mid-February, Eisenhower proclaimed his support for a highway program along lines recommended by General Clay.  

Clay had been fairly accurate in assessing the response of large numbers of users and engineers to his plan. Similar to their turnabout late in 1953, leaders of the largest highway user organizations approved a stepped up highway construction bill without insisting that Congress drop the gasoline tax first. By the mid-1950's, they defined expressways as so essential to traffic relief that they were willing to forget difficult to achieve financing ideals. The Governors of states with unusual congestion and high construction costs liked his apportionment formula while Defense Department officials were most interested in the completion of a compact, limited access road system within a specified time period. For many business and professional leaders such as Pyke Johnson of the Automotive Safety Foundation, the Clay plan represented the culmination of more than a decade of promoting express highway construction at the state and federal level.  

Although Clay gauged the response of some groups accu-
rately enough, his overall view that his plan could gain widespread support proved incorrect. For leaders of the Farm Bureau and Farmers' Union, the Clay bill was anathema. They had wanted the federal government to pay greater attention to farm roads, not freeze them at current funding levels for 30-years. Then, too, there was grumbling about other features of Clay's plan. Considerable opposition arose over the interest charges on the bonds as well as the decision to keep them out of the national debt. The governors of states without sufficient traffic to support toll-roads complained about the toll reimbursement feature. Finally, there was a fear in some quarters that Clay had granted excessive power to the National Highway Authority.\textsuperscript{45}

Senator Harry F. Byrd's critique of the Clay Committee report embodied many of these views. Byrd argued that Clay's financing procedures violated sound fiscal policy and centered excessive power with the highway authority. In place of the Clay Plan, Byrd recommended continuing the federal aid road program more or less as it existed, eliminating interest charges in favor of more highway construction and retaining control of routing and standards in the states. Byrd claimed that the alternative would create "fiscal confusion and disorder..." and raised the specter of the "iron hand of the federal bureaucracy..."\textsuperscript{46}

Members of the administration were conscious of the opposition to the Clay program. Commissioner duPont wrote
to a professional colleague that it was the object of "a great deal of political opposition...." The ranking minority member of the House Subcommittee on Roads, J. Harry McGregor, sent along a similar report to Sec. Humphrey. McGregor claimed that financing and the concern of many groups that their favorite road network would no longer receive sufficient federal attention were causing widespread dissatisfaction with the Clay program. As it was constituted presently, warned McGregor, the administration bill did not enjoy a "'ghost of a chance'" in either chamber.  

Response within the administration varied greatly. General Clay and Commissioner duPont clung to the main themes of the original bill tenaciously. For the dissatisfied members of the Inter-Agency Committee however, the cool response to the Clay program offered a unique opportunity to lobby for the adoption of their plan.

Their immediate problem was locating some factual bases on which to prop their briefs. After all, the Clay report presumably rested on a careful determination of national highway requirements as well as cost and income projections. The data contained in the BPR's study of the economic feasibility of toll road construction and operation presented an opportunity to restart debate within the government. The Bureau had concluded that most projected toll mileage could not attract sufficient traffic to cover the expenses of construction. Opponents of the Clay plan had to rearrange data
to show that a toll network would recover its original costs plus interest charges.48

Bragdon pointed out the significance of the Bureau's study to the Council of Economic Advisers. Even before survey material was available to him, however, he had recognized that the Eisenhower bill was in danger of defeat, presenting them with an opportunity "to suggest again the clear-cut, sensible, simple way of doing this job." Bragdon argued that the Bureau should be required to present certain statistical information to them, allowing the issue of financing to be "reopened on the basis of new data."49

Bragdon and his cohorts took advantage of the BPR's data when it was presented to them finally. Yet there really was not much to be said about federal highway construction. Most of the areas of disagreement had been debated thoroughly since 1939 at least. What all of this amounted to, then, was just another opportunity to drum up support for a special point of view.

Certainly Bragdon had almost nothing to add to the controversy. He proposed the creation of a national highway authority with broad powers, leaving the state road departments with supervisory tasks. In general, Bragdon still was hopeful that the government would gain another lever in economic affairs.50 For that matter, Treasury Department officials remained obsessed with toll financing. One of them argued that BPR materials would actually show that no less
than 75 percent of the Interstate could be financed safely with toll collections.\footnote{51}

Bragdon and his cohorts tried to develop a broader base of support, yet each moved in a more or less independent direction. Secretary of the Treasury Humphrey was attempting privately to bring Sen. Byrd over to the side of the toll road forces. Bragdon thought that the most fruitful route was through the White House. He presented his views to several of Eisenhower's aides and repeatedly urged Arthur Burns to contact Sherman Adams. For the moment, however, Burns viewed such activity as premature. He believed the most propitious course of action was to contact other members of the CEA and to discuss the situation with members of the Advisory Committee on Economic Growth and Stability.\footnote{52}

By early May, the administration bill had incurred a wide range of enemies. Constituents of the original road networks protested the lengthly freeze placed on their funding levels; road users and many state governors objected to reimbursing toll roads constructed in the future; still others disliked what they claimed was the excessive power granted to the national highway authority. Though they generally approved of the main tenets of Eisenhower's legislation, Army officials disliked the prospect of a national road authority wielding decision-making power. It would lead to a situation, they feared, where a group of financial
experts would exercise control of "engineering standards." At the same time, members of the Inter-Agency group were promoting their own program, utilizing the uncertainty created by the criticism of Eisenhower's bill to call for increased toll financing and even greater centralization of control.

Although they understood that their bill was not popular, supporters of the Clay program felt little inclination to adjust it. First, it contained points to which they were committed in principle. Somehow, too, they believed that it had a reasonable chance of passing through Congress largely intact. For instance, General Clay was satisfied with the bill as it stood. He told a group of governors that he approved of the proposed financing scheme and did not wish to draw funds from the Interstate in order to finance the remaining networks. The Interstate created "a profit," he claimed, and it was unfair to users to levy additional charges in order to finance low-volume roads. Besides, he did not discern any reason to modify the administration's bill. While their legislation would encounter difficulty in the Senate, Clay felt it would receive a more positive response in the House. At this point, he argued, it was not a "lost cause in any sense of the word."

CONGRESS AND THE CLAY PLAN

Clay misjudged the support for his program again. By
a vote of 8 to 4, members of the Senate Public Works Com-
mittee turned down the Clay plan in favor of a bill spon-
sored chiefly by the Chairman of the Roads Subcommittee,
Senator Albert Gore of Tennessee. In large measure, the
Gore bill simply raised the funding levels and time frame
for federal highway construction, leaving the administration
of the program and distribution of funds much as they were.
Gore allowed $900 million to the original networks for each
of five years while authorizations for the Interstate ranged
from $1 billion during the initial year to $2 billion during
the last two years. Although he made a few changes in the
rural-road section and altered the federal-state expense
sharing to approximately 90-10, the only substantial de-
parture from past practice was the inclusion of the Davis-
Bacon Amendment. It was an old federal law requiring the
payment of prevailing wages on federally sponsored projects,
and Gore made it applicable to the Interstate System as a
way of enticing organized labor. They had been largely in-
different to highway legislation, asking only that Davis-
Bacon be made a part of whatever bill was approved.\textsuperscript{55}

The Senate modified the Gore bill somewhat. By a voice
vote, for example, they dropped the Davis-Bacon section. But
true to predictions, they approved the Gore bill, turning
down by a 2 to 1 margin Senator Edward Martin's motion to
substitute the Administration's measure.\textsuperscript{56}

The Chairman of the House Roads Subcommittee,
Representative George H. Fallon, tried to resuscitate a reformed road program in the House. He had the difficult assignment of fashioning a bill which provided for the construction of additional farm roads, stepped up Interstate construction, left management alone and financed itself without overburdening road users. It proved to be an impossible task.

New tax measures were the key to Fallon's thinking. By raising taxes on a graduated basis, he could complete Interstate construction in 12 years and expand the rural road program, all without disturbing the budget. As he planned it, the excise on the largest truck tires would jump from 5 to 50 cents a pound while gasoline and diesel fuel taxes went to 3 and 6 cents a gallon respectively. At those rates, income and expenses were supposed to balance in a number of years.\(^57\)

Fallon's proposal received a negative reception generally. Truckers were alarmed at the prospect of paying graduated taxes and objected strenuously to the huge increases in tire taxes. Since they employed proportionately more diesel units, Western operators, in particular, were upset about the difference between diesel and gasoline tax rates. In order to construct the roads they needed, large truckers were willing to pay slightly higher taxes, but they had to be imposed at a uniform rate.\(^58\) In reality, they preferred the regressive factor built into a uniform tax
schedule.

Administration officials were divided in their response to the Fallon bill, but hardly more enthusiastic about it. They agreed that whatever bill passed Congress had to avoid deficit financing. Eisenhower proclaimed his support for the Clay plan, arguing that it would not disturb the budget or upset state taxation practices. Secretary Humphrey preferred the Clay plan, relative to the Gore plan at least, but endorsed Fallon's proposal insofar as it provided for the liquidation of expenses. In any case, the feeling persisted within administration circles that the House would approve road legislation in some form or other.59

Chairman Fallon attempted to reconcile these groups, appointing a special, nine-member committee to find a new formula. While they were enthusiastic about the fruits of highway construction, looking forward to flowing traffic and an expanding economy, they produced only a scaled-down version of Fallon's original proposal. Their modified plan still included a graduated tax schedule on tires and an extra increase on diesel fuel.60

The special committee's bill did not satisfy truckers. Nearly 500 of them were in Washington, complaining about the inequity of graduated taxes. In the meanwhile, Eisenhower had not wavered from his support of the Clay plan.61

It was at about this point that support for any highway legislation began to disintegrate. If competing groups
could not construct a bill close to their original plans, they preferred to block all legislation. House debate and voting patterns reflected these sentiments. Supporters of the Clay plan offered a couple of compromises, dropping the section allowing for toll road repayment and adding Davis-Bacon. Congressman Charles Halleck suggested financing an expanded road program with bonds for 20 rather than 30 years by raising the gas tax slightly; but his motion was ruled out of order. At this juncture, one of the proponents of Eisenhower's bill called on his colleagues to "stand by the President of the United States and support the President's program."^62

With the lines drawn so taut, every alternative was struck down. A motion to recommit the Fallon bill and substitute Eisenhower's measure was defeated 193-221. Most of the supporters of the Administration bill then joined opponents of the Fallon bill to kill it, 1923-292. Congress then adjourned for the year, divided seriously over the course of the American highway program.^63

Administration leaders discussed calling a special session of Congress to deal with highway legislation. Burns in particular urged such a course on Eisenhower. For his part, the President pleaded with Congress to reconsider its decision prior to adjourning, but he decided not to require a special session. Hopes of reforming the federal-aid highway program, in any direction, were dead until 1956.^64
By the end of July, 1955, road users, state highway engineers, farm leaders, government officials and the President of the United States had attempted to revise the federal highway program. Certainly the Administration's reform effort had been the most strenuous since discussion of revisions along these lines had begun back in the 1930's. Although they had succeeded in narrowing the parameters of debate significantly, the Eisenhower Administration could not find a plan capable of breaking through the deadlock.

The failure of the CEA, Budget, and Treasury faction of the Inter-Agency Committee to achieve their minimum objectives is easiest to understand. In the first place, the structural setting of committee relationships tended to limit the influence of Inter-Agency members. According to Eisenhower's arrangement of committee responsibilities, the CEA and others were to consolidate government thinking and then present their views to General Clay. This arrangement meant that from the beginning, the Inter-Agency group was secondary to the quasi-governmental Clay Committee. For that matter, the Under Secretary for Transportation, a long-time advocate of state responsibility for toll roads, was not officially included in any of these proceedings.

The Committee members' interpretation of their relationship to the Clay Committee further circumscribed their influence. They perceived their primary obligation as one of representing a federal and national viewpoint on highway
matters. Bragdon and a few other officials were successful in that sense. But they defined themselves as subordinate to Clay and awaited his invitation to submit their ideas, assuming they would be consulted once Clay had held public hearings and secured the views of the "special interest" representatives on his Committee. When that invitation was not sent, Inter-Agency members were left in impotent fury. Furthermore, they enjoyed few options except to lobby with Clay for minor revisions, affirm his final decision, and then push surreptitiously for major changes as the program wallowed in conflict.

The Inter-Agency's program was itself a source of debate and controversy leading to failure. Bragdon, Burns and Humphrey dreampt of a national road authority controlling highway construction activities in the interest of economic efficiency and stability. Their plan would have revolutionized the political economy of road building which, for the most part, was decentralized and not related instrumentally to movements in the economy.

Legislative ineptitude and staunch partisanship killed the Clay plan. Competent observers had reported all along that the Administration bill would not survive a vote in Congress. Farm groups disliked it while a number of its supporters were unenthusiastic about many of its features. But Administration leaders continued to believe that the Clay plan would survive Congress somehow. When the Senate
killed the Clay bill, road users saw an opportunity to junk its negative features and build something even more to their liking. Eisenhower and Clay insisted on their bill as it stood, however, especially its prohibition on deficit finance. Fallon then tried to write legislation which pleased everyone. Again, Eisenhower and Clay stuck to their original plan, offering no more than the barest compromise. In that atmosphere, they preferred to sacrifice highway construction entirely.

Disputes within the highway construction field continued unabated over the next year. As in the past, few were willing to concede major principles. Congress refused to pass a highway construction bill until mid-1956, when competing groups found a formula which satisfied their most salient concerns and asked few sacrifices besides.
FOOTNOTES


5Bertram D. Tallamy and Robert Moses, Draft of a Bill to Create a Continental Highway Finance Corporation, circa May 1, 1954, Bragdon Files, Moses-Tallamy Plan File, Eisenhower Library; Tallamy and Moses to Adams.

6Bragdon to Burns, May 24, 1954; Tallamy and Moses, Draft of a bill to Create a Continental Highway Finance Corporation.


10. Remarks of Vice President Nixon to the Governors' Conference, June 12, 1954, OF 147 A-1, Eisenhower Library. Nixon delivered his remarks from the text which Eisenhower had intended to use. The President did not attend the Conference due to a death in his wife's family. Eisenhower's definition of highway problems was largely conventional. For the most part, he quantified the road situation into readily comprehensible units of measure.

11. The importance to Adams and Burns of rapidly developing a program is mentioned in Bragdon to Burns, July 16, 1954 and Bragdon to the Record, July 21, 1954.


14Dwight D. Eisenhower to George M. Humphrey, August 20, 1954, OF 141 B-l-A; Dwight D. Eisenhower to Sinclair Weeks, August 20, 1954, Bragdon Files, Interagency Committee on a National Highway Program Files, both in Eisenhower Library.


See also Arthur Minnich to Thomas E. Stephens, August 23, 1954, OF 141 B-l-B; Francis V. duPont to Roemer McPhee, September 9, 1954, OF 141 B-l-A, all in Eisenhower Library.

16Clay interview, February 20, 1971, p. 102.

For the suggestions of Burns and Frank Merrill, the head of the New Hampshire Public Works Department and a correspondent of Sherman Adams, see Burns to the President, July 22, 1954; and Frank Merrill to Sherman Adams, July 30, 1954, Records of the President's Advisory Committee on a National Highway Program, Organization File, both in Eisenhower Library.


17Inference drawn from an examination of Clay's description of their choices. See Clay to the President, August 30, 1954.

18Clay to the President, August 30, 1954.


23 Minutes of Meeting of Interagency Committee on the President's Highway Program, September 9, 1954.


For an indication of the reluctance of BOB, Treasury and CEA officers to commit themselves to certain aspects of financing, see Bragdon to the Record, October 27, 1954, October 28, 1954, Bragdon Files, Highways-1954 (September through Dec.) File, Eisenhower Library.


See also Raynond J. Saulnier to the Council, December
Leaders of the American Farm Bureau Federation argued in favor of a similar sort of program, though they opposed increasing federal aid to highway building. See Matt Triggs to Lucius D. Clay, December 20, 1954, Records of the President's Advisory Committee on a National Highway Program, "T" File, Eisenhower Library.


33 Bragdon for the Record, December 13, 1954; Notes on General Clay's Discussion of November 18, 1954.

34 Bragdon for the Record, December 13, 1954.


See also Tucker, Anthony and Company, "Highlights from the Washington Conference to discuss the Clay Committee $101 Billion Road Project to be made to the Congress by President Eisenhower on January 27, 1955," p. 6,
39 See Bragdon to the Council, January 24, 1955.
In the meantime, members of the Highway Study Committee of the President’s Commission on Intergovernmental Relations had not reached agreement on many issues. Moreover, their final report differed on some important points from the recommendations of the Clay Committee. See Frank D. Merrill to Richard M. Zettel, December 14, 1954; Robert B. Murray to Richard M. Zettel, December 23, 1954; William J. Cox to Richard M. Zettel, December 28, 1954; Richard M. Zettel to Members of the Highway Study Committee, January 10, 1955, all in Records of the President’s Commission on Intergovernmental Relations, Committees and Meetings Federal Aid to Highways June–December 1954 File; Frank D. Merrill to Sherman Adams, February 17, 1955, GF 158 A-1, all in Eisenhower Library.

40 John S. Bragdon to the Council, February 1, 1955, Bragdon Files, Highways–1955 (January through March) File; F. C. Turner to Kevin McCann, January 28, 1955, Records of the President’s Advisory Committee on a National Highway Program, Special Message to Congress File; Lucius D. Clay to Governor Paul Patterson, February 17, 1955, Records of the President’s Advisory Committee on a National Highway Program General Clay File, all in Eisenhower Library.


In drafting the Administration bill, the Treasury and Budget officials assumed responsibility for details of the financing section while duPont handled the remaining sections. This division of labor mirrored the divergent interests of government agencies.


See also Frank D. Merrill to Sherman Adams, April 22, 1955, GF 158 A, Eisenhower Library.


See also Cong. J. Harry McGregor to Sherman Adams, April 1, 1955, OF 141 B-1, Eisenhower Library.

The Clay Committee had employed much BPR survey material in its deliberations.


See also John S. Bragdon to Arthur F. Burns, April 11, 1955, Bragdon Files, Highways-1955 (April through August) File, Eisenhower Library.

Toll Roads and Free Roads reported economic feasibility on a route by route basis.


Bragdon criticized this memo for failing to perceive the potential for full funding of Interstate construction through tolls. Even from a dissenting position, unsatisfied groups could not achieve unanimity of opinion on salient issues. See John S. Bragdon to the Council, April 22, 1955, Bragdon Files, Highways-1955 (April through August) File, Eisenhower Library.


See also undelivered memo from Burns to Adams prepared by Bragdon, April 19, 1944, Bragdon Files, Highways-1955 (April through August) File, Eisenhower Library.

Comments on S. 1160, n.d., Records of the Department of the Army, Office of the Chief of Transportation, RCSI #7(d) Highways for National Defense-Legislation 84th Congress-Senate Bills File, FRC.


See also Bragdon for the Record, April 29, 1955; Remarks of Francis V. duPont to the Washington Conference of Governors, May 2, 1955, OF 147 A-2, Eisenhower Library; duPont to Davis.

DuPont had resigned as Commissioner of the BPR early in 1955 to assume a post as congressional liaison for highway matters under Secretary of Commerce Sinclair Weeks. See duPont's remarks to the Governors' Conference.


Newcomb to Burns.

Congressional Record, Vol. 101, Part 9, 11561, 11695, 11709-11710.
Ibid., pp. 11717-11718; Louis Shere to the Council [of Economic Advisers], August 1, 1955, Bragdon Papers, Roads #1 File, Acc. No. A64-12, Eisenhower Library.

CHAPTER VIII

THE INTERSTATE HIGHWAY ACT OF 1956

For a great many years now highway users have complained, and I think with some justification since the conclusion of World War II and the Korean conflict, that vast revenues were being collected from them but were not being used for purposes of building highways. This bill recognizes that complaint and it establishes the highway trust fund which dedicates most of those funds to highway construction and for that purpose only.

Congressman Hale Boggs, April 26, 1956.

The defeat of all road legislation midway through 1955 did not shake the conflicting perspectives of competing highway groups and government officials. While they approved the construction of roads to relieve the miserable traffic jams, they could not resolve troublesome political conflicts. During the next 12 months or so, highway users, road engineers and administration officials debated repeatedly the virtues of national control of road construction, the merits of toll and free roads and the proper rate of gasoline taxation. At several points, it seemed that Congress would not enact legislation again. By June, 1956,
however, Congress voted overwhelmingly for a bill fashioned by Congressmen George H. Fallon and Hale Boggs. Actually Boggs and Fallon had not eliminated the sources of controversy. What they had done, basically, was fashion a bill which provided competing groups with nearly everything they wanted while asking few sacrifices of them.

GENERAL BRAGDON AND NATIONAL ROAD BUILDING

Road-minded groups returned quickly to the struggle to impose their brand of highway building. Although they nodded occasionally in the direction of compromise, they were not prepared to concede basic objectives. As a result, the next round of discussions repeated the main lines of earlier conflicts.

Members of the old Inter-Agency Committee offered few fresh ideas. General Bragdon, Treasury Secretary Humphrey and Gabriel Hauge, the President's liason to the Committee, still were thinking in terms of a national road program which would accelerate traffic and offer another countercyclical weapon to them. If their ideal road system ever reached fruition, construction would be centralized under some sort of federal authority while bond sales and tolls would cover the expenses of construction fully.

General Bragdon was the most diligent proponent of national road building. As soon as the Fallon bill was defeated, he was busy preparing numerous plans again, hoping
to persuade Administration leaders to adopt them. In one way or another, however, they repeated familiar enough themes.

Bragdon reissued the financing portion of his original proposal late in July. As in the past, he was promoting tollways. He argued that BPR officials and General Clay had underestimated the number of expressway miles capable of sustaining their costs through tolls. According to his calculations, more than 30,000 miles were susceptible to toll finance provided that funds collected on any part of the system could be employed to pay the expenses of any other part of it. Even if only intra-state fund transfers were permitted, Bragdon claimed that the costs of about 23,000 miles could be borne by toll charges.\(^1\)

About a month and a-half later, Bragdon proposed what he called a "compromise plan..." for financing. Basically, it was a repetition of his toll financing scheme along with a provision permitting the states to opt for freeways. Bragdon thought that this plan would satisfy groups opposed to toll roads as well as those who disliked the notion of transferring toll fees collected in one state to another.\(^2\)

Bragdon perceived a number of advantages to this plan. It promised lower interest charges than a large-bond sale, no increase in taxes and direct payment by those who benefitted from the road. Another positive feature of the plan was that the states would not have to raise additional
revenues in order to match federal grants, leaving them with more funds for maintenance work. But tax and interest rates were secondary items in Bragdon's highway planning. He was willing to adjust them to suit opposition groups. Essentially he was interested in centralizing highway construction planning, not manipulating toll charges. He had never given up hope of creating a board with wide authority over an accelerated road program, giving the project a "distinctly national character...." This arrangement promised to provide the government with a greater voice in routing and augmented influence over the timing of construction. Both were important for purposes of exercising greater influence over economic movements. As Bragdon pointed out, these plans stood in distinction to the usual arrangements in which questions of funding, route location and the rate of highway construction were examined from a state perspective.

A few members of the former Inter-Agency Committee also were busy lobbying for a national road program. Gabriel Hauge, for example, the President's liaison to the Inter-Agency group and his "personal economic adviser," focused on linking road-construction expenditures with economic fluctuations. Members of the Council of Economic Advisers were sketching out similar plans. Treasury Secretary Humphrey followed a different course, concentrating his efforts on insuring the self-sufficiency of any project.
While he preferred to finance an accelerated program with tolls, he was favorably disposed toward an earmarked user tax so long as its proceeds equalled expenses. All in all, defeat had not dampened the enthusiasm of Inter-Agency members for a radical change in the federal road program.

TRUCKERS AND LOW TAXES

Leaders of the road transportation industry had not wavered far from established views either. Through the years they had promoted a program of concentrated, tax and toll free road building. While they defended that position as a matter of principle and as a good point of departure for bargaining, actually they were prepared to accept financial responsibility for the American highway system. In return, tax increases had to be relatively small and uniform and there could be no toll charges on new roads.

1955 legislation had faltered largely over these points. Truckers would not accept the graduated tax increases which Congressman Fallon had in mind for them. An unsatisfactory status quo seemed more desirable than an accelerated construction program promising graduated tax increases and perhaps more toll charges.

Time consuming traffic jams and costly accidents continued through the summer. Certainly truckers wanted to speed up traffic. The President of the American Trucking Associations told a meeting of the Associated Traffic Clubs
of America that truckers were not so "stupid..." as to stand "in the way of our own progress." As always, the problem was locating the path to progress.

Leaders of organized truck operators met with Administration officials several times through the latter part of 1955. At each conference, they insisted on two basic points. They accepted responsibility for the expenses of road construction, but did not wish to serve as "whipping boys" again. As they figured it, a one-cent a gallon across-the-board jump in gas and diesel taxes and a 2 cent per pound increase in the tax on tires and tubes seemed reasonable. Truckers were willing to accept additional taxes as well. They would pay a two percent increase in the new truck excise, provided the proceeds were dedicated to highway construction. All of this amounted to a desire for more roads based on an essentially regressive tax schedule.

Truckers also harbored some fairly fixed views about federal aid to toll roads brought onto the Interstate System. They did not object to compensating states for roads they had constructed in the past, but opposed any crediting scheme which permitted toll collections on new roads or the extension of toll networks.

THE AMERICAN AUTOMOBILE ASSOCIATION AND TAX EQUITY

American Automobile Association officials shared many of these sentiments with truck operators. Since the 1930's,
AAA members had united with other road users in opposition to diversion, dispersion and toll roads. Together they had lobbied for the sufficiency ratio and increased federal participation in the funding of urban expressways. For that matter, auto club leaders were staunch advocates of state highway department hegemony in road building affairs.

As these ambitions neared fruition, however, AAA officers had separated from truckers over the tax schedule. Club leaders had endorsed Fallon's 50 cent a pound tax on large truck tires as well as the extra jump in diesel fuel rates. Graduated taxes were a matter of equity, they argued.  

Yet AAA members wanted new roads badly. Expanding the nation's highway system, especially the Interstate network, would boost the economy, cut the accident rate and reduce the "traffic muddle...." Since Congress planned to reconsider road legislation in 1956, club leaders offered a revised plan for accelerating the federal highway program. It repeated some of the well-worn schemes in road user circles, including federal assumption of most Interstate expenses and regular increases in aid for the urban, primary and farm networks. Mildly graduated tax increases were part of their plan as well.  

Quite simply, the only innovation here was club endorsement of continuing grants to little used roads.

Auto club officers were fairly frank about their intentions. Basically, they designed their revised plan to serve two functions. Payments for the construction of
low-volume roads was part of a strategy of coalition building. Hopefully their plan could act as a "rallying point..." for the industry, building a coalition for forthcoming political battles. The graduated taxes, though at lower levels than last year, were intended to shove a greater share of the tax burden of new roads onto truckers.11

HIGHWAY LEGISLATION, POLITICAL FRAGMENTATION AND DEADLOCK

Defeat and political conflict had not reshaped debate over the direction of the American highway program. While everyone proclaimed the utility of more express roads for loosening traffic and boosting the economy, contending groups found few items on which they could agree. More important, the leaders of road minded groups were in no mood for compromise. If they could not proceed along certain lines, it seemed preferable to continue a program which did not solve the traffic crisis. At that point, then, it appeared to many that Congress might deadlock over highway legislation again. For example, a representative of the National Highway Users Conference thought that any bill proposing certain financial arrangements would be in for a rough "go." The outlook for legislation appeared so gloomy in fact, that one auto industry executive predicted flatly that no bill would pass Congress. Highway legislation was blocked, he claimed, by "political times."12
Divisions within government and industry were reflected in Congress. As it was, members of the House Public Works Committee remained divided over the direction of road legislation and uncertain of events. There was sentiment among members of the Committee for increased taxes, especially on heavier trucks and diesel units, and a general feeling that the program ought to finance itself. Beyond that point, however, they were not certain how to proceed. The ranking minority member of the Roads Subcommittee, J. Harry McGregor, was seeking Administration support for graduated increases in user taxes plus some sort of permit fee. Another Committee member, Representative Fred Schwengel of Iowa, was lobbying for a graduated increase in auto and truck taxes coupled with a bond issue. According to Representative Karl LeCompte of Iowa, also a Committee member, "there was a wide divergence of thought on the subject."  

THE BOGGS-FALLON BILLS

Suddenly the rancorous debate and political conflict ended. Indeed, leaders who had refused to budge from previous commitments marched into line behind bills sponsored by Congressmen George Fallon and Hale Boggs of Louisiana. Fallon's measure included the details of distribution, control of construction and apportionment; Boggs confined himself to finances. On April 27, 1956, the House approved their legislation by a vote of 388-19.
Congressmen ascribed this unity to a sense of compromise and moderation emanating from various groups. Frequently they took to the House floor to assert that the success of the 1956 road legislation was the product of a series of concessions to one-another by rival groups. McGregor thought this sudden success was the "result of study and 'give and take.'" One legislator concluded that major differences were "at the threshold of being resolved."

Yet there were few points in the Boggs and Fallon bills which someone had not suggested at one time or another. For that matter, a healthy part of the Fallon bill was only a restatement of his 1955 program. But a year later, everything seemed improved. Boggs and Fallon had written legislation which incorporated long-sought goals, asked few significant sacrifices and managed to sidestep difficult questions besides.

Basically the key to success was providing something for everyone without imposing high-taxes on truckers. The distribution of funds had been a sticky issue since the beginning of the Federal-Aid Highway System. Farm and urban groups, local and nationwide truckers as well as spokesmen for sectional interests had battled one-another repeatedly for a larger share of federal grants. Fallon handed out record high sums to each of the contending groups. Local road proponents received $700 million a year, divided
according to the usual formula, plus a guaranteed increase of $25 million per year for the next 13 years. Supporters of Interstate construction won even more. The federal government would finance 90 percent of Interstate expenses, at a cost of about $25 billion, distributing the money according to local needs. Since expenses in congested urban centers were greater than at other spots on the System, they would receive a disproportionate share of Interstate funds.

In order to finance all this construction, Fallon and Boggs increased automotive taxes. But they largely went along with the truckers in this area, asking only for moderate, ungraduated tax increases. As it worked out, only Representative Daniel A. Reed's amendment imposing a surcharge of $1.50 per 1000 pounds on the gross weight of trucks in excess of 26,000 pounds was out-of-line with their willingness to pay.\textsuperscript{16}

Fallon and Boggs secured additional support for their legislation by incorporating sentiments long-valued by most road users and highway engineers. In the past, they had complained that governments collected more in motor vehicle taxes than they expended on roads. At the state level, these views had crystallized into anti-diversion amendments and trust fund arrangements. The Boggs-Fallon bills embodied the anti-diversion impulse by creating the Highway Trust Fund. In the future, gasoline, diesel and tire taxes, revenues from Reed's surcharge and a part of the new truck
and bus excise would go directly into the Trust Fund for expenditure on roads along. Finally, Boggs and Fallon included advance condemnation and limited access. No longer would engineers and users have to suffer intolerable delays in acquiring land or endure the nuisance of cross traffic.

Delaying action on divisive items was the third factor in the success of the Boggs-Fallon bills. Toll road repayment and equity between user groups had convulsed parts of the road transport industry for years. Boggs and Fallon avoided them. Since there was widespread agreement that the federal government should offer compensation to the states for completed toll as well as free roads added to the Interstate system, Boggs and Fallon were able to make that promise. But they delayed a decision on which roads were entitled to a credit pending a study of standards by the Secretary of Commerce. In turn, Congress would review the results of the Secretary's study. They went around the equally troublesome matter of tax equity between auto, truck and bus operators by ordering a lengthy study of it too.

THE SENATE BILL

Although the Fallon-Boggs bills were immensely popular, they still did not entirely satisfy members of several key groups. In one way or another, costs, taxation and financing methods were at the source of discontent. Treasury
officials were worried about budgetary deficits. While the Trust Fund was supposed to balance after several years, it was assumed that there would be periods where expenses exceeded income. In that case, the government was to make up the difference temporarily. But the prospect of withdrawals from the Treasury for road construction alarmed Secretary Humphrey. He wrote Senator Byrd, himself a long-time champion of balanced government finance, that highway expenditures would "put us in trouble in the general budget."

Davis-Bacon also excited much controversy. While the House had included it, members of the Administration and parts of the business community, especially highway contractors, were anxious to drop it. Then, too, there was the question of truck taxation. Senator Lyndon B. Johnson, the Majority Leader, was campaigning for the elimination of the first 13 tons from the $1.50 per thousand surcharge imposed by the House.19

The Senate had to deal with all these vexatious questions plus the usual conflicts over the distribution of funds for rural road construction. In the end, the adopted a course aimed at pleasing road users, rural road advocates and key members of the Senate and Administration. In the first place, they accepted most of Rep. Boggs' financing measures. Along the way, they added in the Byrd-Humphrey Amendment prohibiting Trust Fund deficits and, following Senator Johnson's lead, exempted the first 13 tons of truck
weight from the surcharge. In terms of fund apportionment, however, they continued the old formula more or less, bowing to pressure from proponents of the original networks plus a careful calculation of state receipts under each schedule. As it turned out, only Davis-Bacon excited real controversy on the Senate floor. At one point, there was so much confusion and so many different approaches to Davis-Bacon that the Senate voted the amendment or a modified version of it several times, achieving that many different results.  

Although the major issues had been settled, the Senate and House bills differed in significant respects. Negotiations between the members of the Senate-House Conference Committee were difficult, so much so that at one point they considered returning without a completed bill. But the lures of an expanded road program were overwhelming. On the major items such as apportionment, they compromised more or less, providing something for everyone. In areas such as the Byrd-Humphrey Amendment, however, the House group had to give way. As part of this give and take, the conferees accepted the House approved name change for the national expressway system. As of 1956, it became the National System of Interstate and Defense Highways. In any event, the overall emphasis was still on federal financing, rapid completion of the Interstate System, and continuing modernization of the remaining road networks. Late in June, the Senate approved the Conference Report 89-1, while the House did
not even record its vote. President Eisenhower signed the bill three days later.21

After more than 18 years of argument and unstarted road mileage, the leading parties had agreed at last to the provisions of an accelerated highway building program. The key to success was the ability of the respective committees in Congress to draw up a bill which was compatible with the needs of most groups without violating their most basic ideals. At the core of this formula was the decision of road users, however reluctant, to sponsor the entire federal aid highway system. Once financing was arranged, the committees were left with the relatively easier task of dividing the proceeds among contending groups.

Additional factors impelled participants to modify at least a few of their views. There was a feeling that 1956 was a year of decision as far as a stepped up federal road program was concerned. If the leaders of national organizations could not achieve some agreement, then local groups who were subject to more particularistic influences threatened to launch their own highway programs. Local construction raised the specter of more toll roads and a disjointed effort.

Conflict between road groups had some more general solvents. In the first place, most participants were optimistic about the natural congeniality of highway building
and economic growth. If the traffic tangle were solved, the economy would prosper. Added to this in their deliberations was the expected stimulus to the economy of $25 billion for Interstate construction alone. Under these circumstances, truckers could look forward to personal prosperity while economists and government officials presided over a steadily increasing gross national product and social harmony. No one was required to make a sacrifice and everyone might anticipate a greater or lesser share of the growth.

There was a larger dimension which facilitated a solution to the tangle over road building. Americans loved motor vehicles and fast-flowing express highways; they deplored congestion which reduced efficiency, contributed to accidents and circumscribed their personal autonomy. As it was, they had been waiting in traffic jams since the depression. Midway through the 1950's, many Americans had determined that additional road construction rather than a particular apportionment formula or financing scheme was their highest priority. President Eisenhower certainly felt that way. At first, he had insisted upon the Clay Committee's recommendations for financing, apportionment, and toll road repayment. After losing that battle, however, Eisenhower was ready to accept almost any bill as long as it included a self-financing feature. By 1956, the President just "wanted the job done."
FOOTNOTES

1 John S. Bragdon to Colonel Andrew J. Goodpaster, July 28, 1955, OF 141-B, Eisenhower Library.


Inferences drawn from study of Bragdon papers and files; see also Minutes of First Meeting of Advisory Committee on Federal Public Works, October 18, 1955, Bragdon Files, Advisory Committee-Federal Public Works #2 File, Eisenhower Library.


7 Jack Martin to Sherman Adams, October 18, 1955; Jack Martin to Howard Pyle, October 19, 1955, both in OF 141-B, Eisenhower Library; Margolin to Rothschild.

See also Curry, "What's Ahead in Truck Transportation," pp. 8-9.
Margolin to Rothschild.  
See also Martin to Adams.

House, Committee on Public Works, Hearings, National Highway Program, Part 2, pp. 1277-1279, 1281.


American Automobile Association, The AAA Motorists' Program for Better Highways, forward, p. 2

Under the AAA's revised tax schedule, large-truckers would pay 26.2 percent of highway expenses, an increase of 3 percent. See Ibid., Table II.

Henry W. Osborne to John S. Bragdon and Colonel Meek, November 17, 1955, Bragdon Files, Highways 1955 (September through December) File, Eisenhower Library. 
See also J. Harry McGregor to Jack Martin, November 4, 1955, Martin Files, Highway Program File; Frazar B. Wilde to Sherman Adams, OF 141-B, both in Eisenhower Library.

McGregor to Martin; J. Harry McGregor, "Adequate Highways—How and When," circa January, 1956, speech in GF 158 A-1, Eisenhower Library; Fred Schwengel to Karl LeCompte, November 9, 1955; Karl LeCompte to Fred Schwengel, November 13, 1955, both in Frederick E. Biermann Collection, University of Iowa. (Iowa City, Iowa)

The Boggs and Fallon bills were consolidated into one bill, H.R. 10660.

Ibid., Part 5, 7119-7121, 7128, 7132, 7134.

Ibid., 7117, 7121, 7148; Ibid., Part 6, 7178-7179, 7181-7182.
Reed was Chairman of the House Ways and Means Committee.

Ibid., 7180-7184.
See also Margolin to Rothschild.

For views of Congressmen on compensating their state toll authorities, see U.S. Congress, House, Committee on Public Works, Hearings on H.R. 8836, National Highway Program, Federal Aid Highway Act of 1956, 84th Congress, 2d Session, 1956, pp. 13-16, 27-28, 33-34, 37. Commerce Department officials backed away from reimbursement in 1956 on the grounds that it would boost the cost of completing the Interstate. See remarks of Secretary of Commerce Sinclair Weeks in Ibid., p. 11.

Members of the Administration also thought it might prove advantageous to postpone or exclude certain features of proposed legislation. See Memorandum for Governor Adams, April 10, 1956, Martin Files, Highway Program File, Eisenhower Library.


For language of the House bill obligating the Treasury for highway construction expenses, see Congressional Record, Vol. 102, Part 6, 7183-7184. For estimates of Trust Fund deficits see Ibid., Part 5, 7153.

For Congressional views of Bacon-Davis see Ibid., Part 6, 7185-7206. A portion of construction industry sentiment regarding Bacon-Davis is reflected in the testimony of William E. Dunn, the Manager of the Associated General Contractor's Labor Relations Department, to the Public Works Committee in Committee on Public Works, Hearings on H.R. 8836, pp. 266-293. Members of the Administration were also devising methods for maneuvering the elimination of Bacon-Davis. See Memorandum for Governor Adams, April 10, 1956.

See also Allen Early, Jr., to Honorable Walter Rogers, Lyndon Johnson, Martin Dies and Price Daniel, March 1, 1956, RG 46, Senate, Records of the Public Works Committee, File 84A-E14 Federal Highway Legislation 1956, NA.

Congressional Record, Vol. 102, Part 7, 9070, 9075, 9080, 9117, 9232-9235, 9248.

See also correspondence regarding distribution, financing, tollways and Davis-Bacon in RG 46, Senate, Records of the Public Works Committee, File H.R. 10560. Members of the Senate Finance Committee voted to increase the surcharge to $2.50 per thousand pounds over 26,000, allowing a small savings for truckers with units fairly close to the limit.
Comparison of H.R. 10660, as Passed by the House, with H.R. 10660, as Passed by the Senate, circa June, 1956, RG 46, Senate, Records of the Committee on Public Works, 84th Congress, File H.R. 10660, NA; Congressional Record, Vol. 102, Part 8, 10964, 10969, 10991-10997, 11004; Eisenhower, Mandate for Change, 1953-1956, p. 548.

See also correspondence of Congressmen and highway group leaders in RG 46, Senate, Records of the Committee on Public Works, 84th Congress, File H.R. 10660, NA; See also Operating a Wage Determination Program Under the Davis-Bacon Act as Applied to Highway Construction Under House and Senate Provisions, circa June, 1956; and Stuart Rothman to the Secretary (of Labor), June 1, 1956, both in James P. Mitchell Papers, 1956 Bacon-Davis (Confidential) File, Acc. No. A70-17, Eisenhower Library.


See also the remarks of Senator Francis Case of South Dakota to the Senate, June 26, 1956, in Congressional Record, Vol. 102, Part 8, 10964.
The Interstate Highway Act foreclosed most of the options in American road politics. For the next decade or so, engineers and users were preoccupied with completing the Interstate System rapidly, free from political squabbles about allocation formulas and the distribution of power. Yet debate and conflict proceeded along anyhow, sometimes repeating old themes ritualistically.

Highway spending was largely inflexible under the 1956 Act. Nonetheless, members of the Council of Economic Advisers were still seeking some method of varying the pace of road expenditures, hoping to develop another countercyclical weapon for the administration. They recognized that it would prove difficult to modify the Interstate Act. As Bragdon saw it, "the horse ... [was] out of the stable ..." After some indecisiveness initially, however, they fixed on the idea of advancing an amendment allowing deficit finance in the event of recessions and limiting road spending under inflationary conditions. If that tactic failed, they looked forward to reviewing financing procedures during a more general examination of road finance.
scheduled for 1959. On the other hand, Chairman Burns was not concerned with the political feasibility of CEA proposals, just "their technical and administrative soundness." In any case, none of their initiatives were successful.

The picture was much the same in terms of utilizing Interstate roads for urban redevelopment purposes. Since BPR and state road engineers enjoyed control of the program, they had few incentives to include urban renewal and broader transportation objectives in their programming. As in the past, they defined their task as one of promoting traffic efficiency, not rebuilding cities or regenerating the urban social structure. While the 1962 Highway Act provided for consideration of urban transport and the city as a whole, engineers were able to maneuver their way around it adroitly, building roads largely as they wished. Only where urban leaders were committed to a unified program of renewal and mass transit were expressways built as part of some wider plan. Basically, then, the construction of the Interstate System followed the lines determined by highway users and road engineers.

Actually post-1956 highway politics was only a scaled-down version of traditional patterns of political conflict within the road construction and urban rebuilding fields.
Political conflict had been a part of highway construction for years. Certainly participants shared a number of values. They celebrated low taxes, balanced budgets and traffic efficiency as well as the more general goal of local autonomy. As a rule, too, they believed that more roads were vital to economic growth and, at some point, social harmony. While all this seemed right in principle, highway politics had been deadlocked since the depression, leaving the pace of road construction well-behind the huge upsurge in motor vehicles.

Factors largely outside of personal control such as inflation limited road mileage somewhat, but the real problems were social and political in nature. Diverse professional and commercial experiences shaped vastly different perspectives on highway traffic and urban problems. Road users and highway engineers always affirmed a benefit theory of taxation and endorsed highway construction which served traffic needs alone. In practice, these views meant that users would finance state roads through gasoline taxes, leaving the federal government to pay for national highways as part of its national defense and general welfare obligations. Whatever the theory, users and their allies did not intend to construct roads as part of some larger urban complex. As in the late 1930's, they claimed that roads were built for commerce.
Members of three presidential administrations shared many of these goals and values, supporting accelerated Interstate construction without much reference to general transportation and urban objectives. Yet they were at odds with engineers and users, largely over the level of federal financing. Essentially they wanted to vary the rate of road construction according to a wider understanding of economic needs. Through 1954 or so, they argued in favor of a relatively low level of road expenditures, trying to restrain inflationary movements. About a year through the first Eisenhower Administration, however, they reverted to advocating accelerated road construction, hoping to bolster the economy and relieve traffic congestion as well. Road users and their allies liked government road spending, but wanted a program which was free of taxes, more stable and subject to local control. In this sense, anyway, members of the Eisenhower team continued a practice begun under President Hoover.

Advocates of city remodeling and wider transportation planning composed another element in expressway politics. While they accepted the norms of traffic efficiency and were enthusiastic proponents of economic growth, they hoped to channel development according to notions of wider social utility. They believed that expressway construction should assist with local renewal projects and serve as one
member of a larger urban transportation facility. Occasionally they spoke of expressways as part of a planned system of urban and rural communities. In any event, planners were the least successful group in road politics, winning only limited gains in a few cities. For that matter, their elaborate plans for remodeling the nation's transport system found little support at the federal or urban levels.

The Interstate Highway Act emerged from this milieu. But it did not represent a marked departure from the basic pattern of highway politics. While the Act was unique in many respects, it continued a number of traditional practices and grew from the very framework of highway affairs. By the mid-1950's traffic congestion seemed intolerable to most Americans. More important, truckers relented in their campaign to drop the federal gasoline tax. They were willing to finance the federal road system provided tax increases were moderate and ungraduated and all of the money was channeled into road construction. Finally, President Eisenhower's support for a program of accelerated road construction was vital for pushing the appropriate legislation through Congress. In general, he assumed a national view of highway affairs, putting the economy prior to the immediate needs of road users. In this sense, he continued the practices of Presidents Truman and Roosevelt.
But Eisenhower had to operate in a context of intolerable traffic and a receding economy. An accelerated road construction program promised to free traffic. If it was financed prudently, it also would hitch the economy to a gigantic public works project, capable of modifying the range of economic swings.

By early 1955, therefore, all of the political elements for a stepped up road program were in order. Although participants in road politics did not recognize it, they had settled most of the outstanding questions. Essentially they lost road legislation in 1955 because of differences over the details of finance and a high-level of commitment to certain principles. By 1956, their principles were dissolved by the press for more roads and a bill which asked few sacrifices, especially from users. Ultimately the Interstate Highway Act of 1956 embodied standard building and financing arrangements, incorporating techniques which had been used in the states for many years. In other cases, the Interstate Act brought to fruition the most basic aspirations of users, road engineers and three Presidents.

What emerged from this conflict was more expressways pure and simple. Builders did not have to consult with economists or the proponents or social and physical planning. Nonetheless, there were alternatives available to
this narrow form of highway construction. As far back as the late 1920's, there had been talk of greenbelt communities surrounded by fast-moving expressways. The General Motors' exhibit at the New York World's Fair in 1939 capped this trend of thought, promising regenerated cities a traffic utopia. Then, too, there were all sorts of proposals for expressways which would contribute to an overhaul of the nation's transportation system and promote full employment. Later on, concern for full employment switched to planning for road building as one phase of a government effort to promote stable economic growth. At a minimum, however, planners promised to construct recreation areas in the right-of-way area and include a place for mass transit facilities between roads.

But none of this was feasible politically. In the first place, the proponents of alternative highway building strategies were as divided as supporters of standard forms of road construction. Usually toll road advocates favored decentralized construction and private development; city planners and their colleagues favored national direction of the economy as well as social affairs. Members of the Bragdon group assumed a third point of view. They were centralizers in terms of road building, but perceived their efforts as a contribution to unlimited economic growth. In the meanwhile, downtown business groups, local
engineers as well as many many planners rejected these schemes as utopian, hoping to bolster CBD property values with expressways. In the end, even the promise of $25 billion for the construction of Interstate roads could not abate political conflict between proponents of alternative forms of road building.

Alternative schemes also lacked political support. By definition, they fell outside of the mainstream of American road politics. Since 1921, road engineers highway users and most members of the incumbent administration had favored road building which served traffic, not schemes for social and economic regeneration. Most Americans looked at road construction in these terms as well. Whenever they had a chance, they voted to limit gasoline tax revenues to road construction, keeping them from the general fund and dispersion to other state services. Members of the Bragdon group, including Secretary of the Treasury Humphrey, tried to break this pattern. While they were divided over a number of matters and inept and obsequious in others, they managed to produce a thoughtful plan for tollway construction. But it was a radical proposal in most respects, destroying established patterns of federal road construction. General Clay was probably correct in his prediction that the implementation of portions of their scheme would produce a "'revolution'" in some areas of the country.
Deadlock and political conflict were part of the larger American scene. America was a divided nation. While economics was at the heart of many disputes, a narrow definition of social obligations widened the gulf between Americans further. Certainly race was a source of much bitterness. Throughout this century Blacks and Whites have competed for employment, housing and access to political institutions. Ethno-cultural disputes cut through the society as well. Factions of Protestants and Catholics have sought, sometimes with remarkable success, to prescribe forms of worship and pleasure for one-another. Business groups have also been divided. When it seemed appropriate, they turned to government agencies for aid in crushing competitors or blocking unfavorable action by other business groups. All the while, huge bureaucracies emerged to handle the day-to-day problems of a complex social order. In many cases, they turned their attention to gathering greater influence within the affairs of their neighbors. In turn, these efforts were resisted vigorously. During the past decade, the war in Vietnam added another source of tension and conflict between Americans. By the late 1960's, indeed, sheer force constituted one of the primary factors holding American society intact.

One of the key factors in the development of these disputes was the lack of external controls from government
and trade associations and no more than formal adherence by their members to unifying norms. There was a consensus of sorts on certain core values such as private property and individualism, and most Americans at least genuflected before the ideals of thrift, diligence and equality of opportunity. But political parties and government agencies as well as business and professional groups reflected a particular view of things. Their perceptions of the nation's needs were rooted in narrow definitions of industrial and professional welfare and the exigencies of bureaucratic survival. As a result, they were restricted in their ability to determine common values. In a fragmented society, there were few who would accept their prescriptions anyway.
FOOTNOTES


Engineers also defined tenant relocation outside of their domain. See M. Justin Herman to Albert M. Cole, May 8, 1957, Record Group 207, Housing and Home Finance Agency, Records of the Office of the Administrator, Box 18, National Archives.

Curiously, E. H. Holmes, one of the men who had worked with MacDonald formulating the Interstate plan, objected to the direction of the BPR's urban highway programming. See E. H. Holmes to C. D. Curtiss, May 3, 1956, RG 30, BPR, Commissioner C. D. Curtiss 1955-1957 File, FRC.

3For a fuller treatment of the popularity of the gasoline tax see Burnham, "The Gasoline Tax and the Automobile Revolution."

See also James J. Flink, "Three Stages of American Automobile Consciousness," American Quarterly, 24 (October, 1972, 451-473, for an insightful analysis of the significance of the automobile for Americans.
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