

The Evolution of Transportation Planning: A Federal Perspective

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In defining the beginning of the highway program in the United States, I have started with the Post Office Appropriations Act of 1912, which provided for federal aid in the construction of rural post roads. The time line at the end of this paper provides a brief look at many legislative acts, conferences, reports, and regulations between 1912 and 1983. It is not complete nor is it detailed, but it does provide a quick reference to significant events for the highway program, with a special emphasis on planning. This paper presents a federal perspective (with a certain state flavor) from one individual's point of view. It does not necessarily reflect the views of this Administration.

THE FIRST 70 YEARS

Before the 1950s, the federal highway interest was focused primarily on rural areas. After World War II, there was an expansion of interest into the urban areas, primarily caused by creation of the Interstate system. Perhaps the most significant legislation was the Federal-Aid Highway Act of 1956, which provided for creation of the Highway Trust Fund and for funding of the Interstate system on a 90/10 basis.

During the 1950s some of the most notable large urban transportation studies were begun. Along with this there were several outstanding conferences dealing with urban transportation--the Hartford Conference of 1957, the Sagamore Conference of 1958, the Hershey Conference of 1962, and the Williamsburg Conference of 1965. During the 1960s there was much legislation that created a positive force for comprehensive urban transportation planning. This included

- Housing Act of 1961--amended Section 701 of the Housing Act of 1954 to provide funds for comprehensive urban transportation studies;
- Federal-Aid Highway Act of 1962--provided for the comprehensive, continuing, and cooperative (3C) urban transportation planning process;
- Urban Mass Transportation Act of 1964--encouraged planning for areawide urban mass transportation systems;
- Department of Transportation Act of 1966--created the U.S. Department of Transportation;
- Intergovernmental Cooperation Act of 1968--provided for consideration of state, local, and regional viewpoints on federal-aid projects; and
- Office of Management and Budget (OMB) Circular A-95 of 1969--provided for project notification and review by regional planning agencies.

To this point, I believe the federal actions were quite constructive and did not place too great a burden on state and local governments. However, these actions, along with legislation creating the Appalachian Regional Commission and the Economic Development Administration in 1965, provided so many new initiatives that the stage was set for a proliferation of federal regulations, massive red tape, and conflicts. The Department of Housing and Urban

Development, Appalachian Regional Commission, Economic Development Administration, OMB, UMTA, and FHWA were each marching to a different tune, listening to a different drummer. Although there is no date certain, these problems began to surface in the 1970s. One note of self-criticism to all of us involved in the major transportation studies of the 1960s appears appropriate at this point. When we developed those so-called 20-year transportation programs and showed the costs, we did not focus on reality. Although some studies broke the costs down into 5-year programs, very few studies bothered to provide realistic estimates of where the funds would come from to pay for such projects--not to mention calculating the impact of inflation. These 20-year plans may be more like 40- to 50-year plans. It is hoped that the lesson has been learned.

In 1969 the National Environmental Policy Act was passed, followed by the Clean Air Act of 1970, which created the Environmental Protection Agency. These were well-intentioned acts, brought about because state and local governments had not done enough to protect the environment. However, in the 1970s building highways became a nightmare because of regulations and policies implementing these acts as well as other laws relating to historic sites, archeological sites, endangered species, Section 404 of the Clean Water Act, and so forth.

From 1973 to 1976 there were three actions that I believe were particularly counterproductive to the highway program and transportation planning:

1. The Federal-Aid Highway Act of 1973 provided for the withdrawal of Interstate highway projects and substitution of mass transportation projects. Although the concept of the legislation was to focus on building the most efficient transportation system, in many instances this was not the result. Instead, facilities were built that were unrelated to the initial project. This was because of the concept of entitlement and, as a result, this became the highway program's major contribution to the current federal deficit.
2. The Emergency Highway Energy Conservation Act of 1974 created the national 55-mph speed limit--a massive federal intrusion born of an emotional energy policy, which may have been justified for several years.
3. In 1975 joint FHWA-UMTA urban transportation planning regulations were instituted. A number of very competent federal transportation professionals still think these were great. I would agree in part, but the regulations went too far; they represented a formal, coordinated, prescriptive mass of federal red tape and intervention into state and local matters. These became the foundation of additional, more burdensome federal requirements, which continued until 1981.

The period from 1975 to 1981 was not a pleasant one for many state transportation planners. Many ideas and policies, each having some degree of merit, began to have a collective impact that made it difficult to plan projects as part of a cost-effective, comprehensive highway program, particularly in

urban areas. There were so many laws and regulations concerning highway projects that antihighway groups could delay almost any project for years, and with minimal effort--and you may remember that these were the years of very high inflation. However, during this same period there were some very positive steps. Two of these were (a) the establishment of the Highway Performance Monitoring System (HPMS) and (b) the recognition that the federal government should help in the rehabilitation, restoration, and resurfacing of the Interstate system.

Beginning in 1981 the federal government began to eliminate much of its red tape and to reduce its intrusion into state and local matters. In 1982 FHWA issued a new Highway Planning and Research (HPR) policy, and in 1983 FHWA and UMTA issued a revised regulation for the 3C planning process. Various regulations have been eliminated or revised and work is proceeding on others. It is not a simple process, and we still have significant challenges, but I believe that a great deal will be accomplished in the next 4 years.

GEORGE ORWELL'S 1984 IS HERE

To some, 1984 must be as Mr. Orwell anticipated, but to most of us it does not appear that bad. For the first 70 years of the highway program the emphasis was more on planning, but at the present and in the future, it appears appropriate to broaden the perspective. One reason for this is my view that a key emphasis for planning is policy formulation, and thus planning must be concerned with many different issues.

Today, we appear to have many problems, or are they really opportunities? Certainly there are challenges. Let's discuss some of them:

- * The 55-mph speed limit: This national requirement was passed by Congress as a response to an energy crisis. Its continued retention has been justified on the basis of safety, but far more credit is claimed for reductions in fatalities than many people believe is supported by fact. It is an example of federal intrusion into state and local decision making, not based on engineering but on public perception.

- * Unified budget concept: Federal highway funds are user fees that are part of a highway trust fund. The highway program does not contribute to the national debt and it should not be held hostage. These funds should be made available to the states without any artificial constraints, such as placing obligation limitations by a particular quarter. We must recognize the different climatic conditions and construction seasons across the United States and provide the states with maximum flexibility.

- * Entitlement concepts: The Interstate project withdrawal and substitution legislation provided for an entitlement to federal funds. This is the type of situation that has led our country to its present massive national debt. If you don't need it, don't build it. We must refuse solutions that simply give you something you don't need--not only must we refuse federal funds for noncritical projects, but we must prevent the situation that permits such extremes.

- * Interstate cost estimates: In fiscal year 1984, the highway program was held hostage for a single massive pork-barrel project. Changes need to be made to eliminate the possibility of such situations. A major factor in the success of the federal-aid highway program is the minimization of special projects; however, there are still too many such examples.

- * Nonprogrammatic requirements: All the special interest groups like to tack on their requirements to the federal-aid highway program. Sometimes, we wonder whether we are responsible for building highways for the safe and efficient movement of people and goods, or whether we are federal agents charged with enforcement of conflicting and overlapping social and economic goals. Davis-Bacon, disadvantaged business enterprises, Section 402, endangered species, and so on, each has a certain validity, but it is difficult to recognize for someone trying to maximize the effectiveness of public funds collected from highway users to build and maintain highways.

- * Staffing: Everybody seems to like across-the-board cuts. Legislative bodies and chief executives (or their key advisors) find it a popular concept to cut the cost of government, often by cutting staff. In some instances this is valid, but often cuts will be dictated without appropriate analysis. Planning is always vulnerable because, after all, isn't it really a communistic idea, or at least socialistic? Besides, let's put all our money into asphalt and concrete. Who cares whether it is cost effective, coordinated, and so on.

- * Mass transit: Every city with a population of more than 50,000 appears to believe that either light or heavy rail is its salvation. Some presentations sound like Elmer Gantry seeking funds at a revival meeting. Few will be built and even fewer are needed.

DOWN THE ROAD

Where should we be headed in the future, and where are we likely to go? Rather than try to differentiate between these two questions, I will focus on where planning, the highway program in general, and even a little of mass transit should be by 1990. Some of my previous comments carry over to this view of the future, but I will try to avoid repetition.

The highway program should be restructured to sort out what each level of government should do. The federal government should continue the federal Highway Trust Fund and should increase user fees periodically to meet a realistic national interest. Federal funds with federal guidelines and regulations should only apply to the Interstate system, the primary system, and to bridges and tunnels on these systems. However, a certain level of federal user fees should be collected and returned to the states for highway construction and resurfacing, restoration, rehabilitation, and reconstruction (4R) activities, with minimum federal regulations and guidelines, for use on other highways (a replacement for urban and secondary system funds). No matter what formulas are used to distribute funds for the Interstate and primary systems, the total should be made available as a block grant for use on these systems. FHWA would monitor and enforce adequate maintenance of these systems. The emphasis should be on maximum flexibility and self-determination at the state level. The state-local issue should be decided within the constitutional framework of state and local governments, without the "benevolence" of the federal government. The issue of whether toll facilities are to be built or improved with federal funds should be left to the state governments, except that a federal finding regarding no undue restriction of interstate commerce would appear appropriate.

Revenues at the state and federal levels will be a concern, particularly when we remember the events of the 1970s. We cannot count on stable revenue from the gasoline and diesel fuel taxes. Technology exists that eventually could eliminate this revenue.

We need to establish a national weight-distance tax as soon as it is feasible to do so. This would provide a basic system for taxing trucks. For the automobile we need to be thinking of a registration fee tied to mileage in the previous year. This will require attention to administrative problems such as tax evasion.

In the 1970s we recognized that highway design should be more practical and we turned to the level-of-service concept to define needs in realistic terms. Now it is time for us to recognize that some highways should be removed from a particular federal-aid system--for example, some highways on the federal-aid primary system should be on the federal-aid secondary system. It is time to recognize practicality and to reject an absolute adherence to artificial standards.

In recent years we have focused attention on the preservation of our highways. During the 1980s this emphasis will be strengthened. The decline in performance resulting from inadequate investment would have a negative impact on the gross national product and on employment. FHWA will undertake significant pavement design and rehabilitation research. We will support AASHTO's design guide and will initiate a program to evaluate data from our pavement testing to support the development of future guides. FHWA and the states must stress pavement management techniques and, where necessary, FHWA must not be timid in enforcing the provisions of Section 116 of Title 23, U.S. Code, as amended in the Surface Transportation Assistance Act of 1982.

With the issues of truck size and weight, uniformity, weight-distance taxation, weigh-in-motion, a network for the larger trucks and local access for these trucks, the states have moved more into the field of operation of vehicles on the highway systems. This is a positive evolution that will continue. One challenge is to provide the same uniformity of licensing and registration for trucks that we have for cars today. With the advent of microcomputers, satellites, microwave transponders, weigh-in-motion, and various automated devices it is possible to measure that which is using and consuming our highways quicker, more accurately, and with far less manpower. The technology exists to issue citations for speeding and weight violations and to count and classify vehicles without staff at field locations. In the 1980s this technology should be implemented on a national scale.

The 1980s might well be the decade of the micro-computer. Not only is it critical for our field work, it is essential for maximizing the effectiveness of our headquarters. Word processors are fast becoming essential to our secretaries, and the same will be true of microcomputers to our technical staff. No matter how technically competent we are and regardless of how great a manager we may be, we are shortchanging our agencies and ourselves if we do not become involved, personally, with microcomputers.

As all of you know, FHWA really has very little to do with mass transit. We support construction of high-occupancy-vehicle lanes, vanpooling, carpooling, and so on and until this year we managed the Section 18 rural public transportation program. We do support mass transit and UMTA and FHWA have developed an excellent working relationship. I believe that FHWA carries out its program in such a way that it is one of the best examples of a federal-state partnership. With that in mind, and recognizing that I am not a transit expert, there are several ideas that I believe UMTA should consider in the 1980s. The first three suggestions are based on applying some of FHWA's experience to UMTA's program, and the fourth is based on discussions with a number of

transit professionals. Perhaps these suggestions won't work, but at least they might stimulate an interesting debate.

UMTA should

1. Adopt a division structure in each state, even if it means eliminating regional offices. This would put the federal staff in more frequent touch with local and state officials and the federal staff would have a better understanding of local problems.

2. Provide for UMTA funding to flow to and through the states and eliminate direct grants to local governments. The states could be helpful to both their local governments and UMTA if they were more involved with mass transit. The concerns of the local governments must be worked out, which, it is hoped, could be done.

3. Concentrate more on providing adequate mass transit in a cost-effective manner with an emphasis on engineering, ridership, and revenue rather than on some of the secondary issues.

4. Define operational subsidies as support for labor--managers, drivers, maintenance workers, and so on--and get the federal government out of funding such costs. Then agree to support such things as construction, capital acquisition, spare parts, and fuel at an appropriate federal level. Local elected officials should recognize that mass transit will require operational subsidies from local revenue and make decisions accordingly.

I suspect that to some of you I have rambled somewhat far afield for a presentation on planning--where we have been, where we are, and what's ahead. For me, planning is an integral part of policy. The data from the Highway Performance Monitoring System and highway statistics lead to needs estimates and investment and taxation strategies, not to mention apportionments. The 3C planning process looks at needs, relates transportation to land use, provides for coordination between levels of government, and results in an integrated transportation investment strategy. Our cost-allocation work leads to taxation policies and legislation on truck size and weight issues. Data on weights, speeds, volumes, and types of traffic lead to design decisions and safety improvements.

The future role of the federal highway program should be to provide significant funding, technical assistance, guidance, leadership, and research in a framework that returns most authority to state government through block grants, minimal regulations, and maximum flexibility. This is our challenge for the 1980s--yours is to help us achieve it and then to prove to everyone else that it should remain that way.

A HIGHWAY PLANNING TIME LINE

1912 Post Office Appropriations Act: Federal Aid in Construction of Rural Post Roads

The Secretary of Agriculture, in cooperation with the Postmaster General, was to provide federal assistance to state or local subdivisions for improving rural delivery routes; the purpose was to ascertain how much rural delivery service could be improved, savings to locals in transporting their products, and costs of properly maintaining the roads.

The Secretary of Agriculture and Postmaster General were to report to Congress after 1 year with their findings and with recommenda-

- tions for providing a general plan of national aid for improving postal roads in cooperation with states and counties, bringing about uniform and equitable interstate highway regulations, and providing necessary funding.
- 1914 First Comprehensive Road Inventory
- Although an inventory of national road mileage and revenues and expenditures for construction and maintenance was done in 1904, the information was obtained entirely by correspondence and was not complete or accurate. A similar census was done in 1914 but was much more comprehensive and accurate because the information was collected directly from local authorities, road associations, postmasters, private categories, and so on.
- 1916 Federal-Aid Road Act
- Beginning of federal-aid highway program. Federal assistance provided for construction of rural post roads and roads and trails in national forests.
- 1920 Highway Research
- Formation of National Advisory Board on Highway Research to have a coordinated national research program on highway design for motorized vehicles. It included agencies and organizations engaged in highway transportation and highway research.
- 1920 Planning Surveys
- A series of transportation surveys involving 20 states over a period of 16 years was initiated by the Bureau of Public Roads (BPR). This can probably be considered the beginning of formal highway planning.
- 1921 Federal Highway Act
- Established federal-aid program characteristics.
- Funds to be apportioned.
- Contract authority:
- State highway department required
 - State matching required
- Identified federal-aid highway system (later to become the primary system) and forest highway system.
- 1934 Hayden-Cartwright Act, Section 11
- Earmarked 1.5 percent of the apportionments for the federal-aid system for planning. Provided stimulus and means for statewide planning surveys. Missouri was one of the first states to actively undertake a statewide planning survey using funding provided by the act. By the end of 1937, the number had risen to 43.
- Established emergency relief program.
- 1936 Federal-Aid Highway Act
- Established Railroad-Highway Crossing Program.
- 1937 The American Association of State Highway Officials (AASHO) Committee of Planning and Design formed to review and evaluate research and operational information on highways.
- 1938 Federal-Aid Highway Act
- Required a study and report on feasibility of building north-south and east-west superhighways, including consideration of making them toll roads.
- 1939 BPR produced the required report "Toll Roads and Free Roads," and recommended development of a 26,700-mile system of interregional highways. The report also used input from the War Department, which had studied military highway needs in 1935. This was the initial effort at identifying an Interstate highway system.
- 1941 The President appointed a National Interregional Highway Committee of highway engineers and planners to investigate need for a limited system of national highways to improve facilities then available for interregional transportation.
- 1943 An act amending certain provisions of highway acts also directed that a study be made of the need for, cost of, and approximate location of a system of express highways throughout the country. The report was due in 6 months. The work of the Interregional Committee was used and the report ultimately recommended an "optimum" system of 33,902 miles.
- 1944 First home-interview origin-destination survey in urbanized areas.
- 1944 Federal-Aid Highway Act
- Established secondary highway program.
- Established urban extension program.
- Directed the designation of a 40,000-mile national system of Interstate highways; routes to be selected by joint action of the state highway departments--no funding was provided.
- 1945 Public Roads Administration (PRA) asked each state for recommendations for Interstate system routes within its boundaries. Recommendations totaled 45,070 miles.
- 1946 PRA reduced the mileage and asked states to concur in a system map for their states. Concurrence received from 37 states. Other 11 states and PRA worked out rest of system mileage over next year.
- 1947 Federal Works Administrator approved a 37,681-mile system on August 2; 2,319 miles were held in reserve for urban circumferential routes to be selected later.
- Most states began to initiate state highway needs studies that included forecasts of future traffic demands and of funding requirements. In some cases, cost allocation of the

- financing burden among truck and automobile users and property owners was included also.
- 1952 Federal-Aid Highway Act
First Interstate system funding.
- 1956 Federal-Aid Highway Act
Significantly increased authorizations for Interstate, primary, secondary, and urban extensions of primary. This also generated significant increases in available planning and research funding.
Provided for Interstate cost estimate for report to Congress (initially every 4 years).
Established federal share of 90 percent for Interstate program.
Provided for construction in advance of apportionment.
Established Highway Trust Fund.
- 1957 Hartford Conference
To consider the need for comprehensive planning in metropolitan areas in order to address the effects of the construction of Interstate and other expressways.
- 1958 Codification of highway laws into Title 23 of the U.S. Code.
- 1958 Sagamore Conference on Highways and Urban Development
To encourage the cooperative development of highway plans and programs, held at Syracuse University.
Focused on need for regional planning to support the orderly development of urban areas. Benefits and costs of users and nonusers should be considered.
Conference recommendations were endorsed but progress was slow.
- 1959 Interregional Travel Surveys
First interregional travel survey conducted cooperatively by about 10 states as part of Mississippi Valley Multiple Screenline O-D Study. In 1971, a similar survey was conducted in the Northeast Corridor between Washington, D.C., and Boston.
- 1961 Housing Act
Amended Section 701 of Housing Act of 1954 to allow use of federal funds on comprehensive urban transportation studies.
- 1961 National Travel Surveys of U.S. Households
For the first time, the Bureau of the Census collected national transportation information on the types and amounts of daily travel related to household size, income, etc. This survey was repeated in 1969, 1977, and 1983.
- 1962 Federal-Aid Highway Act
Provided for financial and advisory relocation assistance to persons, businesses, and nonprofit organizations displaced by highway projects.
Encouraged development of comprehensive transportation systems.
Directed states to develop long-range highway plans coordinated with other modes.
Required that all federally funded highway projects be based on a continuing, comprehensive, and coordinated (3C) planning process involving states and local communities.
Defined planning focus as the urban area.
Made 1.5 percent deduction for HPR mandatory. Provided for additional 0.5 percent deduction at option of states. Also, required matching share by states.
- 1962 Hershey Conference on Urban Freeways
Response to growing concern about freeway construction in urban areas. Concluded that freeways cannot be planned independently of environs. Recommendations reinforced the need for integrated planning for highways and urban development.
Planning should be done by a team of specialists in various areas. Planning should involve the community. When properly planned, freeways provided opportunity to shape and structure the urban community in a manner that meets the needs of the people who live, work, and travel in these areas.
- 1963 Guidelines for Implementing 3C Process
Resulted in quick development of relatively standardized planning processes in all urbanized areas.
- 1964 Urban Mass Transportation Act
Encouraged planning of areawide urban mass transportation systems.
Established federal support match for acquisition and construction of transit facilities at two-thirds of cost. Federal share was limited to 50 percent when no comprehensive plan existed.
Required that all funds be channeled through public agencies to projects initiated locally.
Established a program of mass transportation research, development, and demonstrations.
- 1965 Joint Resolution
Established requirement for biennial highway needs report to Congress.
Directed that each state have highway safety program--no funding provided.
- 1965 Highway Beautification Act
Established Outdoor Advertising Control and Junkyard Control programs.

- 1965 Housing and Urban Development Act
Authorized grants for comprehensive planning to regional organizations thus allowing councils of government and regional planning councils to participate in transportation planning.
- 1965 Williamsburg Conference on Highways and Urban Development
Concern that planning processes were not adequately evaluating community and social values. Concluded that transportation must be directed toward raising urban standards and enhancing aggregate community values. Highlighted the need to identify urban goals and objectives that should be used to evaluate urban transportation plans. Endorsed concept of making maximum use of existing transportation facilities through traffic management and land use controls.
- 1966 Highway Safety Act
Established highway safety program.
Directed Secretary of Transportation to develop uniform safety standards
Established highway safety research and development program.
- 1966 Department of Transportation Act
Created U.S. Department of Transportation (DOT) and provided focal point for coordinated federal transportation policy.
- 1967 Dartmouth Conference on Urban Development Models
Land Use Evaluation Committee of Highway Research Board determined that research on land use planning models needed to be developed.
Recommended that agencies sponsoring such research, generally the federal government, expand the capabilities of their in-house staff to handle these models. Concern over bridging gap between modelers and decision makers.
Early optimism in this field faded as complexity became apparent.
- 1968 Federal-Aid Highway Act
Established Traffic Operations Program for Increasing Capacity and Safety (TOPICS).
Required a study on functional highway classification (report submitted in 1970).
- 1968 Intergovernmental Cooperation Act
Required that national, state, regional, and local viewpoints be taken into account (to the extent possible) in planning of federally assisted development programs and projects.
- 1968 Reorganization Plan No. 2 from the President to Congress
Established UMTA within DOT and transferred existing urban mass transportation program from the Department of Housing and Urban Development to DOT.
- 1968 Freeway in the City
Report of the urban advisers to the Federal Highway Administrator. Includes recommendations on transportation planning.
- 1969 OMB Circular A-95
Encouraged establishment of project notification and review systems.
Required areawide comprehensive planning agencies to comment on the relationship of proposed projects to the planned development of the area.
Required that federal agencies notify governors of awards within their state.
- 1969 Policy and Procedure Memorandum 50-9
Comprehensive directive issued by FHWA that implemented Title 23, Section 134, of the U.S. Code regarding urban transportation planning.
- 1969 National Environmental Policy Act
Required the preparation of environmental impact statements for major federal actions, which would include discussions of alternatives and unavoidable adverse effects.
Required a systematic interdisciplinary approach to planning and decision making.
Created Council on Environmental Quality to implement policy.
- 1970 Federal-Aid Highway Act
Required report to Congress with specific recommendations on functional realignment of the federal-aid systems. Report on functional classification study used as base. Highway Needs Report due in 1972 to include recommendations for a continuing federal-aid highway program for period 1976-1990. Needs estimates to conform to functional alignment recommendations. Studies to be conducted in cooperation with state highway departments.
Required promulgation of guidelines (known as the process guidelines) to assure that economic, social, and environmental effects are fully considered in highway projects.
Required promulgation of standards for highway noise levels compatible with different land uses, to be applied to future federal-aid highway projects (published in 1972).
Required promulgation of guidelines to assure that future highway construction is consistent with state implementation plans to meet ambient air quality standards established as result of 1970 Clean Air Act.
Established special bridge replacement program.
Established economic growth center highways program.
Established rail crossing demonstration projects program.

- Established the federal-aid urban system.
- Authorized expenditure of highway funds on bus transit projects.
- Increased federal share for non-Interstate projects to 70 percent.
- Amended Section 134 to require consultation with local officials before any highway project was built in urban areas of 50,000 population or more.
- 1970 Clean Air Act
- Created the Environmental Protection Agency (EPA), authorized to set ambient air-quality standards.
- Required development of state implementation plan (SIP) for these standards.
- Set deadlines for meeting EPA's ambient air-quality standards.
- Required focus on low-capital and traffic management actions.
- 1971 FHWA Instructional Memorandum 50-3-71
- Established annual certification of 3C processes.
- 1972 Policy and Procedure Memorandum 90-4: Process Guidelines
- Required states to develop their own action plans to describe organization and procedures for highway planning and allowed different procedures for different categories of project (more flexibility than a federally prescribed approach).
- Topics to be covered included social, economic, and environmental effects, alternative courses of action, involvement of other agencies and the public, systematic interdisciplinary approach, decision-making process, responsibility for implementation, and fiscal and other resources.
- 1972 Williamsburg Conference on Urban Travel Forecasting
- Addressed concern that travel demand forecasting had not changed in response to new policy issues and options.
- Recommendations:
- * Upgrade existing methodology with the results of recent research.
 - * Pilot test emerging procedures in several urban areas.
 - * Perform research to transform results of travel behavior research into practical forecasting techniques.
 - * Develop dissemination method to get information on new methods to field and results back to the researchers.
- 1973 Federal-Aid Highway Act
- Established Alaska highway program.
- Established program to eliminate high-hazard locations.
- Established pavement marking demonstration program.
- Authorized rural highway public transportation demonstration program.
- Established urban high-density program.
- Redefined federal and state relationship by codifying in Title 23 the intent of a federally assisted, state-administered program.
- Required a realignment of federal-aid primary, secondary, and urban systems based on their functional usage.
- Set aside 0.5 percent of federal-aid system authorizations for metropolitan planning, funds to be apportioned to state and made available to local agency designated by state as responsible for 3C process in urban areas.
- Required distribution of portion of federal-aid urban system (FAUS) funds to attributable urbanized areas of 200,000 or more population.
- Required that governors designate metropolitan planning organizations (MPOs) in each urban area.
- Required that programs for projects on the urban system be in accordance with Section 134 planning procedures.
- Allowed expenditure of FAUS funds on urban mass transportation projects.
- Allowed withdrawal of Interstate segments and substitution of mass transportation projects.
- 1974 Emergency Highway Energy Conservation Act
- Established temporary maximum speed limit of 55 mph on all highways, effective until June 30, 1975, or until President declares no fuel shortage.
- Set up first carpool-vanpool demonstration program and allowed expenditure of federalaid funds.
- 1974 Federal-Aid Highway Act Amendments
- Continued the national maximum speed limit by providing that the Secretary of Transportation shall not approve federal-aid highway projects in any state with a maximum speed limit greater than 55 mph.
- Project approval withheld if state fails to certify that it is enforcing 55-mph speed limit or vehicle size and weight laws.
- Established access to lakes program.
- Established off-system roads program.

- 1974 Williamsburg Conference on Statewide Transportation Planning
 This first national conference concentrated on two levels of planning: policy planning and statewide systems. Issues confronting most states were summarized.
- 1975 FHWA-UMTA Joint Regulations on Urban Transportation Planning
 Comprehensive regulations consolidating separate directives issued by FHWA and UMTA.
- 1975 Conference on Transportation Programming Process, Orlando, Florida
 Defined programming activities required to finance, select, and schedule projects with major focus on allocation of funds.
- 1976 Federal-Aid Highway Act
 Established Interstate 3R program.
 Revised Interstate withdrawal provisions to allow substitute highway projects as well as substitute public transportation projects.
 Changed fiscal year to October 1 through September 30 and provided that apportionments be made on October 1 each year.
 Directed Secretary of Transportation to conduct (in cooperation with state, county, city, and other local organizations) a study of the factors in planning, selecting, programming, and implementing FAUS routes.
- 1977 Clean Air Act Amendments
 Tied together transportation and air-quality planning.
 Required conformity of transportation plans, programs, and projects with the SIP and established sanctions if transportation-related SIPs are not established.
- 1978 Surface Transportation Assistance Act
 Set September 30, 1986, as date by which all remaining portions of Interstate system must be under contract or be designated.
 Set September 30, 1983, as last date for withdrawing Interstate segments and for approval of substitute projects. Increased federal share for substitute projects to 85 percent.
 Made carpool and vanpool projects eligible for financial assistance with primary, secondary, and urban system funds.
- 1978 Guidelines for Transportation and Air-Quality Planning
 Provided guidance on coordinated transportation and air-quality planning in urban areas.
 Specified types of air-quality evaluations to be incorporated into transportation planning activities.
- 1979 DOT Regulation: Nondiscrimination of Handicapped
 Implemented Section 504 of the Rehabilitation Act of 1973 by defining how program accessibility was to be achieved for each mode.
 Prescribed transition planning process to be implemented by recipients of federal funds, with specific rules for each transportation mode.
 Required preparation of transition plans documenting how and when system accessibility would be achieved.
 Required that transition plans be developed under direction of MPOs. Specified accessibility standards.
- 1979 Airlie Conference on Statewide Transportation Planning
 Focused on challenges to be faced over next 20 years, especially in energy conservation and optimum programming of scarce state resources.
- 1979 Aspen Conference on Future Urban Transportation (sponsored by the American Planning Association)
 Consensus not reached on an image of the future but range of factors that would be important agreed on. Incremental planning seen as the only feasible and desirable approach to the future. Automobile will be dominant but public transportation will become increasingly important. Both will require increased public investment.
- 1980 Regulation of Environmental Impact and Related Procedures
 Established specific National Environmental Policy Act requirements to be followed by FHWA and UMTA. Specified three classes of actions that prescribe the necessary level of documentation. Outlined "scoping process."
- Increased basic federal matching share from 70 to 75 percent.
 Established bridge replacement and rehabilitation program with federal share of 80 percent. Also required that 15 to 35 percent of a state's apportionment be used for bridges off the federal-aid system.
 Changed period of availability of Interstate construction apportionments from 4 to 2 years and provided that any unused funds after that period go into a discretionary fund for distribution to other states.

- 1981 Federal-Aid Highway Act
- Redefined Interstate completion, limiting program to construction necessary to provide minimum level of acceptable service, including full access control, 20-year design, essential environmental requirements, and maximum of six lanes in rural and smaller urbanized (400,000) areas and eight lanes in larger urbanized areas. Costs limited to those included in 1981 Interstate cost estimate.
- Changed I-3R program to I-4R by adding reconstruction as a major eligible activity. Defined reconstruction to include some of the items eliminated under the redefined Interstate completion program.
- 1981 DOT Regulation: Nondiscrimination of Handicapped
- Rescinded 1979 rule in which DOT specified how program accessibility for handicapped persons was to be achieved in local areas.
- Promulgated a policy giving officials in each locality the authority to decide how to meet transportation needs of the handicapped.
- Required mass transit operator receiving financial assistance from DOT to certify that special efforts are being made to provide transportation that handicapped persons can use.
- Deleted previous requirement that regularly scheduled fixed-route mass transit operations be made accessible to all handicapped persons, including wheelchair users.
- 1981 FHWA-UMTA Policy on Applicability of Urban Planning Requirements in Newly Designated Urbanized Areas
- Minimized burden of planning and programming requirements on 95 new urbanized areas (from 1980 census). Intended to provide 2-year transition period for new areas to comply with standards.
- Allowed interim designation of MPOs, preferably existing agencies, in new areas.
- 1981- Conferences on Transportation Programming
- 1982 Issues and Practices
- Two separate conferences (Washington, D.C., and Denver, Colorado) focused on the programming process, current issues, and pragmatic responses of states to current restraints.
- 1982 Airlie House Conference on Urban Transportation Planning
- Reaffirmed need for systematic urban transportation planning, especially to maximize the effectiveness of limited public funds. Planning needs to be adjusted to nature and scope of the area's problems.
- Regulations of federal government should be streamlined. More flexibility was needed. Increased attention to system management and fiscal issues was needed.
- 1982 Woods Hole Conference on Future Directions in Urban Public Transportation
- Addressed the role of public transportation, present and future, the context with public transportation functions, and strategies for the future.
- 1982 Easton Conference on Travel Analysis Methods
- Focused on defining state of the art versus state of the practice. Gap between research and practice was wide. Technology transfer needed.
- 1982 Surface Transportation Assistance Act (STAA)
- Provided specific funding for Interstate construction discretionary by setting aside \$300 million from each year's apportionment. Established priorities for distribution.
- Created Interstate 4R discretionary funds, made up of lapsed I-4R apportionments.
- Provided contract authority and specific authorizations for Interstate highway substitute projects.
- Increased apportionments about 50 percent in FY 1983 over FY 1982 (HPR and PL funds increased same percentage).
- Earmarked 40 percent of primary, secondary, and urban apportionments for 4R-type projects.
- Established requirement for 10 percent of authorizations to be spent by disadvantaged business enterprises.
- Required states to have maximum weight limits of 80,000 lb gross, 20,000 lb single axle, 34,000 lb tandem on Interstate system; to allow twin trailer combination trucks on any segment of Interstate system and designated primary-system routes; to have a maximum width limit of 102 in. (actually established by 1983 DOT Appropriations Act and later incorporated in 1983 STAA by P.L. 98-17).
- Increased motor fuel tax from 4 to 9 cents per gallon with one-ninth of those revenues to be used for capital mass transit projects.
- Established mass transit within the Highway Trust Fund to which the one-ninth of motor fuel tax receipts will be credited.
- Established motor carrier safety grant program.
- Allowed transfer of urban system attributable allocations from urbanized areas of 200,000 or more population to another urbanized area in a state or to the state for use in any urban area in the state. Required approval of affected local officials and the Secretary.
- Provided minimum allocation grants so that each state's percentage share of apportionments should be at least 85 percent of its percentage of estimated Highway Trust Fund contributions (would benefit only 10 to 12 states).

1982 Executive Order 12372: Intergovernmental Review of Federal Programs

Replaced OMB Circular A-95 issued in 1969.

Federal government relied on state-established process for intergovernmental review of federal program.

Federal government accommodated state and local officials concerned with proposed program actions or explained basis for alternative decision.

1983 FHW/UMTA Urban Transportation Planning--Final Rule

Product of 2.5-year effort to comprehensively review the planning process to determine the appropriate federal role in the process.

Gave state and local officials more discretion in carrying out the planning process, including institutional relationships.

Strengthened the tie between planning activities and programming decisions.

The state and MPOs are required to certify that certain federal laws and regulations are met.

The Evolution of Transportation Planning in California

BOB DATEL

Transportation planning in California developed as a direct result of California's entry into the building of freeways. In 1939 the legislature established the freeway principle by statute and authorized the Division of Highways to construct any portion of the state highway system as a freeway or to make any existing highway a freeway. Since then, the state of California has made considerable progress in planning and building freeways. The boom in freeway development was spurred by the tremendous increase in California's population during the 1940s and 1950s. The population grew between 1940 and 1960 from 7 million to 15.9 million. By 1970 the state's population reached 20 million. This tremendous increase in population brought about a corresponding increase in motor vehicle registrations and miles of vehicle travel.

Because California's natural resources, manufacturing centers, and recreational areas are widely dispersed, economic activity in the state was, and still is, highly dependent on highway transportation. During the 1950s the street and road system, which was developed to serve a relatively small population dependent largely on agriculture, was no longer adequate.

California recognized the need for a highway system that had the primary purpose of linking major areas of traffic interest with high standard facilities to provide fast, safe, through traffic movement.

During the later 1950s and early 1960s, the California legislature became concerned that the rapidly expanding freeway network was not the result of a cooperatively planned system that considered local desires and plans. A legislative subcommittee report outlined these and other shortcomings in the state's highway planning procedures. In order to remedy this situation, the legislature asked the California Department of Transportation (Caltrans) to undertake development of an overall statewide freeway plan. This plan would provide a basis for state, city, and

county authorities to coordinate all transportation plans, work out necessary financial arrangements, and promote the development of land use planning. This first attempt at long-range transportation planning in California was a highly successful one.

The plan, finished in 1959, resulted in the legislative adoption with practically no controversy of the 12,250-mile California freeway and expressway system. The actual system adopted was the result of cooperation and coordination developed between Caltrans and city and county authorities in the area of transportation planning.

With the state-adopted freeway and expressway system as a framework, comprehensive transportation studies continued during the decade of the 1960s in the 10 largest urban areas in California. The advent of the computer made these complex transportation analysis and large transportation planning studies possible. Caltrans made significant strides in the field of modeling by using land use, demographic, and economic factors in transportation planning.

The new interest in cooperative transportation planning involving the state and local agencies was fostered by federal and state legislation. The first law to significantly affect transportation planning in California was the Federal-Aid Highway Act of 1962. This act required, for the first time, a "continuing, comprehensive transportation planning process carried on cooperatively" by state and local communities with urbanized areas of more than 50,000 population, which is commonly referred to as the 3C process. With the support of the 1962 Federal-Aid Highway Act, regional planning agencies quickly evolved in California's 10 largest urban areas. Caltrans' 11 districts were closely involved in much of the early transportation planning effort, which was largely staffed and paid for by the department, using state funds and federal highway planning and research (HPR) funds. As a result, the regional planning agencies did not develop into strong organ-