

Y4
.P 96/10

1045

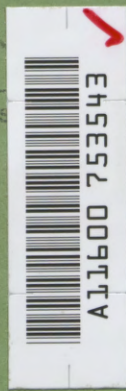
93-4434
P 96/10
93-4434
pk 2

93-H 34/
PT. 2

GOVERNMENT
Storage

TRANSPORTATION PLANNING AND PRIORITIES FOR THE SEVENTIES (UNIFIED TRANSPORTATION ASSISTANCE ACT OF 1974)

DOCUMENTS



1974

THE
KANSAS

UNIVERSITY

HEARING

BEFORE THE

COMMITTEE ON TRANSPORTATION

OF THE

COMMITTEE ON PUBLIC WORKS

UNITED STATES SENATE

NINETY-THIRD CONGRESS

SECOND SESSION

ON

S. 3035

A BILL TO AMEND TITLE 23, UNITED STATES CODE, THE FEDERAL-AID HIGHWAY ACT OF 1973, AND OTHER RELATED PROVISIONS OF LAW, TO ESTABLISH A UNIFIED TRANSPORTATION ASSISTANCE PROGRAM, AND FOR OTHER PURPOSES

(DEPARTMENT OF TRANSPORTATION WITNESSES)

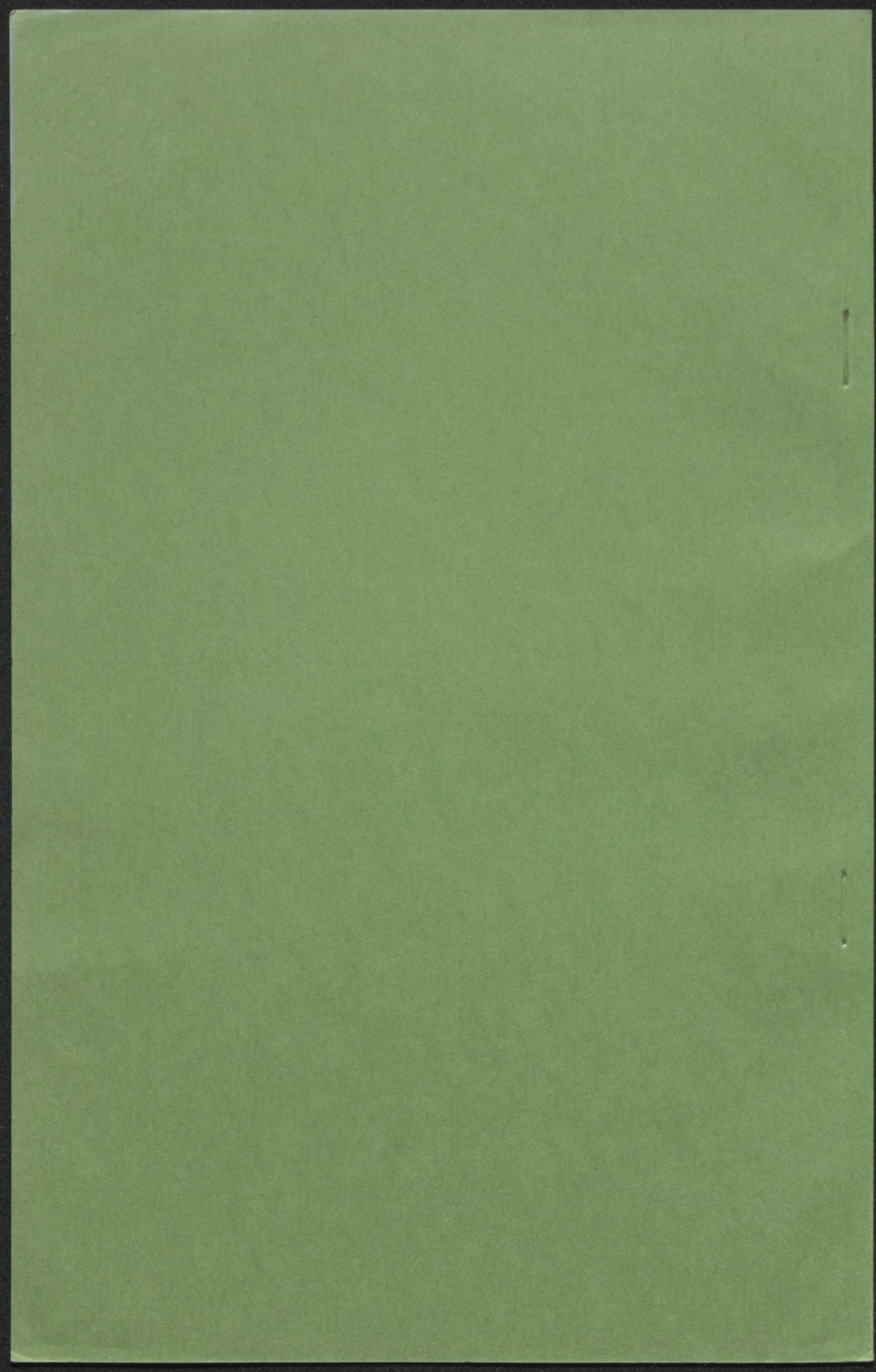
MARCH 12, 1974—WASHINGTON, D.C.

SERIAL NO. 93-H34

PART 2

Printed for the use of the Committee on Public Works





**TRANSPORTATION PLANNING AND
PRIORITIES FOR THE SEVENTIES
(UNIFIED TRANSPORTATION ASSISTANCE ACT OF 1974)**

HEARING
BEFORE THE
SUBCOMMITTEE ON TRANSPORTATION
OF THE
COMMITTEE ON PUBLIC WORKS
UNITED STATES SENATE
NINETY-THIRD CONGRESS
SECOND SESSION

ON

S. 3035

A BILL TO AMEND TITLE 23, UNITED STATES CODE, THE FEDERAL-AID HIGHWAY ACT OF 1973, AND OTHER RELATED PROVISIONS OF LAW, TO ESTABLISH A UNIFIED TRANSPORTATION ASSISTANCE PROGRAM, AND FOR OTHER PURPOSES

(DEPARTMENT OF TRANSPORTATION WITNESSES)

MARCH 12, 1974—WASHINGTON, D.C.

SERIAL NO. 93-H34

PART 2

Printed for the use of the Committee on Public Works



U.S. GOVERNMENT PRINTING OFFICE

COMMITTEE ON PUBLIC WORKS

JENNINGS RANDOLPH, West Virginia, *Chairman*

EDMUND S. MUSKIE, Maine	HOWARD H. BAKER, Jr., Tennessee
JOSEPH M. MONTOYA, New Mexico	JAMES L. BUCKLEY, New York
MIKE GRAVEL, Alaska	ROBERT T. STAFFORD, Vermont
LLOYD BENTSEN, Texas	WILLIAM L. SCOTT, Virginia
QUENTIN N. BURDICK, North Dakota	JAMES A. McCLURE, Idaho
DICK CLARK, Iowa	PETE V. DOMENICI, New Mexico
JOSEPH R. BIDEN, Jr., Delaware	

M. BARRY MEYER, *Chief Counsel and Chief Clerk*

BAILEY GUARD, *Minority Clerk*; RICHARD A. HELLMAN, *Minority Counsel*

LEON G. BILLINGS, *Senior Staff Member*

PHILIP T. CUMMINGS, *Assistant Chief Counsel*; JOHN W. YAGO, Jr., *Assistant Chief Clerk*

JAMES R. READLE and RICHARD E. HEROD (minority), *Assistant Counsels*

Professional and Research Staff: KARL BRAITHWAITE, HAROLD H. BRAYMAN, PAUL CHIMES, FRANCES T. CLARK, KATHERINE Y. CUDLIPP, RANDOLPH G. FLOOD, KATHALEEN R. E. FORCUM, ANN GARRABRANT, RICHARD D. GRUNDY, WESLEY F. HAYDEN, RONALD L. KATZ, CLARK NORTON, JUDY PARENTE, JOHN PURINTON, A. DAVID SANDOVAL, JACQUELINE E. SCHAFER, DIANE W. STEWART, CHARLENE STURBITTS, E. STEVENS SWAIN, and SALLY WALKER

SUBCOMMITTEE ON TRANSPORTATION

LLOYD BENTSEN, Texas, *Chairman*

JOSEPH M. MONTOYA, New Mexico	ROBERT T. STAFFORD, Vermont
MIKE GRAVEL, Alaska	JAMES L. BUCKLEY, New York
EDMUND S. MUSKIE, Maine	WILLIAM L. SCOTT, Virginia
QUENTIN N. BURDICK, North Dakota	PETE V. DOMENICI, New Mexico

CONTENTS

OPENING STATEMENTS

	Page
Bentsen, Hon. Lloyd, U.S. Senator from the State of Texas-----	1
Randolph, Hon. Jennings, U.S. Senator from the State of West Virginia---	2
Stafford, Hon. Robert T., U.S. Senator from the State of Vermont-----	5

DEPARTMENT OF TRANSPORTATION WITNESSES

Brinegar, Hon. Claude S., Secretary, Frank C. Herring, Administrator, Urban Mass Transportation Administration, Theodore C. Lutz, Deputy Under Secretary, Lester Lamm, Executive Director, Federal Highway Administration, and Rodney E. Eyster, General Counsel-----	49
--	----

ADDITIONAL MATERIAL

"A Study of Revenue Mechanisms For Financing Urban Mass Transporta- tion," report of the Secretary of Transportation to the Congress-----	81
Letters:	
March 28, 1971, and November 21, 1971, to the President and the Office of Management and Budget regarding the withholding of appropri- ated funds-----	69
April 12, 1974, to Senator Bentsen outlining technical amendments to S. 3035-----	76
May 9, 1974, to Senator Randolph in regard to the formula question---	52
S. 3035, reprint of-----	7

1923

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
RESEARCH REPORT NO. 10
BY
J. H. VAN VAN NEST
AND
W. R. S. LEECH
PUBLISHED BY THE UNIVERSITY OF CHICAGO PRESS
CHICAGO, ILL., U.S.A.
1923

**TRANSPORTATION PLANNING AND PRIORITIES FOR
THE SEVENTIES
(UNIFIED TRANSPORTATION ASSISTANCE ACT OF 1974)**

TUESDAY, MARCH 12, 1974

U.S. SENATE,
COMMITTEE ON PUBLIC WORKS,
SUBCOMMITTEE ON TRANSPORTATION,
Washington, D.C.

The subcommittee met at 10 a.m., pursuant to call, in room 4200, Dirksen Senate Office Building, Hon. Lloyd M. Bentsen, Jr. [chairman of the subcommittee] presiding.

Present: Senators Bentsen, Randolph (chairman of the full committee), Burdick, Buckley, Stafford, and Domenici.

**OPENING STATEMENT OF HON. LLOYD BENTSEN, U.S. SENATOR
FROM THE STATE OF TEXAS**

Senator BENTSEN. The committee will come to order.

Mr. Secretary, we are very pleased to have you with us this morning.

Today the Senate Subcommittee on Transportation will hold the second in a series of hearings on transportation planning and priorities for the 1970's.

Our first hearing was held on March 4 in New York City and subsequent hearings are scheduled for March 29 in Detroit, May 10 in Atlanta, May 24 in San Francisco, May 25 in Los Angeles and July 1 in Columbus, Ohio.

The subcommittee may schedule additional Washington hearings as circumstances warrant.

Our only witness today is Hon. Claude Brinegar, Secretary of Transportation, who will testify on the administration's new transportation proposals. These proposals include a new unified transportation assistance program introduced a month ago.

I believe they constitute a serious effort to confront our transportation problems during this decade of change. I believe that our subcommittee has indicated that it takes these proposals seriously by the broad range of hearings that we have scheduled to discuss these and other transportation issues.

Following the passage of last year's historic highway bill I said I didn't intend to let this subcommittee lie dormant until that bill expired.

Our transportation problems are evolving constantly. We intend to review them steadily to seek ways to improve and expand on that legislation.

In the course of these hearings we expect to hear from administration witnesses, State and local officials, representatives of industry and citizen and environmental groups as we seek to develop new legislation.

This subcommittee has set itself the task of reviewing three major issues in transportation policy during these hearings.

First, the financing of highways and mass transit; second, transportation in the time of energy shortages; and third, transportation planning for the 1970's.

Since the Secretary testified before us last December on transportation and energy we have asked him today to concentrate on questions of planning and financing. I have said before that I believe that transportation will be one of the major issues of the 1970's as more Americans are forced to ask serious questions about how they will get to work, how frequently they travel and what mode of transportation they will use.

Mr. Secretary, we welcome the chance to meet with you and have the Administration views on transportation planning and S. 3035, the unified transportation assistance program. We are pleased also to have with us this morning the chairman of the full committee.

I would like to call on the chairman at this time and ask if he has a statement to make.

**OPENING STATEMENT OF HON. JENNINGS RANDOLPH, U.S.
SENATOR FROM THE STATE OF WEST VIRGINIA**

Senator RANDOLPH. Thank you, Mr. Chairman. I believe that your opening remarks indicating our desire to counsel with the Secretary of Transportation on important problems and possibilities for a more effective transportation system are timely.

I would underscore what you say about the 1970's, but I think what we are doing today is thinking in terms of what we must do in the 1980's as well as in the 1970's.

I, of course, welcomed the opportunity to discuss with Secretary Brinegar what I call the sweeping transportation proposal set forth by the administration.

I am sure all members of your subcommittee, Mr. Chairman, welcome this opportunity.

It is important certainly for us and for the Congress generally to review this recommendation which is brought to us and I think it is highly desirable that we do it so soon after it has been introduced and I commend you for that action.

The Congress certainly will give careful consideration to a proposal which I have indicated is sweeping—it has far-reaching implications. Our inquiries will be, in a proper perspective if we can consider it first from its source and that is exactly what you are doing with the Secretary of Transportation.

Mr. Secretary, I recognize as do all of us that you have been a key figure in the development of the unified transportation assistance program, that system being incorporated in S. 3035.

This bill is extensive, it is detailed and it is a legislative proposal that raises questions that must be answered not only before this subcommittee, this committee, but the Congress, and certainly the others

on Capitol Hill and in Government who have jurisdiction and intense interest in this act.

I wish for the record to indicate that I joined with Senator Baker as a cosponsor of S. 3035 when it was introduced by Senator Stafford of our subcommittee on the 21st of February.

At that time I observed that my cosponsorship did not mean that I fully endorsed all of its provisions. This statement has already, Mr. Secretary, been interpreted by at least one outside organization as meaning that I am "unenthusiastic"—that is the quote—about the administration's proposal.

This characterization is inaccurate, it is not a fair appraisal of my feelings. Indeed, if I had not felt that S. 3035 was a well-intentioned attempt to improve our national transportation system I would not have been a co-sponsor.

This legislation, however, raises important issues of national transportation policy that will affect Federal involvement in transportation activities for many years.

I underscore not only in the 1970's, but in the 1980's as well. It contains provisions about which I am very enthusiastic and it is worthy of our serious consideration.

Mr. Secretary, I have mentioned that this bill raises questions which need to be answered. I am sure that you will discuss with us how your proposal relates to the completion of the interstate highway system in this country. No one realistically expects this mammoth project to be finished in this decade but we cannot afford to stretch out the completion of the system so that gaps will remain in it.

The progress that has been made on our interstate roads over the past 18 years was possible because of assured financing—and I think this is very important for all of us to think about today—it was assured financing that made it possible through the Highway Trust Fund to do what we have done as of today.

In this context I hope you will address yourselves to the question of financing not only for the interstate roads but for the total package which you present in this bill.

The Federal Aid Highway Act of 1973, as you recall and the members of our subcommittee recall, strengthened the relationship between the highway and the mass transit programs.

The administration proposal would lead to an ultimate merger of these two programs, particularly as they operate in urban areas. Some provisions of the bill are long-range and will not become operative until the 95th Congress.

It may be desirable to let the provisions of the 1973 act become fully operational before we proceed further.

I have worked for some time to secure Federal attention to an area of transportation that has been neglected.

An important breakthrough was achieved in our 1973 Highway Act when we authorized a demonstration program to attack the problems of public transportation in rural areas and in small towns.

We must remember even though we are a nation of large urban areas that we have millions and millions of Americans who do not live in these areas and, frankly, they are without the means of mobility to a greater degree than are those who live in urban areas.

Although our highway network reaches into most of the parts of America, many of our citizens cannot take the advantage of the transportation system for they do not own cars and there is no public transportation.

I hope that will be underscored in these hearings, Mr. Chairman, that we have practically no public transportation in the rural sections of the United States of America.

We are constantly talking and appropriately and it is necessary to think in terms of the urban areas, but we must not forget the areas for which I speak at this moment that are without public transportation that are throughout the countryside of America and in the smallest towns.

The demonstration program in that 1973 act, as you will recall, as a provision which I initiated which permits a long-delayed examination of the need for rural public transportation and the best means for providing it.

I am gratified that the administration endorses this program and you have recommended that in S. 3035 it be extended and that the existing funding level be more than doubled.

I think this is a very significant statement that I am making because you certainly have responded to the need which I have outlined.

The legislation to implement the unified transportation assistance program is broad in its scope. The Committee on Public Works, especially the subcommittee chaired by the able Senator from Texas, has jurisdiction only over the portions of it that relate to highways.

Our Subcommittee on Transportation has begun hearings to assess future transportation priorities.

The introduction of this bill I say, therefore comes at an opportune time. Its general goals fit into the purposes of the subcommittee hearings which have been announced.

We will receive a wide range of reactions to the UTAP proposal and to its potential for meeting our transportation requirements not only in the 1970's, but I emphasize in the 1980's as well.

In conclusion, Mr. Secretary, and Mr. Chairman and my colleagues, your responsibilities, Secretary Brinegar, are very great.

I am sure that you recognize them as great, for mobility, I think, is a vital key to the continued strength of our Nation and the well-being of our people.

The development of transportation has helped us to advance in just about a period of, let's say, 18 or 20 years, and as we think in terms of 200 years of history we have come from a frontier land to a strong land.

I am not always desirous of saying a rich country, but we are a strong country. We are now a mature country and our transportation needs and certainly anyone who reads the signs, who senses the situations knows that needs in transportation are changing.

Mr. Secretary, I am sure all of the members of this subcommittee will counsel with you and your associates on ways in which we can work together.

I think this is highly important and you as the Secretary have indicated your desire to do that. We have had solid achievements in the construction of highways in the United States of America.

We have begun to have achievements in mass transit. I am one who has advocated and supported not only authorizations but funding for mass transit in the past.

I think today we check our achievements but we look forward to the challenge ahead.

Thank you, Mr. Chairman.

Senator BENTSEN. Thank you very much, Mr. Chairman.
Senator Stafford?

**OPENING STATEMENT OF HON. ROBERT T. STAFFORD, U.S.
SENATOR FROM THE STATE OF VERMONT**

Senator STAFFORD. Thank you, Mr. Chairman.

Mr. Chairman, I join with you and the chairman of the full committee in welcoming Secretary Brinegar before the Transportation Subcommittee this morning. Mr. Secretary, we are looking forward to your testimony on the administration's proposed Unified Transportation Assistance Act. I was pleased to introduce the proposal as S. 3035, because I believe it offers a number of significant initiatives that would improve urban transportation across our Nation.

The concept in the bill to consolidate gradually the urban highway and mass transit programs is quite sound. We need, I am convinced, to give the cities and States greater flexibility so that they can decide without artificial restrictions how to best meet their particular urban transportation problems.

Flexibility, of course, was the issue that delayed the resolution of the 1973 highway bill for nearly a year. Blending the highway and mass transit programs into a single effort merits the closest and most careful attention.

S. 3035, would also, for the first time, authorize mass transit operating subsidies out of the general fund. Such support is probably essential if we are to make our urban mass transit systems more productive.

While I support the general outline of this bill I must express my honest reservations over several specifics in the bill. Section 103(e), for example, eliminates the one-half of 1 percent guaranteed out of the urban system for Vermont and other similar smaller States.

Section 103(b) of the bill excludes urban areas of less than 50,000 population from the urban system support. Since some States have no population centers exceeding 50,000, this language would apparently eliminate such States, including Vermont, entirely from the urban system program.

Another provision of real concern is section 108 which deletes the existing requirements that urban system projects be designed to provide access for handicapped persons. That proposed change would require that new buses and rolling stock for fixed rail systems be designed with reasonable and practical features and allow the physically handicapped and elderly to use them. And any State that could satisfy that proposed requirement by providing alternative service for transporting the physically handicapped using urban system funds to finance the alternative service.

While such a proposal may be sound I shall support it if only it can be shown that the handicapped and elderly do not suffer as a result. With these words of concern I do want to welcome the Secretary and say, Mr. Secretary, that we value your testimony very highly.

Your testimony will be most valuable in helping us to focus attention on our mutual desire to improve the urban transportation system.

Thank you.

Senator BENTSEN. Thank you, Senator Stafford.

[S. 3035 follows:]

1 TITLE I—AMENDMENTS TO TITLE 23, UNITED
2 STATES CODE: URBAN, SMALL URBAN, AND
3 RURAL HIGHWAY PROGRAMS

4 EFFECTIVE DATE

5 SEC. 102. Sections 103 through 105 of this title shall
6 become effective after June 30, 1974. The other provisions
7 of this title shall become effective upon their enactment.

8 APPORTIONMENT

9 SEC. 103. (a) The definition of the term "rural areas"
10 in section 101 (a) of title 23, United States Code, is amended
11 by substituting "urbanized" for "urban".

12 (b) Section 103 (d) of title 23, United States Code, is
13 amended by placing a period in the first sentence of para-
14 graph (1) after the words "urbanized area" and striking the
15 remainder of that sentence and the entire third sentence; and
16 by amending the first sentence of paragraph (2) to read as
17 follows: "After June 30, 1976, the Federal-aid urban sys-
18 tem shall be located in each urbanized area and shall consist
19 of arterial and collector routes."

20 (c) The term "outside of urbanized areas" shall be
21 substituted for the term "rural areas" in paragraphs (1)
22 and (2) of section 104 (b), title 23, United States Code.

23 (d) Paragraph (3) of section 104 (b), title 23, United
24 States Code, is amended to read as follows: "For extensions

1 of the Federal-aid primary and secondary systems in ur-
2 banized areas:

3 "In the ratio which the population in urbanized areas,
4 or parts thereof, in each State bears to the total population
5 in such urbanized areas, or parts thereof, in all States as
6 shown by the latest available Federal census."

7 (e) Paragraph (6) of section 104 (b), title 23, United
8 States Code, is amended by substituting the term "urbanized
9 areas" for the term "urban areas" wherever that term ap-
10 pears in the first sentence, and by deleting the last sentence.

11 (f) Subsection (c) of section 104, title 23, United
12 States Code, is amended by substituting in the first sentence
13 "paragraphs (1), (2), (3), or (6)" for "paragraphs (1)
14 or (2)", and inserting at the end of the first sentence the
15 following: "Funds apportioned in accordance with paragraph
16 (6) of section 104 (b) shall not be transferred from their
17 allocation to any urbanized area of 400,000 population or
18 more under section 150 of this title, without the approval
19 of the local officials of such urbanized area."

20 (g) Section 104 (d), title 23, United States Code, is
21 amended to read as follows: "Not to exceed the total amount
22 of funds apportioned in any fiscal year to each State in ac-
23 cordance with paragraph (3) of section 104 (b) may be
24 transferred to the apportionment under paragraph (6) of sec-
25 tion 104 (b) if such transfer is requested by the State high-

1 way department and is approved by the Governor of such
2 State and by the Secretary as being in the public interest.”.

3 AVAILABILITY OF PLANNING AND URBAN SYSTEM

4 FUNDS

5 SEC. 104. (a) Paragraph (2) of section 104 (f), title
6 23, United States Code, is amended by placing a period after
7 “census” and striking the remainder of the paragraph.

8 (b) Section 150, title 23, United States Code, is
9 amended by substituting “400,000” for “200,000” wher-
10 ever that number appears.

11 FEDERAL SHARE

12 SEC. 105. (a) Subsection (a) of section 120, title 23,
13 United States Code, is amended by substituting “80 per
14 centum” for “70 per centum” where it appears in that
15 subsection.

16 (b) The first sentence of subsection (f) of section 120,
17 title 23, United States Code, is amended by substituting
18 “80 per centum” for “70 per centum”.

19 (c) The amendments contained in this section shall take
20 effect with respect to all obligations incurred after June 30,
21 1974.

22 AUTHORIZATIONS

23 SEC. 106. (a) For the purpose of carrying out the
24 provisions of title 23, United States Code, the following
25 sums are hereby authorized to be appropriated:

1 (1) For the Federal-aid urban system, out of the
2 Highway Trust Fund, \$800,000,000 for the fiscal year
3 ending June 30, 1977. For the extensions of the Fed-
4 eral-aid primary and secondary system in urbanized
5 areas, out of the Highway Trust Fund, \$300,000,000
6 for each of the fiscal years ending June 30, 1976, and
7 June 30, 1977.

8 (2) For the Federal-aid primary system in rural
9 areas, out of the Highway Trust Fund, \$700,000,000
10 for the fiscal year ending June 30, 1977.

11 (3) For the Federal-aid secondary system in rural
12 areas, out of the Highway Trust Fund, \$400,000,000
13 for the fiscal year ending June 30, 1977.

14 (b) The second sentence of paragraph (2) of section
15 104(a) of the Federal-Aid Highway Act of 1973 is
16 amended by placing a period after "June 30, 1975" and
17 deleting the remainder of that sentence.

18 (c) To the extent that (1) the sum of the authoriza-
19 tions to appropriate funds out of the Highway Trust Fund
20 under subsection (a) and the total amount authorized to
21 be appropriated out of the Highway Trust Fund through the
22 fiscal year ending June 30, 1977, exceed (2) the sum of
23 the amount which will be available in the Highway Trust
24 Fund (excluding repayable advances) to defray the expendi-
25 tures which will be required as a result of the authorizations

1 to be appropriated out of the Highway Trust Fund under
2 subsection (a) and the total amount of authorizations to be
3 appropriated out of the Highway Trust Fund through June
4 30, 1977, an amount equal to the difference between (1)
5 and (2), but not to exceed \$2,200,000,000, is authorized
6 to be appropriated out of the general funds in the Treasury
7 to liquidate obligations resulting from authorizations under
8 (1) for which the sums available under (2) are not suffi-
9 cient. For the purposes of section 209 (g) of the Federal-Aid
10 Highway Act of 1956, funds authorized pursuant to this
11 subsection shall constitute the amounts which will be avail-
12 able in the Highway Trust Fund to defray the expenditures
13 which will be required to be made from such fund.

14

TECHNICAL AMENDMENT

15 SEC. 107. Section 142, title 23, United States Code,
16 is amended by deleting subsection (d) and relettering the
17 subsequent subsections accordingly, including any refer-
18 ences thereto.

19 MASS TRANSPORTATION FOR ELDERLY AND HANDICAPPED

20 SEC. 108. (a) Title 23, United States Code, is hereby
21 amended by adding a new section 154.

22 "§ 154. Mass transportation for the elderly and hand-
23 icapped

24 "(a) It is hereby declared to be the national policy
25 that elderly and physically handicapped persons have the

1 same right as other persons to utilize mass transportation
2 facilities and services; that special efforts shall be made in
3 the planning and design of mass transportation facilities and
4 services so that the availability to elderly and physically
5 handicapped persons of mass transportation which they can
6 practically utilize will be assured; and that all Federal pro-
7 grams offering assistance in the field of mass transportation
8 should contain provisions implementing this policy.

9 “(b) In order to further this policy, the Secretary
10 shall require that any bus or other mass transportation
11 rolling stock acquired, or any mass transportation station,
12 terminal, or other passenger loading facility improved or
13 constructed after June 30, 1974, with Federal financial
14 assistance under sections 104 (e) (4) and 142 of this title,
15 and the Urban Mass Transportation Act of 1964, as amended,
16 and after June 30, 1977, chapter 5 of this title, be designed
17 with practical and reasonable features which allow their
18 utilization by physically handicapped persons and elderly
19 persons with limited mobility.

20 “(c) Any Governor or local public body may satisfy
21 the requirement of subsection (b) by providing alternative
22 transportation service for physically handicapped persons
23 and elderly persons with limited mobility. The alternative
24 service provided shall be sufficient to assure that handicapped
25 persons and elderly persons with limited mobility have avail-

1 able transportation service meeting standards, which shall
2 be promulgated by the Secretary. Funds apportioned under
3 104 (b) (6) of this title under title II of the Urban Mass
4 Transportation Act of 1964, as amended, shall be available
5 for the Federal share of the cost of alternative services
6 authorized by this section.

7 “(d) Section 165 (b) of the Federal-Aid Highway
8 Act of 1973 is hereby repealed.

9 “(e) The analysis of chapter 1 of title 23, United
10 States Code, is amended by adding at the end thereof the
11 following:

“154. Mass transportation for the elderly and handicapped.”

12 RURAL AND SMALL URBAN AREA PUBLIC TRANSPORTATION

13 SEC. 109. (a) Section 101, title 23, United States
14 Code, is amended by adding the following new definition:

15 “The term ‘small urban area’ means an urban place as
16 designated by the Bureau of the Census having a popula-
17 tion of five thousand or more and not within any urbanized
18 area, within boundaries to be fixed by responsible State and
19 local officials in cooperation with each other, subject to ap-
20 proval by the Secretary. Such boundaries shall, as a min-
21 imum, encompass the entire urban place designated by the
22 Bureau of the Census.”

23 (b) Section 142 (a) of title 23, United States Code,
24 is amended by adding a new section 142 (a) (3) to read
25 as follows:

1 “(3) To encourage the development, improvement,
2 and use of public mass transportation systems operating
3 vehicles on highways for transportation of passengers in
4 small urban and rural areas, the Secretary may, in addition
5 to the projects under paragraph (1), beginning with the
6 fiscal year ending June 30, 1975, approve as a project
7 on the Federal-aid primary or secondary systems, for pay-
8 ment from sums apportioned under section 104(b) (1)
9 and (2) of this title, the purchase of buses.”.

10 (c) Paragraph (2) of section 142(d) of title 23,
11 United States Code, as redesignated herein, is amended by
12 adding the following at the end thereof: “After June 30,
13 1974, notwithstanding section 209(f) (1) of the Highway
14 Revenue Act of 1956, the Highway Trust Fund shall be
15 available for making expenditures to meet obligations result-
16 ing from projects authorized by subsections (a) (2) and (3)
17 of this section and such projects shall be subject to, and
18 governed in accordance with, all provisions of this title appli-
19 cable to projects on the Federal-aid urban system, primary
20 system, and secondary system, respectively, except to the
21 extent determined inconsistent by the Secretary.”.

22 (d) Section 142(g) of title 23, United States Code, as
23 redesignated herein, is amended by inserting after “subsec-
24 tion (a) (2)” the following: “, and after June 30, 1974,
25 under subsection (a) (3).”

1 (e) Section 142 (i) of title 23, United States Code, as
2 redesignated herein, is amended to read as follows: "The pro-
3 visions of section 13 (c) of the Urban Mass Transportation
4 Act of 1964, as amended, shall apply in carrying out subsec-
5 tions (a) (2) and (c) of this section, and after June 30,
6 1974, subsection (a) (3) of this section."

7 RURAL HIGHWAY PUBLIC TRANSPORTATION

8 DEMONSTRATION PROGRAM

9 SEC. 110. (a) The first sentence of section 147 of the
10 Federal-Aid Highway Act of 1973 is amended to read as
11 follows: "To encourage the development, improvement, and
12 use of public mass transportation systems operating vehicles
13 on highways for transportation in rural areas and small urban
14 areas, in order to enhance access of populations in rural and
15 small urban areas to employment, health care, retail centers,
16 education, and public services, there are authorized to be
17 appropriated \$75,000,000 for the three-fiscal-year period
18 ending June 30, 1977, of which \$50,000,000 shall be out of
19 the Highway Trust Fund, to the Secretary of Transportation
20 to carry out demonstration projects for public mass transpor-
21 tation on highways in such areas."

22 (b) The second sentence of section 147 of the Federal-
23 Aid Highway Act of 1973 is amended by deleting the word
24 "and" after "other public mass transportation passengers,"
25 and the period at the end of the sentence, and adding at the

1 end thereof the following: “, and the payment of operat-
 2 ing expenses incurred as a result of providing such service.”.

3 TITLE II—AMENDMENTS TO THE URBAN MASS
 4 TRANSPORTATION ACT OF 1964

5 DESIGNATION OF TITLE I OF URBAN MASS

6 TRANSPORTATION ACT

7 SEC. 201. (a) After the enacting clause of the Urban
 8 Mass Transportation Act of 1964, as amended (49 U.S.C.
 9 1601 et seq.), insert the following:

10 “TITLE I—THE URBAN MASS TRANSPORTATION
 11 PROGRAM”.

12 (b) Sections 2 through 15 of the Urban Mass Trans-
 13 portation Act of 1964, as amended (49 U.S.C. 1601-1611),
 14 shall be included in title I of the Urban Mass Transportation
 15 Act of 1964, as amended.

16 (c) The introductory phrase of section 12 (c) of the
 17 Urban Mass Transportation Act of 1964, as amended (49
 18 U.S.C. 1607c (c)), is amended to read as follows: “As
 19 used in title I of this Act—”.

20 (d) Section 12 (c) of the Urban Mass Transportation
 21 Act of 1964, as amended (49 U.S.C. 1607c (c)), is fur-
 22 ther amended by deleting the word “and” at end of para-
 23 graph (4), by inserting that word at the end of paragraph
 24 (5), and by adding at the end thereof the following new
 25 paragraph:

1 aggregate of \$1,860,000,000 prior to July 1, 1975, and not
2 to exceed an aggregate of \$7,400,000,000, thereafter. Ad-
3 ministrative reservations for grants authorized under sections
4 3, 7 (b), and 9 of this Act shall not exceed \$700,000,000
5 for fiscal year 1975. Sums appropriated under this subsection
6 to finance grants under sections 3, 7 (b), and 9 shall
7 remain available until expended.”.

8 INVESTMENT STANDARDS

9 SEC. 203. Section 4 of the Urban Mass Transportation
10 Act of 1964, as amended (49 U.S.C. 1601 et seq.), is
11 amended by adding a new subsection (e) to read as follows:

12 “(e) The Secretary may issue regulations establishing
13 investment standards for the grant-in-aid program under
14 this title.”.

15 TECHNICAL AMENDMENT

16 SEC. 204. (a) Section 4 (d) of the Urban Mass Trans-
17 portation Act of 1964, as amended (49 U.S.C. 1603d), is
18 amended by striking all after the first sentence.

19 (b) Section 16 of the Urban Mass Transportation Act
20 of 1964, as amended (49 U.S.C. 1612), is hereby repealed.

21 THE URBAN TRANSPORTATION FORMULA GRANT PROGRAM

22 SEC. 205. The Urban Mass Transportation Act of 1964,
23 as amended (49 U.S.C. 1601 et seq.), is amended by adding
24 at the end thereof the following new title:

1 "TITLE II—THE URBAN TRANSPORTATION
2 FORMULA GRANT PROGRAM

3 "DEFINITIONS

4 "SEC. 201. As used in title II—

5 "(a) The term 'construction' means the supervis-
6 ing, inspecting, actual building, and all expenses inci-
7 dental to the construction or reconstruction of facilities
8 and equipment for use in mass transportation, includ-
9 ing designing, engineering, locating, surveying, map-
10 ping, acquisition of rights-of-way, relocation assistance
11 and acquisition and replacement of housing sites;

12 "(b) The term 'Governor' means the Governor, or
13 his designate, of any one of the fifty States and of Puerto
14 Rico, and the Mayor of the District of Columbia;

15 "(c) The term 'local public bodies' includes munici-
16 palities and other political subdivisions of States; public
17 agencies and instrumentalities of one or more States,
18 municipalities, and political subdivisions of States; and
19 public corporations, boards, and commissions established
20 under the laws of any State;

21 "(d) The term 'mass transportation' means trans-
22 portation by bus, or rail or other conveyance, either
23 publicly or privately owned, which provides to the

1 public general or special service on a regular and con-
2 tinuing basis;

3 “(e) The term ‘Secretary’ means the Secretary of
4 Transportation;

5 “(f) The term ‘States’ means any one of the fifty
6 States, the District of Columbia, and Puerto Rico; and

7 “(g) The term ‘urbanized area’ means an area so
8 designated by the Bureau of the Census, within boun-
9 daries to be fixed by responsible State and local officials
10 in cooperation with each other, subject to approval by
11 the Secretary. Such boundaries shall, as a minimum, en-
12 compass the entire urbanized area within a State as
13 designated by the Bureau of the Census.

14 “APPORTIONMENT OF FUNDS

15 “SEC. 202. (a) On the first day of fiscal years 1975,
16 1976, and 1977, the Secretary shall apportion the sums
17 authorized by section 4 (c) of this Act for apportionment in
18 fiscal years 1975, 1976, and 1977, respectively, to the
19 Governors in the following manner: ‘In the ratio which the
20 population in urbanized areas, or parts thereof, as designated
21 by the Bureau of the Census, in each State bears to the total
22 population in such urbanized areas, or parts thereof, in all
23 the States as shown by the latest available Federal census.’

24 “(b) Three percent of the funds apportioned under sub-

1 section (a) of this section shall be used for planning activities
2 authorized by section 212 of this Act. Such funds shall be
3 made available by the Governor to the metropolitan plan-
4 ning organizations in urbanized areas designated by the
5 Governor as being responsible for carrying out the provisions
6 of section 212 of this Act. These funds shall be matched in
7 accordance with section 205 of this Act unless the Secretary
8 determines that the interests of the program would be best
9 served without such matching.

10 “(c) The distribution within any State of the planning
11 funds made available to organizations under subsection (b)
12 of this section shall be in accordance with a formula devel-
13 oped by the Governor and approved by the Secretary, which
14 shall consider but not necessarily be limited to, population,
15 status of planning, and metropolitan area transportation
16 needs.

17 “(d) The funds remaining after the allocation required
18 by subsection (b) of this section which are apportioned to
19 any Governor under section 202 (a) of this Act and which
20 are attributable to urbanized areas of 400,000 population or
21 more shall be made available for expenditure in such ur-
22 banized areas for projects approved under section 207 of this
23 Act in accordance with a fair and equitable formula devel-
24 oped by the Governor, which formula has been approved by
25 the Secretary. Such formula shall provide for fair and equi-

1 table treatment of incorporated municipalities of 400,000 or
2 more population. Whenever such a formula has not been
3 developed and approved for a State, the funds apportioned
4 to any Governor under section 202 (a) of this Act which
5 are attributable to urbanized areas having a population of
6 400,000 or more, or parts thereof, shall be allocated among
7 such urbanized areas within such State for projects approved
8 under section 207 of this Act in the ratio that the population
9 within each such urbanized area, or part thereof, bears to
10 the population of all such urbanized areas, or parts thereof,
11 within such State. In the expenditure of funds allocated
12 under the preceding sentence, fair and equitable treatment
13 shall be accorded incorporated municipalities of 400,000 or
14 more population.

15 "AVAILABILITY OF SUMS APPORTIONED

16 "SEC. 203. Sums apportioned to any Governor under the
17 Act shall be available for obligation by that Governor for
18 a period of two years after the close of the fiscal year for
19 which sums are apportioned, and any amounts so apportioned
20 remaining unobligated at the end of such period shall lapse
21 and shall be returned to the Treasury of the United States for
22 deposits as miscellaneous receipts.

23 "PROJECTS ELIGIBLE FOR FEDERAL FINANCIAL ASSISTANCE

24 "SEC. 204. (a) The Secretary may approve as a project
25 under this title, on such terms and conditions as he may pre-

1 scribe (1) the acquisition, construction, and improvement of
2 facilities and equipment for use, by operation or lease or
3 otherwise, in mass transportation service, (2) the payment
4 of operating expenses to improve such service, and (3) mass
5 transportation related projects as described in section 142
6 (a) (1), title 23, United States Code.

7 " (b) The Secretary shall issue such regulations as he
8 deems necessary to administer this section and section 205,
9 including regulations regarding maintenance of effort by
10 States, local governments, and local public bodies, and the
11 appropriate definition of operating expenses.

12 "FEDERAL SHARE

13 "SEC. 205. The Federal share payable on account of any
14 project financed with funds made available under this title
15 shall not exceed 80 percent of the cost of the project. The
16 remainder of the cost of the project shall be provided from
17 sources other than Federal funds. Funds available for ex-
18 penditure for mass transportation projects described by sec-
19 tion 204 (a) (2) of this Act shall be supplementary to and
20 not in substitution for the average amount of State and local
21 government funds expended on the operation of mass trans-
22 portation service for the two Federal fiscal years preceding
23 the fiscal year for which the project is intended.

24 "PROGRAMS

25 "SEC. 206. (a) As soon as practicable after the appor-
26 tionments pursuant to section 202 of this Act have been

1 made for any fiscal year, any Governor desiring to avail
2 himself of the benefits of this title shall submit to the Secre-
3 tary for his approval a program, or programs, of proposed
4 projects for the utilization of the funds authorized. The
5 Secretary shall act upon programs submitted to him as soon
6 as practicable, and he may approve a program in whole or
7 in part.

8 “(b) In approving programs for projects under this title,
9 the Secretary shall require that such projects be selected
10 by the appropriate local officials with the concurrence of the
11 Governor and, in urbanized areas, also in accordance with
12 the planning process required pursuant to section 212 of this
13 Act.

14 “PLANS, SPECIFICATIONS, AND ESTIMATES

15 “SEC. 207. (a) The Governor shall submit to the Secre-
16 tary for his approval such surveys, plans, specifications, and
17 estimates for each proposed project as the Secretary may
18 require. The Secretary shall act upon such surveys, plans,
19 specifications, and estimates as soon as practicable after the
20 same have been submitted, and his approval of any such
21 project shall be deemed a contractual obligation of the
22 Federal Government for the payment of its proportional
23 contribution thereto.

24 “(b) In approving the plans, specifications, and esti-
25 mates for any proposed project under this section, the Sec-

1 including requirements under the Clean Air Act, as amended,
2 the Federal Water Pollution Control Act, as amended, and
3 other applicable Federal environmental statutes, and its
4 consistency with the goals and objectives of such urban
5 planning as has been promulgated by the community. Such
6 certification shall be accompanied by (1) a report which
7 indicates the consideration given to the economic, social, en-
8 vironmental, and other effects of the proposed project, in-
9 cluding, for construction projects, the effects of its location
10 or design, and the consideration given to the various alter-
11 natives which were raised during the hearing or which were
12 otherwise considered; and (2) upon the Secretary's re-
13 quest, a copy of the transcript of the hearings.

14 "CERTIFICATION ACCEPTANCE

15 "SEC. 209. (a) The Secretary may discharge any of
16 his responsibilities under this title for projects upon the re-
17 quest of any Governor, by accepting a certification by the
18 Governor, or his designee, if he finds such projects will be
19 carried out in accordance with State laws, regulations, di-
20 rectives, and standards establishing requirements at least
21 equivalent to those contained in, or issued pursuant to, this
22 title.

23 "(b) The Secretary shall make a final inspection or a
24 review of each such project upon its completion and shall
25 require an adequate report of its estimated and actual cost,

1 as well as such other information as he determines
2 necessary.

3 “(c) The procedure authorized by this section shall be
4 an alternative to that otherwise prescribed in this title. The
5 Secretary shall promulgate such guidelines and regulations
6 as may be necessary to carry out this section.

7 “(d) Acceptance by the Secretary of a Governor’s
8 certification under this section may be rescinded by the
9 Secretary at any time if, in his opinion, it is necessary to
10 do so.

11 “(e) Nothing in this section shall affect or discharge
12 any responsibility or obligation of the Secretary under any
13 Federal law, including the National Environmental Policy
14 Act of 1969 (42 U.S.C. 4321 et seq.), section 4 (f) of the
15 Department of Transportation Act (49 U.S.C. 1653 (f)),
16 title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000 (d)
17 et seq.), title VIII of the Act of April 11, 1968 (Public
18 Law 90-284, 42 U.S.C. 3601 et seq.), and the Uniform
19 Relocation Assistance and Land Acquisition Policies Act of
20 1970 (42 U.S.C. 4601 et seq.), other than this title.

21 “PROJECT AGREEMENTS

22 “SEC. 210. (a) As soon as practicable after the plans,
23 specifications, and estimates for a specific project have been
24 approved, the Secretary shall enter into a formal project
25 agreement with the Governor. Such project agreement shall

1 make provisions for State funds required for the State's pro
2 rata share of the cost of such project.

3 “(b) The Secretary may rely upon representations
4 made by the Governor with respect to the arrangements
5 or agreements made by the Governor and appropriate local
6 officials where a part of the project is to be constructed at
7 the expense of, or in cooperation with, local subdivisions of
8 the State.

9 “PAYMENT TO GOVERNORS FOR CONSTRUCTION

10 “SEC. 211. (a) The Secretary may, in his discretion,
11 from time to time as the work progresses, make payments
12 to a Governor for costs of construction incurred by him on
13 a project. These payments shall at no time exceed the
14 Federal share of the costs of construction incurred to the
15 date of the voucher covering such payment plus the Federal
16 share of the value of the materials which have been stock-
17 piled in the vicinity of such construction in conformity to
18 plans and specifications for the project. Such payments may
19 also be made in the case of any such materials not in the
20 vicinity of such construction if the Secretary determines that
21 because of required fabrication at an offsite location the
22 materials cannot be stockpiled in such vicinity.

23 “(b) After completion of a project in accordance with
24 the plans and specifications, and approval of the final voucher
25 by the Secretary, a Governor shall be entitled to payment

1 out of the appropriate sums apportioned to him of the un-
2 paid balance of the Federal share payable on account of
3 such project.

4 “(c) No payment shall be made under this title, except
5 for a project covered by a project agreement.

6 “(d) In making payments pursuant to this section,
7 the Secretary shall be bound by the limitations with respect
8 to the permissible amounts of such payments contained in
9 section 205 of this Act.

10 “(e) Such payments shall be made to such official or
11 officials or depository as may be designated by the Gover-
12 nor and authorized under the laws of the State to receive
13 public funds of the State.

14 “TRANSPORTATION PLANNING IN URBANIZED AREAS

15 “SEC. 212. The development of projects under this title
16 shall be based upon a continuing, cooperative, and compre-
17 hensive planning process covering all modes of surface trans-
18 portation and carried on in accordance with section 134 (a),
19 title 23, United States Code. The Secretary shall not approve
20 any project under this title unless he finds that such projects
21 are based on a continuing comprehensive transportation
22 planning process carried on cooperatively by States and
23 local communities in conformance with the objectives stated
24 in section 134 (a), title 23, United States Code. A project
25 under this title may not be undertaken unless the responsible

1 public officials of the urbanized area in which the project is
 2 located have been consulted and, except for projects to pay
 3 operating expenses, their views considered with respect to
 4 the corridor, the location, and the design of the project.

5 "LABOR STANDARDS

6 "SEC. 213. The provisions of section 13 (c) of title I of
 7 this Act shall apply in carrying out mass transportation
 8 projects under this title."

9 TITLE III—AMENDMENTS TO TITLE 23, UNITED
 10 STATES CODE: UNIFIED TRANSPORTATION
 11 ASSISTANCE PROGRAM

12 EFFECTIVE DATE

13 SEC. 301. This title shall become effective after June
 14 30, 1977.

15 REDESIGNATION OF TITLE 23

16 SEC. 302. (a) The title of title 23, United States Code,
 17 is hereby amended to read as follows:

18 "TITLE 23—HIGHWAYS AND MASS
 19 TRANSPORTATION".

20 (b) The analysis of chapter 1, title 23, United States
 21 Code, is amended by striking out

"CHAPTER 1—FEDERAL-AID HIGHWAYS"

22 and inserting the following:

"CHAPTER 1—FEDERAL-AID HIGHWAYS AND MASS TRANSPORTATION".

DEFINITIONS

1

2 SEC. 303. Section 101 of title 23, United States Code,
3 is amended by—

4 (a) inserting after the definition of “forest devel-
5 opment roads and trails” the following:

6 “The term ‘Governor’ means the Governor, or his desig-
7 nate, of any one of the fifty States, of Puerto Rico, and the
8 Mayor of the District of Columbia.”;

9 (b) inserting after the definition of “maintenance”
10 the following:

11 “The term ‘mass transportation’ means transportation
12 by bus, or rail or other conveyance, either publicly or pri-
13 vately owned, which provides to the public general or special
14 service on a regular and continuing basis.”; and

15 (c) amending the definition of “construction” by
16 inserting after the word “highway” the following: “or
17 facilities and equipment for use in mass transportation”.

GOVERNOR AND STATE AGENCY

18
19 SEC. 304. (a) The term “Governor” is substituted for
20 the term “State” where that term appears in title 23, United
21 States Code, unless the context requires otherwise.

22 (b) (1) Section 302, title 23, United States Code, is
23 amended by substituting “State agency” for “State highway
24 department” wherever that term appears in the section and
25 the title of the section.

1 (2) The analysis of chapter 1 of title 23, United States
2 Code, is amended by deleting
"302. State highway department."

3 and inserting the following:
"302. State agency."

4 (c) The term "State agency" is substituted for the term
5 "State highway department" wherever that term appears in
6 any other section of title 23, United States Code.

7 FEDERAL-AID SYSTEMS

8 SEC. 305. The first sentence of section 103 (d) (2) of
9 title 23, United States Code, is amended by adding after
10 "collector routes" the following: ", and the public mass
11 transportation systems of each urbanized area".

12 APPORTIONMENT

13 SEC. 306. (a) Section 104 (b), title 23, United States
14 Code, is amended by striking "On or before January 1 next
15 preceding the commencement," and substituting therefor
16 "On the first day,".

17 (b) Section 104 (f) (1), title 23, United States Code, is
18 amended to read as follows:

19 "(f) (1) Three percent of the funds apportioned under
20 paragraph (6) of subsection (b) of this section for the
21 Federal-aid urban system shall be available only for the
22 purpose of carrying out the requirements of section 134 (a)
23 of this title."

1 (c) Section 104 (f) (2), title 23, United States Code,
2 is hereby deleted and subsequent paragraphs, and all refer-
3 ences thereto, are renumbered accordingly.

4 (d) Section 104 (f) (2), title 23, United States Code, as
5 redesignated herein, is amended to read as follows:

6 “(2) Funds required to be used for planning pursuant
7 to section 134 (a) of this title shall be made available by the
8 Governor to the metropolitan planning organizations desig-
9 nated by the Governor as being responsible for carrying out
10 the provisions of section 134 (a) of this title. These funds
11 shall be matched in accordance with clause (A) of section
12 120 (a) of this title unless the Secretary determines that the
13 interests of the Federal-aid transportation program would be
14 best served without such matching.”.

15 CERTIFICATION ACCEPTANCE

16 SEC. 307. (a) Section 117, title 23, United States Code,
17 is amended by deleting subsection (a) and inserting the
18 following subsections (a) and (b) therefor, and relettering
19 the subsequent subsections accordingly:

20 “(a) The Secretary may discharge any of his respon-
21 sibilities relative to highway and mass transportation projects
22 on Federal-aid systems, except the Interstate System, under
23 this title, the National Environmental Policy Act of 1969
24 (49 U.S.C. 4321 et seq.), and section 4 (f) of the Depart-
25 ment of Transportation Act (49 U.S.C. 1653 (f)), upon the

1 request of any Governor, by accepting a certification by the
2 Governor if the Secretary finds, after consultation with the
3 Council on Environmental Quality, that (1) such projects
4 will be carried out in accordance with State laws, regulations,
5 directives, and standards establishing requirements at least
6 equivalent to those contained in, or issued pursuant to such
7 Acts, and (2) with respect to the National Environmental
8 Policy Act and section 4 (f) of the Department of Trans-
9 portation Act, the Governor has an agency suitably equipped
10 and organized to carry out to the satisfaction of the Secre-
11 tary the duties under these Acts.

12 “(b) Where the Secretary has accepted a certification
13 by a Governor pursuant to subsection (a), the Governor for
14 the purposes of the National Environmental Policy Act shall
15 be considered the ‘responsible official’, and for the purposes
16 of section 4 (f) of the Department of Transportation Act, he
17 shall be considered the ‘Secretary’, and shall be subject to
18 the same judicial remedies and Federal court jurisdiction
19 with regard to such laws as the Secretary otherwise would
20 be subject. This subsection shall not preclude the States
21 from providing other judicial and administrative remedies.”.

22 (b) Subsection (c) of section 117, title 23, United
23 States Code, as redesignated herein, is amended by insert-
24 ing after “final inspection” the words “or review”.

1 (d) Section 117 (f) of title 23, United States Code, as
2 redesignated herein, is amended to read as follows:

3 “(f) Nothing in this section shall affect or discharge
4 any responsibility or obligation of the Secretary under any
5 other Federal law, including title VI of the Civil Rights
6 Act of 1964 (42 U.S.C. 2000 (d) et seq.), title VIII of the
7 Act of April 11, 1968 (Public Law 90-284, 42 U.S.C.
8 3601 et seq.), and the Uniform Relocation Assistance and
9 Land Acquisition Policies Act of 1970 (42 U.S.C. 4601
10 et seq.), other than this title, the National Environmental
11 Policy Act, and section 4 (f) of the Department of Trans-
12 portation Act.”.

13 TECHNICAL AMENDMENT

14 SEC. 308. Section 134, title 23, United States Code, is
15 amended by substituting in the last sentence of subsection
16 (a) “transportation project” for “highway project”.

17 OPERATING EXPENSES

18 SEC. 309. (a) Section 142 (a) (2) of title 23, United
19 States Code, is amended by adding after “rolling stock for
20 fixed rail” the following: “and the payment of operating
21 expenses incurred as a result of improving mass trans-
22 portation service. Not to exceed 50 percent of the sums
23 apportioned to each Governor for each of the fiscal years
24 1978, 1979, and 1980 under section 104 (b) (6) shall be

1 available for the payment of the Federal share of projects
2 for the payment of operating expenses.”.

3 (b) Section 142 (a) of title 23, United States Code, is
4 further amended by adding at the end thereof a new para-
5 graph (4) to read as follows:

6 “(4) The Secretary shall issue such regulations to
7 administer this section as he deems necessary, including reg-
8 ulations regarding the maintenance of effort by State and
9 local governments and an appropriate definition of operating
10 expenses.”.

11 (c) Section 142 of title 23, United States Code, is
12 further amended by adding at the end thereof a new sub-
13 section (k) to read as follows:

14 “(k) Funds available for projects for the payment of
15 operating expenses pursuant to paragraph (2) of subsection
16 (a) shall be supplementary to and not in substitution for the
17 average amount of State and local government funds
18 expended on mass transportation service in the two Federal
19 fiscal years preceding the Federal fiscal year for which the
20 project is intended.”.

21 MASS TRANSPORTATION FARES

22 SEC. 310. Section 301 of title 23, United States Code,
23 is amended by adding at the end thereof the following new
24 sentence: “For the purposes of this section, fares on public

1 mass transportation systems shall not be construed as a toll
2 of any kind.”.

3 RESEARCH AND PLANNING

4 SEC. 311. (a) Section 307 (c) (1), title 23, United
5 States Code, is amended to read as follows:

6 “(c) (1) Not to exceed $1\frac{1}{2}$ per centum of the sums appor-
7 tioned for each fiscal year beginning with fiscal year 1974
8 to any State under section 104 (b) (1), (2), and (5) of
9 this title shall be available for expenditure upon request
10 of the Governor, with the approval of the Secretary, with
11 or without State funds for statewide surface transportation
12 planning, including but not limited to transportation studies,
13 feasibility studies, and social, environmental, and economic
14 studies, for the planning of rural and small urban area
15 transportation systems and interurban transportation systems;
16 for the determination of appropriate relationships between
17 locally adopted urban and State transportation plans; for
18 studies of the desirable regulatory and equitable tax policies
19 regarding transportation, for studies on the operation of
20 transportation facilities; and for research and development
21 to assist States in responding to their transportation prob-
22 lems.”.

23 (b) Section 307 (c) (2), title 23, United States Code,
24 is hereby deleted, and the subsequent paragraphs of this

1 section, and any references thereto, are renumbered ac-
2 cordingly.

3 (c) Section 307 (c) (2), title 23, United States Code, as
4 redesignated herein, is amended to read as follows:

5 “(2) In addition to the percentage provided in para-
6 graphs (1) and (2) of this subsection, not to exceed one-
7 half of 1 per centum of sums apportioned for each fiscal
8 year beginning with the fiscal year 1974 under paragraphs
9 (1) and (2) of section 104 (b) of this title shall be avail-
10 able for expenditure upon request of the Governor for the
11 purposes enumerated in paragraph (1) of this subsection,
12 including demonstration projects in connection with such
13 purposes.”

14 **TRANSPORTATION AUTHORIZATIONS**

15 **SEC. 312.** For the purposes of carrying out the provi-
16 sions of title 23, United States Code, the following sums are
17 hereby authorized to be appropriated:

18 (a) For the Federal-aid urban system, \$2,000,000,-
19 000 for each of the fiscal years ending June 30, 1978,
20 June 30, 1979, and June 30, 1980.

21 (b) For the urban mass transportation capital
22 grant program, \$700,000,000 for each of the fiscal years
23 ending June 30, 1978, June 30, 1979, and June 30,
24 1980.

1 DISTRIBUTION OF AUTHORIZED SUMS

2 SEC. 313. (a) The amounts authorized by section 312
3 (a) of this Act shall be apportioned to the Governors in
4 each of the fiscal years ending June 30, 1978, June 30,
5 1979, and June 30, 1980, in the manner prescribed by sec-
6 tion 104 (b) (6), title 23, United States Code.

7 (b) The first sentence of subsection (b) of section 118,
8 title 23, United States Code, is amended to read as follows:
9 "Such sums shall continue available for expenditure by the
10 Governor for a period of two years after the close of the
11 fiscal year for which sums are apportioned. Any amounts so
12 apportioned remaining unexpended at the end of such period
13 shall lapse and be returned to the Treasury of the United
14 States for deposits as miscellaneous receipts."

15 (c) The Secretary is authorized to incur obligations on
16 behalf of the United States in the form of grant agreements
17 or otherwise for projects authorized by chapter 5, title 23,
18 United States Code.

19 (d) The amounts authorized by subsection (c) shall
20 become available for obligation after June 30, 1977, and
21 shall remain available until obligated.

22 (e) There are authorized to be appropriated for liquida-
23 tion of the obligations incurred under subsection (c) not to
24 exceed \$200,000,000 prior to July 1, 1978, which amount
25 may be increased to not to exceed an aggregate of

1 \$400,000,000 prior to July 1, 1979, and not to exceed
2 an aggregate of \$2,100,000,000 thereafter.

3 URBAN MASS TRANSPORTATION CAPITAL GRANT

4 PROGRAM

5 SEC. 314. Title 23, United States Code, is amended by
6 adding at the end thereof the following new chapter:

7 **Chapter 5—THE URBAN MASS TRANSPORTATION**
8 **CAPITAL GRANT PROGRAM**

9 **§ 501. Federal financial assistance**

10 “The Secretary is authorized, in accordance with the pro-
11 visions of this chapter and on such terms and conditions as
12 he may prescribe, to make grants to assist Governors and
13 local public bodies in financing the acquisition, construction,
14 and improvement of facilities and equipment for use, by
15 operation, or lease, or otherwise, in mass transportation serv-
16 ice in urbanized areas and in coordinating such service with
17 highway and other transportation in such areas. Eligible fa-
18 cilities and equipment may include land (but not public high-
19 ways), buses, and other rolling stock, and other real and per-
20 sonal property needed for an efficient and coordinated mass
21 transportation system. No grant shall be provided under this
22 section unless the Secretary determines that the applicant has
23 or will have—

24 “(1) the legal, financial, and technical capacity to
25 carry out the proposed project; and

1 “(2) satisfactory continuing control, through opera-
2 tion or lease or otherwise, over the use of the facilities
3 and equipment.

4 Any Governor or local public body applying for assistance
5 under this section for a project located wholly or partly in a
6 State in which there is statewide comprehensive transporta-
7 tion planning shall furnish concurrently with its submission
8 to the Secretary, a copy of its application to the Governor
9 of each State affected. If within thirty days thereafter, the
10 Governor of an affected State submits comments to the Sec-
11 retary, the Secretary must consider the comments before
12 taking final action on the application.

13 **“§ 502. Public hearings**

14 “Any application for a grant under this chapter to
15 finance the acquisition, construction, or improvement of
16 facilities or equipment which will substantially affect a com-
17 munity or its mass transportation service shall include a
18 certification that the applicant—

19 “(a) has afforded an adequate opportunity for pub-
20 lic hearings pursuant to adequate prior notice, and has
21 held such hearings, unless no one with a significant
22 economic, social, or environmental interest in the matter
23 requests a hearing;

24 “(b) has considered the economic and social effects
25 of the project and its impact on the environment, includ-

1 ing the requirements of the Clean Air Act, as amended,
2 and the Federal Water Pollution Control Act; and

3 “(c) has found that the project is consistent with
4 official plans for the comprehensive development of the
5 urbanized area.

6 Notice of any hearings under this subsection shall include
7 a concise statement of the proposed project, and shall be
8 published in a newspaper of general circulation in the geo-
9 graphic area to be served. If hearings have been held,
10 upon the request of the Secretary, a copy of the transcript
11 of the hearings shall be submitted with the application.

12 **“§ 503. Requirements of capital grant program**

13 “Federal financial assistance shall not be provided pur-
14 suant to section 501 unless the Secretary determines that
15 the facilities and equipment for which the assistance is sought
16 are needed for carrying out a program, meeting criteria
17 established by him, for a unified or officially coordinated
18 urbanized area transportation system as a part of the com-
19 prehensively planned development of the urbanized area,
20 and are necessary for the sound, economic, and desirable
21 development of such area. Such program shall encourage to
22 the maximum extent feasible the participation of private
23 enterprise. Where facilities and equipment are to be acquired
24 which are already being used in mass transportation service
25 in the urbanized area, the program must provide that they

1 shall be so improved (through modernization, extension,
2 addition, or otherwise) that they will better serve the
3 transportation needs of the area.

4 **“§ 504. Federal share**

5 “The Secretary, on the basis of engineering studies,
6 studies of economic feasibility, and data showing the nature
7 and extent of expected utilization of the facilities and equip-
8 ment, shall estimate what portion of the cost of a project
9 to be assisted under section 501 cannot be reasonably fi-
10 nanced from revenues—which portion shall hereinafter be
11 called net project cost. The Federal grant for any such
12 project to be assisted under section 501 shall be in an
13 amount not to exceed 80 per centum of the net project cost.
14 The remainder of the net project cost shall be provided,
15 in cash, from sources other than Federal funds. Any public
16 or private transit system funds so provided shall be solely
17 from undistributed cash surpluses, replacement or depre-
18 ciation funds or reserves available in cash, or new capital.

19 **“§ 505. Investment standards**

20 “The Secretary may issue regulations establishing in-
21 vestment standards for the grant-in-aid program under this
22 chapter.

23 **“§ 506. General provisions**

24 “(a) In the performance of, and with respect to, the
25 functions, powers, and duties vested in him by this chapter,

1 the Secretary shall (in addition to any authority otherwise
2 vested in him) have the functions, powers, and duties set
3 forth in section 402, except subsections (c) (2) and (f),
4 of the Housing Act of 1950. Funds obtained or held by the
5 Secretary in connection with the performance of his functions
6 under this chapter shall be available for the administrative
7 expenses of the Secretary in connection with the performance
8 of such functions.

9 “(b) All contracts for construction, reconstruction, or
10 improvement of facilities and equipment in furtherance of
11 the purposes for which a grant is made under this chapter,
12 entered into by applicants under other than competitive
13 bidding procedures as defined by the Secretary, shall provide
14 that the Secretary and the Comptroller General of the United
15 States, or any of their duly authorized representatives, shall,
16 for the purpose of audit and examination, have access to any
17 books, documents, papers, and records of the contracting
18 parties that are pertinent to the operations or activities under
19 such contracts.

20 “§ 507. Definitions

21 “(a) As used in this chapter—

22 “(1) the term ‘Governor’ includes the Governor,
23 or his designate, or any one of the several States, of
24 Puerto Rico, and of the possessions of the United States,
25 and the Mayor of the District of Columbia; and

1 “(2) the term ‘local public bodies’ means munici-
2 palities and other political subdivisions of States; public
3 agencies and instrumentalities of one or more States;
4 municipalities, and political subdivisions of States; and
5 public corporations, boards, and commissions established
6 under the laws of any State.

7 **“§ 508. Labor standards**

8 “(a) The Secretary shall take such action as may be
9 necessary to insure that all laborers and mechanics employed
10 by contractors or subcontractors in the performance of con-
11 struction work financed with the assistance of grants under
12 this chapter shall be paid wages at rates not less than those
13 prevailing on similar construction in the locality as deter-
14 mined by the Secretary of Labor in accordance with the
15 Davis-Bacon Act, as amended. The Secretary shall not ap-
16 prove any such grant under this chapter without first obtain-
17 ing adequate assurance that required labor standards will be
18 maintained upon the construction work.

19 “(b) The Secretary of Labor shall have, with respect to
20 the labor standards specified in subsection (a), the author-
21 ity and functions set forth in Reorganization Plan Numbered
22 14 of 1950 (15 F.R. 3176; 64 Stat. 1267; 5 U.S.C. 133z-
23 15), and section 2 of the Act of June 13, 1934, as amended
24 (48 Stat. 948; 40 U.S.C. 276c).

1 “(c) It shall be a condition of any assistance under
2 section 501 of this title that fair and equitable arrangements
3 are made, as determined by the Secretary of Labor, to pro-
4 tect the interests of employees affected by such assistance.
5 Such protective arrangements shall include, without being
6 limited to, such provisions as may be necessary for (1) the
7 preservation of rights, privileges, and benefits (including
8 continuation of pension rights and benefits) under existing
9 collective-bargaining agreements or otherwise; (2) the con-
10 tinuation of collective-bargaining rights; (3) the protection
11 of individual employees against a worsening of their posi-
12 tions with respect to their employment; (4) assurances of
13 employment to employees of acquired mass transportation
14 systems and priority of reemployment of employees termi-
15 nated or laid off; and (5) paid training or retraining pro-
16 grams. Such arrangements shall include provisions protect-
17 ing individual employees against a worsening of their posi-
18 tions with respect to their employment which shall in no
19 event provide benefits less than those established pursuant
20 to section 5 (a) of the Act of February 4, 1887 (24 Stat.
21 379), as amended. The contract for the granting of any
22 such assistance shall specify the terms and conditions of the
23 protective arrangements.”.

- 1 (b) The table of contents of title 23, United States
2 Code, is amended by adding the following at the end thereof:

“CHAPTER 5—THE URBAN MASS TRANSPORTATION CAPITAL GRANT PROGRAM

“Sec. 501. Federal financial assistance.

“Sec. 502. Public hearings.

“Sec. 503. Requirements of capital grant program.

“Sec. 504. Federal share.

“Sec. 505. Investment standards.

“Sec. 506. General provisions.

“Sec. 507. Definitions.

“Sec. 508. Labor standards.”.

Senator BENTSEN. Mr. Secretary, we are very pleased to have you. If you will proceed with your testimony.

STATEMENT OF HON. CLAUDE S. BRINEGAR, SECRETARY, DEPARTMENT OF TRANSPORTATION; ACCOMPANIED BY FRANK C. HERRINGER, ADMINISTRATOR, URBAN MASS TRANSPORTATION ADMINISTRATION, THEODORE C. LUTZ, DEPUTY UNDER SECRETARY, LESTER LAMM, EXECUTIVE DIRECTOR, FEDERAL HIGHWAY ADMINISTRATION, AND RODNEY E. EYSTER, GENERAL COUNSEL

Secretary BRINEGAR. Mr. Chairman, Chairman Randolph, members of the committee, we appreciate very much the chance to appear before this committee this morning. I have with me at the table Mr. Rod Eyster, on my right, our General Counsel; Mr. Frank Herringer, Administrator of the Urban Mass Transportation Administration; on my left, Ted Lutz, Deputy Under Secretary; on his left, Mr. Les Lamm, Executive Director of the Federal Highway Administration. He is representing Governor Tiemann who had a longstanding commitment that took him out of town today.

Mr. Chairman and members of the committee, we very much appreciate this opportunity to discuss with you the administration's proposed Unified Transportation Assistance Act of 1974, which we refer to as UTAP.

Following these comments I will offer a broad overview of the Department's urban planning process. At the start I wish to say that we are pleased by the interest of the committee in our legislative proposal, both through its action in holding this initial hearing on the bill and also by scheduling regional hearings throughout the country.

Unified Transportation Assistance Act has its origin in the important new section of the Federal Aid Highway Act of 1973 that permitted flexible uses of the urban system fund as between either highway Capital projects or urban transit capital projects. I should note that this subcommittee and the full committee played such a key role in the passage of that important bill.

This new section, coupled with the existing Urban Mass Transportation Administration's capital grant program, gave the administration a two-pronged approach to helping our cities with their transportation capital needs.

But as we worked to implement and coordinate these two programs, it became increasingly obvious from our studies of the cities and their transportation problems that a still broader approach is needed.

This need has, of course, been intensified by the energy shortage and the continuing pressures on the major cities to meet federal environmental standards.

The major problems that Unified Transportation Assistance Act is designed to help solve are as follows:

1. Our two present urban programs are too dissimilar, short-term, and inflexible to permit the cities to make really good, coordinated, long-term transportation plans.

2. Our really large urban areas need greater Federal financial commitments for transportation uses than are presently available through the existing two programs.

3. Some of our urban areas clearly need the flexibility to use available Federal funds for either capital or as a supplement to operating costs. By opening up the range of uses, as Unified Transportation Assistance Act does, we are confident we will see better local planning, better local resource usage, and better local public transportation.

4. Many of our rural and small urban areas are increasingly without any forms of public transportation. Although a rural bus program could offer a low-cost way of helping such areas, we are now severely limited in our abilities to help fund the capital and operating costs of such systems.

The Unified Transportation Assistance Act was designed to deal fairly and properly with the above problems. It provides for a \$19.3 billion program over the next 6 years, \$11.6 billion of which is new money.

This is obviously a significant Federal commitment to a serious national issue. I should stress, however, that it does not, by any means, meet every city's desires for transportation money. We do not believe it is possible nor fair to the Nation's taxpayers to accept such an open-ended obligation.

We have designed Unified Transportation Assistance Act to assist in meeting high priority needs. We believe that the States and local governments are fully capable of providing the additional needed funding.

The key elements of Unified Transportation Assistance Act are shown in the following two tables. Table 1 shows the urban program and table 2 the rural program.

[Tables 1 and 2 follow:]

TABLE 1.—URBANIZED AREA PROGRAM

[Contract authority in millions of dollars]

Fiscal year:	Urbanized area highway programs	Transit optional use ¹	Total formula alloca- cation	UMTA capital grant funds	Total
1975.....	1,100	700	1,800	700	2,500
1976.....	1,100	800	1,900	700	2,600
1977.....	1,100	900	2,000	700	2,700
1978.....	(²)	(²)	2,000	700	2,700
1979.....	(²)	(²)	2,000	700	2,700
1980.....	(²)	(²)	2,000	700	2,700

¹ Funds may be used for transit capital improvements, operating assistance, and transit-related highway projects.

² These programs are merged in 1978 and funded from the general fund.

The major program features are as follows:

1. Highway Trust Fund authorizations can continue to be used for urban highway and urban public transit capital investment (as provided by the Federal-Aid Highway Act of 1973.) None of these dollars would be used for operating costs.

2. Apportioned General Fund dollars for fiscal year 1975-77 can be used for any urban public transportation purpose, including transit operating assistance.

3. \$700 million of the General Fund authorizations for each fiscal year (1975-1980) will be reserved for direct urban mass transit capital grants. All other funds will be apportioned by formula.

4. Apportioned dollars in fiscal year 1978-1980 can be used for urban highway and public transit capital and transit operating assistance (up to 50 percent of total).

5. Local sharing will be on a 20/80 percent basis, as is current UMTA policy.

TABLE 2.—SMALL URBAN AND RURAL PROGRAM

[Contract authority in millions of dollars]

	1975	1976	1977
A. Basic rural highway program (primary/secondary systems).....	1,100	1,100	1,100
B. Rural highway public transportation demonstration program.....	10	20	45

Note: This covers 3 yr. It adds a 3d yr to the present 2 authorizations, 1977 and it adds an additional \$45,000,000 for the demonstration program.

The major program features are as follows:

1. It provides \$1.1 billion in new authorizations for rural highways for fiscal year 1977.

2. It permits rural highway funds to be used for bus purchases (effective 1975).

3. It adds \$45 million in new authorizations for the rural highway public transportation demonstration program and permits these funds to be used for operating subsidies (effective 1975).

4. It changes the State/Federal matching requirement to 20/80 (effective 1975).

Before going to the details of the bill it is perhaps worth stressing that the Department will later submit legislation setting forth our small urban and rural transportation plans for the 1978-80 period, and I urge you not to consider the emphasis in UTAP on urbanized area programs as a decision to deemphasize our programs for other areas.

Let me now turn to the UTAP bill itself. The bill is organized into three titles.

Title I contains amendments which carry the urban and rural highway programs through 1977. Among other things, it authorizes funds out of the Highway Trust Fund for the several Federal-aid highway programs for these years and increases the Federal share for non-interstate projects from 70 percent to 80 percent.

Title II modifies the Urban Mass Transportation program between 1975 and 1977. It adds \$1.4 billion to the funds currently available for public transportation projects, and it establishes a formula grant program for the payment of operation expenses, as well as capital investment.

Title III, which becomes effective in fiscal year 1978, merges the UMTA formula grant program and the urban highway program into the unified transportation assistance program.

The UTAP bill would strengthen the transit systems by providing additional capital assistance and authorizing payments to provide

operating funds for public transit systems where such payments will result in service improvements.

The amount of funds for operating expenses will be subject to a "maintenance of effort" limitation and, after 1977, to a 50 percent limit on the amount of each Governor's apportionment which can be spent statewide for operating expenses.

One of the more difficult issues which we addressed in developing the UTAP proposal was selection of the appropriate distribution formula. We have proposed that urbanized area funds under the bill be distributed to the Governors on the basis of their States' population in urbanized areas.

As I have stated previously, we are not entirely satisfied with an urbanized area population formula, and would be pleased to work with the committee in developing other reasonable approaches.

I might point out that we have examined other formulas, such as those based on ridership and transit vehicle miles. Some contend that these factors are more indicative of transit needs. However, we are concerned that an unintended effect may be to place a disproportionate share of the funds in just a few areas and, therefore, deny other cities needed help.

In our view, transit funds should go to both groups of cities, that is, those which already have extensive transit systems and those which need to expand their transit systems. Thus, while we recognize that a population-based formula will not give some urban areas the amount of funds they desire, it does have the benefit of equitably helping all urban areas over 50,000.

Our actions in working out the formula question with this Committee and other interested Members of the Congress will be guided by President Nixon's statement as he transmitted UTAP on February 13:

We are aware of the concerns voiced by some that our proposed formula should be altered to meet the unique problems of some of our largest cities. We intend to work closely with the Congress, elected officials and others, in examining alternative formulas.

We would appreciate the opportunity to file additional material with the committee on the formula question.

Senator BENTSEN. That will be fine, Mr. Secretary.

[The information referred to follows:]

OFFICE OF THE SECRETARY OF TRANSPORTATION,
Washington, D.C., May 9, 1974.

HON. JENNINGS RANDOLPH,
Chairman, Committee on Public Works, U.S. Senate,
Washington, D.C.

DEAR MR. CHAIRMAN: Enclosed is a proposed revision to our proposed Unified Transportation Assistance Act of 1974. It is intended to reestablish the minimum apportionment for the Federal-aid urban system. The minimum would be set at one-half of one percent prior to fiscal year 1978 when the authorization is \$800 million per year, and then be reduced to one-quarter of one percent beginning in fiscal year 1978, when the annual authorization is increased to \$2 billion. The amendment also contains a provision permitting a State that receives an apportionment which is not in excess of the minimum to use any portion of those funds on other Federal-aid systems.

The Office of Management and Budget has advised that, from the standpoint of the Administration's program, there is no objection to the submission of the enclosed amendments.

Sincerely,

RODNEY E. EYSTER.

Enclosure.

UTAP AMENDMENTS

Section 103(e) is amended to read as follows:

"(e) Paragraph (6) of section 104(b), title 23, United States Code, is amended (1) by substituting the term "urbanized areas" for the term "urban areas" wherever that term appears in the first sentence, and (2) by adding the following at the end thereof:

"Notwithstanding the provisions of subsection (c) of this section, a State whose apportionment under this paragraph does not exceed the minimum apportionment provided by the previous sentence may transfer any portion of that amount to an apportionment made under paragraph 1, 2, or 3 of this subsection. However, any such funds allocated to any urbanized area of 400,000 population or more under section 150 of this title may not be so transferred without the approval of the local officials of such urbanized area."

Section 306 is amended by inserting the following as a new subsection (b) and relettering the subsequent subsections accordingly:

"(b) Paragraph (6) of section 104(b), title 23, United States Code, is amended by substituting the term 'one-quarter' for the term 'one-half' in the second sentence."

Secretary BRINEGAR. Our proposal, by apportioning urban system funds based on the population in areas of 50,000 or more, is directed at those cities with major transportation problems.

Some will argue that changing the highway formulas and programs to reflect an urban/rural break point at 50,000 population is unfair to rural and small urban areas. We believe that given the different planning requirements and the relative needs of urbanized, small urban, and rural areas, the 50,000 break point is reasonable.

Another important feature of the unified transportation assistance program is its creation of a unified transportation program for urbanized areas. This is accomplished by establishing a transit formula grant program for urbanized areas in 1975 modeled after our urban highway program, which will operate concurrently with it through 1977.

Beginning in fiscal year 1978, the transit formula program will merge with the urban system and urban extension programs at a combined authorization level of \$2 billion per year.

By establishing a unified delivery system, a unified formula, and unified project procedures for these programs, we will complete the work initiated by the Federal-Aid Highway Act of 1973 toward providing urbanized areas with flexibility in their transportation investment decisions.

There are two aspects of the bill regarding intergovernmental relations that I would like to mention.

Beginning in 1978, the bill vests the Governor, instead of the State highway department, with the allocated funds. We think that giving allocated funds to the Governor will help avoid the possibility of unbalanced competition for funds at the State and local levels between public transportation and highway interests.

Also, the bill requires that certain transportation project sums be earmarked for use in urbanized areas of 400,000 or more population. We have proposed the 400,000 level because the 57 areas of this size are likely to have a level of need that requires a continuing flow of funds.

Also, earmarking for more areas would make it difficult to accumulate enough money for large projects in certain parts of the State.

Next, the bill continues the Urban Mass Transportation Administration discretionary grant program. Funds under this program will be available only for mass transportation capital projects.

Between 1975 and 1977, this program will be funded from authorizations contained in our proposed title I of the Urban Mass Transportation Administration Act; subsequently, we propose the transfer of the statutory provisions governing it into a new chapter 5 of title 23.

Maintaining a capital discretionary program will allow us to direct capital to those larger projects in need of more funds that would be available under the formula program.

The small urban and rural transportation program is another important element of the unified transportation assistance program. Our bill would extend the 2-year rural highway public transportation demonstration program authorized by the Federal-Aid Highway Act of 1973 for an additional year, authorize an additional \$45 million for it, and expand its coverage to include small urban areas (5,000-50,000 population).

The bill also adds the payment of operating expenses as an eligible demonstration program expenditure. To further strengthen rural and small urban public transportation systems, the bill makes primary and secondary system funds available for the purchase of buses in these areas.

Several other provisions in the bill are worth mentioning. We have proposed modification of the statutory provisions regarding transportation for the elderly and handicapped.

Section 108 of the bill would direct the Secretary to require that any public transportation rolling stock or passenger loading facility improved or constructed after June 30, 1974, with urban mass transportation or Federal-aid highway funds, be designed with practical and reasonable features which allow their utilization by elderly and handicapped persons.

This section further provides that a recipient of public transportation funds may satisfy this requirement by providing alternative transportation service sufficient to assure that the elderly and handicapped have transportation service available which meets standards to be promulgated by the Secretary.

We believe this explicit statutory requirement will help us to meet the congressional intent of mobility for the elderly and handicapped set forth in current statutes, while providing greater flexibility to local officials as to the best means for meeting these goals in light of local situations.

Moreover, its applicability to public transportation projects financed with both Urban Mass Transportation Administration and highway funds would establish parity between the two programs.

On a smaller point, through a drafting error, our bill inadvertently proposes repeal of the Urban Mass Transportation Administration Act provision authorizing grants to private nonprofit corporations and associations to assist them in providing transportation services for the elderly and handicapped where regular public transportation services are not available, sufficient, or appropriate.

We did not intend to delete this authority, and I ask that the committee consider as part of the Department's bill the corrected language, which, along with other minor technical modifications, we will shortly submit to the committee.

Senator BENTSEN. It will be done.

[The information to be furnished appears on p. 76.]

Secretary BRINEGAR. As part of our efforts to reduce the amount of Federal review of highway and public transportation projects planned and carried out by the States, we have proposed that, beginning in fiscal year 1978, the certification acceptance procedures permitted by section 117 of title 23 be expanded to cover the National Environmental Policy Act and section 4(f) of the Department of Transportation Act for all but Interstate projects.

Under section 307 of our bill, a Governor would certify to the Secretary that his State has enacted and has an agency suitably equipped to carry out State laws at least equivalent to the National Environmental Policy Act and section 4(f).

The Secretary would be authorized to accept this certification if he found that the above requirements had been met. Before deciding whether to accept a Governor's certification regarding the National Environmental Policy Act, the Secretary would consult with the Council on Environmental Quality, which has the primary responsibility for the act.

If certified, the Governor would be subject to the same judicial remedies and the Federal court jurisdiction as the Secretary otherwise would be.

The bill also modifies our planning programs in a number of respects, following the advances made in the 1973 Highway Act. A significant achievement in that legislation is that urban planning funds are "passed through" directly to metropolitan planning organizations responsible for urban transportation planning in areas of 50,000 or more.

In recent months, we have taken actions to encourage the designation of a single planning agency in all such urbanized areas for all modes of transportation.

The unified transportation assistance program bill moves further in this direction by proposing statutory changes, which, for the period 1975-77, would establish an urban planning program for the Urban Mass Transportation Administration program similar to the recently enacted one-half percent urban highway planning program.

In addition, section 205 would establish a formula distribution program under the Urban Mass Transportation Administration Act and provide for the pass-through of transit planning funds to local planning agencies. This proposal logically leads to the merger of the separate highway planning and transit planning programs in the 1978-

80 period. Thus, our legislation strongly endorses the planning approach advanced in the 1973 Highway Act.

Beginning in 1978, with adequate funding provided for urban planning, we have redefined the uses of the traditional 1½ percent planning funds to focus them more directly on statewide surface transportation problems. Taken together, we believe that the proposals contained in this bill will materially improve transportation planning at the State and local levels.

Now, I would like to turn to the urban transportation planning process required by section 134 of title 23. Since the enactment of the Federal-Aid Highway Act of 1962, a "comprehensive, continuing and cooperative" transportation planning process (known as the 3C Process) has been required for Federal-aid highway projects in urbanized areas of 50,000 population or more.

The establishment of a planning requirement as early as 1962 represented great foresight on the part of the Congress, and, as a result, on urban transportation planning capability has been established that is recognized as one of the Nation's more technically competent planning processes.

This planning process has provided the organizational structure on which other planning programs in some urban areas have been built. These include community development, air and water quality, housing, public transportation, and airport planning programs.

As the result of changing conditions and the enactment of various laws during the 12 years since 1962, the 3C Process has changed significantly in several respects. The term "comprehensive, continuing and cooperative planning process" now requires that new and complex factors be taken into account.

For example, comprehensive transportation planning implies the consideration of an area's broad social, economic and environmental goals and of transportation systems planning to achieve these goals.

Meaningful consideration of these factors is a great challenge for State and metropolitan planners. Changing values, external factors such as economic and energy problems, and the frequent inability of metropolitan areas to reach a consensus on broad goals also have made the planning process more complex.

The development of a "continuing" process is not as difficult, although problems do arise in defining the term. We consider the term to mean plan refinement, or the continuing assessment and modification of the long-range regional transportation plan at the subarea scale so that areawide planning is more relevant to programing and project implementation.

Here too changing urban growth patterns, political issues, and social values are complicating factors. Monitoring traveler behavior and maintaining an adequate data base are essential elements of this aspect of the planning process.

Probably the most significant element of the 3C Process is inter-governmental "cooperation." This is the area where the process has changed the most over the years. During the mid-1960's the respective roles of State highway departments and local governments were relatively clear. The establishment of formal agreements between them was accomplished satisfactorily for virtually every urbanized area.

However, as metropolitan areas have developed a stronger interest in planning, as well as greater abilities, their roles in the planning and decisionmaking process have increased in relative importance. We favor this trend.

Let me now spend a moment describing how the Department has unified at the areawide level the various planning programs called for by the Federal-aid highway legislation, the Urban Mass Transportation Act, and the Airport and Airway Development Act.

In recognition of the interrelationships among highway, public transportation, and air transportation, we instituted in 1971, on a trial basis, the establishment of regional intermodal planning groups (IPG). The objective of these groups is to provide intermodal coordination and to improve the structuring of area planning programs. Central to the objective of IPG is the "unified planning work programs" for urban areas which request Federal funds for transportation planning.

The unified work program is a procedure for State, metropolitan and local agencies charged with the responsibility for transportation planning to agree on the tasks which each will undertake, to unify their efforts by jointly funding common tasks, and, in general, to clarify their respective roles in the planning process.

In March 1973 I approved the unified work program for use on a nationwide basis, and now almost every urbanized area either is planning under such a program or is developing one for fiscal year 1975.

This program has allowed us to require, as a pre-condition to funding a planning program, that the respective planning agencies document how they plan to address such issues as the consideration of transportation alternatives, energy conservation, environmental concerns, public involvement, and joint development. We believe that this approach is an important step forward.

Of primary importance to any discussion on urban transportation planning are those provisions in the Federal-Aid Highway Act of 1973 which are designed to strengthen the planning process. One of the important provisions of the 1973 act is section 112 (codified as section 104(f) of title 23) which requires States to designate metropolitan transportation planning organizations to receive an earmarked amount of transportation planning funds.

As I mentioned earlier, we have encouraged that the Governors, in designating an urban planning agency responsible for section 134 planning, designate an agency which will be responsible for all urban transportation planning funded by DOT. This designation process is essentially complete, and the planning funds are now available to most metropolitan transportation planning organizations.

As part of our implementation of the 1973 act, we are establishing a single policy on urban transportation planning for both FHWA and UMTA programs. This policy will emphasize the development of multimodal plans and short-range improvement programs by the local officials of the area and require concurrence by the State. We are limiting Federal aid under the FHWA and UMTA urban programs to projects which are a part of plans and programs approved by local and State officials.

In summary, we believe that a sound approach to transportation planning and implementation has been structured under existing law, and we are committed to making it work effectively. Our UTAP proposal, as I have indicated, builds upon this approach.

This concludes my prepared testimony, Mr. Chairman. My colleagues and I now will be happy to answer any questions you or other committee members may have.

Senator BENTSEN. Thank you very much, Mr. Secretary. Because of the interest of a number of members in asking questions concerning your testimony we will limit the time to 5 minutes for each of them, if that is agreeable to members of the committee. If someone has a clock around here they can start running time on me.

Mr. LUTZ. I have one.

Senator BENTSEN. Mr. Secretary, on these UTAP proposals, proposals of yours, many of those provisions and many of the major provisions really don't go into effect on this 6-year program until 1978. Do you think it is imperative that we act on those provisions this year or that we could go ahead and cover such provisions as are applicable before 1978?

I might say I am just remembering the conferences that we had on that last major transportation bill.

Secretary BRINEGAR. I would certainly separate the requirements into near-term and long-term. I would point out that our bill is structured in a way that the dollars start flowing immediately, as the first table shows in the testimony. The stepped up dollars go out promptly.

What we would like to find is a way to enable the cities to realize that these allocated dollars are coming over a reasonable time span so that they can make appropriate plans for those dollars and to determine what they must raise locally.

If it was a matter of simply enabling a city to build and buy one project, I could look upon a single one-time program. But we are trying to put into place a program that will enable our larger cities to think about the urban transportation planning and construction, operation, in the same sense that they thought about some of their highway programs. To us this requires at the very least a 6-year program so that this flow of funds can be counted upon.

I admit that the important thing to many cities is to get more money right away. So there is an obvious short term need, and we think we have tried to strike a balance. I can't give you a precise answer but I would like to see it start immediately and go for 6 years.

Senator BENTSEN. But there are a number of major provisions that really aren't implemented under your proposals until 1978; isn't that correct?

Secretary BRINEGAR. In 1978 the funding process changes and moves into the general fund. The dollar amounts that the cities get doesn't change very much of that time, although they start going up right away and rise slowly year by year. So although the bill is a blending of programs into a unified process by 1978, we surely recognize that immediate help could come from immediate approval of even the first 3 years of it. Yes.

Senator BENTSEN. You are speaking of spreading some \$2 billion amongst the urban areas on a population formula and you are also

talking about reserving \$700 million to the Secretary as a discretionary fund.

Why do you think that large amount is necessary and if we agree to that large amount what kind of a criteria would we be using in trying to allocate that amount of money?

Secretary BRINEGAR. The amount that we are reserving for discretionary grants reflects in part our belief that the very large cities have near-term costs that exceed anything that could be funded under the formula part of the bill. There was an effort to strike a balance between the discretionary fund and allocating a major part of the funds on a uniform basis. We wanted a 6-year program so the cities could look to a longer term receipt of these funds, but some of the really large cities, the cities mostly over 1 million in size, have construction programs that require fairly large sums of money right away to fund the requirements. We tried to make an estimate, admittedly a rough one, of the magnitude of those needs. It is something on the order of say \$4 billion.

This \$700 million a year discretionary program for 6 years is about \$4 billion. This would be in our judgment a fair and equitable Federal involvement to help some of these large construction projects that are starting or are well underway.

Senator BENTSEN. Do you have any parameters, any criteria as to how you would allocate this?

Secretary BRINEGAR. It would be in response to applications where there is an obvious need, and the cities that cannot be funded any other way. An extension of a major subway system for example.

Senator BENTSEN. Is this just subjective judgment?

Secretary BRINEGAR. This is admittedly the objective but it is basically directed at the cities which have extreme density in their cores. We found from studies that, as the cities get bigger the cost of handling these projects gets much bigger. So we are in the process of developing some criteria. We expect to go public with our ideas and seek comments. But we think it is quite appropriate to reserve a sum of this magnitude to meet these problems.

Senator BENTSEN. I think I just received a fast count there.

Senator Burdick?

Senator BURDICK. Thank you for your statement, Mr. Brinegar. According to the North Dakota Highway Commissioner the proposed act deals rather harshly with small States. Here is what he tells me. Under the present act for each of the fiscal years 1975 and 1976 Congress authorized \$3.8 million in urban funds and \$500,000 in urban extensions. The same level of funding for 6 years would be \$25.8 million.

A press release on February 13, 1974, apparently from the Department of Transportation, Washington, stated that North Dakota would receive only \$9.1 million for the same 6-year period.

Secretary BRINEGAR. Senator, certainly the numbers that we published were based on our understanding of how the allocation process would work. I suspect that part of the difficulty here is shifting our concept of the urban areas that are most in need to 50,000 population away from the 5,000 population level; that is, our studies suggest that the cities over the 50,000 are the ones that really have the urban prob-

lems that we are trying to address here. The smaller ones come closer to the rural type problems that we would like to address with another program.

I suspect that this change is partly due to the absence in our bill of the half-of-one-percent minimum that has been in previous bills.

I guess today I would say simply if we see evidence that this is a matter of hardship, unexpected to us, we would certainly reconsider it. I don't have enough facts today to give you a good answer.

Senator BURDICK. If I send you that letter would you analyze it carefully for me?

Secretary BRINEGAR. I certainly will.

Senator BURDICK. It is also my understanding that the administration proposal will not provide urban funds for cities in the 5,000 to 50,000 class outside of the special demonstration program. Is that correct?

Secretary BRINEGAR. That is right.

Senator BURDICK. In North Dakota we have 13 cities having a population between 5,000 and 50,000. None of these would receive any urban funds then?

Secretary BRINEGAR. We would be stepping up, however, the rural program so that we address them in a rural program and try to concentrate the urban program on the cities of 50,000.

Senator BURDICK. The cities at that time aren't rural. They are cities and have many of the same problems that towns with populations in excess of 50,000 do.

Secretary BRINEGAR. As I say, we are perfectly willing to examine the cases, Senator. We are trying to design a program that addresses what we have seen to be the really serious urban transportation problems and thus we are beginning by addressing the cities over 50,000.

Senator BURDICK. Could this mean that in North Dakota there will be no funds available for street improvement or transit in these cities from 5,000 to 50,000 for the fiscal year period beginning July 1, 1974?

Secretary BRINEGAR. That is not true.

Senator BURDICK. What else is available?

Secretary BRINEGAR. We are redesigning the rural program to embrace those cities and putting additional funds into it. I can provide you the allocation results from that program. We have not simply said they don't belong anywhere.

Senator BURDICK. In your statement you have not taken care of them.

Secretary BRINEGAR. No, because today I am talking about the UTAP program. They will be included in the rural highway program.

Senator BURDICK. You understand a State like North Dakota has only one city of 50,000 people.

Secretary BRINEGAR. We understand.

Senator BURDICK. Cities of 35,000 and 40,000 have problems, too, and are very concerned. I would like to have a suggestion of what you are going to do for them as soon as possible.

Secretary BRINEGAR. Mr. Lamm is very close to the rural thing. Do you want to comment?

Mr. LAMM. Senator Burdick, there are about 1,800 or so cities between 5,000 and 50,000 population in the country. Historically, of the

existing Federal aid highway program, including interstate, roughly 7 or 8 percent each year of the total program dollars go into these cities. The UTAP proposal would expand the definition of rural to include the small urban places so that the \$1.1 billion that shows up as eligible for rural and small urban would take up the 7 or 8 percent of the total program that had historically been going into the smaller places.

Senator BURDICK. My time is up, Mr. Brinegar. I will send you this letter, and if you will, give me answers as best you can.

Secretary BRINEGAR. Certainly. It is certainly not our intention to take anything away from the rural areas. We are trying to concentrate this program on the large urban areas.

Senator BURDICK. As it stands right now, you are going to take away the difference of \$9 million and \$25 million. I would like to have something more definite on your rural plans.

Secretary BRINEGAR. I hope not.

Senator BENTSEN. Senator Stafford?

Senator STAFFORD. Thank you, Mr. Chairman.

I must say the Senator from North Dakota and I have a community of interest here—17 urban areas of between 5,000 and 50,000 are in Vermont. Unlike North Dakota, we don't have even one urban area with 50,000 or more people in it, as Mr. Lamm very well knows.

So I, to a considerable degree, join with Senator Burdick as I have in the past on matters affecting rural States.

Mr. Secretary, this bill getting into this area again eliminates urban assistance funds for urban areas of less than 50,000 population. Has the present provision of law allowing the State to designate communities of less than 50,000 population where urban systems funds can be spent proved ineffective, and if it hasn't, wouldn't this shift alter the overall balance between urban and rural funding?

Secretary BRINEGAR. I won't say it has proved ineffective. I think it was our view that, as we looked across the country and the needs of each State, there are obviously some States such as yours that are almost special in their makeup. But in the larger States where we are trying to design a program to deal with the urban needs, we allocate the money to the Governor. If the Governors were trying to deal with the urban areas all the way down to 5,000, it would become a difficult administrative, almost a competitive, problem to deal with.

We are trying to focus on the 50,000 cities and up in the administrative process.

It may be that we must—and I have indicated in my testimony—readdress this question of rural America, so to speak, but I am not sure that I can design this program to do that to everyone's satisfaction.

It really is a matter of trying to set this in place across the whole country and see how it works. I think we have struck a fair balance. If we can see evidence—and one must remember we are out here with all of our data—that it is not working right, sure, we will reconsider. That is about the best I can say today.

Senator STAFFORD. Then the message I get that this program is probably negotiable and Senator Burdick and I may want to confer with our end of the negotiation.

Secretary BRINEGAR. If you would help me get the whole program through, I would be delighted to consult with you.

Senator STAFFORD. That is the reason, Mr. Secretary, that I introduced it in the first place.

Could you comment on what specifically has been accomplished to date under the rural highway public transportation demonstration program and how much of the proposed \$75 million would you anticipate would be spent on operating subsidies in this field?

Secretary BRINEGAR. It is just getting started. Mr. Lamm again is looking at the application.

Mr. LAMM. Senator, the 1973 Highway Act which set up the initial funding for the rural public transportation demonstration program provides for funding to begin in fiscal 1975. Therefore, until the first appropriation comes in our 1975 budget, we cannot do any funding. We have been receiving proposals from individual States for these projects.

I think we have approximately a dozen different proposals right now which we are looking at. Because the funding doesn't start until 1975, we have deferred publishing regulations on this section. We had 99 new elements in the 1973 Highway Act. We have concentrated on the ones which began immediately. I think you can look for the regulations to come out within a month or so at the very outside, and we would be hopeful of getting underway with some of these proposals immediately upon receiving the 1975 budget.

As far as the amount of the \$75 million which might go into operating subsidies, I couldn't answer that. It appears that, from the initial projects we are looking at, maybe in the vicinity of 40 to 50 percent of the total project cost is tied up in operating subsidies.

Under the present legislation, there is a question as to whether we can even consider using the Federal funding for operating subsidies. We haven't answered that question yet; that will come out in the regulations. But the new proposal would definitely make funds available for operating subsidies in this area.

Senator STAFFORD. Mr. Secretary, as I read this bill, the UTAP program would be financed out of general revenue. Does that mean that the administration intends to oppose any extension of the trust fund or does it mean that you have not made that decision yet and that general fund support is a way of keeping the administration's options open?

Secretary BRINEGAR. Your last one is a fair statement, sir. We particularly have made a decision that we think the urban transportation, which is really of a general benefit to so much of the Nation, can properly come out of the general fund. Other than that, we would reserve comment on the rest of the highway trust fund. Let me emphasize that we have a high priority commitment to finish the interstate highway system as promptly as possible. I can say that comes first and we will do that.

Senator STAFFORD. Thank you very much.

Thank you, Mr. Chairman.

Senator BENTSEN. Senator Buckley?

Senator BUCKLEY. Thank you, Mr. Chairman.

Mr. Secretary, as a representative of the State having the third largest rural population I would like to ask a question about the rural and small urban programs for the 1978-80 period for which you intend to introduce separate legislation.

Can you tell us at this time whether your proposal will provide any flexibility or coordination between urban and rural programs so that the States will be able to plan comprehensively for transportation throughout the State or will your proposal in effect create a dichotomy between urban and rural planning?

Secretary BRINEGAR. We certainly do not do that deliberately. We are trying to focus on the level of planning that we believe is needed as we address the problems because I think they are fairly distinct.

As cities get bigger, their problems become complex and more expensive basically. We are addressing the urban program as the high priority.

It is our desire to have the rural program phase neatly into the urban program, but be targeted to the rural needs.

This rural program, I suspect, will rely more on the Governors and their concept of the States' overall planning responsibility.

We are learning a lot about the rural transportation issues. They have been kind of neglected, as the chairman said. We agree. I think that the early experiences from the demonstration program is exactly what we need to design a 1978-80 rural program.

Senator BUCKLEY. But the general thrust will be to encourage an integration?

Secretary BRINEGAR. Very much so.

Senator BUCKLEY. In recent hearings before the subcommittee in New York City, witnesses from three States testified that the current division in DOT of program responsibility along different modal administration has hampered the orderly planning and the processing of programs and project approval.

Would your near-term proposals in UTAP alleviate this problem? Does the 1978-80 program address this issue?

Secretary BRINEGAR. We think it does very much. I agree in my year, a little bit more in the Department, that we have been too divided in some of our approaches to solving the Nation's transportation problems.

We named UTAP, the first word being "unified," with the idea of bringing together this planning process, to force it under the same rule, virtually.

These are transitional steps so that in 1978 highways and mass transit are exactly the same in terms of the urban planning process. I think that in recognition of this, I mentioned in my testimony we have established the requirement for the intermodal planning groups with the unified work plans. In fact, Mr. Herringer has a team working on this.

I think even without this you will see better performance, but with UTAP much better performance. That is certainly our objective.

Senator BUCKLEY. Of course the "U" in UTAP is focused on the urban areas.

Secretary BRINEGAR. It is focused on unified.

Senator BUCKLEY. I would like to address now the question of operating subsidies. In the past, of course, the administration has opposed any operating subsidies for mass transit.

Thus, the support for operating subsidies in the present bill represents a major policy change.

Do you consider the administration's approach of giving metropolitan areas flexibility for either operating subsidies or capital improvements to represent a significant difference from a categorical program, such that the practical effects that were anticipated under separate legislation for operating subsidies would not occur?

Secretary BRINEGAR. We believe that the flexibility that we have offered in this bill is a reasonable extension of our efforts to put in the hands of the urban areas responsibility for implementing their systems and operating them.

We oppose a categorical subsidy program because it would simply become a way of almost subsidizing inefficiency.

In UTAP we have said you have some money, you have got to decide whether you are going to use it for capital, or are you going to use it for operations? It is a tradeoff. We think there will be local discipline. The people on the State and local level, are certainly capable of making prudent decisions under the pressures of allocating scarce resources.

So we did recognize their needs. Some cities do have urgent needs to help operations. Some have needs to build things.

We cannot design a program that would go one place to do one thing and thereto do another by target. We would try to design a program that will offer these tradeoff choices.

We think it avoids the obvious evils of a direct operating subsidy program by putting responsibility and flexibility in the cities.

In many ways it is an extension of the revenue-sharing concept. I find that nearly 20 percent of revenue-sharing funds are going into various kinds of transportation. We are trying to build on that flexibility.

We think it is a reasonable, responsible approach. We put limits on it so that it doesn't dominate the program. But we think it is a reasonable part of the program.

Senator BUCKLEY. Thank you.

Senator BENTSEN. Senator Domenici?

Senator DOMENICI. Thank you, Mr. Chairman.

Mr. Secretary, I am somewhat concerned with reference to this bill because I think that the successful transportation programs in the past and of course they are subject to criticism obviously, but they have been rather goal, g-o-a-l, oriented.

If there is any strength to the trust fund concept, it was that we set aside a package of resources and we very precisely defined what we were trying to do with it.

I understand that you take over as far as transportation in our big cities a rather confused state of affairs and I think I appreciate the detailed effort you have gone to in your statement and the bill directed at planning and coordinating.

I think that certainly is a preliminary ingredient to any mass transit goal for the major cities of America.

It seems to me that what is lacking and perhaps it is because you can't yet define it, but it is sort of a national goal for the Congress with reference to mass transit and the emphasis on it in the major cities.

We can speak of subsidies. We can speak of flexibility. But you know with flexibility and all the needs comes a diffuseness that could

perhaps put us 8 or 9 years down the line and we have spent the money under this bill and yet not have reached any alternative mode of transportation to the highways and streets.

Do you see in the evolution of planning and coordinating some kind of goal coming out where the major cities of America could say our goal is and alternate, viable mass transit system and here it is, this is how we will do it?

I know this is extremely limited in scope and we are in an evolutionary environment. We are in a crisis environment, but I am very concerned that as we move in the direction you are suggesting that we could diffuse all of the funding.

We want to give the governors authority to choose alternatives and move money from roads into mass transit, but I don't see any goal other than a mechanism type of goal which is giving back to urban areas authority to plan and think and coordinate.

Do you see a problem involved in what we are really trying to do? I know in my small city we could have a subsidy for buses, for instance, and we could still be here today with buses inoperative.

We could have thought we were providing an alternative form of transportation whereas some other very precise, alternate system for that community or a large-sized one might have gotten us much further down the line.

Could you speak to that, please?

Secretary BRINEGAR. I will try. There are a few distinctions that I think are important. First, a highway can be specified as a goal, that is, you connect two cities with a six-lane highway. That is a fairly distinct piece of infrastructure and we can decide to do it.

A city is a totally different animal. It is a multidimensional problem. It is a problem that escalates as the city escalates in size.

I have in front of me a list of 250 urbanized areas over 50,000. When you look at them and study, as we have, their transportation problems, you realize that when you get below about the first 25, the problems become entirely different in terms of the likely solutions.

The problems are almost always in the cities first a problem of what is the city trying to do with its own urban growth patterns. It is not transportation problem. It is an urban growth problem.

Transportation is a linking function. It links together other matters, where the jobs are, where the houses are, what have you.

So that the first thing we must see the cities achieve is a responsible total planning process. Not just "let's design a transit system," if you really want to solve it. I think our program is, along with a lot of other programs, pushing the cities in this direction. That is a major objective.

Senator DOMENICI. We are going to run out of time. Let me be a little more specific. Wouldn't it be appropriate to charge the major cities of America, define what we are talking about, as cities and charge them with coming up with an alternate mass transit plan, at least inventory it across the Nation, as far as the suggested proposals and have that before us so that we would understand what could be expected of us if we are going to give the thrust toward it equal to that which we gave to the highway?

Secretary BRINEGAR. We are doing that, Senator. I can provide some material to you. But we basically have concluded, and I think

this will be supported with our criteria when we come out with it, that only in the 10 or so really large cities are fixed guideway systems, as we now know the technology, the right way to address the mass transit problem.

In most of the other cities it is going to be good traffic planning, good bus system, bus lanes, carpools, parking, traffic control, peak hour stretchouts, using the infrastructure that is largely in place.

I think that repeatedly, studies come out with about that kind of conclusion, that we need to manage the traffic systems we have in most of the cities and keep people from necessarily always driving themselves to work.

That is the thrust of where we see we are going. As we size the dollars in our program to those needs, we come out pretty well in all but the few very large cities.

Senator DOMENICI. Thank you, Mr. Chairman.

Senator BENTSEN. Thank you, Senator.

Chairman Randolph.

Senator RANDOLPH. Thank you, Mr. Chairman.

You have stated, Secretary Brinegar, that you endorse the completion of the Interstate System. Is that correct?

Secretary BRINEGAR. I certainly do. As rapidly as we can.

Senator RANDOLPH. Would you address yourself now as to how that financing will take place in the future?

Secretary BRINEGAR. We have been following the finances of the Highway Trust Fund rather carefully. The receipts are a little lower than we thought they would be at this point because of the gasoline cutbacks.

We estimate a cash balance on June 30 of about \$7 billion and looking to receipts versus likely outlays. Until 1977 we estimate we will have a cash balance of between \$11 and \$11½ billion.

Obligations to complete the outstanding program at that point could be \$2 to \$3 billion more than the funds that are then on hand.

This does not appear to us to be a serious financing question. If necessary, it could be finished out of the General Fund, or it could be finished from an extension of the tax rate for a time.

These are issues we can address as we get a little closer, we think. Certainly we feel that we have adequate resources to finish the System about as rapidly as it could be finished.

There will be parts as we get near the end with various environmental problems or other problems that may take a long time to finish. Some may never be finished. We may need some kind of a special program to deal with finishing it.

But we feel that by 1980 we will have a great deal of the System in operation or in the final stages.

Les, do you want to speak about that? We were talking this morning about the mileage.

Mr. LAMM. Yes, sir.

Senator Randolph, we can estimate that as of 1980 there will be in the vicinity of 39,000 miles of the Interstate System open to traffic, and work underway on another 3,000 miles. I would say our current estimate is maybe 500 miles that by 1980 we will determine will not eventually be completed.

As the Secretary mentioned, we are dealing with a relatively small problem of additional financing. As some of the interstate transfers that are in the works now come to fruition, money will be freed up from the trust fund which is now allocated to completing the interstate and which would then be available to offset that balance.

As of today we can't tell you that the available dollars within the trust fund will match totally the amount required to complete the Interstate System, but it will come very close.

Senator RANDOLPH. I appreciate the comment which has been given to us. I have a question that I think is very important for you to answer for the subcommittee. We have a cash balance.

How much of that money is there because it has been withheld?

Secretary BRINEGAR. It is hard for me to give you the exact amount. There is obviously an amount that has been authorized and not obligated. It is more than a cash balance, I am told. It is about \$8 billion.

We can see this problem coming, yet, as we address the large need of the trust fund to finish the interstate we think we are within striking range of having enough money to finish it.

I think as the energy situation clarifies and and as we move to the end, we will have a much better fix on what it is. But I assure you our commitment to finish the interstate highway system is absolutely high priority. We will certainly do it.

[The following information was supplied subsequent to the hearing:]

We would like to clarify for the record our response to Senator Randolph's question at page 55 of the hearing transcript: "How much of that money [the Highway Trust Fund balance] is a cash balance because it has been withheld?" The answer for the record should be: "\$3.4 billion is being held in reserve for Federal-aid highway programs for fiscal 1974 and prior years; \$6.0 billion in contract authority for fiscal 1975 is also being reserved."

Senator RANDOLPH. Mr. Secretary, I don't want to indicate that you have skirted the question at all. But you are in that area.

Secretary BRINEGAR. I didn't withhold the money myself. I have only tried to look at the program since I started administering it.

As I see it now, we are putting out funds about as fast as the States can take it.

Senator RANDOLPH. I think that is true, the latter statement, at the present time.

Secretary BRINEGAR. That is to me the important issue.

Senator RANDOLPH. Then you will keep current, of course, your continuing look and review because it will be very necessary, will it not?

Secretary BRINEGAR. We certainly will.

Senator RANDOLPH. Mr. Secretary, the Congress has approved very substantial investments in mass transit facilities and equipment.

I know that members of the subcommittee, I presume all of us, have supported this program. I know I have cosponsored the legislation and as of this time we have authorized \$6.1 billion in transit grants. Is that correct?

Secretary BRINEGAR. Yes.

Senator RANDOLPH. That is an action of the Congress. There are those who continually attempt to indicate that the congress has not given attention to mass transit problems.

Do you think the Congress has, by the authorizing of grants of over \$6 billion, indicated its concern with the mass transit problem in this country?

Secretary BRINEGAR. Certainly, and this has been a most important start to addressing a problem that has been, for various reasons, neglected throughout the country. Frank Herringer might like to speak about the things that have been accomplished through this \$6 billion just for a moment. Frank?

Mr. HERRINGER. I would certainly echo the Secretary's comments on the attention that the Congress has given to mass transit through the program.

We have been able to assist in the purchase of 15,000 buses, 2,000 subway cars, and 1,000 commuter cars, plus some 50 miles of extensions and improvements to transit systems.

So I think the accomplishments have been considerable.

Secretary BRINEGAR. I think I will just add that what we are trying to do now is build on what we have started, bring the programs together that have somewhat different operating ground rules and encourage what is to us the still major problem in the city, the responsible local planning.

Our program is designed to do that. I am sure from your comments that you share that objective.

We are not trying to throw a lot of money out. We are trying to design a responsible program to meet the urgent priority needs. I think this is a reasonable and responsible approach to it.

Senator BENTSEN. Mr. Chairman, all of the Senators have had a chance to ask questions. If you would like to proceed, why don't you go ahead?

Senator RANDOLPH. You are very kind. Thank you very much, Mr. Chairman.

Moneys have been withheld in the trust fund. That is correct, is it not?

Secretary BRINEGAR. Yes, sir.

Senator RANDOLPH. We are speaking of a \$6 billion-plus in mass transit grants. Money has been withheld there also, hasn't it?

Secretary BRINEGAR. Not too much. Frank?

Mr. HERRINGER. No, sir. We operate under annual ceilings. That is the \$6.1 billion of course which is contract authority. We agree every year with the Appropriations Committee how much of that \$6 billion will be obligated during the year. But no money has been withheld.

Senator RANDOLPH. I will have to differ with you about it. We have appealed by letter in the past to the President for the release at one particular time of a certain several hundred millions of dollars. I signed such a letter to the President as well as one to the Office of Management and Budget.

I am correct about the fact that there was the withholding of funds. I will place the letters in the record, Mr. Chairman.

Do you have knowledge of that situation?

Secretary BRINEGAR. We will certainly look into it.

Mr. HERRINGER. We will reply for the record.

Senator RANDOLPH. At this point I will not continue it except to say you have withheld money for mass transit, just as money in the highway trust fund has been withheld. I am not attempting to argue a point here. But I think, Mr. Chairman, for the record I will include the letters which were sent to the President and the Office of Management and Budget in reference to this matter pleading with him to release moneys. The first was sent on March 28, 1971, to the Office of Management and Budget and was signed by 28 Senators. On November 21, 1971 another appeal was addressed to the President and was signed by 37 Members of the Senate.

[The letters referred to follow:]

HON. GEORGE P. SHULTZ,
*Director,
 Office of Management and Budget,
 Washington, D.C.*

DEAR MR. SHULTZ: As you know, one of the important achievements of the Ninety-First Congress was the authorization of the Administration's program of expanded aid for urban mass transportation.

In response to the urgent needs of our congested urban and suburban areas, Congress acted to increase federal assistance to mass transit from under \$200 million a year to \$3.1 billion over a five-year period.

As is often the case, authorizing a worthy program such as mass transit is only half the battle. The other, equally important, half is getting the program adequately funded.

In the case of mass transit, the funding phase was marked by a difficult struggle to peg the program at a sufficiently high level. While the House sought to clamp a \$214 million ceiling on mass transit, the Senate supported the Administration's request for more than \$860 million for fiscal 1971.

As late as mid-December of last year, the Administrator of Urban Mass Transit reaffirmed "our intention to conduct (an) \$864,300,000 urban mass transportation program in 1971."

In the end the program was given a funding level of \$600 million. While not all the Administration and the Senate had sought, this still represented a good start for the new program.

Now we are disturbed to learn that the Administration has decided to reduce its own fiscal 1971 program from \$600 million (originally \$864 million) to \$400 million. However, of this latter amount less than \$300 million will go into the crucial capital grants program under the Department of Transportation's present plans.

The capital grants program, the heart of any effort to replace, improve and expand local bus, rail and subway systems, apparently will bear the greatest burden of the Administration's cutback.

At the moment, the Department of Transportation reports a backlog of \$2.2 billion in applications for capital grants. Thus, even if the Administration carried out the mass transit program at the \$600 million level, this would only go part of the way toward meeting requests for assistance.

The Administration's action will have a disheartening effect on communities which have been encouraged by the new program to proceed with mass transit projects.

Mass transit stands at a critical juncture. Without adequate support from the Federal Government, it will surely fail in the vital job which only it can perform.

The Federal Government, by its past actions, has made a commitment to help our urban and suburban areas deal with their serious public transportation problems. We must meet that commitment without qualification or diminution of effort.

We, therefore, strongly urge that the Administration's decision to cut the already funded fiscal 1971 mass transit program by \$200 million be reversed.

With best wishes.

Sincerely,

NOVEMBER 2, 1971.

The PRESIDENT,
The White House,
Washington, D.C.

DEAR MR. PRESIDENT: We urge the speedy allocation of the \$900 million provided by Congress for the urban mass transit program in fiscal 1972.

There is ample justification for committing the full amount of this appropriation.

After years of neglect, the cost of revitalizing and expanding our urban and suburban transportation systems will be substantial.

One striking measure of the cost is the backlog of applications for Federal assistance placed with the Urban Mass Transit Administration. It presently totals \$2.6 billion.

That the states and cities will not be able to undertake the job on their own is beyond question. They understandably must look to the Federal Government as their principal source of financing.

Under the 1970 law, which expanded the mass transit program, it will be possible to provide \$3 billion over a five-year period to help finance mass transit improvement. However, if the program is to meet the need, as well as live up to the expectations it has created, it must be adequately funded.

The Administration request for a \$600 million program level is a step in the right direction. Under this approach, \$510 million would be allocated to capital grants, the heart of any effort to replace, improve and expand local bus, rail and subway systems.

Yet we believe that at least the full \$900 million appropriated by Congress is needed. Under the Congressional figure, the allocation to capital grants will be \$810 million.

The urban Mass Transit Administration advises that it can commit the appropriated amount between now and the end of the present fiscal year next June 30. In addition, it believes a substantial portion of the \$810 million can be put to use quickly on existing construction projects and thereby create jobs in this period of high unemployment.

Mass transit stands at a critical juncture. Without adequate support from the Federal Government it surely will fail in the vital job which only it can perform.

The Federal Government has made a commitment to help the thousands upon thousands of people living in our metropolitan areas deal with their serious transportation problems. We must meet that commitment.

It is essential that the \$900 million be made available promptly.

Senator RANDOLPH. Mr. Secretary, in connection with mass transit and transportation controls that would be required under the Clean Air Act, we run into a situation in reference to the purchase of buses which has been mentioned here today.

What is our present capacity for the manufacture of buses to meet this need and what is the demand that must be met and what is a typical leadtime for meeting the new orders for buses?

Secretary BRINEGAR. I would like Frank Herringer, who has been looking into this matter rather carefully, to address this.

Mr. HERRINGER. Your last question, first, Senator, the typical leadtime now is approximately 6 to 8 months depending on the manufacturer.

We would estimate that the current one-shift capacity of the bus industry in the United States is about 7,000 buses. Of course, if you went to two shifts it would go to 14,000 buses per year and with about an 18-month leadtime that could be expanded to some 20,000 buses a year.

Production over the last 2 or 3 years has been in the neighborhood of 3,000 buses. We expect the 1974 demand to be about 5,000 buses and the 1975 demand to be perhaps 6,000 or 7,000 buses. But we think certainly the demand is going to be within the productive capacity.

Secretary BRINEGAR. One of the positive aspects of our program, by offering a 6-year program of some certainty, the bus manufacturers would be more inclined to add to the capacity because they now could expect a stream of orders that would extend over just a year or two. This is just the kind of assurance that the manufacturers need before they make the investment to go ahead and add.

Senator RANDOLPH. This final comment, Mr. Chairman: We need adequate operating funds. I think that is a major need. There might be disagreement on it from your standpoint, but I don't believe there is. I think the administration proposal recognizes the need for operating assistance; is that correct?

Secretary BRINEGAR. Yes, it does.

Senator RANDOLPH. I would wonder why you continue to oppose Senate 386, which would provide operating assistance on an immediate basis because there is a need now, not in the future? Would you comment on this, sir?

Secretary BRINEGAR. We oppose that bill because we think it went at it wrong. It put me in the position basically of allocating money initially to cities that would help with their transit operations, but it was initially basically just money to go out and say here is what it takes to fulfill the gap in your operating costs.

It put, to me, too much of the pressure on Washington and not enough on the management prerogatives and the management decisions of the local operations.

We think that what is needed is a series of local tradeoffs between capital and operations. We think it is a matter of responsible, large sector planning at the local levels. S. 386 was amended very late by the conference. It was taken out of the package. We think we have a bill that responsibly addresses the whole urban area question. It would be hopefully in place by July 1 so that I think the cities could be met quite quickly if they have that need.

The bill was designed, as amended finally, so that the recipients of this money were not the Governors, were not the mayors in some cases, but were the transit authorities. We think this would destroy our efforts to build prudent coordinated planning between highways and transit by officials at the local level. This is something I think we all endorse. The formula in S. 386 we believe was distorted by excessive concentration on present transit ridership and present transit miles.

It had too much of a tendency to put the money where people are now riding on the transit systems and not enough of the money would have gone to where people want to build the transit systems. We think we have responsibly addressed those issues with a large program. With Congress help we can pass it by July 1.

Certainly our discussions with the cities led us to believe that that is what they would like to see. Consequently we very much favor our proposal.

Senator RANDOLPH. Mr. Secretary, this final comment: I think you may be correct in some of your assessments of the situation, particularly as it affected you in your desire to present the bill which is before us at the present time.

I come in the spirit of working with you and your associates. I am sure the chairman of our subcommittee and the committee as a whole desire to move. When you are rather sanguine about July 1, I am not certain if the chairman would want to comment. But there are those of us who will cooperate in an effort to move this important legislation regardless of the exact detailed provisions that are included.

In the whole your purpose is good and I commend you and your associates who have come and talked with us today. I think it is a positive approach. Now we will have to go into the matters of course with others, as you can understand, and have their viewpoints expressed. But there is, I think, a need for the Congress not to act hastily, but to act as promptly as possible based on the facts that will be given to us. There is certainly no reason for undue delay.

Secretary BRINEGAR. We certainly endorse that, Mr. Chairman. I would like to add just one comment that we should all keep in mind; that whatever we design, builds on coordination of prudent cooperation between the States, the local levels and the Federal Government. That to me is the ultimate answer to good local transportation planning.

We have to make the highways and transit authorities work together. That is the thrust of our approach.

Senator BENTSEN. Thank you very much, Senator Randolph.

I had my attention diverted for a moment while you were making a comment on July 1. Are you referring that you were going to bring before the Congress a substitute for the Williams-Minish bill, something in lieu of that by July 1 or are you referring to the bill we are discussing?

Secretary BRINEGAR. No, sir. This bill that we are discussing. We believe that at least the effective date of the funds could be July 1.

Senator BENTSEN. As you know, Mr. Secretary, the general rule of thumb has been in the Highway Trust Fund on the division of the funds. You had a 50-50 split between the rural and urban areas, exclusive of the interstate. With some of the problems that have developed do you still hold to that view? Do you think that is a proper apportionment or not?

Secretary BRINEGAR. I am told that the definition of the areas that we propose, the 50,000, if we could define urban to be 50,000 and the larger, the 50-50 split is about appropriate, yes.

Senator BENTSEN. In fact you have moved it then, some, haven't you? You have really spread the rural funds over more cities and towns, plus the rural areas?

Secretary BRINEGAR. Yes. We would have a rural and small urban area that would include more cities, yes, or small cities.

Senator BENTSEN. So in effect that is a move in emphasis and concentration of funds to a degree?

Secretary BRINEGAR. But we would add more funds.

Senator BENTSEN. I understand. But we are talking about emphasis.

You recommend in your UTAP proposal that the Federal share of the highway programs be raised from 70 percent to 80 percent. You get into sort of a game with mirrors here. That doesn't necessarily mean that when you have a program in an area that 80 percent of it is going to be funded by the Federal Government, does it?

Secretary BRINEGAR. No, sir.

Senator BENTSEN. There are those that would argue that by going to 80 percent that this could encourage cities to try to fund illogical schemes and would put out circulars saying let's go ahead and build it because the Federal Government is going to be paying for 80 percent of it anyway.

Secretary BRINEGAR. I don't believe the additional 10 points would do that as much as whether or not local and State governments thought they could get a large amount of money by that application. I think if a city would get—

Senator BENTSEN. I don't think the 10 points does it by itself, either, but it is an acceleration and a compounding of that sort of view and a misinterpretation a lot of times by taxpayers, isn't it?

Secretary BRINEGAR. Possibly. Although in bringing these programs together we looked at the UMTA program which is 80 and looked at the cities' needs. We have proposed putting the two programs together under 80 percent, allocating the bulk of the money, recognizing that most cities, at least the larger ones, those that would be thinking big, would have to raise a great deal more money to do the total program than 20 or 30 percent. You take the last big transit system built in this country, the BART System in San Francisco Bay area; 80 percent of that money was raised locally. I don't know what the future relationships are going to be, but certainly the bulk of the money of the big systems will not come from a program like UTAP.

There will be a major and responsible local commitment for these programs. We would like to encourage that.

Senator BENTSEN. What we ought to be emphasizing to these cities when we talk about 70 or raising it to 80 that that by no means means that the Federal Government is going to be paying 70 or 80 percent of that project; is that correct?

Secretary BRINEGAR. That is correct. That is why we would like to shift to an allocation process so the cities know the amount of money that is coming, can plan on it, can discipline their own planning to that reasonable amount of money and fit their financial resources and their concepts together. I think that that is one of the driving reasons that we have conceived the 6-year program.

Senator BENTSEN. In our New York hearings the other day we had some rather pointed criticism of your department not getting out directives or guidelines on last year's legislation; they told us that they had not received one finalized directive to guide the States in implementing any of the more complicated sections of the act such as dealing with mass transit flexibility for interstate transfer. That act was passed last August. You are talking to me about our doing something here by July 1 on new legislation and we don't even have the guidelines out on the last legislation.

Isn't it time that the States had their guidelines?

Secretary BRINEGAR. I was just handed the guideline. Les, do you want to defend the department?

Mr. LAMM. The directive which the Secretary is referring to, Senator Bentsen, is the one which deals with the interstate substitution, the transit substitution, the Cramer-Howard extension and the gen-

eral 1974 and 1975 deadlines. These directives were printed as a draft directive earlier this week.

I might mention that on the whole I don't think we need to accept criticism of the progress we have made. I said earlier that the 1973 Highway Act gave us 99 new things to do. By our count we have completed activity in about 55 of these areas and the others are either cases where no actual action is required, that is, the law speaks for itself, or they are one-time only reports to Congress which have deadlines later in 1974 and 1975.

I think there are only a dozen or so sections for which the States have not seen at least the first version of the directives. I think that is a pretty good record given the complexity of the legislation last year.

Senator BENTSEN. You have no objection if the State of Connecticut filed a rebuttal?

Mr. LAMM. No, sir. None whatsoever.

Secretary BRINEGAR. We have also had very verbal discussion with the agencies as to the directives of our thinking. We were not hiding from them. There was a lot of talk as to how it would actually work, where we had high-priority problems. But we were certainly slower than we would like to have been.

Senator BENTSEN. Let me ask you, Mr. Secretary, a number of the witnesses in New York were concerned with the maintenance of effort provisions on operating subsidies. I would like a little further explanation of what you have in mind by the term maintenance of effort. I for one feel that some subsidies are necessary for the major cities, mass transit, and yet I want some kind of discipline to be sure that we have efficiency in operation and that we don't find ourselves funding inefficient operations.

Secretary BRINEGAR. Mr. Chairman, our objective is precisely as you have stated it. We are proposing an approach that would require them to maintain a level of effort both in funding and in service levels. The exact process is one that I will have to propose as we move further along. We need some flexibility to define what these terms mean.

Most particularly, though, we do not want localities simply to back money out of what they are doing because suddenly now they have free Federal money. The first order would be a requirement to continue a present level of involvement. We can define those terms fairly well.

Mr. Chairman, beyond that, we will have to look at it more carefully, but I certainly don't want to find myself setting up 50 desks to study the exact fare policy, maintenance policy, and the route structure of 50 major transit systems. This is something we cannot do.

So I think the Federal role will have to be more of an overriding overview. That is why we chose this language, maintenance of effort.

Senator BENTSEN. Mr. Secretary, I would like for the record, if you can give us some studies because this was a very major point in the New York hearings, just what influence price has on utilization of mass transit, any direct correlations that you can show in the reduction and usage of mass transit by increases of fare.

I am sure that there are some correlations. I do not know to what degree, but I am also convinced that utilization of mass transit is

perhaps equally dependent, maybe more, on the efficiency of mass transit, the convenience of mass transit, the appearance of mass transit. I rode the New York subway and I experienced some new odors and a form of art that I wasn't particularly impressed with; and felt like I should have been wearing some of those earmuffs that I see the mechanics wear outside of some of the 707's when they are warming up to take off.

Secretary BRINEGAR. We have just published a report called for by the Federal-Aid Highway Act of 1973 that discussed some of these issues. The report questions some of its conclusions because it is basically a study of the last 10 years during which conditions prevailed that may not prevail in the next 10; that is, many cities had an easy opportunity to expand automobile usage, parking lots, freeway extensions, low-cost gasoline and what have you, conditions that will most likely not prevail in the next 10 years. (The report referred to appears on p. 81.)

The relationship of fares to usage in the next decade may be quite different. It is always a question for each government authority as to what are its alternatives? What is the cost of doing a particular alternative? What is the convenience of doing another? How good is the public transportation that is being offered? We are hoping that public transportation through our various programs, and State and local programs, will sharply rise in quality.

The BART system in San Francisco offers a fine ride. You will not see there what you saw in New York or smell what you smelled in New York.

The new systems, and I am sure New York can upgrade theirs, will offer a far better ride, and a more frequent one.

On the other hand, the automobiles are more expensive to operate. They may be usable in some of the urban areas because of parking problems or high fees, lack of adequate gasoline—this whole spectrum of alternatives.

The factors other than fares are extremely important. We will provide you such documentation as we have and indicate some of the problems.

Senator BENTSEN. Senator Stafford?

Senator STAFFORD. Thank you, Mr. Chairman. I have got just one or two final questions.

Mr. Secretary, do you or your colleagues have any figures on how much demand you would anticipate for bus purchases, the primary and secondary highway money under the proposed revision of section 142?

Secretary BRINEGAR. Not very good data. Our guesses are not too much. From applications and discussions, we are expecting that the demonstration money will provide most of the funds for the next 2 or 3 years.

Senator STAFFORD. The administration in the past has opposed operating subsidies for mass transit. The support for operating subsidies of this bill is a major policy change, is it not?

Secretary BRINEGAR. Yes, it is. From the standpoint of a specific program aimed at transit, yes.

Senator STAFFORD. Federal support for operating costs could be about a bottomless pit, but do you consider the structure the way it is in this bill as a choice in the use of funds available also for mass transit or highway capital grants, the result would be to secure better use of funds and would encourage the development of transportation systems?

Secretary BRINEGAR. We think that our approach is a good way of avoiding the bottomless pit, by forcing local planning, local tradeoff decisions in the uses of the money between capital and operations, putting a limit on the capital, having a maintenance of effort requirement, and letting the cities know that this is the proper and the only Federal approach. I don't want to leave the impression that the cities are incapable of making good plans. They are very capable, but they have had some terrible problems. I think our bill is a responsible approach to their problems, and our discussions with the cities, with just a few exceptions, indicate a good reception for this approach. It will work very well.

Senator STAFFORD. Thank you, Mr. Secretary. I think your testimony and that of your colleagues have been very helpful this morning and it is appreciated.

Secretary BRINEGAR. Thank you for your attention.

Senator BENTSEN. Thank you, Mr. Secretary. It has been a contribution. We are appreciative of it.

[Technical revisions to S. 3035 submitted by the Department of Transportation follow:]

OFFICE OF THE SECRETARY OF TRANSPORTATION
Washington, D.C., April 12, 1974.

HON. LLOYD BENTSEN,
Chairman, Subcommittee on Transportation, Committee on Public Works, U.S.
Senate, Washington, D.C.

DEAR MR. CHAIRMAN: As Secretary Brinegar stated during his appearance before the Subcommittee on Transportation on March 12, 1974, the Department would like the enclosed technical revisions to be included in the Committee's consideration of the Unified Transportation Assistance Act of 1974. The references are to the Act, as introduced in the Senate (S. 3035), and to the section-by-section analysis submitted by the Department with the bill on February 13, 1974.

In addition, we would like to clarify for the record our response to Senator Randolph's question at page 55 of the hearing transcript: "How much of that money [the Highway Trust Fund balance] is a cash balance because it has been withheld?" The answer for the record should be: "\$3.4 billion is being held in reserve for Federal-aid highway programs for fiscal 1974 and prior years; \$6.0 billion in contract authority for fiscal 1975 is also being reserved."

Sincerely,

RODNEY E. EYSTER.

Enclosures.

ENCLOSURE A

Availability of Sums Apportioned

Bill:

Revise section 203 of S. 3035 by placing a period after the word "lapse" in line 20, page 17, and striking lines 21 and 22.

Amend section 313 of S. 3035 by placing a period and closed quotation mark after the word "lapse" in line 13, page 34 and striking the remainder of that line and all of line 14.

SECTION-BY-SECTION ANALYSIS

On page 8, third paragraph, place a period after the word "lapse" and strike the remainder of the sentence.

On page 14, in the last sentence of the first paragraph regarding section 313, place a period after the word "lapse" and strike the remainder of the sentence.

ENCLOSURE B

Certification Acceptance

Bill:

Section 307(a) is amended by deleting everything on line 20, page 28, down through the end of line 11, page 29, and inserting in lieu thereof the following:

"(a) The Secretary may discharge any of his responsibilities relative to highway and mass transportation projects on Federal-aid systems, except the Interstate System, under this title, the National Environmental Policy Act of 1969 (49 U.S.C. 4321, et seq.) and section 4(f) of the Department of Transportation Act (49 U.S.C. 1653(f)), upon the request of any Governor, by accepting a certification by the Governor if the Secretary finds that (1) such projects will be carried out in accordance with State laws, regulations, directives, and standards establishing requirements at least equivalent to those contained in, or issued pursuant to such Acts, and (2) with respect to the National Environmental Policy Act and section 4(f) of the Department of Transportation Act, the Governor has an agency suitably equipped and organized to carry out to the satisfaction of the Secretary the duties under these Acts. Before accepting a certification by the Governor regarding the National Environmental Policy Act, the Secretary shall consult with the Chairman of the Council on Environmental Quality.

Section 307(d) is amended by striking the word "other" in line 5, page 30.

SECTION-BY-SECTION ANALYSIS

On page 12, in the last sentence of the first paragraph regarding section 307, insert "with respect to NEPA" after the word "request".

ENCLOSURE C

Investment Standards

Bill: No change.

SECTION-BY-SECTION ANALYSIS

On page 6, in the paragraph explaining section 203 of the bill, substitute in the first sentence "Section 203" for "Section 104" and strike the last sentence.

ENCLOSURE D

Authority of State and Local Governments and Nonprofit Corporations to Assist in the Transportation of the Elderly and Handicapped

Bill:

Revise section 201 of S. 3035 by changing "15" in line 12, page 11 to "16", and substituting "(49 U.S.C. 1601-1612)" for "(49 U.S.C. 1601-1611)".

Revise section 204 of S. 3035 by striking lines 19 and 20, page 13 and substituting the following therefor:

"(b) The text of section 16 of the Urban Mass Transportation Act of 1964, as amended (49 U.S.C. 1612), is amended to read as follows:

"Sec. 16. In addition to the grants and loans otherwise provided for under this Act, the Secretary is authorized to make grants and loans—

"(1) to States and local public bodies and agencies thereof for the specific purpose of assisting them in providing mass transportation services which are planned, designed, and carried out so as to meet the special needs of elderly and handicapped persons, with such grants and loans being subject to all of the terms, conditions, requirements, and provisions applicable to grants and loans made under section 3(a) and being considered for the purposes of all other laws to have been made under such section; and

"(2) to private nonprofit corporations and associations for the specific purpose of assisting them in providing transportation services meeting the special needs of elderly and handicapped persons for whom mass transportation services planned, designed, and carried out under paragraph (1) are

unavailable, insufficient, or inappropriate, with such grants and loans being subject to such terms, conditions, requirements, and provisions (similar insofar as may be appropriate to those applicable to grants and loans under paragraph (1)), as the Secretary may determine to be necessary or appropriate for purposes of this paragraph.

"Of the total amount of the obligations which the Secretary is authorized to incur on behalf of the United States under the first sentence of section 4(c), 2 per centum may be set aside and used exclusively to finance the programs and activities authorized by this subsection (including administrative costs)."

Revise section 314 of S. 3035 by adding at the bottom of page 41 a new section 509 to chapter 5 of title 23, United States Code, to read as follows:

"Section 509. Discretionary grants for the transportation of elderly and handicapped persons.

"In addition to the grants otherwise provided for under this chapter, the Secretary is authorized to make grants—

"(1) to States and local public bodies and agencies thereof for the specific purposes of assisting them in providing mass transportation services which are planned, designed, and carried out so as to meet the special needs of elderly and handicapped persons, with such grants being subject to all of the terms, conditions, requirements, and provisions applicable to grants made under section 501 and being considered for the purposes of all other laws to have been made under such section; and

"(2) to private nonprofit corporations and associations for the specific purpose of assisting them in providing transportation services meeting the special needs of elderly and handicapped persons for whom mass transportation services planned, designed, and carried out under paragraph (1) are unavailable, insufficient, or inappropriate, with such grants being subject to such terms, conditions, requirements, and provisions (similar insofar as may be appropriate to those applicable to grants under paragraph (1)), as the Secretary may determine to be necessary or appropriate for purposes of this paragraph.

"Of the total amount of the obligations which the Secretary is authorized to incur on behalf of the United States under section 312(b) of the Unified Transportation Assistance Act of 1974, 2 per centum may be set aside and used exclusively to finance the programs and activities authorized by this subsection (including administrative costs)."

Revise the table of contents for chapter 5, title 23, by striking the close quote and period at the end of line 2, page 42, and adding:

"Section 509. Discretionary grants for the transportation of elderly and handicapped persons."

SECTION-BY-SECTION ANALYSIS

On page 5, third line of the paragraph describing section 201 of the bill, change "15" to "16".

On page 6, revise the paragraph describing section 204 of bill to read:

"This section deletes subsections (a), (c) and (d) of section of the UMTA Act regarding transportation for the elderly and handicapped, and redesignates existing section 16(b) as section 16. Section 108 of the bill establishes a new section 154 of title 23, United States Code, to replace subsections (a), (c) and (d) of section 16. Continuing existing subsection (b) will maintain the authority to make grants and loans under the UMTA Act to States, local public bodies, and private nonprofit corporations and associations to assist them in providing transportation services for the elderly and handicapped."

On page 16, add after the paragraph in section 208 the following:

"Section 509 authorizes the Secretary to make grants to States and local public bodies and agencies and to private nonprofit corporations for the specific purpose of assisting them in providing mass transportation services to meet the special needs of elderly and handicapped persons. It also authorizes 2 percent of the obligations the Secretary is authorized to incur under section 312(b) of the bill to be used exclusively to finance grants for this purpose."

ENCLOSURE E

UMTA Formula Grant Projects Located in Urbanized Areas

Bill:

Revise section 205 of S. 3035 by deleting the word "and" in line 19, page 16, and inserting in its place "shall be available for expenditure in urbanized areas. Such funds ", and by striking in line 11, page 19 the words ", in urbanized areas, also".

SECTION-BY-SECTION ANALYSIS

The first sentence in the second paragraph on page 8 should read as follows:

"Subsection (d) specifies that funds remaining after the allocation of planning funds are to be expended in urbanized areas, and earmarks to urbanized areas of 400,000 population or more the funds apportioned to a Governor which remain after the allocation of planning funds and which are attributable to such urbanized areas."

ENCLOSURE F

Labor Standards

Bill:

Revise section 205 of S. 3035 by amending proposed section 213 of the Urban Mass Transportation Act of 1964 (page 25, lines 6-8) to read as follows:

"Section 213. The provisions of section 13(c) of title I of this Act shall apply in carrying out mass transportation projects described by section 204(a) (1) and (3) of this title."

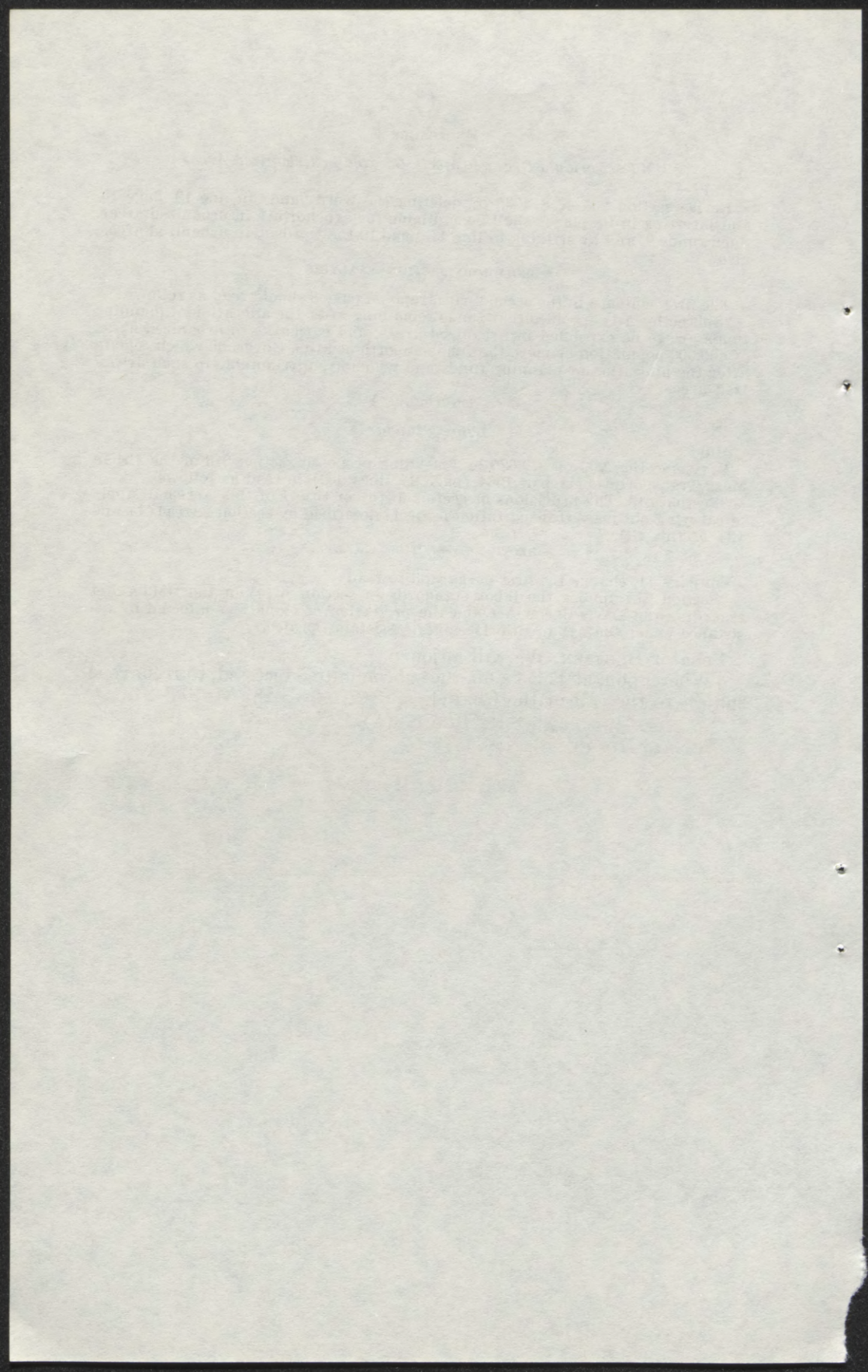
SECTION-BY-SECTION ANALYSIS

On page 11, change the first paragraph to read:

"Section 213 applies the labor standards in section 13(c) of the UMTA Act regarding the Davis-Bacon Act and the protection of employees affected by assistance under the Act to title II capital assistance projects."

Senator BENTSEN. We will adjourn.

[Whereupon, at 11:55 a.m., the subcommittee recessed, to reconvene subject to the call of the Chair.]



**A STUDY OF REVENUE MECHANISMS FOR FINANCING
URBAN MASS TRANSPORTATION**

**Report of the Secretary of Transportation to the United States
Congress pursuant to Section 138(b), Public Law 93-87 The Fed-
eral-Aid Highway Act of 1973**

FEBRUARY 1974

REPORT OF THE BOARD OF DIRECTORS OF THE
UNITED STATES DEPARTMENT OF AGRICULTURE

FOR THE YEAR ENDING JUNE 30, 1917

WASHINGTON, D. C.



THE SECRETARY OF TRANSPORTATION
WASHINGTON, D.C. 20590

February 28, 1974

Honorable Gerald R. Ford
President of the Senate
United States Senate
Washington, D.C. 20510

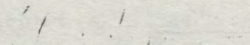
Dear Mr. President:

In compliance with Section 138(b) of the Federal-Aid Highway Act of 1973, I am pleased to submit herewith a study of Revenue Mechanisms for Financing Urban Mass Transportation.

The report covers two revenue mechanisms: a transit fuel tax and an additional gasoline tax imposed in urban areas. The report includes analyses of the magnitude of revenues, tax rates required to raise these revenues, tax incidence, potential impact on transit usage, and mechanisms for tax collection.

Consideration of the use of special taxes for financing Federal aid to urban mass transportation implicitly raises the question of earmarking of the revenues of certain taxes for limited purposes. In general, we feel that such earmarking should not be extended beyond its current applications. Continuing revenue sources very often come to be considered either a floor or a ceiling on annual expenditures for a particular purpose regardless of the merits of either decreasing or increasing these expenditures as times and priorities change.

Sincerely,


Claude S. Brinegar

Enclosure

EXECUTIVE SUMMARY

PURPOSE OF THE STUDY

This report responds to Section 138(b) of the Federal-Aid Highway Act of 1973 which directs the Secretary of Transportation to study the potential of two proposed revenue mechanisms or taxes which could be used to finance urban transportation activities receiving financial assistance from the Highway Trust Fund. The two taxes to be studied are:

- . a tax on fuel used in the provision of urban mass transportation service; and
- . an additional gasoline tax imposed in urban areas.

The study includes an analysis of the potential ranges of revenue yields from the two tax sources, the rates at which such taxes could be levied, the administrative and legal problems associated with collection of such taxes, the incidence of such taxes, and the effects on transit ridership.

MAJOR FINDINGS

Transit Fuel Tax. A tax rate necessary to generate sufficient revenues to make a meaningful contribution to transit financing requirements would be extremely high. The effects of such a tax on transit ridership would depend on the extent to which the revenues to pay the tax were derived from the farebox.

If the tax is passed on to transit riders in the form of higher fares, then it would have the following effects:

- . Although the current gasoline shortage is expected to increase transit ridership, higher fares would be an influence discouraging ridership.
- . The transit users who would pay the tax are composed largely of people from households with low to modest income, working women, minorities, school children, youths, and elderly people.

If the tax is not passed on to transit riders in the form of higher fares, then states or localities would have to raise the money through their own tax sources. This would mean, in effect, that state or local taxes would be used to pay a federal tax which, in turn, would be used to pay a portion of the costs of urban mass transportation.

The levy of a federal tax on public transit systems which are instrumentalities of state or local governments also raises some potential problems of constitutionality.

Urban Area Gasoline Tax. If a tax on gasoline sold in urban areas were used to finance urban mass transportation, the tax rate required to raise a given amount of revenue would be much smaller than the equivalent transit fuel tax rate. Even if the national revenue targets were as much as \$1.5 billion per year, the tax rate per gallon of gasoline would be only about 3 cents and would not be expected to have any significant effect on the consumption of gasoline or on transit usage.

There are questions of equity raised by a tax applied to gasoline--for

example, gasoline used for trips in areas where transit alternatives are not available. Constitutional questions are also raised by a federal tax imposed only within certain geographic areas.

OTHER FINDINGS

Transit Fuel Tax

The analysis has been specifically directed to a tax on transit fuel (gasoline, diesel oil, and propane), and the assumption has been made that the transit fuel tax would be imposed on bus fuel only. The study does not consider a tax on energy sources other than transit fuel; thus no consideration has been given to an equivalent tax on the electrical power requirements of rail and trolley coach systems, although the implications of such a tax are noted in the report as appropriate. The following findings are representative of the effects of a transit fuel tax:

- . The trend of a continuing decrease in transit ridership over the past 30 years is expected to be reversed in the immediate future. Projections for 1976 ranging from a low of 3.58 billion bus riders (equal to 1972) to a high of 4.98 billion bus riders have been used as a basis for estimating transit fuel tax yields.
- . The yield of a transit fuel tax would depend on these ridership projections and on the extent to which fare increases due to the tax would, in turn, affect ridership. A \$0.10 per gallon tax on bus fuel would yield \$30 to \$42 million, depending on these factors.
- . Approximately 84 percent of the proceeds of a bus fuel tax would be raised in the 44 urbanized areas having pop-

ulations over 500,000. An even greater portion would be raised in these areas if the tax were extended to cover rail and trolley coach systems.

- The bus fuel tax does not pose serious administrative problems although if extended to a tax on rail and trolley coach systems the administrative problems could become complex.

Urban Area Gasoline Tax

The analysis of this tax has been conducted with regard to all "urbanized areas" (population of 50,000 or greater), in which the preponderance of transit ridership exists. The following findings are taken as representative of the effects of the tax proposal in all urban areas (population of 5,000 or greater).

- Total gasoline consumption (urban and rural) is estimated at 102.2 billion gallons for 1973. Taking account of gasoline shortages which are expected to persist through the 1976 forecast period, nationwide projections of gasoline consumption in urbanized areas range from a low of 35.1 to a high of 50.1 billion gallons in 1975 and 1976, depending on assumptions concerning the shortage of gasoline and the proportion of sales between urbanized and rural areas.
- The estimates of gasoline consumption in urbanized areas provide the following estimates of tax yields at alternative rates per gallon:

Annual Tax Yields (Million \$)

<u>Tax Rate Per Gallon</u>	<u>Low</u>	<u>High</u>
1 cent	\$ 351	\$ 501
2 cents	702	1,002
3 cents	1,053	1,503

- . Changes in the price of gasoline resulting from a 1 cent to 3 cent per gallon additional tax would be so small that no resulting decrease in gasoline consumption would be expected.
- . The total tax burden falling on any individual automobile owner would be so small that the incidence effects of the tax can be disregarded.
- . Approximately 72 percent of the proceeds of an urban area gasoline tax would be raised in the 44 urbanized areas having populations over 500,000.

Magnitude of Expenditures for Mass Transportation

The Federal-Aid Highway Act of 1973 provides funds for urban mass transportation from the Federal-Aid Highway Program, in addition to the funds available from the Urban Mass Transportation Program.

- . The most likely commitments of Urban System funds out of the Highway Trust Fund for mass transportation programs are estimated at \$150 million in 1975 and \$250 million in 1976.
- . Under the Interstate Highway transfer provisions of the Federal-Aid Highway Act of 1973 and under the provisions of the same Act whereby general funds are made available for mass transportation programs under the urban system, it is estimated that these additional funds would amount to \$150 million in 1975 and \$200 million in 1976.
- . By the end of FY 1974, state and local governments will have received federal commitments totaling approximately \$2.5 billion. An additional \$1.225 billion of UMTA capital grants is expected to be committed during each of FY 1975 and FY 1976.

Comparison of Funding Sources and Requirements

There are several interpretations of the language in Section 138(b) of the Federal-Aid Highway Act of 1973 as to the expenditures that

might be financed from a possible transit fuel tax or urban area gasoline tax.

- The lowest funding interpretation would be for mass transportation projects under Urban System authorizations funded out of the Highway Trust Fund. The highest fund interpretation would be for mass transportation projects under Urban System authorizations funded out of the Highway Trust Fund and the general fund, plus transfers of Interstate Highway funds, plus Urban Mass Transportation (UMTA) capital grants. The range of program levels implied would be:

	FY 1975	FY 1976
<u>Program Level</u> (Million \$)		
Lowest funding interpretation	\$ 150	\$ 250
Highest funding interpretation	\$1,525	\$1,675

- Assuming that all the necessary yield is to be provided by a transit fuel tax, a tax rate of \$0.39 to \$0.52 per gallon would fund the lowest program level (\$150 million) in 1975, while a tax rate of \$3.92 to \$8.43 per gallon would be required to fund the highest 1975 program level (\$1,525 million), depending on ridership projections and assumptions about effects of fare changes on ridership. The range of transit fuel tax rates required to meet the range of 1976 funding requirements would be between \$0.59 per gallon and \$9.62 per gallon.
- Assuming that all the necessary yield is to be provided by an urban area gasoline tax, the range of tax rates required to meet the range of 1975 funding requirements would be between \$0.004 per gallon and \$0.043 per gallon, and, for 1976, between \$0.007 per gallon and \$0.048 per gallon.

CONCLUSIONS

Under either of the above funding interpretations, it is clear from the magnitude of the tax rates that a transit fuel tax would not be a workable alternative. With regard to an urban area gasoline tax, several potential problems have been raised in this study. Such a tax proposal would have to be judged in relation to other alternatives for financing urban mass transportation and highway facilities in urban areas. This report does not represent a comprehensive study of these alternatives.

TABLE OF CONTENTS

<u>Section</u>		<u>Page</u>
	EXECUTIVE SUMMARY	i
	Purpose of the Study	i
	Major Findings	i
	Other Findings	iii
I	INTRODUCTION	I-1
	Purpose of the Study	I-1
	Background to the Study	I-2
	Organization of the Study Report	I-3
II	ANALYSIS OF A TRANSIT FUEL TAX	II-1
	Sources of Data	II-2
	Method of Analysis	II-2
	Forecast of Bus Transit Passengers Through 1976	II-4
	Estimates of Bus Miles	II-9
	Estimates of Fuel Consumption	II-16
	Estimates of Tax Yields at Selected Rates	II-17
	Effects of Higher Transit Fares on Ridership	II-17
	National Forecast of Transit Fuel Tax Yields	II-26
	Incidence of Tax Among Riders	II-29
	Urbanized Area Forecast of Transit Fuel Tax Yields	II-35
	Potential Administrative Problems and Legal Implications	II-38
	Conclusions	II-44

TABLE OF CONTENTS (CONT.)

<u>Section</u>		<u>Page</u>
III	ANALYSIS OF AN ADDITIONAL URBAN GASOLINE TAX	III-1
	Vehicle Miles of Travel in Urbanized Areas	III-2
	Projections of Urbanized Area Gasoline Consumption	III-4
	Estimate of Gasoline Tax Yields	III-7
	Effects of Increases in Gasoline Taxes on Vehicle Use	III-7
	Urbanized Area Projection of Gasoline Tax Yield	III-10
	Potential Administrative Problems and Legal Implications	III-14
	Conclusions	III-15
IV	MAGNITUDE OF EXPENDITURES FOR MASS TRANSPORTATION	IV-1
V	COMPARISON OF FUNDING SOURCES AND REQUIREMENTS	V-1
	Funding Sources and Requirements	V-1
	Ranges of Tax Rates Required to Meet Alternative Funding Levels	V-2
APPENDIX A--Notes and Assumptions for Study Projections		A-1

LIST OF TABLES

<u>Number</u>		<u>Page</u>
II-1	Range of Projected Annual Percentage Increase in Total Transit Ridership, 1974-1976	II-9
II-2	Range of Projected Annual Transit Bus Ridership, 1974-1976	II-11
II-3	Historical Trends in Selected Bus Transit Statistics, 1955-1972	II-12
II-4	Projections of Annual Bus Passengers and Bus Vehicle Miles, 1974-1976	II-13
II-5	Transit Bus Fleet and Bus Miles, 1968-1972, and Projections to 1976	II-14
II-6	Comparison of Derived and Direct Annual Bus Mile Projections, 1974-1976	II-16
II-7	Projections of Annual Transit Bus Miles and Fuel Consumed, 1974-1976	II-18
II-8	Projected Range of Unadjusted Annual Tax Yields From Transit Fuel for Selected Tax Rates and Fuel Consumption, 1975-1976	II-19
II-9	Estimates of U.S. National Average Fares in 1976, Including Effect of Three Selected Fuel Tax Rates and Two Ratios of Riders Per Bus Mile	II-22
II-10	Effect of Fare Changes on Transit Ridership, Expressed as Negative Elasticities, 1947-1967	II-24
II-11	Effect on Bus Riders of Raising Fares From 25-30 Cents to Higher Amounts, 1965-1967	II-25

LIST OF TABLES (CONT.)

<u>Number</u>		<u>Page</u>
II-12	Percentage Decrease in Bus Ridership Given -0.3 Fare Elasticity	II-27
II-13	National Projections of Transit Fuel Tax Yields, 1975-1976	II-28
II-14	Socioeconomic Characteristics of Public Transit Bus Riders	II-31
II-15	Socioeconomic Characteristics of Transit Bus Riders Who are Licensed Drivers-- Five Middle-Sized Urban Areas	II-33
II-16	Distribution of Bus Vehicle Miles of Travel by Urbanized Area Size, 1971	II-36
II-17	Projection of Tax Yields by Urbanized Area Population Size, 1975-1976	II-37
III-1	Average Daily Vehicle Miles of Travel, 1968	III-2
III-2	Nationwide Projections of Gasoline Con- sumption or Purchases in Urbanized Areas, 1975-1976	III-6
III-3	Projection of Yields, 1975-1976, From an Additional Gasoline Tax in Urbanized Areas	III-8
III-4	Total Vehicle Miles of Travel, 1971, Distributed by Urbanized Areas by Popu- lation Sizes	III-11
III-5	Annual Gasoline Tax Yields Distributed by Urbanized Area Population Size, 1975-1976	III-12

LIST OF TABLES (CONT.)

<u>Number</u>		<u>Page</u>
IV-1	Funds Apportioned and Authorized for the Federal-Aid Urban Highway System for the Fiscal Year 1975	IV-3
IV-2	Program Level for Urban Mass Transportation Projects	IV-5
V-1	Urban Area Gasoline Tax Rates Required to Finance Alternative Program Levels for Urban System Mass Transportation Projects, FY 1975 and FY 1976	V-4

I. INTRODUCTION

PURPOSE OF THE STUDY

This report responds to requirements of Section 138(b) of the Federal-Aid Highway Act of 1973, which states:

"The Secretary shall conduct a study of revenue mechanisms including a tax on fuels used in the provision of urban mass transportation service, and an additional gasoline tax imposed in urban areas which could be used now or in the future to finance transportation activities receiving financial assistance from the Highway Trust Fund. Such a study shall include an analysis of the magnitude of the various potential sources of user tax revenues, the rates at which such taxes could be levied (including possible differential rates), the mechanisms for collection of such taxes, the incidence of such taxes, and the potential impact on transit usage caused by such taxes."

The major thrust of the study requested by Section 138(b) is to extend to urban mass transportation programs the concept of user taxation which was the foundation of the Highway Trust Fund. A direct tax on fuels used by transit vehicles would be a direct extension of the policy on which the Highway Trust Fund is based. An urban area gasoline tax on all motor vehicles would be a broadening of the user tax concept to include federal support for ground transportation in urban areas involving all classes of motor vehicles providing varying levels and kinds of service. This report considers the major effects and implications of such taxes, including policy and legal implications.

BACKGROUND TO THE STUDY

The Federal-Aid Highway Act of 1973 put into effect a major change in national policy on the ways and means by which the Federal Government assists the states and municipalities in meeting their needs for ground transportation.

In the earlier Federal-Aid Highway Acts of 1968 and 1970, special provisions were written into the law which permitted funds apportioned to the states from the Highway Trust Fund to be used for public transportation related purposes such as exclusive or preferential bus lanes, parking facilities, bus stops, loading and unloading facilities, bus shelters, and similar bus ancillary type facilities.

The Federal-Aid Highway Act of 1973, however, represents a major change in policy by permitting certain of the basic program authorizations to be used for the full range of public transportation capital costs, including rail rapid transit. The Act, for the first time, combined into one legislative action the enactment of policy and funding levels for both the Federal-Aid Highway Program and the Urban Mass Transportation Program.

With this break from the traditional operation of the highway program, there came a great deal of discussion regarding sources of revenue for the highway and mass transit programs. The Congress, as a means of obtaining the necessary information and data on this issue,

directed the Secretary of Transportation to carry out, and report on, two separate but directly related studies.

As noted, this report complies with Section 138(b) of the Federal-Aid Highway Act of 1973. Much of the information in this report will be expanded in the subsequent report complying with Section 138(a), which requires a broader and more thorough analysis of public transportation needs and financing into the future. The report complying with Section 138(a) is due July 1, 1974.

ORGANIZATION OF THE STUDY REPORT

The report is presented under the following section headings:

- II. Analysis of a Transit Fuel Tax
- III. Analysis of an Additional Urban Gasoline Tax
- IV. Magnitude of Expenditures Required for Mass Transportation
- V. Comparison of Funding Sources and Requirements

II. ANALYSIS OF A TRANSIT FUEL TAX

It was noted in the Introduction that Section 138(b) of the Federal-Aid Highway Act of 1973 requires that the Secretary of Transportation study the implications of using a tax on transit fuel to finance urban mass transportation activities.

The objective of this section, therefore, is to analyze the consequences of imposing various tax rates on the fuel used in urban bus transit. The consequences of particular interest include:

- . direct effects on fares, ridership, bus mileage, and fuel consumption; and
- . incidence of the tax by socioeconomic groups.

The potential administrative problems and legal implications of a transit fuel tax are discussed at the end of this section.

The analysis has been specifically directed to a tax on transit fuel (gasoline, diesel oil, and propane), and the assumption has been made that the transit fuel tax would be imposed on bus fuel only. The study does not consider a tax on energy sources other than transit fuel (such as middle distillates, coal, or natural gas); thus, no consideration has been given to an equivalent tax on the electrical power requirements of rail and trolley coach systems. However, the broad implications of such a tax are noted in this section as appropriate.

SOURCES OF DATA

At the time this report was prepared, only preliminary transit data was available from the 1974 National Transportation Study (NTS) and thus it was necessary to utilize the data resources of the American Transit Association (ATA), in addition to the preliminary 1974 NTS data.

ATA is the primary trade association for the transit industry in North America. One of its main functions is the collection and dissemination of basic data for the industry. In carrying out this function, ATA regularly obtains reports from both members and nonmembers, and uses these reports as the basis for the data it publishes.

The two basic sets of data utilized in this analysis include aggregate operating and financial data published in the ATA's Transit Fact Book, and selected detailed ATA operating and financial data on individual transit operators. The approach to the analysis took into account the limitations of the data, and the assumption is therefore made that the ranges of the findings would not have been significantly different even if more ideal data had been available.

METHOD OF ANALYSIS

The objective of the analysis reported in this section is to develop an estimate of transit (urban bus) fuel consumption for fiscal years (FY) 1975 and 1976, from which one may then estimate tax yields for different assumed rates. The estimate of transit bus fuel consumption or usage for FY 1975 and FY 1976 is itself obtained through the use

of estimates of transit bus miles for those years. Because of the difficulties in projecting transit trends under the current rapidly changing conditions discussed below, two different types of estimates of transit bus miles have been developed for comparison purposes:

- . A derived estimate, which focuses on passenger volume (ignoring the question of bus production) and uses the likely range of passenger volume to derive transit bus miles.
- . A direct estimate, which focuses on bus production projected through the forecast period (through 1976) and uses fleet size to estimate transit bus miles.

These two estimates can then be compared for consistency, and reconciled, if necessary, to reach a final range of estimates of transit bus miles from which fuel consumption can be estimated. A range of transit fuel tax rates can then be applied to the fuel consumption estimates in order to derive some alternative estimates of possible tax yield.¹

In the analysis, two alternatives have been considered. The first assumes that the transit fuel tax is not passed on to passengers in the form of fare increases, so that there will be no negative effects on passenger volume because of fare increases. The second assumes that the tax is passed on, wherever possible, in the form of higher fares; it is thus necessary to estimate the effects of the higher fares on passenger volume, and subsequently on the demand for buses and the resulting vehicle miles and fuel consumption. Here is where the tax incidence by socioeconomic groups is of particular interest.

^{1/} In the analysis, the tax yields are estimated without regard to the price of fuel.

FORECAST OF BUS TRANSIT PASSENGERS THROUGH 1976Background

Total transit revenue passengers in the United States have decreased constantly from almost 19 billion passengers in 1945 to a preliminary estimate of 5.3 billion passengers in 1972.¹ Over the 10-year period ending with 1972, bus passengers declined at an average annual rate of 3 percent; for the last five years, the average annual rate of decline has been 5 percent.

Although transit ridership has been constantly decreasing for almost 30 years, it appears that this trend is being reversed and that increases in ridership may well be experienced over the next several years.² There are several possible reasons.

At present, there are many factors which affect transit ridership. The most important considered in this study include:

- . quality of service--in particular, schedule frequency, on-time performance, and seat availability;
- . fares;

1/ American Transit Association, Transit Fact Book (Washington: American Transit Association, 1972-1973), p. 7.

2/ In December 1973, ATA testified to its belief that 1973 would show a ridership decline of less than one percent below that of 1972, and might possibly show an increase. American Transit Association, Statement before the U.S. Senate Public Works Committee, Transportation Subcommittee, December 11, 1973, p.2.

- . gasoline shortages and higher gasoline prices;
- . policies of the Environmental Protection Agency; and
- . urban area policies to limit growth in automobile traffic.

The first two of these factors are influenced by transit agencies, whereas the latter three constitute constraints on the free use of automobiles.

Significant changes are occurring with respect to each of these factors. Transit agencies, particularly the great number operating motor buses, are attempting to improve service through such means as adding more buses, replacing old equipment, providing fully air-conditioned fleets, and improving schedule frequency. A few transit agencies have experimented with lower fares.

On the constraint side, it is expected that shortages in supplies of gasoline for automobiles will continue through 1976. It is also expected that policies aimed at shifting journey-to-work trips from automobile to transit in order to reduce air pollution will continue to be implemented.

The 1973 leveling off in the long-term decline in transit ridership is evidently the result of improvements in the quality of service and, in a few cities, fare reductions. The possible influences of the other factors--the shortages and rising prices of gasoline, and pollution and urban area control policies--are substantially unknown at present.

The Federal Highway Administration has estimated a reduction of up to 30 percent in gasoline availability for 1974 from 1973 levels.¹ Public statements by Federal Energy Office officials have cited likely gasoline shortages of 20 percent to 25 percent. Based on these statements, it is assumed that the supply of gasoline in 1974 will be in the range of 20 percent to 30 percent below the unconstrained demand. Also, if urban areas levy parking surcharges, as is being considered, some automobile journey-to-work trips would undoubtedly be shifted to transit.

The projections in this study assume that the effects of the gasoline shortage on an annual increase in transit ridership will be greater in the first year (1974) than in subsequent years. The first year will show the largest shift from auto to transit for the journey-to-work, so transit will experience smaller growth rates in subsequent years.

The specific effects on transit ridership of environmental and urban area policies to limit growth in automobile traffic are highly uncertain at present, although these policies will also tend to increase transit ridership.

^{1/} Department of Transportation News, Release FHWA 80-73, Federal Highway Administration, Washington, D.C., December 12, 1973.

In summary, the combined effects of these several factors are expected to slow and reverse the downward trend in transit ridership, with increasingly more persons choosing transit over automobiles for the journey-to-work. However, since each of the factors is still in flux, no reliable indications are yet available as to their individual or combined effects on transit ridership. Accordingly, the most useful approach is to attempt to make reasonable estimates of the possible range of effects.

Projections of Bus Revenue Passengers

Although it is impossible to make any reliable specific forecasts of transit ridership, even for a short-term period of three years, one can at least state likely endpoints of the possible range. At the low end of the range, it seems probable that service improvements will, at a minimum, cause the 1972 volume of passengers to continue through the three-year forecast period, 1974-1976.

At the high end of the range, the rationale is as follows: as noted, the possible 20 percent to 30 percent shortfall in gasoline supplies in 1974 may be expected to result in some decrease in automobile travel, with a concomitant shift to car pooling and to public transit. According to the Nationwide Personal Transportation Study, 4 percent of all travel, and 11.3 percent of journey-to-work trips, in urban areas of

more than 5,000 population in 1969 and 1970 were by public transportation. Even a small percentage shift to transit from automobile travel would significantly increase current transit ridership. For example, a 1.5 percent decrease in auto journey-to-work usage--or a 0.6 percent decrease in total automobile usage--would result in a 15 percent increase in transit ridership.

The transit industry has estimated that the industry can accommodate a 15 percent increase in riders in FY 1974 through higher load factors without additional equipment; additional equipment will be relatively scarce in 1974 because of the current time-lag in bus production. As already noted, the projections in this study assume that the effects on transit ridership of the gasoline shortage and resultant decrease in automobile usage will be greater in the first year (1974) of the forecast period than in the two subsequent years. Consequently it seems unlikely that a growth of 10 percent in transit ridership for each of the two subsequent years (1975 and 1976) will be exceeded.

Between these two extremes, one can select an intermediate rate of increase of 10 percent in 1974 over 1972-1973, with increases of 5 percent in each of the subsequent years. The range of percentage increases is summarized in Table II-1.

TABLE II-1

RANGE OF PROJECTED ANNUAL PERCENTAGE INCREASE
IN TOTAL TRANSIT RIDERSHIP, 1974-1976

(Projections subject to assumptions and notes in Appendix A)

Annual Increases Projection Level	1974	1975	1976	Compound Increase for Three-Year Period
Low	0%	0%	0%	0%
Medium	10	5	5	21.3
High	15	10	10	39.2

Trends in transit ridership, by mode and total, are plotted in Figure II-1 for the period 1955 through 1973, with low, medium, and high projections to 1976. It is expected that these projected increases in transit ridership would be distributed between bus and rail modes in approximately the same proportions as present ridership (bus accounts for about 68 percent). As a result, the percentage increases for total transit may be directly applied to bus transit to obtain the estimates required for the forecast period 1974-1976. These estimates are summarized in Table II-2.

ESTIMATES OF BUS MILES

Derived Estimate. The next step in the analysis requires a conversion of passengers to bus vehicle miles of travel (VMT) by applying a factor of riders per mile to the projections for bus revenue passengers. The historical trend in riders per mile for the period 1955 through 1972 is shown in Table II-3. The average of the past four years is 2.75. In the period 1955-1960, when ridership was considerably

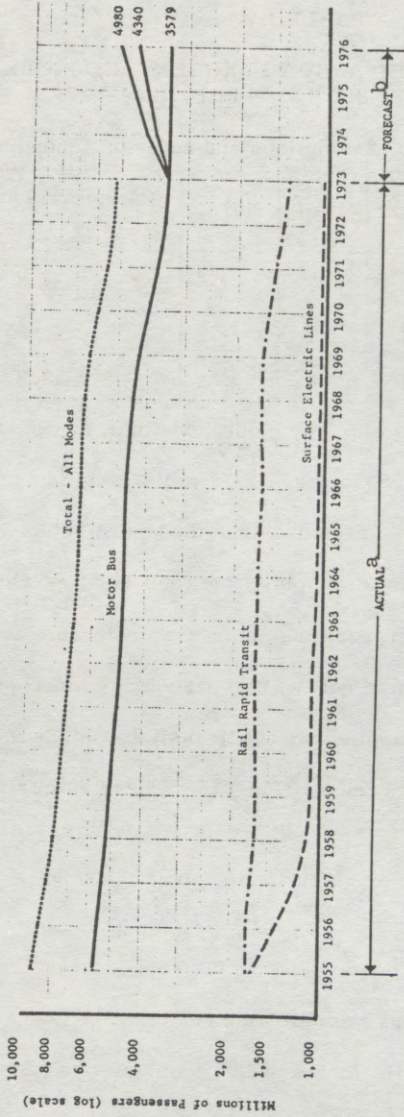


FIGURE II-1: TRENDS OF TRANSIT RIDERSHIP 1955-1973 AND PROJECTIONS OF BUS PASSENGERS TO 1976

(a) Source: 1972-1973 Transit Fact Book, American Transit Association, Washington, D. C.
 (b) From Table II-2.

TABLE II-2

RANGE OF PROJECTED ANNUAL TRANSIT BUS RIDERSHIP,
1974-1976
(Millions of Revenue Passengers)

(Projections subject to assumptions and notes in Appendix A)

Projection Level	Actual 1972	Estimated 1973	Projected*		
			1974	1975	1976
Low	3,579	3,580	3,580	3,580	3,580
Medium			3,940	4,130	4,340
High			4,120	4,530	4,980

*Projections rounded to nearest 10 million passengers.

greater than the 1972-1973 level, there was a ratio of 3.25 passengers per bus mile. For the purpose of deriving projections of bus miles, two estimates of riders per mile have been used, therefore: a low ratio of 2.75 and a high ratio of 3.25. The resulting derivations are shown in Table II-4.

Direct Estimate. Data on the total number of buses, total bus miles, and average (annual) miles per vehicle for the period 1968 through 1972, with projections for 1973 through 1976, are given in Table II-5.

The projections of the number of vehicles for the period 1973 through 1976 are based on data on manufacturers' capabilities and on discussions with bus manufacturers. The production rates which form the basis of the fleet size projections in Table II-5 are as follows:

1973	3,000 buses
1974	6,500 buses
1975	9,000 buses
1976	14,000 buses

TABLE II-3
 HISTORICAL TRENDS IN SELECTED
 BUS TRANSIT STATISTICS, 1955-1972

	Bus Riders (Millions)	Bus Miles (VMT) (Millions)	Bus Fuel-- Gallons (Millions)	Riders per Mile*	Miles per Gallon
1955	5,734	1,709	448.9	3.3	3.81
1957	5,438	1,648	422.6	3.2	3.90
1959	5,108	1,577	401.0	3.2	3.93
1961	4,834	1,530	379.1	3.1	4.04
1963	4,752	1,523	373.7	3.1	4.08
1965	4,730	1,528	372.6	3.0	4.10
1967	4,633	1,526	361.1	3.0	4.28
1968	4,525	1,508	352.1	2.9	4.28
1969	4,335	1,478	345.4	2.9	4.28
1970	4,058	1,409	338.8	2.8	4.16
1971	3,735	1,376	312.7	2.7	4.40
1972	3,579	1,308	297.3	2.7	4.40
Average 1969-1972				2.75	4.31

*Total ridership divided by total bus mileage. This does not represent an average bus occupancy figure.

Source: 1972-1973 Transit Fact Book, American Transit Association, Washington, D.C.

TABLE II-4

PROJECTIONS OF ANNUAL BUS PASSENGERS
AND BUS VEHICLE MILES, 1974-1976

(Projections subject to assumptions
and notes in Appendix A)

	1974	1975	1976
Estimated Bus Passengers	(Millions of Bus Passengers)		
Low	3,580	3,580	3,580
Medium	3,940	4,130	4,340
High	4,120	4,530	4,980
Low Ratio 2.75 Projection Levels	(Millions of Bus Miles (VMT))		
Low	1,300	1,300	1,300
Medium	1,430	1,500	1,580
High	1,500	1,650	1,810
High Ratio 3.25 Projection Levels	(Millions of Bus Miles (VMT))		
Low	1,100	1,100	1,100
Medium	1,210	1,270	1,330
High	1,270	1,390	1,530

$\frac{\text{Projected number of riders}}{\text{Historical average number of passengers per bus mile}} = \text{Projected bus miles}$

All figures rounded to nearest 10 million.

TABLE II-5

TRANSIT BUS FLEET AND BUS MILES, 1968-1972,
AND PROJECTIONS TO 1976

(Projections subject to assumptions
and notes in Appendix A)

Year	Number of Vehicles	Annual Miles per Vehicle	Bus Miles (VMT) (Millions)
(Actual)			
1968	50,000	30,160	1,508
1969	49,600	29,798	1,478
1970	49,700	28,350	1,409
1971	49,150	28,000	1,376
1972	49,075	26,653	1,308
(Projected)			
1973	49,520	26,700*	1,320#
1974	53,465	26,700	1,430
1975	59,910	26,700	1,600
1976	71,355	26,700	1,910

*Rounded to nearest hundred thousand.

#Rounded to nearest 10 million.

Source: 1968-1972 data--1972-1973 Transit Fact Book, American Transit Association, Washington, D. C.

Since 1965, bus retirements have averaged 2,555 per year. The increments to the fleet shown in Table II-5 allow for retirements as well as expected production.

The main problem in estimating aggregate bus VMT from estimates of fleet size occurs in the determination of annual miles per vehicle (average annual mileage). Annual miles per vehicle have declined from 34,600 in 1945 to 26,653 in 1972. However, the average annual mileage is largely controlled by the ratio of peak to off-peak passengers. Transit operators will continue to provide fleet capacities required to accommodate peak-period riders. For this reason it seems likely that 1972 can be considered to be representative of the forecast period. This average, rounded to 26,700, is used to project bus VMT from the forecast fleet size. The forecasts of bus VMT are shown in the last column of Table II-5.

Comparison of Bus VMT Projections. The derived and the direct projections of bus VMT for the forecast period 1974-1976 are compared in Table II-6. The high and the low forecasts derived from passenger projections represent the extremes of the forecast range, as set forth in Table II-6. In both 1974 and 1975 the direct projection from fleet size falls within the range derived from the passenger projections, although the direct projection is closer to the high end than to the low end of the range of the passenger projections. In 1976, however, the direct projection from fleet size exceeds the high estimate derived from

the passenger projections; the difference is less than 5 percent, however, and is not considered meaningful. For the subsequent analysis, the bus mile estimates derived from the passenger projections will be used.

TABLE II-6*
COMPARISON OF DERIVED AND DIRECT
ANNUAL BUS MILE PROJECTIONS, 1974-1976

	1974	1975	1976
Derived from passenger projections:	(Millions of Bus Miles (VMT))		
High (2.75 riders per bus mile)	1,500	1,650	1,810
Low (3.25 riders per bus mile)	1,100	1,100	1,100
Direct projection from estimated fleet size	1,430	1,600	1,910

*Data developed in Tables II-4 and II-5.

ESTIMATES OF FUEL CONSUMPTION

The new regulations of the Federal Energy Office¹ provide that all transit systems will receive fuel allocations equal to 100 percent of current needs. Accordingly, it is expected that the higher estimate

^{1/} Federal Register, January 16, 1974, Vol. 39, No. 10, Part III. Mandatory Petroleum Allocation Regulations.

of bus miles based on the 2.75 ratio of riders per bus mile will be achieved. To simplify the analysis and reduce the number of different tax rates, the estimates of tax yields are calculated only for the 2.75 ratio.

Projections of fuel consumption by all U.S. transit systems were prepared using the bus mile estimates set forth in Table II-4. These projections of fuel consumption are given in Table II-7. The low forecast is the constant projection of the 1972-1973 level of operation. Fuel consumption for the low forecast is the same in 1974, 1975, and 1976.

ESTIMATES OF TAX YIELDS AT SELECTED RATES

A range of tax rates was selected so as to raise tax yields (before fare increases) as low as \$30 million and as high as \$1.3 billion annually. Tax rates of \$0.10, \$1.00, and \$3.00 per gallon were applied to the forecast fuel consumption to obtain the ranges of tax yield shown in Table II-8. The estimated tax yields do not reflect probable reductions in transit ridership resulting from fare increases.

EFFECTS OF HIGHER TRANSIT FARES ON RIDERSHIP

The foregoing analysis has assumed that the higher costs of transit resulting from fuel taxes are not passed on to transit riders in the form of higher fares. This assumption implies that the tax would be paid by state or local governments. The result would be, in effect,

TABLE II-7
 PROJECTIONS OF ANNUAL TRANSIT BUS MILES
 AND FUEL CONSUMED, 1974-1976

(Projections subject to assumptions
 and notes in Appendix A)

	In Millions							
	1974			1975			1976	
	Bus Miles*	Gallons Consumed #	Bus Miles*	Gallons Consumed #	Bus Miles*	Gallons Consumed #	Bus Miles*	Gallons Consumed #
<u>Low Forecast</u> Continue 1972- 1973 level	1,300	303	1,300	303	1,300	303	1,300	303
<u>Medium Forecast</u> @ 2.75 passen- gers per bus mile	1,430	335	1,500	351	1,580	369	1,580	369
<u>High Forecast</u> @ 2.75 passen- gers per bus mile	1,500	351	1,650	386	1,810	423	1,810	423

*Rounded to nearest 10 million.

Rounded to nearest one million.

TABLE II-8

PROJECTED RANGE OF UNADJUSTED* ANNUAL TAX
YIELDS FROM TRANSIT FUEL FOR SELECTED TAX
RATES AND FUEL CONSUMPTION, 1975-1976

(Projections subject to assumption
and notes in Appendix A)

	Fuel Consumed (Million gallons)#	Annual Yields from Selected Tax Rates per Gallon--Unadjusted*		
		\$ 0.10	\$ 1.00	\$ 3.00
		(Million \$)		
Low - 1975 (2.75 riders/ bus mile)	303	\$30.3	\$303.0	\$909.0
- 1976 (2.75 riders/ bus mile)	303	30.3	303.0	909.0
High - 1975 (2.75 riders/ bus mile)	386	38.6	386.0	1,158.0
- 1976 (2.75 riders/ bus mile)	423	42.3	423.0	1,269.0

*These yields have not been adjusted for the decrease in ridership resulting from any fare increases.

#Rounded to nearest 10 million.

a tax to pay a tax. Alternatively, the tax could be paid by the transit riders in the form of higher fares. The objective of this section is to consider the effect of the tax proposal on transit fares and thence on ridership.

Estimate of Fare Increases. The national average bus fare in 1972 was approximately \$0.34.¹ Table II-9 shows the results of adjusting this fare for the price increases resulting from the three tax rates of \$0.10, \$1.00, and \$3.00. The \$0.10 per gallon tax increases fares by approximately \$0.01; the \$1.00 tax by a range of \$0.07 to \$0.08; and the \$3.00 tax by \$0.21 to \$0.25.

Effects of Fare Increases on Ridership. Most economic demand relations are such that as the price of a good or service increases, the quantity purchased decreases, other things being equal. With regard to transit, the ratio between a percentage decrease in ridership and a percentage increase in fare is called, in economic terms, the

¹/American Transit Association, Transit Fact Book, 1972-1973, p. 11.

"price elasticity" of demand for transit service.¹ Although price elasticity is the main focus of this report, it should be noted that it is technically a "partial" elasticity since transit ridership, for example, depends on a number of other factors besides fare. For the past 25 years, transit ridership has decreased as transit fares have increased, but during this same period transit service has been reduced and gasoline prices have been relatively stable and, in terms of 1971 constant dollars, have even decreased.

In the analysis that follows, the possible effects of fare changes on ridership have been calculated on the basis of a continuation of past patterns. It should be noted, however, that very high gasoline prices and/or a very limited supply of gasoline could have a dramatic effect on elasticities, since these factors limit the alternatives available for urban area travelers. It is conceivable that with such limited

¹Understanding of the demand/price elasticity relationship is important in this study. Extensive modal choice analysis studies have revealed that transit usage is inelastic (elasticities are less than 1.0) to price changes. The larger the numerical value of elasticity, the greater will be the percentage reduction in ridership for a given percentage increase in fare; for example, a -0.3 elasticity indicates that ridership goes down one-third percent for a one percent fare increase, while a -0.5 elasticity indicates that ridership goes down one-half percent for a one percent change in fare. Price elasticities are usually negative (-0.3, for example), since demand usually drops as price increases. Income elasticities, on the other hand, are usually positive--as income increases, demand usually increases also.

alternatives to public transit, riders may continue, within limits, to use transit regardless of the higher fares. It should also be understood that all effects of fare changes are calculated in relation to ridership projections, which themselves depend on different gasoline shortage assumptions. For example, under the "high" ridership projections, there would already be an increase of 40 percent in passengers by 1976 as compared with 1973. Thus fare elasticity effects could bring the projection back down somewhat.

TABLE II-9

ESTIMATES OF U. S. NATIONAL AVERAGE
FARES IN 1976, INCLUDING EFFECT OF
THREE SELECTED FUEL TAX RATES AND
TWO RATIOS OF RIDERS PER BUS MILE

(Projections subject to assumptions
and notes in Appendix A)

Tax Rate per Gallon	Fare* (2.75 Riders per Bus Mile)	Fare* (3.25 Riders per Bus Mile)
\$0.10	\$0.35	\$0.35
1.00	0.42	0.41
3.00	0.59	0.55

*Includes average U. S. bus fare of \$0.34
(1972), rounded to nearest cent.

A selective history of transit fare elasticities is given in Table II-10. Average elasticities have remained quite constant at about -0.35 over the 20-year period, 1947 through 1967. There are some interesting patterns within this average, however. In the larger cities (with populations of 500,000 or more), elasticities have decreased significantly (fares have become less elastic) from -0.34 to -0.22 over the 20-year period. In the intermediate cities (with populations in the range of 100,000 to 500,000), fare elasticities have remained relatively constant. And in the smaller cities (with populations of less than 100,000), transit fare elasticities have increased over the 20-year period.

Throughout the period up to 1965, transit fares were typically \$0.25 or less. Table II-11 presents elasticity calculations for increases to fares above \$0.25 which have occurred since about 1965. Table II-11 indicates that elasticities in general do not appear to have increased as fares have risen above \$0.25. Four locations have elasticities in the -0.28 to -0.35 range, two cities in the -0.06 to -0.16 range, and only two cities in the -0.46 to -0.65 range.

From the above reported findings, it is concluded that a long-run elasticity of -0.3 represents the likely price effect of the projected range of fuel taxes, assuming elasticities follow historic patterns. As already noted, however, it is possible that gasoline shortages and/or higher gasoline prices could reduce the price elasticity substantially. Thus the following estimates are speculative.

TABLE II-10

EFFECT OF FARE CHANGES ON TRANSIT RIDERSHIP,
EXPRESSED AS NEGATIVE ELASTICITIES, 1947-1967

Population of Principal City Served	Elasticities(a)					
	No. Cities	1947-1952(b)	No. Cities	1950-1961(c)	No. Cities	1961-1967(d)
More than 500,000	60(e)	-0.34(e)	51	-0.28	15	-0.22
100,000-500,000	91(f)	-0.36(f)	88	-0.33	35	-0.32
Less than 100,000	44	-0.33	68	-0.36	39	-0.43
Total	195	-0.35	207	-0.32	89	-0.35

(a) Calculated from three months immediately preceding and six months immediately following fare change. Expressed as percentage change in ridership per one per cent fare change.

(b) Source: "Summary of 195 Observations on Estimated Loss in Passenger Traffic Resulting from Fare Increases on U.S. Transit Companies," ATA, dated April 16, 1953.

(c) Source: "Estimated Loss in Passenger Traffic Incident to Increases in Urban Transit Fares," ATA, dated November 24, 1961.

(d) Source: "Estimated Loss in Passenger Traffic Due to Increases in Fares (1961-1967)," ATA, dated February 9, 1968.

(e) Combined figures for cities 500,000-1,000,000 and over 1,000,000.

(f) Combined figures for cities 100,000-250,000 and 250,000-500,000.

TABLE II-11

EFFECT ON BUS RIDERS OF RAISING FARES FROM
25-30 CENTS TO HIGHER AMOUNTS, 1965-1967

Principal City Served*	Date of Fare Change	Elasticity#
Cincinnati	7/1/66	-0.16
Washington, D.C.	3/1/67	-0.29
Des Moines	2/1/67	-0.65
Kansas City, Mo.	11/1/66	-0.29
Portland, Ore.	4/1/67	-0.35
Worcester, Mass.	1/1/67	-0.06
Battle Creek, Mich.	7/1/66	-0.46
Cleveland (Shaker Hts.)	10/1/65	-0.28

*Source: "Estimated Loss in Passenger Traffic Due to Increases in Fares (1961-1967)," ATA, dated February 9, 1968.

#Calculated from three months immediately preceding and six months immediately following fare change. Expressed as percentage change in ridership per one percent fare change.

NATIONAL FORECAST OF TRANSIT FUEL TAX YIELDS

The effects on transit bus ridership and tax yields of a fuel tax being passed on to bus riders through higher fares are estimated for the elasticity value of -0.3 .¹ For example, a \$0.10 fuel tax results in a \$0.01 fare increase for bus riders, a \$1.00 fuel tax results in an \$0.08 increase, and a \$3.00 fuel tax results in a \$0.25 increase.² These increases are added to the 1972 base fare of \$0.34. A \$0.01 fare increase is approximately a 3 percent increase and would result in just under a one percent decrease in bus ridership at an elasticity value of -0.3 . The resultant percentage decrease in total ridership has similarly been estimated for the \$1.00 and \$3.00 rates as well (see Table II-12).

It is assumed that the decrease in transit ridership will result in an equivalent decrease in bus mileage and fuel consumption. The effect on ridership of a service reduction implied by decreased bus mileage--which may be reflected in schedule cuts by operators--has not been taken into account.

National projections of transit fuel tax yields are shown in Table II-13. The table reports projected tax yields for the base fuel consumption estimates without elasticity effects and for the revised

1/ Even though the tax yields are calculated assuming an elasticity of -0.3 , it is possible to estimate the effects of a lower elasticity value by comparing these yields with those calculated assuming no elasticity effects.

2/ It should be noted that if the fuel tax were distributed over all transit passengers (bus, rail, or trolley coach), the fare increase effect would be reduced.

TABLE II-12

PERCENTAGE DECREASE IN BUS RIDERSHIP
GIVEN -0.3 FARE ELASTICITY

Tax Rate per Gallon	Percent Increase in Fare	Percent Ridership Decrease*
\$0.10	2.94%	0.88%
\$1.00	23.53%	7.06%
\$3.00	73.53%	22.06%

*Based on percentage change in fare between 1972 average fare of \$0.34 and revised fare including tax share developed in Table II-9, assuming ratio of 2.75 passengers per bus mile.

TABLE II-13
 NATIONAL PROJECTIONS OF TRANSIT FUEL TAX YIELDS, 1975-1976
 (Projections subject to assumptions and notes in Appendix A)

Tax Rate per Gallon	Bus Fare*	Ridership Assumption	Annual Tax Yield Without Elasticity Effects (Million \$)		Annual Tax Yield With -0.3 Elasticity Effects (Million \$)	
			1975	1976	1975	1976
\$0.10	\$0.35	Low	\$ 30.3	\$ 30.3	\$ 30.0	\$ 30.0
		High	38.6	42.3	38.3	41.9
\$1.00	\$0.42	Low	303.0	303.0	281.0	281.0
		High	386.0	423.0	358.0	393.0
\$3.00	\$0.59	Low	909.0	909.0	708.0	708.0
		High	1,158.0	1,269.0	903.0	990.0

* Base fare is \$0.34 plus fuel tax increase.

Note: Tax yields for elasticity assumptions less than -0.3 can be estimated by comparing the tax yields calculated assuming a -0.3 elasticity with the tax yields assuming no elasticity effects.

estimates allowing for elasticity effects. The tax yields based on fare elasticity effects are calculated for a \$0.10, \$1.00, and \$3.00 tax rate per gallon, and the ranges of tax yields for low and high forecasts are reported.

On the basis of an assumed fare elasticity value of -0.3 ¹, the expected tax yields from a \$3.00 rate will likely vary between \$708 and \$990 million in 1976, depending upon the level of bus transit ridership. The 1975 forecast of tax yields will range between \$708 and \$903 million. In the case of a \$1.00 fuel tax, the tax yields in 1976 will range between \$281 and \$393 million and in 1975, between \$281 and \$358 million. A \$0.10 fuel tax would yield between \$30.0 and \$41.9 million in 1976 and \$30.0 to \$38.3 million in 1975. The fare elasticity effects are negligible for a \$0.10 fuel tax.

INCIDENCE OF TAX AMONG RIDERS

The incidence of the transit fuel tax among bus riders was analyzed in accordance with congressional request. Two sources of information were available to analyze the socioeconomic characteristics of transit riders. First, the Nationwide Personal Transportation Study (NPTS) conducted for the Federal Highway Administration by the U.S. Bureau

¹/ Transit fare elasticities, even at relatively high fares, could be lower in the short run because of gasoline shortages and higher gasoline prices.

of the Census provides nationwide data on the socioeconomic characteristics of transit riders for 1969-1970. Second, similar data are available from transit rider surveys conducted in selected urban areas and documented in reports that were supported by the Urban Mass Transportation Administration's Technical Studies Program. Summary information from these sources is presented in Table II-14. The following points are evident in the table:

- . Female riders are in the majority, constituting 57 percent of the total nationwide ridership, but increasing to a proportion of 67 percent to 81 percent for the selected cities with populations less than two million.
- . Bus riders generally come from the households with lower incomes. National totals show that approximately 45 percent of the bus riders come from households with incomes of \$6,000 or less. (It should be noted that 32 percent of U.S. households have incomes of \$6,000 or less.) For the smaller urban areas (approximately 500,000 population or less), the proportion increases to between 76 and 87 percent with incomes of \$6,000 or less.
- . The proportion of all bus riders accounted for by minorities is disproportionately large. About 34 percent of bus riders come from these groups, whereas they constitute only 11 percent of the total U.S. population.
- . The younger and the older riders are in the majority; 31 percent of the riders are less than 20 years of age, and more than 27 percent are 50 years or older. These percentages approximate the proportions of younger and older persons in the total U.S. population.
- . Commuting to work is the trip purpose of 60 percent to 80 percent of bus riders. Travel to school accounts for another 5 percent to 20 percent of all transit riders, a variation which is accounted for by policy differences on the provision of special school buses.

TABLE II-14

SOCIOECONOMIC CHARACTERISTICS OF PUBLIC TRANSIT BUS RIDERS

	1970 Total U. S. Population Distribution	1970 Bus Riders (NPTS)	Sacramento, California 1968	Broward Co., Fla. 1972	Minneapolis, St. Paul 1968	Tulsa, Okla. 1970	Honolulu, Hawaii 1971	Pinellas Co., Fla. 1970
Urban Area 1970 Population			633,700	613,800	1,704,000	371,500	442,400	495,200
Sex %								
Male	48.7	42.7	29	18.3	24.7	30.2	32.3	N. A.
Female	51.3	57.3	67	81.7	75.3	68.4	67.7	
Not reported			4			1.4		
Age %								
Less than 14	28.5	12.2	2	2.4	N. A.	9.3	N. A.	1.0
15-19	9.4	19.0	7	6.8		7.0		2.0
20-29	13.1	16.0	22	12.3		14.0		8.4
30-49	22.9	25.4	30	32.4		36.3		23.4
50-64	16.2	19.5	30	25.2		23.5		26.2
65 or more	9.9	7.9	9	20.9		9.8		38.2
Race %								
Mexican-American			7	N. A.	N. A.	N. A.	N. A.	N. A.
Negro	11.1 ^o	33.9 ^o	7					
Oriental			4					
White	88.9	66.1	78 [#]					
Not reported			4					
Household Income %								
Less than \$3,000	10.3	13.8	12	43.8	21.8	N. A.	N. A.	56.8
\$3,000-\$6,000	21.9	27.3	30	32.2	33.9			31.3
\$6,000-\$10,000	20.6	23.0	21	16.8	28.5			7.0
\$10,000 or more	47.2	27.6	23	9.2	15.8			5.7
Not reported		8.3	14					
Trip Purpose %								
Work		N. A.	63	58.6	66	87	N. A.	48.7
Shopping			11	19.8	7	5		23.5
Personal Business			4	9.8	6	4		15.8
Social, Recreation			9	6.0	2	3		6.5
School			13	1.4	7	1		3.5
Other				4.4	2			
Auto Availability %								
Yes, this trip	82.5	N. A.	41	6.5	26.7	N. A.	15.7	N. A.
No, this trip	17.5		58	93.5	73.3		89.3	

^oNegro and other

[#]White and other

Sources: Selected Urban Mass Transportation Administration Technical Study Reports, Federal Highway Administration Nationwide Personal Transportation Study, and 1970 U. S. Census.

Significant differences in socioeconomic distributions occur between national statistics from the NPTS and those reported for urbanized areas with population under two million. The NPTS statistics tend to be heavily weighted by higher transit ridership in New York, Chicago, San Francisco, Boston, Philadelphia, Los Angeles, Baltimore, Detroit, and Pittsburgh. In these cities the income of transit riders is higher and a larger proportion of male workers ride transit than in the smaller cities.¹

It is apparent from the foregoing data that a transit fuel tax paid by increased fares could fall most heavily on:

- . households of low to modest income (many with relatively fixed income);
- . working women;
- . minorities; and
- . school children, youths, and elderly persons.

These groups have the least access to alternate modes of transportation, such as the private automobile. The elderly, the younger, and women workers would be the groups least able to shift their trips to other transportation modes.

^{1/} If the transit fuel tax covered urban rail and trolley coach systems, the socioeconomic distributions, and thus the incidence, discussed in this report would be different. Ridership surveys in New York, Philadelphia, and Boston have confirmed that rail passengers in the larger urbanized areas have different socioeconomic characteristics from bus riders in small and medium size areas--for example, a higher proportion of male workers, with average or above average incomes, are riders on urban rail systems.

TABLE II-15

SOCIOECONOMIC CHARACTERISTICS OF TRANSIT BUS RIDERS WHO
ARE LICENSED DRIVERS--FIVE MIDDLE-SIZED URBAN AREAS

	Springfield, Mass., 1964-65 (%)	Richmond, Va., 1964-65 (%)	Baltimore, Md., 1961-62 (%)	Columbia, S. C., 1964-65 (%)	Lehigh Valley, Pa., 1964-65 (%)
<u>Sex</u>					
Male	40.1	39.4	52.6	31.8	42.3
Female	59.9	60.6	47.4	68.2	57.7
<u>Household Status*</u>					
Senior	68.2	76.4	71.4	56.6	69.4
Junior	31.8	23.6	28.6	43.4	30.6
<u>Household Income</u>					
Less than \$3,000	N. A.	6	N. A.	11	3
\$3,000-\$5,000		14		20	7
\$5,000-\$7,000		29		37	18
\$7,000-\$10,000		27		19	27
\$10,000 or greater		23		13	45
<u>Trip Purpose</u>					
Work	60	82	75	63	68
Shopping	13	5	6	5	8
Personal Business	5	7	6	7	5
Social/Recreational	5	2	4	7	2
School	17	4	9	18	17
<u>Auto Availability</u>					
Auto available for trip	35.0	47.9	47.8	34.6	46.8
Auto not available for trip	65.0	52.1	52.2	65.4	53.2

*"Senior" person refers to husband, wife, or single adult.
"Junior" household members are single persons under 21.

Source: Wilbur Smith Associates, Evaluation of Bus Transit Demand in Middle-Sized Urban Areas, 1966.

In the short run, the bus-user group most able to adjust to increased fares is composed of the licensed drivers living in households with cars, who may have the option to shift to the use of a car. Table II-15 indicates that the average income of bus riders holding driver's licenses is higher than the average income of bus riders as a whole. Among transit bus riders licensed to drive, males constitute a slightly higher proportion than among bus riders as a whole. In part this is because more males than females are licensed, but also because some commuters travel by bus even when a car is available. This is particularly true in large cities. In Baltimore, for example, 53 percent of all bus riders are male licensed drivers.

The impact of a transit fuel tax would be the least burdensome on those licensed bus riders who are predominately workers, males, and members of higher income households because of this group's greater ability to transfer transit trips to an available automobile to avoid the expense of increased transit fares.

It is important to recognize, however, that a transit fare increase which induced transit riders to switch to automobiles would increase air pollution, energy consumption, and urban congestion.

The foregoing analysis is based on an assumption that transit ridership would continue to be composed largely of the same groups of people as in the past. If, however, the ridership increases envisioned

in the "high" alternative projection used in this study were to be realized, then it is likely that a substantial part of the increases would be composed of former automobile commuters. Since this group tends to be more representative of the general population than current transit riders, then under the "high" projection the incidence of a fare increase would be distributed over a broader segment of the population than that reflected in current transit ridership.

URBANIZED AREA FORECAST OF TRANSIT FUEL TAX YIELDS

Various ranges of national fuel tax yields for 1975 and 1976 were discussed earlier in this section. Recently reported statistics by the states to the Department of Transportation through the 1974 National Transportation Study (NTS) are used to estimate tax yields by size of urbanized area. Four categories of urbanized areas are considered according to 1970 population ranges--50,000 to 250,000; 250,000 to 500,000; 500,000 to 2,000,000; over 2,000,000. Bus miles reported by the state are summarized for calendar year 1971 for all the urbanized areas. The distribution of bus vehicle miles of travel (VMT) in calendar year 1971 by the four categories is reported in Table II-16. The nine most populated urbanized areas account for 53 percent of bus VMT; the top 44 cities with 1970 populations over 500,000 account for 84 percent of the bus VMT.

The forecasts of national tax yields from a transit fuel tax in ranges of \$0.10, \$1.00, and \$3.00 are produced for FY 1975 and FY 1976.

Because of the short duration of the forecasts, the assumption is made that the relative distribution of bus VMT among different sizes of urbanized areas will not change. Therefore, the percentage distribution reported in Table II-16 is applied in Table II-17 to apportion the national tax yields forecast among urbanized areas. The high and low ranges of tax yields based on the -0.3 elasticity value are shown for each population category. As expected, 84 percent of the tax yields would be raised in the 44 urbanized areas with populations over 500,000.

TABLE II-16

DISTRIBUTION OF BUS VEHICLE MILES OF TRAVEL
BY URBANIZED AREA SIZE, 1971

Urbanized Area Population Size	Number of Urbanized Areas	Total Bus Vehicle Miles of Travel (VMT) (Millions)	
		Number*	Percent
50,000 - 250,000	159	120.0	9
250,000 - 500,000	33	88.1	7
500,000 - 2,000,000	35	392.7	31
over 2,000,000	<u>9</u>	<u>675.3</u>	<u>53</u>
Total	236	1,276.0	100

*Rounded to nearest hundred thousand.

Source: Data submitted by the states and urbanized areas as part of the 1974 National Transportation Study.

TABLE II-17

PROJECTION OF TAX YIELDS BY URBANIZED
AREA POPULATION SIZE, 1975-1976

(Projections subject to assumptions
and notes in Appendix A)

Urbanized Area Population Size	Forecast of Transit Fuel Tax Yields (Million \$)			
	Low		High	
	1975	1976	1975	1976
Tax \$0.10				
50,000-250,000	\$ 2.7	\$ 2.7	\$ 3.4	\$ 3.8
250,000-500,000	2.1	2.1	2.7	2.9
500,000-2,000,000	9.3	9.3	11.9	13.0
over 2,000,000	<u>15.9</u>	<u>15.9</u>	<u>20.3</u>	<u>22.2</u>
Total	30.0	30.0	38.3	41.9
Tax \$1.00				
50,000-250,000	\$ 25.3	\$ 25.3	\$ 32.2	\$ 35.4
250,000-500,000	19.7	19.7	25.1	27.5
500,000-2,000,000	87.1	87.1	111.0	121.8
over 2,000,000	<u>148.9</u>	<u>148.9</u>	<u>189.7</u>	<u>208.3</u>
Total	281.0	281.0	358.0	393.0
Tax \$3.00				
50,000-250,000	\$ 63.7	\$ 63.7	\$ 81.3	\$ 89.1
250,000-500,000	49.6	49.6	63.2	69.3
500,000-2,000,000	219.5	219.5	279.9	306.9
over 2,000,000	<u>375.2</u>	<u>375.2</u>	<u>478.6</u>	<u>524.7</u>
Total	708.0	708.0	903.0	990.0

Passengers per bus mile = 2.75

Elasticity = -0.3

POTENTIAL ADMINISTRATIVE PROBLEMS
AND LEGAL IMPLICATIONS

The federal excise tax on the sale of gasoline is customarily assessed by the Internal Revenue Service at the manufacturer or refinery level, whereas the tax on diesel fuel is assessed at the pump. Subsequent sales to wholesalers and distributors include in the sale price the applicable tax paid by the manufacturer. One major variation in this assessment procedure occurs in the case of a sale to a state or local government or any subdivision of a state. Pursuant to federal law and regulations, such sales are exempt from federal excise tax. This exemption has been interpreted very broadly to include all uses by the state or its subdivision.

In practice, a governmental recipient of an exemption registers with the IRS for the exemption and provides a letter of certification to the manufacturer upon the purchase of gasoline. The manufacturer then sells the gasoline excluding the federal tax and later relies upon the letter of certification when accounting to the IRS for his excise tax liability.

Since all publicly owned transit operations qualify under this provision, the major administrative requirement of a federal transit fuel tax would be one of separating the uses of gasoline or diesel fuel sold to state and local transit owners so as to assess only the transit fuel.

The large public transit operators who have their own fueling facilities for their exclusive use should not have a major problem. But, in the case of the small public transit operators who fuel their vehicles from the same tanks used for servicing other government vehicles (for example, maintenance equipment and administrative vehicles), some administrative burden would occur. These small public transit operators would have the choice of either buying their fuel for transit operations in a separate transaction in which the transit fuel tax is paid, or continuing to service their vehicles from common government sources, which would involve keeping comprehensive pump distribution records. The first option would have record-keeping requirements equivalent to those of the large operators, as discussed previously. Like the large operators, it would be necessary to store the transit fuel in tanks separate from other government tanks to assure that no fuel was dispensed for transit use on which the tax had not been paid. This option would entail the costs of additional storage facilities. The second option would require no additional storage facilities, but would entail keeping detailed records of fuel dispensed for transit use.

The collection and assessment procedure is somewhat different in the case of gasoline and diesel fuel sold to private local transit operators which qualify under a special allowance or rebate provision. This provision provides an allowance on the federal gasoline and diesel fuel excise tax for those private transit companies who operate a local transit

system which meets certain criteria. These criteria require the transit vehicles in which the gasoline or fuel is used to engage in furnishing "scheduled common carrier public passenger land transportation service along regular routes," and stipulate that at least 60 percent of the total passenger fare revenue from scheduled service must be attributable to "commuter fare revenue" (§6421(d)(2) of the U.S. Code, Title 26). If these two conditions are satisfied, the private local transit operators are refunded \$0.02 for each gallon of gasoline so used on which the tax was paid at the rate of \$0.04 per gallon.

In practice, the private local transit operators file quarterly statements with the IRS prior to each new quarter to maintain this special allowance. If the special allowance is maintained, the local operator follows a procedure similar to that described above in providing the seller with a letter of certification whereupon gasoline or diesel fuel is purchased at the tax rate of \$0.02 per gallon instead of the regular \$0.04 per gallon.

Most private local transit operators have qualified for this rebate provision and must now keep records, usually based on mileage or gross revenue, to maintain their special allowance. The imposition of a federal transit fuel tax upon these operators should not substantially increase their present bookkeeping burden, therefore.

An example is the Indianapolis Transit System, a private company providing public transportation service to the city of Indianapolis and

also offering private charter services. It purchases its diesel fuel from the wholesaler or distributor initially tax-free by having the fuel deposited directly in bulk into its storage tanks. At the end of each quarter, the company files a return with the IRS indicating the amount of fuel used for municipal services in the urban area and the amount used for charter services. The amount of fuel used for charter services is figured on a percentage basis of miles driven and the tax on it is paid at the usual rate of \$0.04 per gallon. Since the Indianapolis Transit System qualifies under the IRS local transit provision noted above, the remaining fuel is taxed at \$0.02 per gallon.

The adoption of a federal transit fuel tax has some important legal implications. If the policy trend of exempting most public transportation uses of gasoline and fuel from a federal excise tax is reversed,¹ the constitutional issue of governmental immunity may arise.

¹/ A transit fuel tax would represent a major reversal of federal policy which has evolved consistently since the first imposition of a federal tax on gasoline in 1932. Initially by administrative regulation and later by statute, state and municipal governments have been exempt from federal excise taxes on gasoline and diesel fuel (Section 4483, Title 26). The major portion of urban area public transportation services are now publicly owned and operated, and a growing number of transit operations in smaller cities are being taken over by public agencies.

In addition, state and local governments in recent years have increasingly used the tax exemption policy for both publicly and privately operated transit systems as a mechanism for reducing transit costs in the face of increasing fares, decreasing ridership, and operating deficits.

The doctrine of governmental immunity recognizes an implied constitutional limitation on the power of the Federal Government to tax a state government or any of its instrumentalities. Historically, the states feared that the federal taxing power could be used to encumber and destroy their ability to function and govern. Since the Supreme Court cases of McCulloch v. Maryland¹ and Collector v. Day² from which the doctrine of governmental immunity stems, judicial decisions have narrowed the application of governmental immunity to those instances where the federal taxing power threatens or interferes substantially with an essential or indispensable function of state government. The fact that the economic burden of a federal tax may rest on a state government (or its instrumentality) is not sufficient reason to judge that tax unconstitutional. The taxed instrumentality of the state government must also be so intimately associated with the performance of an indispensable governmental function that any taxation would threaten performance of the functions of the government itself. (See Metcalf & Eddy v. Mitchell³ and Helvering v. Powers.⁴)

1/ 4 Wheat. 316 (1819).

2/ 11 Wall.. 113 (1871).

3/ 269 U.S. 514 (1925).

4/ 293 U.S. 214 (1934).

The constitutionality of a federal transit fuel tax depends on whether a court will find that the tax may be substantially absorbed by private persons,¹ and, if not, that the operation of transit service is an "essential or indispensable" governmental function, and that the tax on fuel "threatens" its existence.

There is no question that if the transit fuel tax covered urban rail and trolley systems in addition to urban bus systems, the fare increase effect of a transit fuel tax would be reduced, fewer transit passengers would shift to automobiles, and urban congestion and pollution would be less while fuel tax yields would be greater.² In practice, while it may be possible, albeit difficult, to identify the type of energy source (middle distillates, coal, natural gas) used in the generation of the kilowatt hours consumed by rail and trolley coach systems, the problems of administering a tax on this energy would be extremely complex.

1/ Wilmette Park District v. Campbell, 338 U.S. 411 (1949).

2/ Rail and trolley coach systems exist in 14 American cities--11 with populations over 500,000, and three with populations from 250,000 to 500,000. These systems consumed 2.4 billion kilowatt hours in 1972, and accounted for approximately 32 percent of the nationwide transit ridership (rail, 30 percent; trolley coach, 2 percent).

CONCLUSIONS

A tax rate necessary to generate sufficient revenues to make a meaningful contribution to transit financing requirements would be extremely high. The effects of such a tax on transit ridership would depend on the extent to which the revenues to pay the tax were derived from the farebox.

If the tax is passed on to transit riders in the form of higher fares, then it would have the following effects:

- . Although the current gasoline shortage is expected to increase transit ridership, higher fares would be an influence discouraging ridership. A consequent increase in automobile use would exacerbate the current gasoline shortage, urban pollution, and urban congestion.
- . The transit users who would pay the tax are composed largely of people from households with low to modest income, working women, minorities, school children, youths, and elderly people.

If the tax is not passed on to transit riders in the form of higher fares, then states or localities would have to raise the money through their own tax sources. This would mean, in effect, that state or local taxes would be used to pay a federal tax which, in turn, would be used to pay a portion of the costs of urban mass transportation.

The levy of a federal tax on public transit systems which are instrumentalities of state or local governments also raises some potential problems of constitutionality.

III. ANALYSIS OF AN ADDITIONAL URBAN GASOLINE TAX

This section analyzes the yields and effects of an additional gasoline tax if it were to be imposed in urbanized areas for FY 1975 and FY 1976. The estimates of ranges of tax yields are developed from the 1974 National Transportation Study, the 1970 National Highway Needs Report, and the Censuses of Wholesale and Retail Trade for 1962 and 1967.

While the intent of the request from Congress was a study of the yields and effects of an additional gasoline tax imposed in urban areas (population 5,000 and over), the available data pertains to urbanized areas (population 50,000 and over), which are where the preponderance of transit usage occurs. Thus the analysis discussed in this section was done of necessity on urbanized areas. The urbanized findings, however, are taken as representative of what the urban yields and effects would have been had adequate urban data existed, with one qualification: the urbanized findings are understated in relation to urban areas since they exclude the 5,000 to 50,000 population range.

The analysis proceeds in several steps. The first step estimates vehicle miles of travel (VMT) by motor vehicles in urbanized areas; then this estimate and retail sales data are used in the second step to estimate gasoline consumption in urbanized areas. Consumption is projected to FY 1975 and FY 1976 based on current information on gasoline shortages and allocations. The third step estimates gasoline tax yields, at three

different tax rates, from the projections of urbanized gasoline consumption. Fourth, an analysis is made of the probable effects of the gasoline tax on consumption, taking account of price and income elasticities. Fifth, projections are made of likely yields of the gasoline tax in urbanized areas of different sizes.

The potential administrative problems and legal implications of an urban area gasoline tax are discussed at the end of this section.

VEHICLE MILES OF TRAVEL IN URBANIZED AREAS

Important sources of information on nationwide vehicle miles of travel include the Highway Statistics report for 1971 and 1972 prepared by the Federal Highway Administration (FHWA), the 1974 National Transportation Study, and the 1970 National Highway Needs Report. Estimated average daily motor vehicle miles of travel in the United States in 1968 are reported in Table III-1; VMT in urbanized areas accounted for 49 percent of the average daily VMT.

To forecast the urbanized/rural distribution for FY 1975 and FY 1976, it is necessary to make assumptions about the likely effects of both anti-pollution policies and the present gasoline shortage. For the purposes of this study, it is assumed that Environmental Protection Agency (EPA) policies will have a negligible effect on urbanized motor vehicle mileage in FY 1975 and FY 1976. Accordingly, no reductions on account of EPA policies are assumed for the urbanized VMT. The more serious issue

is the gasoline shortage and possible rationing regulations of the Federal Energy Office (FEO).¹

TABLE III-1

AVERAGE DAILY
VEHICLE MILES OF TRAVEL, 1968

	VMT	Percent
Urbanized streets	1,253,715	49
Rural roads*	<u>1,329,023</u>	<u>51</u>
Total	2,582,738	100

Source: 1970 National Highway Needs Report, USDOT, FHWA, BPR, 91st Congress, 2nd session, Sept. 1970.

* The expression "rural" is used for convenience of notation. It includes rural and small urban areas of less than 50,000 population.

Based on current experience, it is expected that the gasoline shortage and the FEO allocations will have two somewhat offsetting effects on the urbanized/rural distribution of VMT. First, they have tended to reduce rural mileage--particularly weekend, recreational mileage--relative to urbanized mileage. Secondly, however, FEO gasoline allocations now propose to provide relatively less gasoline to those large urbanized areas with extensive transit systems, and more gasoline to the smaller urban areas and rural areas which have little or no transit service. In the absence of definitive guidelines from FEO, it is

^{1/} Federal Register, January 16, 1974, Vol. 39, No. 11, Part II. Gasoline Rationing Contingency Plan.

assumed that the gasoline shortage and FEO regulations will affect motor vehicle travel equally in rural and urbanized areas. Consequently, for the following analysis, the 1968 urbanized/rural split is assumed to remain unchanged for 1975 and 1976.

PROJECTIONS OF URBANIZED AREA GASOLINE CONSUMPTION

Two approaches are available for the projection of urbanized gasoline consumption. One projection can be derived from urbanized VMT by assuming that the urbanized/rural distribution of consumption is the same as the urbanized/rural distribution of VMT. The second projection can be made from data on gasoline sales in rural areas and in Standard Metropolitan Statistical Areas (SMSAs),¹ based on information reported in the Censuses of Wholesale and Retail Trade for 1962 and 1967.

In 1972, 96.5 billion gallons of gasoline were consumed nationwide. In 1973, FHWA estimates consumption of 102.2 billion gallons. Accordingly, the urbanized area estimate for gasoline consumed in 1973 is 50.1 billion gallons (49 percent of 102.2 billion gallons). Alternatively, retail sales data from the business censuses indicate that 68 percent of gasoline sales are made in SMSAs, compared with 32 percent in

^{1/} A Standard Metropolitan Statistical Area (SMSA) is a group of socially and economically integrated contiguous counties which contain at least one city with 50,000 or more inhabitants.

rural areas.¹ In the following projections, therefore, starting with Table III-2, two different urbanized/rural "splits" or distribution patterns

1/ This urbanized/rural split is based on the ratio of the sales of gasoline stations in all SMSAs to total sales of gasoline stations in the U.S. The 1972 ratio is based upon a straight line projection of the 1963 and 1967 ratios.

1963 ratio:*	$\frac{\$11,248,418,000}{\$17,759,917,000}$	=	0.63340
		+	$\Delta 0.03347$
1967 ratio:#	$\frac{\$14,864,703,000}{\$22,709,373,000}$	=	0.65460
		+	$\Delta 0.03347$
1972 ratio:@			0.676509

thus in 1972: 67.7% of total fuel was consumed in urbanized areas.

32.3% of total fuel was consumed in rural areas.

*"1963 Census of Business," Vol. I, Part 1, Table 13, p. 1-114.

#"1967 Census of Business," Vol. I, Table 12, p. 1-140.

@1971 Sales Management's "Survey of Buying Power" indicates $\Delta 0.0345$.

have been used for each projection: one of 49 percent urbanized/51 percent rural, and one of 68 percent SMSA/32 percent rural.¹

Three ranges of gasoline consumption in urbanized areas have been projected for 1975 and 1976 (see Table III-2). The high forecast assumes that the 1975 and 1976 consumption levels will remain the same as 1973.

TABLE III-2

NATIONWIDE PROJECTIONS OF GASOLINE CONSUMPTION
OR PURCHASES IN URBANIZED AREAS, 1975-1976
(Billions of gallons)

(Projections subject to assumptions
and notes in Appendix A)

	1973 Total U. S.	1975-1976	
		Split 49%/51%*	Split 68%/32%#
Low Projection	N. A.	35.1	48.7
Medium Projection	N. A.	40.1	55.6
High Projection	N. A.	50.1	69.5
FHWA Actual @ 49%*	50.1	N. A.	N. A.
Census " @ 68%#	69.5		

*Urbanized/rural split.

#SMSA/rural split.

^{1/} The differences between the distribution based on SMSA sales data (the 68 percent/32 percent split) and the distribution based on the urbanized area VMT data (the 49 percent/51 percent split) are due to several factors, including the differences in areal definition and the fact that gasoline and diesel fuel are purchased in urbanized areas but used in rural travel. For example, the SMSA sales data includes diesel fuel, and a major portion of diesel fuel purchased in urbanized areas is used for long-distance, and hence rural, consumption.

The medium and low forecasts are based on two alternative assumptions concerning reduced gasoline supplies available in those years. The medium projection is based on 1975 and 1976 consumption being 80 percent of that in 1973. This projection reflects the FEO prediction of a 20 percent shortage in gasoline in 1974 continued into 1975 and 1976. The low projection assumes that gasoline supplies could fall to 70 percent of the 1973 level in 1974 and would continue at that level to 1976.¹

ESTIMATE OF GASOLINE TAX YIELDS

The projections of the additional gasoline tax yields are calculated from the three projections of gasoline consumed/purchased in urbanized areas. Annual tax revenues are calculated for three tax rates of 1, 2, and 3 cents per gallon. The calculated tax yields are reported in Table III-3. The 2 cent per gallon gasoline tax produces a yield exceeding one billion dollars.

EFFECTS OF INCREASES IN GASOLINE TAXES ON VEHICLE USE

Short-term (three months) price elasticities of gasoline demand are estimated between -0.07 and -0.14 in a recent study for the EPA and

¹/This assumption is based on information reported in FHWA release #80-73, December 12, 1973, in which FHWA estimated a reduction of up to 30 percent in gasoline availability for 1974.

TABLE III-3

PROJECTION OF YIELDS, 1975-1976, FROM
AN ADDITIONAL GASOLINE TAX IN URBANIZED AREAS
(Millions \$)

(Projections subject to assumptions
and notes in Appendix A)

Tax Rate Per Gallon	Projection Level	1975-1976 Yields	
		Split 49%/51%*	Split 68%/32%#
1 cent	Low	\$ 351	\$ 487
	Medium	401	556
	High	501	695
2 cents	Low	702	974
	Medium	802	1,111
	High	1,002	1,390
3 cents	Low	1,053	1,452
	Medium	1,203	1,539
	High	1,503	2,081

*Urbanized/rural split.
#SMSA/rural split.

the Council on Environmental Quality.¹ Hence, a 1 to 3 cent additional gasoline tax in urbanized areas is not expected to depress consumption by more than one-half percent at current prices. Long-term (30 months) price elasticities are estimated to be in the range of -0.26 to -0.30. The effect of a 1 to 3 cent per gallon gasoline tax would be less than a 2 percent drop in consumption at current prices.

There is undoubtedly some price at which the price elasticity for gasoline consumption will increase above the current estimates; at that price the 1 to 3 cent per gallon gasoline tax increment might have some significant depressing effect on consumption. Currently, however, there are no estimates as to what that price level might be.

Income elasticities related to gasoline consumption are considerably larger, being estimated at +0.4 in the short term and +1.0 in the long term (30 months). Therefore, it seems likely that increases in household incomes in 1975-1976 would offset the small depression in gasoline consumption resulting from a tax in the range of 1 to 3 cents per gallon. Consequently, the suggested gasoline taxes can be expected to have negligible effect on gasoline consumption and hence on tax yields.

¹/ Data Resources, Inc., A Study of the Quarterly Demand for Gasoline and Impacts of Alternative Gasoline Taxes (Lexington, Massachusetts: Data Resources, Inc., 1973).

Finally, with the restricted supplies of gasoline projected for FY 1975 and FY 1976, very large price increases would be required before consumption would fall below the available supply.

URBANIZED AREA PROJECTION OF GASOLINE TAX YIELD

Data from the 1974 National Transportation Study (NTS) provided the calendar year 1971 distribution of total motor vehicle miles of travel by four population categories (50,000-250,000; 250,000-500,000; 500,000-2,000,000; and over 2,000,000). The available information was for urbanized areas only--it did not include VMT in small urban areas (population 5,000 to 50,000). Table III-4 presents an urbanized area distribution of VMT for calendar year 1971. The assumption is made that FY 1975 and FY 1976 distributions will equal that of calendar year 1971.

In the next step (Tables III-5A and III-5B), the gasoline tax yields (Table III-3) are distributed by urbanized areas in each population category according to the percentage distribution reported in 1971 for the NTS (Table III-4). Table III-5A uses the 49 percent urbanized/51 percent rural split, while Table III-5B uses the 68 percent SMSA/32 percent rural split.

Table III-5A shows that the nine urbanized areas with more than 2,000,000 population in 1970 would provide 42 percent of the tax yield from a 3 cent tax rate. The yield for these areas ranges from \$442 million to \$631 million. The top 44 cities with populations over 500,000

TABLE III-4

TOTAL VEHICLE MILES OF TRAVEL, 1971, DISTRIBUTED
BY URBANIZED AREAS BY POPULATION SIZES

Urbanized Area Population Size	Number of Urbanized Areas	Total Motor Vehicle Miles of Travel (VMT) 1971 (Billions)	Percent
50,000-250,000	159	97.3	17
250,000-500,000	33	62.0	11
500,000-2,000,000	35	169.3	30
over 2,000,000	<u>9</u>	<u>240.6</u>	<u>42</u>
Total	236	569.2	100

Source: Data submitted by the states and urbanized areas as part of the 1974 National Transportation Study.

TABLE III-5A

ANNUAL GASOLINE TAX YIELDS DISTRIBUTED
BY URBANIZED AREA POPULATION SIZE, 1975-1976
(49 percent urbanized/51 percent rural split)

(Projections subject to assumptions
and notes in Appendix A)

Urbanized Area Population Size	Million \$		
	Low 1975-1976	Medium 1975-1976	High 1975-1976
1 Cent Tax#			
50,000-250,000	\$ 60*	\$ 68*	\$ 85*
250,000-500,000	39	44	55
500,000-2,000,000	105	120	150
over 2,000,000	<u>147</u>	<u>168</u>	<u>210</u>
Total	\$ 351	\$ 401	\$ 501
2 Cent Tax#			
50,000-250,000	\$ 119	\$ 136	\$ 170
250,000-500,000	77	88	110
500,000-2,000,000	211	241	301
over 2,000,000	<u>295</u>	<u>337</u>	<u>421</u>
Total	\$ 702	\$ 802	\$1,002
3 Cent Tax#			
50,000-250,000	\$ 179	\$ 205	\$ 256
250,000-500,000	116	132	165
500,000-2,000,000	316	361	451
over 2,000,000	<u>442</u>	<u>505</u>	<u>631</u>
Total	\$1,053	\$1,203	\$1,503

*Urbanized area population category totals are rounded to nearest million and may not add to total tax yield.

Tax rate per gallon.

TABLE III-5B

ANNUAL GASOLINE TAX YIELDS DISTRIBUTED
BY URBANIZED AREA POPULATION SIZE, 1975-1976
(68 percent SMSA/32 percent rural split)

(Projections subject to assumptions
and notes in Appendix A)

Urbanized Area Population Size	Million \$		
	Low 1975-1976	Medium 1975-1976	High 1975-1976
1 Cent Tax*			
50,000-250,000	\$ 83	\$ 95	\$ 118
250,000-500,000	54	61	76
500,000-2,000,000	146	167	209
over 2,000,000	<u>205</u>	<u>233</u>	<u>292</u>
Total	\$ 487	\$ 556	\$ 695
2 Cent Tax*			
50,000-250,000	\$ 166	\$ 189	\$ 236
250,000-500,000	107	122	153
500,000-2,000,000	292	333	417
over 2,000,000	<u>409</u>	<u>467</u>	<u>584</u>
Total	\$ 974	\$1,111	\$1,390
3 Cent Tax*			
50,000-250,000	\$ 247	\$ 262	\$ 354
250,000-500,000	160	169	229
500,000-2,000,000	435	462	624
over 2,000,000	<u>610</u>	<u>646</u>	<u>874</u>
Total	\$1,452	\$1,539	\$2,081

*Tax rate per gallon.

provide 72 percent of the yield from a 3 cent tax, with total receipts ranging from \$758 million to \$1,082 million. The yields for 1 cent and 2 cent tax revenues are also shown in Table III-5A. Comparable but higher estimates of yields are given in Table III-5B for the 68 percent SMSA/32 percent rural split.

POTENTIAL ADMINISTRATIVE PROBLEMS
AND LEGAL IMPLICATIONS

By definition, the urban gasoline tax will require the administrative burden of distinguishing between sales of gasoline in urban and in rural areas. Since the refinery would not normally be aware of the final destination of the gasoline sold, the tax would have to be assessed at the distributor (wholesale) level.

The distributor must now keep records of his sales for billing purposes. The imposition of an urban gasoline tax would additionally require the distributor to file a federal excise tax return indicating the amounts sold in urban areas for taxing purposes, and would subject him to federal audits. One mechanism for collection would be to have the state act as the collector of the federal excise tax since it now in most cases collects the state gasoline tax at the distributor (wholesale) level.

An additional problem may exist in enforcing and monitoring the urban gasoline tax. Tax differentials create an incentive for evasion. Thus, large or volume users might be inclined to buy in bulk and have

gasoline either actually or theoretically delivered outside the defined urban area boundary while its predominate use would be within the urban area.

Nevertheless, a gasoline tax imposed in an urban area, if it could satisfy the policy and legal issues, would not result in undue administrative problems.

A fundamental legal issue facing the use of an urban area fuel tax concerns the constitutional doctrines of due process and equal protection. Generally, a valid tax must not arbitrarily discriminate among taxpayers within the boundaries of the government imposing it. Although the notions of due process and equal protection are not infringed upon when bordering states have different taxes on similar items, these notions may prohibit a state or the Federal Government from imposing a tax within its jurisdictional boundaries which discriminates on the basis of geographical location or population. The constitutional acceptability of a tax which discriminates among taxpayers based upon some classification or definition depends upon the rational relationship of the classification to the purpose of the tax.

CONCLUSIONS

If a tax on gasoline sold in urban areas were used to finance urban mass transportation, the tax rate required to raise a given amount of revenue would be much smaller than the equivalent transit fuel tax

rate. Even if the national revenue targets were as much as \$1.5 billion per year, the tax rate per gallon of gasoline would be only about 3 cents and would not be expected to have any significant effect on the consumption of gasoline or on transit usage.

There are questions of equity raised by a tax applied to gasoline-- for example, gasoline used for trips in areas where transit alternatives are not available. Constitutional questions are also raised by a federal tax imposed only within certain geographic areas.

IV. MAGNITUDE OF EXPENDITURES FOR MASS TRANSPORTATION

The Federal-Aid Highway Act of 1973 added significantly increased flexibility in the way states and municipalities can utilize federal funds to meet their needs for improved mass transportation as well as to improve urban streets and highways. It also provided increased levels of funding for both the Urban Mass Transportation Program and the Federal-Aid Highway Program.

Two particular provisions of the Act, as well as other changes in policy, add to the flexibility in the use of federal funds for mass transit purposes. The relevant provisions of the Act are:

- . Funds apportioned to the states and their municipalities for the Federal-Aid Urban System may be used for public mass transportation.
- . Funds available to a particular state from the Highway Trust Fund for construction of Interstate Highway System segments can be relinquished and replaced by equivalent funds from the general fund to be spent in that state for mass transportation projects. The relinquished Interstate Highway System funds revert to the Highway Trust Fund.

These changes provide completely new avenues of federal assistance to state and local governments. Instead of the single source of funds for mass transportation from the Urban Mass Transportation Program, additional funds are now available from the Federal-Aid Highway Program. There are, however, some major factors which discourage the use of highway authorizations for transit:

- . Funds from the Federal-Aid Urban System authorizations, whether used for street and highway purposes, or for mass transit, must be matched by state and local governments at a ratio of 70 percent federal, 30 percent local. The matching ratio under the Urban Mass Transportation Program is 80 percent federal, 20 percent local.
- . Funds authorized for the Urban System are apportioned to the states according to a formula based on urban area population and there is no discretion in reallocation among the states in accordance with needs. Thus, the amounts available for mass transit purposes are limited by state in accordance with the apportionment shown in Table IV-1.

There are several rural states that would not likely spend significant amounts of their apportionments of Urban System funds for transit projects. Consequently, the most likely commitment of Urban System funds for mass transit projects out of the Highway Trust Fund is considerably less than the \$800 million¹ authorized for 1976--estimates of program level are \$150 million in 1975 and \$250 million in 1976 out of the Highway Trust Fund and \$50 million out of the general fund in 1975.

Under the Interstate Highway System transfer provision of the Federal-Aid Highway Act of 1973, the amounts which can be transferred are limited only by Interstate Highway System authorizations. Thus

¹/ Section III(a)(6) of the Federal-Aid Highway Act of 1973 also provides for additional possible transfers to the urban system account from the urban extensions account beyond the \$800 million.

TABLE IV-1

FUNDS APPORTIONED AND AUTHORIZED FOR THE FEDERAL-AID URBAN HIGHWAY SYSTEM FOR THE FISCAL YEAR 1975*

(Amounts are approximately the same for 1974 and 1976)

State	Urban System	State	Urban System
Alabama	\$ 9,636,519	New Hampshire	\$ 3,850,400
Alaska	3,850,400	New Jersey	32,305,964
Arizona	6,966,823	New Mexico	3,850,400
Arkansas	4,356,128	New York	78,472,885
California	91,243,259	North Carolina	10,711,377
Colorado	8,591,213	North Dakota	3,850,400
Connecticut	11,745,947	Ohio	40,078,632
Delaware	3,850,400	Oklahoma	8,275,293
Florida	26,565,720	Oregon	6,685,964
Georgia	13,025,025	Pennsylvania	41,353,502
Hawaii	3,850,400	Rhode Island	4,195,765
Idaho	3,850,400	South Carolina	5,648,456
Illinois	45,877,060	South Dakota	3,850,400
Indiana	16,407,872	Tennessee	11,135,454
Iowa	7,493,763	Texas	43,740,106
Kansas	6,884,360	Utah	4,174,840
Kentucky	8,018,811	Vermont	3,465,360
Louisiana	11,587,308	Virginia	14,616,849
Maine	3,850,400	Washington	12,127,083
Maryland	15,234,179	West Virginia	3,850,400
Massachusetts	24,058,485	Wisconsin	14,132,084
Michigan	32,480,575	Wyoming	3,850,400
Minnesota	12,222,040	District of Col.	3,891,444
Mississippi	4,488,800	Puerto Rico	7,356,940
Missouri	15,984,258	TOTAL	<u>\$769,694,960</u>
Montana	3,850,400		
Nebraska	4,403,617		
Nevada	3,850,400		

*Available to be obligated in 1974.

Source: U.S. Department of Transportation, Federal Highway Administration.

any state can exercise this provision providing it can meet the requirements contained in the Act--the amounts transferred could eventually total between \$4 billion and \$5 billion. Only a relatively small portion of that potential total, however, could be transferred and committed within FY 1975 and FY 1976--the best estimates are \$150 million in 1975 and \$200 million in 1976.

The extent to which state and local governments decide to utilize the mechanism of transferring Interstate Highway System segments and using the equivalent funds for mass transit purposes is uncertain. One state, Massachusetts, already has decided to use this mechanism, while several other states are considering this possibility as a means of providing more funds more rapidly for mass transportation capital facilities and equipment.

By the end of FY 1974, state and local governments will have received federal commitments (administrative reservations) totaling approximately \$2.5 billion of the \$6.1 billion authorized by the Urban Mass Transportation Act (amended). An additional \$2.450 billion of UMTA capital grants is expected to be committed by the end of FY 1976.

The sources of funding available to the states and local governments are summarized in Table IV-2.

TABLE IV-2
PROGRAM LEVEL
FOR URBAN MASS TRANSPORTATION PROJECTS
(Million \$)

Source	FY 1975 Budgeted	FY 1976 Estimated
Urban System	150 (Trust Fund)	250
Interstate Transfers and Urban System from General Fund	100 (IHS) 50 (UHS)	200
Urban Mass Transportation Capital Grants*	<u>1,225</u>	<u>1,225*</u>
Total	\$1,525	\$1,675

*The 1975 figure has been assumed for the 1976 program level only for the purpose of an approximate overall projection; it has not taken into account the newly proposed Unified Transportation Assistance Program (UTAP). The actual 1976 program level for UMTA capital assistance activity has not been determined.

Source: U.S. Department of Transportation.

The amounts shown in Table IV-2 are funds budgeted for FY 1975 and estimated for FY 1976. The figures reflect the administrative policy of providing flexibility as to source for FY 1975 and FY 1976. The estimate for urban systems will be expended only if the impediments to using highway funds are relaxed. Any estimate of the use of

Interstate Highway System transfers is highly speculative at this time.

The foregoing figures represent estimated obligations in the case of the Highway Program and estimated administrative reservations in the case of the UMTA Program for FY 1975 and FY 1976. The Department of Transportation is now working with several states and communities on mass transportation projects where total cost over time may exceed these numbers significantly due to delays between securing approval of a concept and the actual obligation of planning and capital funds. The larger figures would take effect in years beyond FY 1976.

V. COMPARISON OF FUNDING SOURCES AND REQUIREMENTS

The Federal-Aid Highway Act of 1973 requests the Secretary of Transportation to study a tax on fuels used in the provision of urban mass transportation services, and an additional gasoline tax imposed in urban areas which "could be used now or in the future to finance transportation activities receiving financial assistance from the Highway Trust Fund."

FUNDING SOURCES AND REQUIREMENTS

There are a number of alternative interpretations of this language.

The tax might be used to finance:

- . mass transportation projects funded under Urban System authorizations out of the Highway Trust Fund;
- . mass transportation projects funded under Urban System authorizations out of the Highway Trust Fund and the general fund, plus transfers of Interstate Highway funds; or
- . mass transportation projects funded under Urban System authorizations out of the Highway Trust Fund and the general fund, plus transfers of Interstate Highway funds, plus Urban Mass Transportation (UMTA) capital grants.

The first alternative implies that Congress intended that financial assistance for urban mass transportation services that is drawn from the Highway Trust Fund authorizations would be financed by a tax on transit fuels or an additional gasoline tax in urban areas. If this is the intention, then tax yields of \$150 million from the Highway Trust Fund in 1975 and \$250 million from the Highway Trust Fund

in 1976 would be required. These funding levels from the Highway Trust Fund are the authorizations obligated for 1975 and estimated for 1976 for Urban System projects providing mass transportation services in urban areas.

Under the second alternative, financing obligations for mass transportation projects under the Urban System from the Highway Trust Fund and from the general fund plus transfers of Interstate Highway System funds would require \$300 million in 1975 and \$450 million in 1976.

Finally, to finance obligations for mass transportation projects under the Urban System from the Highway Trust Fund and from the general fund plus transfers of Interstate Highway System funds plus UMTA capital grants, requirements would be \$1,525 million for 1975 and \$1,675 million for 1976.

RANGES OF TAX RATES REQUIRED TO
MEET ALTERNATIVE FUNDING LEVELS

Hypothetical rates for a transit fuel tax and an urban area gasoline tax can be calculated to produce yields equal to the three levels of funding requirements outlined above. Assuming that all the necessary yield is provided by a transit fuel tax, a tax rate of \$0.39 per gallon to \$0.52 per gallon¹ would fund the lowest program level (\$150 million)

^{1/} This range is based on interpolation of low and high level forecasts in Table II-13 in Section II.

in 1975, while a tax rate of \$3.92 to \$8.43 per gallon would be required to fund the highest 1975 program level (\$1,525 million), depending on ridership projections and assumptions about effects of fare changes on ridership. The range of transit tax rates required to meet the range of 1976 funding requirements would be between \$0.59 per gallon and \$9.62 per gallon. It is clear from the magnitude of these tax rates that a transit fuel tax would not be a workable alternative.

Table V-1 summarizes the range of urban area gasoline tax rates per gallon required to fund the three alternative program levels in 1975 and 1976, assuming that all the necessary yield is produced by such a tax--the hypothetical rates range from \$0.004 per gallon to \$0.043 per gallon in 1975 and from \$0.007 per gallon to \$0.048 per gallon in 1976.

TABLE V-1

URBAN AREA GASOLINE TAX RATES REQUIRED
TO FINANCE ALTERNATIVE PROGRAM LEVELS FOR
URBAN SYSTEM MASS TRANSPORTATION PROJECTS,
FY 1975 AND FY 1976

FY 1975	1*	2#	3@	Funding Alternative
	\$150	\$300	\$1,525	Program Level (Million \$)
	\$0.004	\$0.009	\$0.043	Required Tax Rate per Gallon**
FY 1976	1*	2#	3@	Funding Alternative
	\$250	\$450	\$1,675	Program Level (Million \$)
	\$0.007	\$0.013	\$0.048	Required Tax Rate per Gallon **

* Urban System mass transportation projects funded from the Highway Trust Fund.

Urban System mass transportation projects funded from the Highway Trust Fund and from the general fund plus Interstate Highway System transfers.

@ Urban System mass transportation projects funded from the Highway Trust Fund and from the general fund plus Interstate Highway System transfers plus UMTA capital grants.

** Assumes 49 percent urbanized/51 percent rural split.

APPENDIX A

NOTES AND ASSUMPTIONS
FOR STUDY PROJECTIONS

A-1

APPENDIX A

The tables listed below have been prepared on the basis of the information and assumptions set forth in this appendix. The achievement of any financial projection is dependent upon the occurrence of future events which cannot be assured. Therefore, the actual results achieved may vary from the projections.

<u>Table</u>	<u>Title</u>
II-1	Range of Projected Annual Percentage Increase in Total Transit Ridership, 1974-1976
II-2	Range of Projected Annual Transit Bus Ridership, 1974-1976
II-4	Projections of Annual Bus Passengers and Bus Vehicle Miles, 1974-1976
II-5	Transit Bus Fleet and Bus Miles, 1968-1972, and Projections to 1976
II-7	Projections of Annual Transit Bus Miles and Fuel Consumed, 1974-1976
II-8	Projected Range of Unadjusted Annual Tax Yields From Transit Fuel for Selected Tax Rates and Fuel Consumption, 1975-1976
II-9	Estimates of U.S. National Average Fares in 1976, Including Effect of Three Selected Fuel Tax Rates and Two Ratios of Riders Per Bus Mile
II-13	National Projections of Transit Fuel Tax Yields, 1975-1976
II-17	Projection of Tax Yields by Urbanized Area Population Size, 1975-1976

<u>Table</u>	<u>Title</u>
III-2	Nationwide Projections of Gasoline Consumption or Purchases in Urbanized Areas, 1975-1976
III-3	Projection of Yields, 1975-1976, From an Additional Gasoline Tax in Urbanized Areas
III-5A III-5B	Annual Gasoline Tax Yields Distributed by Urbanized Area Population Size, 1975-1976
V-1	Urban Area Gasoline Tax Rates Required to Finance Alternative Program Levels for Urban System Mass Transportation Projects, FY 1975 and FY 1976

Table II-1

1. Continued fare reductions and service improvements will cause, at the least, 1972 transit bus passenger volumes to continue through the period 1974-1976.
2. Highest passenger volume increase in 1974 will not exceed 15 percent of expected constant 1972-73 level; increase can be accommodated by existing bus fleet, according to ATA. Passenger volumes in 1975 and 1976 will not increase at an annual rate of more than 10 percent.
3. Intermediate rate of increase simply is an average of the extremes.

Table II-2

1. Actual 1972 and estimated 1973 levels of bus ridership are from ATA Transit Fact Book, 1972-1973.
2. Low projection for 1974, 1975, and 1976 is continuation of 1972-1973 ridership level.
3. Medium projection assumes 10 percent ridership increase in 1974, with 5 percent annual increase in 1975 and 1976 (Table II-1).
4. High projection assumes 15 percent ridership increase in 1974, with 10 percent annual increase in 1975 and 1976 (Table II-1).

Table II-4

1. Low, medium, and high "Estimated Bus Passengers" from Table II-2.
2. Low riders/bus mile ratio (2.75) is the 1969-1972 average riders/bus mile developed from historical trends in bus riders and bus miles in Table II-3.
3. The high riders/bus mile ratio is the average riders/bus mile for 1955-1960, developed from Table II-3. Use of this ratio assumes that ridership levels will return to 1955-60 levels due to the energy crisis and environmental constraints on auto use.

Table II-5

1. Assume number of vehicles in a given year consists of previous year total minus retirement of 2,555/year, plus the following fleet increments: 1973 = 3,000 units, 1974 = 6,500 units, 1975 = 9,000 units, and 1976 = 14,000 units.
2. Assume annual miles per vehicle will remain constant for 1973-1976 at 1972 level, roughly equal to 26,700, since utilization of newly acquired equipment will follow present practice of operating a large proportion of the fleet only during peak periods.

Table II-7

1. Assume average miles per gallon = 4.31, the average from 1969-1972, developed in Table II-3.
2. Bus miles developed in Table II-4.
3. Low projection assumes continuation of 1972 ridership level in 1974, 1975, and 1976; medium projection assumes 10%/5%/5% annual increases in ridership, 1974-1976; high projection assumes 15%/10%/10% annual increases, 1974-1976.

Table II-8

1. Fuel consumption developed in Table II-7.
2. The 2.75 riders/bus mile ratio developed in Table II-3.
3. Low projection of yield assumes continuation of 1972 ridership level in 1974, 1975, and 1976; high projection assumes 15%/10%/10% annual increases in ridership, 1974-1976.

Table II-9

1. Assume average miles per gallon fuel consumption is 4.31, as developed in Table II-3.

Table II-9 (Cont.)

2. Compute fare increase =
$$\frac{\text{tax rate}}{(\text{avg. miles per gal.}) \times (\text{passengers per mile})}$$
3. Riders/bus mile ratios developed from historical data in Table II-3.
4. Base U.S. fare from 1972-1973 Transit Fact Book (ATA), p. 11.

Table II-13

1. Bus fare assumes ratio of 2.75 riders per bus mile.
2. Tax yield without elasticity effects is developed in Table II-8.
3. Tax yield with elasticity effects assumes fuel consumption as developed in Tables II-7 and II-8, reduced by percentages of ridership decrease (elasticity effect) due to a given fare elasticity, developed in Table II-12.
4. Assume fare elasticity = -0.3.
5. Base U.S. fare from 1972-1973 Transit Fact Book (ATA), p. 11.
6. Low projection of yield assumes 1974-1976 ridership will continue at 1972 level; high projection assumes 15%/10%/10% annual increases, 1974-1976.

Table II-17

1. Total tax yield from each fuel tax level is developed in Table II-13, assuming an elasticity of -0.3.
2. Percentage of total yields distributed to each city population category is set equal to percentage of total urbanized area VMT occurring in each population class, developed in Table II-16.
3. Low projection of yield assumes ridership will continue at 1972 level; high projection assumes 15%/10%/10% annual increases, 1974-1976.

Table II-17 (Cont.)

4. Riders/bus mile = 2.75.
5. Elasticity = -0.3.

Table III-2

1. Two alternative assumptions of urbanized gasoline consumption are included:
 - (a) Percentage of total gasoline consumption in urbanized areas set equal to percentage urbanized area VMT is of total VMT (49 percent)--see Table III-1.
 - (b) Retail sales data from the business census indicates that 68 percent of gasoline sales are made in SMSAs.
2. High projection assumes that 1975 and 1976 consumption levels will remain the same as in 1973.
3. Medium projection assumes that 1975 and 1976 consumption levels will be 80 percent of 1973, reflecting a 20 percent reduction in supply as predicted by the FEO for 1974, but continued into 1975 and 1976.
4. Low projection assumes that supplies for 1974-76 could fall to 70 percent of the 1973 level.
5. All projections assume that all available gasoline supplies will be consumed.

Table III-3

1. Tax rates are arbitrarily chosen to be 1, 2, and 3 cents per gallon. Since the tax objective is to raise about one billion dollars, no tax rate above 3 cents need be considered, given present consumption levels.
2. Tax yields assume urbanized consumption levels as developed in Table III-2.

Table III-3 (Cont.)

3. High projection of consumption assumes 1974-1976 level to be same as 1973 level; medium projection assumes 1974-1976 fuel consumption to be 80 percent of 1973 level; low projection assumes 1974-1976 fuel consumption to be 70 percent of 1973 level.

Tables III-5A, III-5B

1. Assume 49 percent (Table III-5A) or 68 percent (Table III-5B) of gasoline consumption takes place in urbanized areas.
2. Total gasoline tax yields to be distributed by population class are developed in Table III-3.
3. Percentage of total yields to be allocated to each population class is developed in Table III-4, assuming yields received are proportional to VMT.
4. High projection of yield assumes 1974-1976 fuel consumption level to be same as 1973 level; medium projection of yield assumes 1974-1976 fuel consumption to be 80 percent of 1973 level; low projection of yield assumes 1974-1976 fuel consumption to be 70 percent of 1973 level.

Table V-1

1. Assume 49 percent urbanized/51 percent rural split, and low forecast of gasoline consumption for 1975-1976 (70 percent of 1973 level).
2. For further breakdown of alternative program levels, see Table IV-2 in Section IV.



