Title
Setting the Stage for National Transportation Policy to the Year 2020: The Surface Transportation and Uniform Relocation Assistance Act of 1987

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Publication Date
1991-06-01

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July 1991
Working Paper No. 13

The University of California
Transportation Center

University of California
Berkeley, CA 94720

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California State University, Long Beach

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SETTING THE STAGE FOR NATIONAL TRANSPORTATION POLICY TO THE YEAR 2020:

The Surface Transportation and Uniform Relocation Assistance Act of 1987

Abstract

Not widely known to the public policy community outside transportation is the fact that the Interstate Highway System is almost finished. By 1992, if all goes as planned, the United States will have a completed, fully mature Interstate transportation system. Even less known is the fact that federal gas taxes could be extended, thus revenues would continue to "roll" in.

So large a "pot of gold" is enormous temptation. It tantalizes other underfunded public services, that may mistakenly believe surface transportation has had its day. In part anticipating a "raid," the surface transportation technical community is developing a coalition, the "2020 Plan," to build a consensus similar to the pre-Interstate era (1955-56). If successful, future surface transportation needs will continue to be funded by gas tax revenues from the highway trust fund.

On what should the funds be spent?

* existing surface highway and urban mass transportation system repair, restoration, and minor additions?

* major new highway/urban mass transportation construction and operation?

* identifying, designing and building a new transport system, yet to be selected?

Discussion at this preliminary stage is exploratory and growing. By no means has a consensus been developed, but vast needs have been identified.

To more fully understand how we got, legislatively, to this point, research focuses on a critical piece of transition legislation, the Surface Transportation and Uniform Relocation Assistance Act of 1987. The statute concludes an era beginning with the Interstate System in 1956 and redirected by the Surface Transportation Assistance Act of 1982. It clearly sets the stage for policy issue debates in 1992 and beyond to 2020. Research compares the three important statutes by selected major factors affecting each period of congressional debate, and relevance to fundamental program goals. A goal framework is suggested for considering future transportation legislation.

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Acknowledgments and Constraints

This project has been supported by the Office of Research, and the Graduate Center for Public Policy and Administration, California State University Long Beach. It is part of a continuing research program effort addressing important transportation policy issues for the nation.

The research approach has been multi-faceted. An extensive literature search along with frequent participation at meetings of the National Academy of Sciences' Transportation Research Board conferences and technical committees have yielded excellent historical perspective and interpretations. Many background, "off-the-record" interviews with senior executives of the U.S. Department of Transportation, Advisory Commission on Intergovernmental Relations, National Commission on Infrastructure, and state and local transportation agencies helped to weave diverse threads into the fabric of public policy. Interviews with Glenn M. Anderson (California), Chair, Committee on Public Works and Transportation, U.S. Congress, Paul Schlesinger, Senior Staff of the House Surface Transportation Subcommittee, and former Congressman Jerry Patterson (California, five terms) were invaluable for real-life grounding.

All of them, civil servant and elected official, tolerated and enjoyed many questions with a central theme along the lines of:

> If you were president, what future do you see for the American surface transportation system?
>
> How do we get there?
>
> What would prevent that from happening?

Such research is full of constraints and caveats. Our dynamic political system is often subject to national crises (inflation, recession, infrastructure disasters, oil import shortages, environment). Any one of them, and others, might provide the context for doing what was formerly unthinkable. Also, unexpected changes in technology (e.g., superconductivity, alternative energy sources, stronger and cheaper construction materials) may help solve knotty public policy dilemmas; although decision-makers should not hope for them. All in all, it is a **stimulating and risky** business looking ahead.

SETTING THE STAGE FOR NATIONAL TRANSPORTATION POLICY TO THE YEAR 2020:

The Surface Transportation and Uniform Relocation Assistance Act of 1987

Introduction

In the domestic arena of public policy and administration, the American public rarely sees basic choices on complex subjects. Thanks to the Surface Transportation and Uniform Relocation Assistance Act of 1987 (STURAA), the country may be facing such a moment in 1992. Not since the Interstate System concept became federal law in 1956 has so clear a public works decision point been reached.

Upon anticipated completion of the system in 1992, an estimated $121.9 billion ($108.3 billion federal) will have constructed 42,904 miles.[1] Assuming the trust fund exists for another thirty-two years (1988 to 2020), an amount exceeding $10 billion a year[2] ($320 billion total) may be generated.

Many interest groups may look covetously at that income stream and fantasize: "What if...?" To the transportation community, it is a very large sum. In comparison to other major claims on the federal tax dollar (defense, space exploration, infrastructure, social security and health entitlements, education, agricultural subsidies, bank bailouts, energy and environment, national debt, annual deficits and debt service), it is a small but nonetheless desirable piece of change.[3]

The very nature of future public discussion and debate may be

recast. Should the nation spend its federal gas tax trust funds on:

* maintaining the existing highway and mass transportation systems?
* building more urban mass transportation systems?
* identifying, designing and installing a new transportation technology system? or,
* diverting some of the cash stream to other non-transportation public needs?

Given current trends, it is the belief of this study that technical transportation internalities will have far less to do with the transportation public policy decision-making process than the above externalities. Thus to a large extent, surface transportation may serve unintentionally as a lightning rod for public discussion about the sanctity of transportation trust funds. Non-transportation public policy forces just might successfully "borrow" or "share" reserved trust funds.

Debate over the STURAA offers a sample of what might occur when only some of the externalities[4] come into play. To many observers, future major public policy decisions will quite likely be even more intense.

Consider the STURRA when President Reagan "went to the mat" for the veto override. On April 2, 1987, he might have said to Congress, "Vote for the veto, vote for the veto, my presidency for the veto." One does not normally expect surface transportation

legislation to offer such high drama for the nation -- threats of vetoes, intensive personal presidential lobbying on the Hill, press corps "helicopter" questions at every stop, more badgering questions after each speech regardless of the official subject, veto, and congressional override of the veto.

What turned the spotlight of media attention on the latest in a series of surface transportation legislation starting with the Interstate System in 1956?[5] Until the late 1970's/early 1980's, transportation legislation was not highly visible. But in 1978 and 1979 commercial aviation, and in 1980 motor carriers and railroads were deregulated.[6] In 1981 an air traffic controller strike seized the public's attention. In 1982-83 the nation's infrastructure was recognized in dire need of vast capital infusions and a larger, newly trained professional cadre to replace retirements.[7] After lively debate in 1982 about job creation, tapping the federal highway trust fund for urban mass transportation programs, and increasing the gas tax, the Surface Transportation Assistance Act of 1982 (STAA) was passed.[8] Ocean shipping was modified too, though a secure formula for federal port and inland waterway dredging remained elusive.[9]

With these major "sea-changes" in mind and an eye on future debate in the post-Interstate era, this study examines the STURAA in comparison to its predecessors. The focus is upon the surface transportation, and <u>not</u> the relocation, elements. The Federal-aid Highway (and Interstate Defense Highway System) Act (1956) and the STAA (1982) are reviewed in terms of:

* basic profile of each statute;

* a snapshot of key macro indicators during periods of major surface transportation legislation debate and passage;

* probable impacts of public policy issues during debate and passage of major surface transportation legislation.

Then, based upon historical review, two structural concerns will be explored:

* what will be our frame-of-reference for considering public policy issues and decisions, when the STURAA expires in 1992?

* what public policy approaches might be effective in building coalitions to help avoid internecine warfare over a trust fund that may no longer be fully reserved for transportation?

Surface Transportation and Uniform Relocation Assistance Act of 1987

After passage of the STAA, it was quickly evident that there were insufficient funds to complete the Interstate System, fund new urban mass transportation heavy and light rail starts, and rehabilitate bridges and highways. These were long-term problems, some of which such as transportation infrastructure safety, became crises.

In 1983-1984, legislative research, hearings, and bills began to address even more strongly the unresolved problems on which the

STAA made progress. A general consensus evolved that in order to deal with the more distant future of surface transportation (post-Interstate/twenty-first century), the chapter had to be closed on current surface systems. Practicality also became paramount.[10] How do we even look at the future when current problems and needs are real-time political concerns? External transportation forces, political and technical, were influencing national transportation decisions.

> **"In retrospect, this Administration's support for the Surface Transportation Assistance Act which became law with the President's signature just 26 months ago, was a tragic joke."**[11]

In 1986, after two years of effort, give and take with the Administration, and frustrating hearings from Congress' perspective, the proposed Federal-Aid Highway Act of 1986 died in conference. Senate and House authors wanted to avoid another lost legislative year. Needed projects were not started, others were interrupted. The successor bill, H.R. 2 (S. 387), incorporated major elements of the prior work in a complex draft, especially on Interstate cost estimates, funding schedules and program priorities. In addition to extensive congressional study and reports, U.S. Department of Transportation (DOT) staff analysis on House, Senate and conference bills ran 646 pages.[12]

Thus almost from the beginning, Congress knew that this legislation was designed to close the Interstate System era. Quite intentionally, the bill meant to set the stage for the Post-

Interstate/twenty-first century era by removing as many major issues as possible.

To better understand what the STURAA accomplished, we should see the legislation alongside its predecessors. Table 1 profiles the Federal-Aid Highway Act of 1956 (Interstate), the STAA (1982) and the STURAA (1987). Note that after the 1956 statute, subsequent highway legislation extended and funded the initial programs.

The STAA included the first gas tax increase since program inception, brought transit into the trust fund (rather than general treasury funding) and had important technical changes.

Against the above backdrop, the STURAA very clearly represented a "completion" philosophy for the short-term. Nevertheless, funds of that scale make it a significant piece of legislation impacting the federal budget.

How did the STURAA differ from its ancestors, the Interstate System and STAA, in terms of the national "mood" and "big picture"? What were important parts of the public debate?[13] Do they hold lessons for us as we consider the post-Interstate era?

Table 1
Profile of Surface Transportation Legislation

Legislation/Year:	PL-84-627*	PL-97-424***	PL-100-17****	PL-?
	1956	1982	1987	1992?
Major Programs:				
1. Interstate	start	add to	complete	?
2. ABC system	.....maintenance/rehabilitation.....			?
3. bridges	.....maintenance/rehabilitation.....			?
4. transit	XXXXXXXXXXXXX	new rail starts.....		?
5. new programs	XXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXXXXXXX	XXXXXXXX	?
Time Period:	13 years**.....	4 years.....	5 years.....	28?
Cost:(billions)	$ 47.3	$ 67	$ 87.5	$?
Fund Source:	4 cts/gal.	9 cts/gal.	9 cts/gal.	18cts/gal.?
(Increase)		(+5cts: 1ct.-transit).....		(+9cts.?)
Trust Fund Use:	highways.....	highways/transit.....		?

Notes: *As a result of compromises in the Joint Conference Committee (H. Rept. No. 24361), the basic outline of the statute, signed by the President, June 26, 1956, Federal-Aid Highway Act of 1956, was: Sec. 102 (ABC System, Fed.-aid highways: 45% primary highways, 30% secondary highway system, 25% extensions into urban areas), Sec. 108 (National System of Interstate and Defense Highways: 40,000 miles covered by tax increase, 1000 more from funds to be identified later, 1 cent gallon increase, size and weight limitations), Sec. 109 (advance purchase of right-of-way), Sec. 11 (reimbursement to states for relocation of utility facilities), Sec. 12 (federal approval on use and access to right-of-ways), Sec. 113 (toll roads/bridges accepted as part of system but no federal funds for construction, operation, or purchase), Sec. 115 (applicability of Davis-Bacon), Sec. 117 (requires highway safety study).

For federal projects in general, the above elements were far-reaching and innovative. For urban transportation, an exceptional item was Sec. 6421 (transit exemption from one cent gas tax increase, rebate upon application). Debate called attention to the already obvious dire straits of transit industry.

U.S. Congress, Congressional Record, 84th. Cong., 2nd. Ses. Washington, D.C.: Superintendent of Documents, June 26, 1956, pp. H-10984 to H-10991.

**Subsequent highway acts extended and funded the initial programs.

***The STAA (1982) pumped money into the system and made important technical changes, as well as commissioned important studies or programs: Sec. 102 ($ 4 billion per year for the Interstate System), Sec. 105 (changed ABC formula to 40% rural and urban areas for "resurfacing, restoring, rehabilitating, and reconstructing existing highways"), Sec. 106 (increased Interstate resurfacing funds from $1.9 billion to 3.15 billion), Sec. 122 (authorized $220 million annually for bridge replacement and rehabilitation), Sec. 202 (authorized Highway Safety Act of 1982 funding increase from $1.65 billion to $2.05 billion for bridge replacement and rehabilitation) and Sec. 302 (established Mass Transit Account of Highway Trust Fund for block grants, starting at $2.75 billion and reaching $3.05 billion. Technical changes included: Sec. 109 (authorize states to give priority to rehabilitation projects tied national energy requirements), Sec. 129 (permits U.S. Secretary of Transportation to accelerate project approval and completion), and Sec. 133 (permitted increase of maximum vehicle weight on Interstate System to 80,000 pounds). Significant studies funded addressed: Sec. 110 (major design, construction, products, standards, training and personnel needs of resurfacing programs), Sec. 135 (future "manpower" needs of surface transportation), Sec. 138 (national intercity truck route network for longer combination commercial motor vehicles, up to 110 feet), Sec. 164 (National Public Works Inventory and Assessment study), Sec. 204 (55 mph national maximum speed limit), Sec. 209 (national minimum drinking age of 21 years of age).
Surface Transportation Assistance Act of 1982, PL-97-424.

**** The STURAA (1987) extended all taxes and the highway trust fund five years to FY 1993 (Secs. 502,503). It continued Interstate funding and provided additional funds for other surface road systems, urban mass transportation systems, numerous special demonstration projects and research studies, and adjustments in relocation provisions. The more important items include: Sec. 102 (approved Interstate cost estimates), Sec. 103 (authorized Interstate substitution projects), Sec. 104 (authorized $17 billion for the Interstate through FY 1993), Sec. 105 (authorized obligation ceiling for all highway projects of $12.35 billion per year, total of $61.75 billion through FY 1991), Sec. 106 (authorized for Interstate resurfacing, restoring, rehabilitating, and reconstructing $2.815 billion per year, total of $10.925 billion through FY 1992, and substantial other funds for the federal-aid system, bridge replacement and rehabilitation and elimination of hazards), Sec. 116 (permitted and

funded toll road construction if the facilities will become free to the public after all indebtedness is retired), Sec. 120 (authorized 35% fund participation in seven "pilot program "local non-Interstate toll roads projects), Sec. 128 (established the Strategic Highway Research Program), Sec. 149-(authorized 121 demonstration and priority projects); authorized technical studies --Sec. 158 (vehicle weight and size, Sec. 159 (rail-highway crossings), Sec. 160 (highway bridges which cross rail lines), Sec. 161 (parking for handicapped persons), Sec. 162 (bridge management), Sec. 163 (state maintenance program), Sec. 164 (feasibility of highway electrification), and many other special topics.

Of special note are two provisions. Sec. 136 essentially said to the President and the Secretary of Transportation that if any cuts are to made the funding of the STURAA, the **"Secretary shall apply the percentage reduction equally to each such specific program or project."** Sec. 174 permitted 65 mph on rural Interstate sections.

Other provisions addressed mass transportation and tightened congressional control over DOT implementation of the STURRA and previous statutes. For example, Sec. 303 specified criteria for new rail starts (alternatives analysis and preliminary engineering, cost-effectiveness, and "supported by an acceptable degree of local financial commitment, including evidence of stable and dependable funding sources to construct, maintain, and operate the system or extension), Sec. 304 (more timely reports on UMTA fund levels and allocations), Sec. 305 (specifying 40% for rail modernization, 40% for new rail starts and extensions, 10% for bus replacement, rehabilitation, purchase and facilities), Sec. 307 (detailed quarterly financial status reports), Sec. 314 (created University Transportation Centers), Sec. 318 (requires the Secretary to prepare annual plan of all rules likely to be proposed, sixty day advance public notice and comment). To fund the act, authorizations included Sec. 21 (Sec. 9 and 18, $2 billion, FY 1987, and $2.1 billion each year through FY 1991, total of $10.4 billion; Sec. 3, 4 (i), 8, 16(b) $1.097 FY 1987, and $1 billion each year through FY 1991, total of $5.097 billion from the Highway Trust Fund/Mass Transit Account; Sec. 3 and 9 B a total of $1.15 billion through FY 1991 from the Highway Trust Fund/Mass Transit Account. Other special projects were Sec. 331 (BART study), Sec. 333 (Santa Barbara electric bus feasibility), Sec. 34 (Philadelphia abandoned trolley service), and Sec. 338 (multi-year contract for Los Angeles Metro Rail Project, total of $2.448 billion through FY 1991.

Surface Transportation and Uniform Relocation Assistance Act of 1987, PL 100-17.

Evolution of Legislation--Three Decades from Interstate Start to Completion

To place the STAA on a thirty year scale, it is helpful to consider the probable influence of congressional perspective, issue impact on legislation formulation, then debate and presidential action.

1. Congressional Perspective

A comparison of the three eras is presented in Table 2, "A Congressional View of the Well-Being of the Country: Snapshot of Key Indicators During Period of Major Surface Transportation Legislation Debate and Passage." The year of passage (or closest year given data available) for each statute is compared by seven significant indicators:

1. population
2. employment
3. gross national product
4. prices
5. money market rates
6. federal budget
7. surface transportation operations

From Congress' point-of-view (and an administration), such information quickly translates into public opinion and elections.

In 1956, the nation was still ascendant in many ways. American economic, military, and political power was intact, after extricating herself from the Korean War. Tremendous internal pressures existed to serve a growing population with low-cost jobs,

Table 2

A Congressional View of the Well-Being of the Country: Snapshot of Key Indicators During Period of Major Surface Transportation Legislation Debate and Passage

Year:*	1956	1982	1987
Category:			
1. POPULATION			
			(1986)
Total	168,091,000[1]	232,520,000[2]	241,596,000
Urban [3]	64% (1950,Metro.)	74.8% (1980)[4]	76.6%
Rural	36% (1950,Nonmet.)	25.2% (1980)	23.4%
Over 65	14,426,000[5] (8%)	26,827,000 (11.5%)	29,173,000 (12%)
Regions:			
(1950)[6]		(1980)[7]	
NE	39,478,000 (26.2%)	49,100,000 (21.7%)	50,000,000 (20.7%)
NCent.(MW)	44,461,000 (29.5%)	58,900,000 (26%)	59,300,000 (24.6%)
South	47,197,000 (31.3%)	75,400,000 (33.3%)	83,000,000 (34.4%)
West	19,562,000 (13%)	43,200.000 (19.1%)	48,800,000 (20.2%)
Total	150,698,000	226,600,000	241,100,000
City Pop. Size[8]	(1960)	(1980)	
Total Number	1,654	2,233	2,333
100-250,000	79 (12.5%)	116 (14.8%)	122 (14.9%)
50-100,000	180 (13.7%)	254 (15.4%)	286 (16.3%)
2. EMPLOYMENT			(1986)
Employed	67,530,000[9]	101,194,000[10]	111,303,000
Unemployed	2,551,000	10,678,000	8,237,000
All%	3.8%	9.5%	6.9%
Const.%[11]	-----	20.0%	13.1%

Year:*	1956	1982	1987
3. GROSS NATIONAL PRODUCT	$412.4 billion[12]	$3.166 trillion[13]	$4.235 trillion
4. PRICES			
Consumer Price Index, Annual Change %[14]	1.6% (1960)	6.1%	1.9%
Petroleum, Crude			
Imported: OPEC %[15]	46.0% (1970)	73.4% (1980)	50.6% (1980)
Barrel Cost/$	2.23[16]	33.84[17]	13.59
Refined Gasoline-unleaded, reg.	-----	1.30 gallon	.93 gallon
Miles Per Gallon-Ave.	(1970)		(1985)
All Vehicles[18]	12.02 MPG	14.07 MPG	14.62 MPG
Transp. Energy %[19]	24.1% (1960)	26.9%	28.0%(prelim., 1986)
5. MONEY MARKET RATES			
Prime Commercial Paper			(1986)
4-6 months	3.31%[20]	11.89%[21]	6.49%
Fed. Res. Discount Rate	4.00%	8.5-12%	5.5-7.5%
U.S. T Bills-3 months	2.62%	10.61%	5.98%
6. FEDERAL BUDGET			(1987)
Expenditures	$70.6 billion [22]	$745.7 billion	$1.004 trillion
Defense %	60.2%[23]	24.9%	28.1%
Human Resources %	22.7%	52.1%	50.0%
Physical Resources %	4.4%	8.3%	5.5%
Interest on Debt	7.2%	11.4%	13.8%

Year:* (Federal Budget con't)	1956	1982	1987
Expenditures/GNP	16.9%	23.8%	22.8%
Defense	10.2%	5.9%	6.4%
Human Resources	3.8%	12.4%	11.4%
Physical Resources	0.7%	2.0%	1.2%
Interest on Debt	1.2%	2.7%	3.1%
Surplus/Deficit	$3.9 billion[24]	$-127.9 billion	$-150.4 billion
GNP %	0.9%	-4.1%	-3.4%
Gross Debt-Total	$272,763 million[25]	$1,146,987 million	$2,355,280 million
GNP %	65.2%	36.5%	53.4%
Surface Transportation			
Highways	$728.9 million[26]	$101.6 million	$69.6 million
Fed. Aid Hwys. (TF)	-----	$7,590.3 billion	$12,414.0 million
Other Hwy. (TF)	-----	$63.7 million	$46.7 million
Hwy. Safety	-----	$4.8 million	$ 3.8 million
Hwy. Safety (TF)	-----	$143.0 million	$114.8 million
Urban Mass Transp.	-----	$3,781.7 million	$2,585.8 million
Urban Mass Trasp. (TF)	-----	-----	$667.5 million
Subtotal	$728.9 million	$11,685.1 million	$15,902.2 million
Trust Funds[27]	(1970)		1987 (est.)
Highways			
Receipts	$5.5 billion	$7.8 billion	$14.9 billion
Outlays	$4.4 billion	$8.0 billion	$13.6 billion
Balances	$2.6 billion	$9.0 billion	$14.0 billion
Airport/Airways			
Receipts	-----	$.7 billion	$ 3.9 billion
Outlays	-----	$1.5 billion	$ 2.6 billion
Balances	-----	$3.9 billion	$10.0 billion

Year:*	1956	1982	1987
7. SURFACE TRANSPORTATION OPERATIONS			
Vehicles-registered			(1986)
Total	64,437,000[28]	159,600,000[29]	176,500,000
Autos/taxis	54,133,000	123,700,000	135,700,000
Trucks/buses	10,304,000	35,900,000	40,900,000
Highway Mileage[30]			
Total (Fed., State, local)	(1955) 3,418,000	3,866,000	(1985) 3,862,000
Fed.-Aid Hwy. Syst.			
Primary	235,000	298,000	301,000
Interstate	-----	42,000	44,000
Urban	-----	134,000	144,000
Secondary	514,000	402,000	398,000
Transit Systems[31]	(1970)		(1985)
Total Operating	1,079	1,036	2,361
Motorbus Systems	1,075	1,031	2,338
Public Systems	144	581	1,018
Passenger Vehicles			
Owned	61,350	73,803	95,512
Passengers Carried	7,332,000	7,741,000	8,918,000

Legend: *Each year presented is the actual year of passage of the major programs. Data may be approximate, i.e., representative of the immediately preceding period depending on the source.

Endnotes

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2. U.S. Department of Commerce, Bureau of the Census, Statistical Abstract of the United States-1988 (Washington, D.C.: Superintendent of Documents, 108th. Ed., 1987), Table No. 13. Total Population, By Age and Sex: 1960-1986, p. 13.

3. Stat.Abst., 1957, op. cit., Table No. 14.-Population in Urban and Rural Territory, By Size of Place: 1790 to 1950, p. 20.

4. Stat. Abst., 1988, op. cit., Table No. 30. Metropolitan and Nonmetropolitan Area Population: 1950 to 1986, p. 26.

5. Stat. Abst., 1957, op. cit., Table No. 3.-Projections of the Total Population, By Age and Sex, 1960 to 1975, With Estimates for 1955 and 1956, p. 6.

6. Ibid., Table No. 9.-Population, 1790 to 1950, and Population Rank and Percent Increase, 1900 to 1950, By States and Other Areas, p. 13

7. Stat. Abst., 1987, op.cit., Table No. 23. U.S. Resident Population, By Region and Division, 1960 to 1986, and Projections, 1990 to 2000, p. 20.

8. Stat. Abst., 1987, op. cit., Table No. 37. Cities, By Population Size: 1960 to 1986, p. 32.

9. Stat. Abst., 1957, op.cit., Table No. 239.-Employment Status of the Noninstitutional Population, By Sex: 1929 to 1957, p. 197.

10. Stat. Abst., 1988, op. cit., Table No. 605. Employment Status of the Noninstitutional Population 16 Years Old and Over: 1950 to 1986, p. 363.

11. Ibid., Table 635. Unemployment Rate, By Industry, 1975 to 1986, and By Sex, 1980 and 1986, p. 382.

12. Stat. Abst., 1957, op. cit., Table No. 359.-The Nation's Income, Expenditure, and Saving: 1954 to 1956, p. 296; presented in then current dollars.

13. Stat. Abst., 1988, op. cit., Table No. 668. GNP in Current and Constant (1982) Dollars: 1970 to 1986, p. 407.

14. Ibid., Table No. 730. Annual Percent Change in Selected Price Indexes: 1960 to 1986, p. 445.

15. Ibid., Supplement (Insert), USA Statistics in Brief-1988, unpaged.

16. Stat. Abst., 1957, Table No. 414.-Annual Average Unit Values of Important Articles Imported and Exported: 1925 to 1955, p. 338.

17. Stat. Abst., 1988, Table No. 744. Average Prices (Unit Values)-Selected Commodities Exported and Imported: 1970 to 1986, p. 454.

18. Stat. Abst., 1988, op. cit., Table No. 1003. Domestic Motor Fuel Consumption, By Type of Vehicle: 1970 to 1985, p. 581.

19. Ibid., Table No. 908,. Primary Energy Consumption By End-Use Sector: 1960 to 1986, p. 537.

20. Stat. Abst., 1957, op. cit., Table No. 552.-Money Market Rates: 1890 to 1956, p. 461.

21. Stat. Abst., 1988, op. cit., Table No. 803. Money Market Interest Rates and Mortgage Rates: 1970 to 1986, p. 484. At the height of the recession (1981), the all time highs were: 15.33%, 14%, 14.03%, respectively. The prime in that year reached 18.87%, while mortgages reached 16.55%.

22. Stat. Abst., 1957, op. cit., Table No. 436.-Expenditures and Gross Debt of the Federal Government: 1789 to 1956, p. 361.

23. U.S. Office of Management and Budget, Historical Tables, Budget of the United States Government, Fiscal Year 1989 (Washington, D.C.: Superintendent of Documents, 1988), Table 1.3--Summary of Receipts, Outlays, and Surpluses or Deficits (-) In Current Dollars, Constant 1982 Dollars, and As Percentages of GNP: 1940-1993, pp. 19-20. Table 3.2--Outlays by

Superfunction in Percentage Terms: 1940-1983, pp. 47, 50, 51; the deficit in 1983 reached 6.3% of the GNP as the nation was ending an era "stagflation" or recession.

24. Ibid., pp. 19-20.

25. Ibid., Table 7.1--Federal Debt at the End of the Year: 1940-1993, pp. 143, 144. The brief surplus in 1956 actually reduced the national debt by that amount!

26. Ibid., Table 12.3--Outlays for Federal Aid to State and Local Governments, By Function, Agency, and Table 27.2--Program, 1940-1993, pp. 255, 281.

27. Stat. Abst., 1988, op. cit., Table No. 473, Federal Trust Fund Receipts, Outlays, and Balances: 1970 to 1987, p. 295.

28. Stat. Abst., 1957, op. cit., Table No. 691.-Motor Vehicles-Factory Sales and Registrations: 1900 to 1956, p. 552.

29. Stat. Abst., 1988, op. cit., Table No. 992. Motor Vehicles-Registration, Factory Sales, and Retail Sales: 1950 to 1986, p. 577.

30. Ibid., Table No. 982. Highway Mileage-Urban and Rural, By Type of Control, and Federal-Aid Highway System: 1955 to 1985, p. 572.

31. Ibid., Table No. 1011. Passenger Transit Industry-Summary: 1970 to 1985, p. 584.

housing, transportation, education, and health service. The "American dream" seemed to be owning an automobile and a single-family detached house, holding a college degree and a "white collar job." Most of the new housing would be constructed outside the central cities, thus quickly creating whole suburbs from farmland. In short, this is a picture of a nation confident of the future, acknowledging its responsibilities to meet the needs of a large younger population forming families.

Highway transportation investment, long deferred by the Depression and World War II, was perceived as an effective way to serve some of the domestic needs over the long term. Prior to the Interstate, federal highway funding was about one perent of the 1956 budget. The system was already strained by deterioration and increased usage from rapidly growing automobile and truck population. Central city transit continued to decline as costs increased and users moved to the new suburbs.

For Congress, the national mood meant a time of optimism and the more pleasurable politics of growth. Unemployment was low; inflation was low, oil prices were low and stable; interest rates were low. Furthermore, the federal budget was shifting from defense to domestic priorities. For the first time in many years, there was a modest budget surplus, although overall deficit financing of the Depression, World War II and the Korean War were still sizeable percentages of the gross national product.

The nation was on the move. To many, the future seemed unbounded. New surface transportation policy was the way to make

the future a reality. A long-planned (first conceived in the 1920's) system of limited-access, high-speed roads connecting major cities was the program. Consequently, the Interstate was a child of an era of few national limitations.

By **1982**, the country had dramatically changed from the peace and prosperity of 1956. Many would not recognize the changes. It was well within an era of limits and the mood was different. Many citizens and policy makers recognized that the public sector could not meet all the needs of a maturing nation without some sacrifice. The recently completed Viet Nam War demonstrated the difficulty in attempting too much. Both "guns and butter" were evidently mutually exclusive goals.

The population had increased by 38.3 percent. Those living in urban areas reached almost 75 percent. And, many had aged, an increase of 86 percent. The South and the West grew at the expense of the North East and North Central regions of the country. Suburban cities grew in number and size as well.

Along with such dramatic demographic changes was a period of "stag-flation" or recession. Unemployment reached almost 10 percent. In the construction industry, it was even worse -- 20 percent. GNP grew by nearly 8 times with the annual change in the consumer price increase over 6 percent, after reaching 18 percent in 1980-1981. Energy crises raised costs 15 times higher. Money market rates werew low and stable compared to nearly 20 percent. The federal budget grew by 10 times with the largest percentage increases in human resources. Even though the national debt/GNP

percentage shrank in comparison, interest due on the debt increased by over a factor of 2. The effects of compound interest were becoming obvious. As to be expected, surface transportation expenditure increased over 16 times, but the administration impounded much of the funds to offset a growing national deficit. Accumulated balances in the highway trust fund and airport/airways trust fund had reached $9 billion and $3.9 billion, respectively.

Surface transportation operations were under stress. Infrastructure deterioration and still growing vehicle population (over double) were difficult forces to overcome. The basic goal of the Interstate System was attained: mileage grew from zero to about 42,000. Reflecting urban growth, urban roads built rose from zero to 134,000 miles. Lastly, central city transit system decline was stabilized and the number of public systems increased four times.

Most observers would more easily recognize 1987 as an offspring of 1982. Basic trends established were continuing, though more incrementally in the shorter time span (four years, compared to the twenty-six from 1956-1982).

There were important exceptions. General unemployment had dropped to under seven percent and construction to thirteen percent. The GNP grew by 33.8 percent. Inflation decreased to under 2 percent. Oil imported from OPEC dropped from over 73 percent (1980) to almost 50 percent, and the price of a barrel of crude had lowered by almost two-thirds. Importantly, average miles per gallon of gasoline used by the vehicle fleet increased

modestly. Lastly, money market rates dropped by almost one-half.

In comparison to 1982, things looked pretty good.

But, the federal budget was cause for concern -- reaching a trillion dollars. Defense expenditures and interest expenditures had increased while human and physical resources continued to decline. An unexpectedly robust economy enabled the percentage of federal expenditures/GNP to decline by one percent, while the gross federal debt/GNP passed by the fifty percent mark.

Surface transportation expenditures were mixed. Trust fund highway expenditures increased substantially reflecting the STAA. General fund transit expenditures declined significantly as transit trust fund expenditures moved from zero to $667.5 million. Despite increased trust fund expenditures, accumulated balances increased: highways/transit, $14 billion; airports/airways, $10 billion. Two thousand more miles to the Interstate were completed and the number of operating transit systems practically doubled.

In sum, even though the nation seemed to make substantial progress, a surface transportation program plateau was attained. Paridoxically, such was the case just when needs were growing and unspent funds accumulating.

2. Issue Impact on Legislation

A comparison of the preceding legislative eras in terms of probable issue impact is presented in Table 3, "Major Public Policy Issues During Debate and Passage of Surface Transportation Legislation." Important policy and program issues explored are:

1. goals
2. implementation
3. costs
4. funding
5. allocation process
6. labor
7. environment
8. political forces

The categories were selected by basic language in the legislation, suggested by committee hearings and reports, and current discussion of future concerns. They are rated by a scale of relevance (high, moderate and low) to legislative debate.

In 1956, there was general consensus about the policy goals and implementation. The military (defense) value of the pre-WWII German Autobahn to the economy and later war effort was not overlooked. Commercial growth required a more efficient interurban and suburban road network as central city traffic congestion worsened.[12] The generally accepted solution was to build a new highway system, slowly complete the ABC system, and provide modest maintenance and rehabilitation,[13] in order to direct funds to the Interstate. Safety was an important but smaller concern.[14] Interstate program costs,[15] funding,[16], and fund allocation,[17] were definitely of concern.[18]

Table 3

MAJOR PUBLIC POLICY ISSUES DURING DEBATE AND PASSAGE OF SURFACE TRANSPORTATION LEGISLATION: Probable Impact on Legislation

Legislation/Year:	PL-84-627 1956	PL-97-424 1982	PL-100-17 1987	PL-? 1992?
Category:				
1. GOALS				
1. defense	H	L	L	L
2. commerce	H	M	M	M
3. mobility	H	M	M	M-H
4. safety	M	M-H	M-H	M-H
5. technology	L	L	L	H?
6. employment	L-M	H	L	L?
7. social	L	L	L	L
8. environment	L	L	L	H?
9. energy	L	L	L	H?
10. urban form	L-M	L	L	H
2. IMPLEMENTATION				
1. build new systems				
-Interstate	H	L	L	-
-transit	L	M	L-M	L-M
-other	-	-	-	M?
2. complete systems				
-Interstate	-	H	H	-
-transit	-	M	L	L-M
-ABC	M-H	L-M	L-M	L-M
3. maintain/rehabilitate				
-Interstate	-	H	H	H
-ABC	L-M	L-M	L-M	L-M
-bridges	-	M	M	M
-transit	-	L	L	M

Legislation/Year:	PL-84-627 1956	PL-97-424 1982	PL-100-17 1987	PL-? 1992?
Category:				
3. COSTS				
1. Interstate	H	H	M	L
2. ABC	L-M	L-M	L-M	M
3. bridges	-	H	H	H
4. transit	-	L-M	L-M	M
5. estimates	L	L	M	M
6. new programs	-	-	-	H
4. FUNDING				
1. General Treasury	L	L	L	H
2. gas/excise taxes	H	H	H	H
3. user fees/tolls	L	L	L	H
4. bonds	M	L	L	H
5. private sector	L	L	L-M	H
6. trust fund/sequestering	L	M	H	H
5. ALLOCATION PROCESS				
1. formula	H	H	H	H
2. need	H	H	H	H
3. fairness	M	M	M	M
4. pork barrel	H	H	H	H
5. sequester	L	M	H	H
6. LABOR				
1. Davis-Bacon	H	L	L	L
2. construction industry	M	H	M	L-M?
3. transit operations	-	L-M	L-M	L-M

Legislation/Year:	PL-84-627 1956	PL-97-424 1982	PL-100-17 1987	PL-? 1992?
Category:				
7. ENVIRONMENT				
1. air quality	-	-	-	H
2. ozone	-	-	-	H
3. greenhouse effect	-	-	-	H
4. energy supply	-	-	-	H
8. POLITICAL FORCES				
1. demographics	M	L	L	H
2. new transp. technology	L	L	L	H?
3. urban form	L	L	L-M	H
4. competing needs	L	M	H	H
5. cost/deficit	L	M	H	H
6. source of funds	L	H	H	H
7. matching shares	L	H	H	H
8. states' rights	H	L	L	L
9. pork barrel	H	M	H	H
10. executive veto	L	H	H	?

Legend: PL-84-627 - Federal-Aid Highway Act of 1956
PL-97-424 - Surface Transportation Assistance Act of 1982
PL-100-17 - Surface Transportation and Uniform Relocation Assistance Act of 1987
H = high degree of relevance to debate
M = moderate degree of relevance to debate
L = low degree of relevance to debate

Interstate = National System of Interstate and Defense Highways
ABC Systems =
Federal-aid Primary System
Federal-aid Secondary System
Federal-aid Urban System

The key issue was to be sure funding came from a special trust fund. Some discussion considered the role ofthe private sector, use of bonds, or tollways.[19] "Needs" and allocation formula were intensely discussed, with vocal concern about "pork barrel" possibilities. Rural areas were guarding their interests against urban areas. Some states were afraid that key cities would not be on the system; or, if on the official map, construction would be scheduled late into the next decade. Becoming an economic backwater was a legitimate fear.

Labor was an issue, in part for job creation reasons, but more for the impact of federal labor law (Davis-Bacon Act), paying prevailing union wages in an area for federal projects.[20] Lower wage states (often rural) resisted application to the program, fearing it would drive up labor costs on non-federal, local projects.[21]

Reflecting the era, environmental matters were not considered.

Several fascinating political issues were evident. The most important was demographically driven. A young, growing nation needed transportation (new technology was not a factor at that time). Widely shared was the belief that defense and domestic programs can be advanced simultaneously. States' rights arose on seemingly minor issues, for example, who would pay the cost of reimbursing utility line relocation? While both houses were considering parallel bills, pork barrel charges were leveled at both,[22] as well fear of sequestering.[23] There was talk of a presidential veto if the program were funded by the general

treasury.[24] When it became clear a trust fund would be established based on a gas tax, President Eisenhower supported the basic legislative framework.

As noted in the preceding discussion of the legislative context, much had changed by 1982. Transportation was still the fundamental legislative policy goal.[25] But other goals, creating jobs in a period of high inflation[26] and unemployment,[27] and safety, came into play. Mobility and commerce were being affected by infrastructure deterioration and safety (thus more funds were allocated).[28] Policy implementation changed as well. Emphasis shifted from building new systems to maintaining and rehabilitating existing facilities, and completing the Interstate system. For the first-time, urban transportation was eligible to receive federal highway trust funds, thereby recognizing looming needs.

Costs and funding were big issues for existing programs. Nothing new was initiated. Opposition came from the administration and system users (mostly commercial freight for cost reasons). Agreement upon needs was not so much in dispute, just how to pay for it.[29] The government continued its policy to hold back trust fund expenditures to help offset the deficit. In a recessionary period, truckers were having enough difficulty surviving under deregulation. Increased user fees (fuel taxes, oil taxes, licenses at the state and local level too), it was feared, might cause many to go out-of-business. Reliance on the private sector was not very important, though directives were included to encourage the private sector's involvement in urban transportation.

Of central import was labor. Construction industry unemployment at twenty percent necessitated the bill perhaps as much a job creation program than as a surface transportation program. Operating support for transit labor costs was continued.

Environment, for all practical purposes, continued to be a non-issue.

Politically, the crux of the discussion shifted to competing non-transportation priorities, source and matching of funds, and threat of executive veto. Transportation technology was not a significant concern. President Reagan believed the general expense (impact on the deficit) and transit provisions (tapping the highway trust fund) were objectionable.

In 1987, the same overall set of issues established in 1982 was prominent. In most cases, there was modest change in the status of the issues. In some, relevance was even more acute. For example, safety (infrastructure) heightened. A big issue was the Interstate speed limit. After much debate, it was raised in rural areas from 55 MPH to 65 MPH.[30] Interstate system completion and rehabilitation were still high priorities.

Program cost[31] and funding issues continued too. Under administration proposals, urban transportation stood to lose even more if Congress did not restore funds.[32] Formula allocations were of concern to rural areas and an amendment to restore equity was proposed.[33] Several tollway demonstration projects in California were funded.[34] Transit system new start funds were continued in special cases (Los Angeles), at the same time that sequestering

trust funds expanded.[35] Some in Congress believed the administration was breaking the law; while, others believed special projects were excessive.[36] More strongly put, the administration announced there was too much "pork" in the bill and objected on substantial technical elements.[37]

No labor issues were paramount this time. But, as noted earlier, many congressmen and senators were concerned that the 1986 bill failed in conference. A construction season was lost to winter in most states and there was real fear that construction jobs would begin to disappear again.

Environmental issues were being discussed for the first time though were not immediately visible in the legislation. Principally, energy and air quality were considered.

Political concerns were about the same as before and even more acrimonious. Technology was becoming a minor factor. One demonstration project was to explore the feasibility of electric vehicles. Competing budgetary priorities, cost and the deficit, source of funds and matching shares, accompanied by charges of pork barrel legislation brought the bill into the media spotlight.

3. Presidential Veto of STURAA

"I haven't seen so much lard since I handed out blue ribbons at the Iowa State Fair."[38]

There was nothing subtle about the President's intentions. His OMB Director sent the administration's views to the Senate in

January 1987.

Public Intent

All along, rumblings about various points were heard. Things went public and hit the news with the following statement, declaring his intention to veto H.R. 2, March 20, 1987:[39]

> As I said last evening at my press conference, our administration will keep its commitment to the American people. We will not raise taxes; we will hold down spending; and we will adhere to the deficit reduction goals imposed by the Gramm-Rudman-Hollings legislation.
>
> And it is with this commitment in mind that I have informed congressional leaders of my intention to veto the highway and transit bill that is on its way to my desk. Let me be very clear. I am in full support of reasonable funding levels for these programs, similar to the legislation passed by the Senate. But I am adamantly opposed to the excessive spending that is in the bill as it emerged from the conference committee.
>
> I've said before and repeat today: Congress can't have it both ways. They cannot talk about cutting unnecessary deficit spending and then vote in favor of bills that bust the budget. The American people clearly expect their elected leaders to vote the same way they talk. So, my vote will be to veto bills that spend unnecessary billions on projects the American people cannot afford.

On March 24, the House and Senate Conferees sent a public letter to "President Reagan urging him to sign the legislation." It cited the fact that the bill had had been reviewed by seven separate committees, met the Gramm-Rudman-Hollings spending requirements, and the fear that another construction season (thus more jobs and essential highways needs) would be lost. It closed with the reminder that the vote for the bill in the House was 407-

17 and in the Senate 79-17.[40]

When signing the message to return H.R. 2 without approval, March 27, 1987, the President elaborated:[41]

> If the American people need any further proof as to who's responsible for the deficit, all they have to do is look at this $87 1/2 billion budget-busting highway and transit bill passed by Congress last week. The bill's a textbook example of special interest, pork-barrel politics at work, and I have no choice but to veto it.
>
> ***
>
> I also want to reaffirm my strong support for allowing the States the authority to return to the 65-mile-an-hour speed limit. It's long past due. But I'm not going to sacrifice this country's economic well-being, and that's the issue - jobs and economic growth. And it's time for me to start writing. And that is the veto on top of the bill.

Helicopter Questions

Many in the White House Press Corps developed a firm conviction that the President wanted to limit unplanned, extemporaneous contacts with the media. As a result (the theory held), media representatives were allowed to ask questions only when very brief exchanges were possible. Accordingly, they were forced to yell questions at any opportunity, no matter how inopportune or irrelevant. Political cartoonists (Gary Treaudeau, "Doonesbury") and humorists (Art Buchwald, Mark Russell, Johnny Carson) quickly picked up on such affairs and dubbed them, "Heliocopter Questions." Whenever the President would be quickly embarking or disembarking, he would take several questions barely audible over the "thumpa, thumpa, thumpa" of the aircraft's rotors. The folklore continues,

only Sam Donaldson could scream loud enough!

One typical informal exchange with reporters prior to departure for Philadelphia, PA, April 1, 1987, was:[42]

> Q-You must have won.
> The Pres. What?
>
> Q. You must have won. You look happy.
> The Pres. Well, not yet. A procedural vote to reconsider is on. There were enough votes to sustain, but now we don't know. And I don't know how long this process is going to take. He's (Howard H. Baker, Jr., Chief of Staff to the President) probably a better judge of that than I am.
>
> Q. (Inaudible)-Senate vote on the override to be a test of your political health?
>
> The Pres. If it sounded good? Now, I don't know what may happen with this procedure that is going on now, but, yes, I was very pleased. But it still isn't final.

Other similar exchanges took place before and after the veto. Some the questions were almost impertinent and rude.[43]

On April 2, 1987, the Senate overrode the President by a vote of 67 yeas and 33 nays.[44] In the House discussion, a telling comment was made by an administration supporter. Congressman Michel stated:[45]

> Mr. Speaker, what a classic case this is of that perennial perplexity we face over the national interest versus the local interest. There is relevancy in both and legitimacy in both in our deliberation over issues.
>
> ***
>
> (Only congress represents local interests), that is why I have made the very difficult decision for the first time in the Reagan Presidency to vote against the President's recommendations on a major peice of legislation.
> (The bill contains funding for a hazardous highway in my district -- U. S. Route 121), My constituents have strong feelings about that road...I am here to represent those

feelings and try to help meet those needs.
The Washington Post is right, when it called this bill "Pork on Wheels," but so was the Escondido, CA, Times Advocate in Ron Packard's district when it said, "Build the roads, Jack."

Nevertheless, it was difficult for the President:[46]

I am deeply disappointed by today's vote.
I knew in advance that the battle would be tough and the odds were long. But we cannot retreat from our commitment to a responsible budget.
My efforts to control spending are not diminshed, and I remain firm in my pledge to the American taxpayers to speak out against such budgetary excesses.

All of a sudden, surface transportation took on an importance it would rather not have. Public attention was quite focussed on all the issues but transportation needs.[47] Even though the President lost, legislators and transportation officials may well now believe that future transportation issues will be decided on forces outside the realm of transportation.

The Next Surface Transportation Legislation

A case has been clearly forming that surface transportation needs help. Partially prompted by the STAA, "blue ribbon commission" studies, and trade group position papers predict dire straits ahead. Framed with the knowledge that a separate process was begun to deal with the post-Interstate era, the STURRA consciously aimed at wrapping up successfully the original (as amended) 1956 concept,

and to hold the other parts of the system together (including urban mass transportation). Legislative authors[48] believe that the way is now clear to organize an approach based on need and resources. Congressman Anderson, Chair, House Committee on Public Works and Transportation, said that "Transportation is essential to the nation. The broad base of bipartisan support for the STURRA and veto override indicated that recognition."

1. Surface Transportation Needs and Resources

Among many recent studies,[49] the most noteworthy is the congressionally funded National Council on Public Works Improvement.[50] In a "Report Card on the Nation's Public Works," the Council grade transportation functions:

> HIGHWAYS: grade= C+
>
> Spending for system expansion has fallen short of need in high-growth urban and suburban areas. Many roadways and bridges are aging and require major work. Needs of most rural and smaller systems exceed available resources. Highway Trust Fund has sizeable cash balance.
>
> MASS TRANSIT: grade= C-
>
> Mass transit is overcapitalized in many smaller cities and inadequate in large, older cities. Systems rarely are linked to land-use planning and broader transportation goals. Maintenance has been erratic and inadequate, especially in older cities.

Our surface transportation, therefore, is generally considered inadequate. In addition, between 1992 and 2020, it appears likely

that the major public policy issues discussed in Table 4 will have undergone a major "sea change" from 1956 to 1992. Emphasis of national transportation legislation has evolved from basic transport and defense rationales to other factors observed in earlier discussion.

The nation has a mature surface transportation system which serves a slowly growing, diverse (racially, culturally, economically) population. From many more decentralized urban origins and destinations (in constrast to 1956), people will be making more nonwork trips (seventy-five percent) than worktrips,[51] suggesting that lifestyle is an important cause of congestion.[52] Many will migrate to the South and West and live in decentralized urban areas (including newly created "urban village"[53]). A large component of the population will be past sixty-five years. Very likely, the employment base will be more and more in the service sector.[54] Conversely, transport labor will be pressured by work force reductions,[55] productivity, and mechanization;[56] although no new transport technologies appear likely in the near term.[57] The economy will continue to be caught in structural financial difficulties,[58] subject to currency exchange fluctuations and productivity[59] problems. Energy crises will be caused by world and domestic (American[60]) politics more than an inadequate world petroleum reserves. Growing in importance are environmental issues such as air quality and ozone,[61] or the "greenhouse effect"[62], which may become <u>prime determinants</u> of the future of surface transportation. Lastly, institutional improvements would be of

considerable value, but may be quite unlikely.[63]

In 1992 projections of key macro-indicators, Table 4, suggest a stable and steady-state general political/economic milieu. Although official projections in an election year are neutral and nonpartisan, there have been questions raised about the basis of government outlooks. Often, fundamental assumptions depend upon beneficial cost-cutting federal measures, not yet taken, by future administrations. Depending upon the source, an optimistic or conservative "spin" could be built into the assumptions.

Given the general factors discussed above and the specific macro indicators in Table 4, it is a challenge to anticipate how a political consensus will develop. Many observers believe that the near-term CBO/OMB projections are optimistic. Even should they be close to the mark, around what will a coalition develop? The STURRA built on a "simple" public works consensus that highways are desirable. A strong coalition existed to support highways, which made it easier to consider legislation designed to finish the Interstate, maintain and rehabilitate the ABC system, and modestly aid urban transportation.

In the absence of the Interstate, more resources potentially are available. Long deferred needs therefore are coming forward on organizational "wish lists." Some fear the list of needs may become open-ended, just when resources will be constrained.

Resource discussion in the transportation technical community has taken the posture that a combination of sources is necessary: spending down existing trust fund balances,[64] higher existing taxes

Table 4
Key Macro Indicators, 1992

Source:	CBO[1]	OMB[2]
Indicator:		
1. GNP (trillion)	$6.263	$6.119
2. Inflation	4.4%	2.8%
3. Unemployment	5.6%	5.2%
4. Three-month treasury bills	6.3%	4.1%
5. Ten-year govt. bonds	8.0%	5.2%

Legend: CBO = U.S. Congressional Budget Office
OMB = U.S. Office of Management and Budget

Endnotes

1. U.S. Congress, Congressional Budget Office, The Economic and Budget Outlook: An Update (Washington, D.C.: Superintendent of Documents, August, 1988), Table I-7, Medium-Term Economic Projections for Calendar Years 1990 Through 1994, p. 35.

2. U.S. Office of Management and Budget, Special Analyses, Budget of the United States Government, Fiscal Year 1989 (Washington, D.C.: Superintendent of Documents, 1988), Table A-1. "Summary of Economic Assumptions," p. A-3.

and fees,[65] new and innovative public[66] and private sources[67], and shifting some transportation functions (thus expense) to the private sector.[68] Others note that a lack of vision is increasingly part of the problem.[69] **It is testament to the finality of the STURRA accomplishment on the Interstate that such questions may even be raised now.**

2. Strategies for 1992

A coalition of transportation interests has been formed under the leadership of the American Association of State Highway and Transportation Officials.[70] The fact-finding Advisory Committee on Highway Policy has "more than 100 state and local government groups, highway-user organizations, trade and industry associations, civic leaders and private citizens." A second group has been organized to reviews plans and develop consensus proposals. The Transportation Alternatives Group (TAG) has prestigious members: National Governors' Association, National Association of Counties, National League of Cities, American Association of Satte Highway and Transportation Officials, Highway Users Federation, National Conference of State Legislatures, U.S. Conference of Mayors, National Association of Regional Councils, American Public Works Association, American Public Transit Association, American Automobile Association, and American Trucking Association. The 2020 goal is to develop a consensus action plan, after determining

needs, which will focus on the 101st. Congress (1989-1990). It envisions itself as a "nationwide townhall on vital issues."

The nation, except for the Interstate system concept, does not have a long-range surface transportation program of similar boldness and scale. Major congressionally mandated and Department of Transportation studies have addressed the problem[71] but no consensus developed as administrations changed. The current administration has had little visible interest in studying distant futures, while Congress has been enmeshed in fulfilling transportation needs at hand. With this history in part in mind, the 2020 Plan was intended to fill an important public/private void. "Driven by concern over the absence of a long-range national policy, it is bringing together for the first time public officials, private groups and citizens to assess future needs for mobility and transportation."[72]

Is a dramatic program proposal really desirable? Are the electorate and political system so immature that we must persuade with the three most powerful words in the English language (according to Madison Avenue's advertising lexicon) -- "New and Improved?" Cynics note that media "sound-bites" should not be any longer than thirty to sixty seconds of broadcast time. Optimists, including this writer, hope that complex matters will be understood and sound solutions supported when presented properly.[73] Realistically, it is difficult to remain even a cautious optimist.

What, then, is available to those wishing to build coalitions[74] in support of the genuine surface transportation needs for

the nation? Several options have been discussed and are reformatted here for the sake of discussion.[75]

Option 1: Status Quo

Most of the projections discussed above state the current condition of the surface transportation. For example, the report card scores were disturbing to many, but not unexpected. Gradually at first, then faster, erosion of the entire system would continue. Users would know the difference on a daily basis. However unless there is a major catastrophe (bridge collapse or transit accident), political forces probably will not take concerted action.

Given this scenario, the option offers little. Basically, it would hold the system together with some incremental changes or fine-tuning, mostly related to underfunded maintenance activities.

Yet, if the Interstate is finished and excess trust receipts are not fully committed to other existing surface transportation programs, political temptation will prevail. Such excess receipts will be seen as "available" for other public policy goals.

Accordingly, the critical policy question would be: are the funds "borrowed" with a short-term due date or an open-ended income stream diversion?

The status quo option, in summary, is tantamount to shrinking the current program and funding system. It would seem almost impossible to hold even against the building forces.

Option 2: Variations on Existing Themes

This option incorporates known quantities, with which policy makers and key elements of the public are familiar. Nonetheless, they are feasible and practical. Essential as they may be, they lack political sizzle; consequently failing the "new and improved" standard.

A. Federal Program Turn-Back

Initial attempts by the administration have been a two pronged approach. On the one hand, federal program funding withdrawal (urban transportation) was a disincentive at the very time local governments were strapped for cash. On the other hand, federal programs encouraged private sector participation at the local level (urban transportation, toll roads, deregulation, etc.) by offering incentives (cash, permission, demonstrations) to local governments.

With the long-term nature of federal budgetary pressures, this option very likely will continue to be stressed by Republican (more so) and Democratic (less so) administrations. Though at first successful to a modest degree, it will have a growing, long-term influence. Including the private sector has grown considerably and appears well established at the local level.

B. Maintenance and Rehabilitation

Essentially, this approach is a blend of status quo plus former Interstate funds dedicated almost totally to maintenance,

rehabilitation, and restoration of the system. Urban mass transportation programs would be treated similarly with current projects being completed but no new starts. Current construction commitments would be honored such as freeway extensions, arterials, bridges, and rail systems.

To hold this package together would be very difficult. Technically, it appears really necessary and desirable. Nevertheless, it too (as with status quo) would suffer from the syndrome of "out-of-sight, out-of-mind." In other words, maintenance, etc., are not yet at the crisis point.

C. Existing System/Some New Starts

Selective new starts of major highway and urban transportation systems might be inititated with great public fanfare. "Your federal tax dollar at work" signs would be everywhere.

With this variation, some of the released from the Interstate might be directed to existing system activities (modest amounts) and to new highway and rail starts (major amounts).

Of the possibilities so far, this approach offers a more potentially winning political strategy. Citizens (thus elected officials) would see major construction activity and new services. If done competently and without negative press (waste, delays, cost overruns, graft and corruption, severe impacts), such support would be widespread. It might even become the basis for proposing totally new transportation concepts and taxes to support them.

D. New Starts

Considering political factors, it would be possible to decouple existing system needs from new starts. Present new starts to the public separately as a justification for additional funds.

If the the public see more exactly where the money goes and what it purchases, support probably would be forthcoming if the economy were sound and other taxes at current levels. Thus one benefit would be a visible positive linkage as with the preceding variation.

Promotional literature for the tax increase would say:

> "Your nine cents a gallon tax increase will buy new freeways, bridges, and rail systems for each of the fifty states (specifiy projects)." "And, your current roads and rail systems will be improved and rebuilt at no additional tax increase."

In effect, new taxes would be dedicated to new major projects; existing taxes to maintenance and rehabilitation. The question of whether and how to renew the existing fuel tax framework in 1992 might well be finessed. Their extension would be automatically assumed in public discussion as a given or "non-negotiable point."

Option 3: New Vision

The "V" word, vision, has become popular to suggest what frequently seems lacking in public policy. Transportation likely suffers from this perception too.

Whatever the content of the "vision" might be, the packaging should be considerably different. "New and improved" comes to mind as a way to advance the next generation of surface transportation programs. Contrary to the political "sizzle" of the defense argument appended to the Interstate, national security probably cannot so easily be applied in an era of ICBMs and nuclear warheads.

Suitable for the Twenty-first Century, a break from the past is necessary to build a large-scale public coalition outside the transportation community. The New Vision should have simple payoffs the public can understand and empirically verify. For example, several opportunities come to mind:

1. mobility and the economy
2. environment and energy
3. leading-edge technology

It would be ideal if positive goals were the stimulus for the New Vision, however some quite disturbing forces may do just as well.

Urban gridlock and deteriorating transportation infrastructure is one potential impetus. To mobility and the economy, faster freight movement in urban areas may be one way to connect needs with publicly comprehensible goals. Available technology could be

brought into play and applied to pipelines, specially restricted freeways for urban freight, or more integrated use of existing rail/highway/utility corridors. On the passenger side, recent advances in electric propulsion, automatic vehicle navigation systems, and vehicle safety promise large gains in efficiency of existing systems. Obviously, these ideas are not glamorous but offer visible payoffs.

Warming of the atmosphere, general air pollution, and ozone holes in the atmosphere could be the **deus ex mechana** for industrialized nations to begin fundamental changes. International agreements could require improvements on all fronts, especially surface transportation. In terms of domestic environmental and energy concerns, transportation changes offer great promise. Many of which the public would likely support. Design and install systems that will dramatically save energy, reduce air and noise pollution, and not devastate existing urban areas when constructed. Again, new technology holds some potential here. In practical terms though, nothing is in the near future.

Antiquated transportation technology may become another negative impetus for change. Whether passengers or freight, mobility may no longer be adequate for the perceived needs in the Year 2000 or later. Therefore, a leading edge technology is sought. Create a national program to encourage and support development of new solutions to the entire range of surface transportation problems. Provide seed money and sustained support for development and demonstration. Identify the most favorable

possibilities and stimulate the marketplace to go ahead. Consider the Japanese model for harnessing and focussing national energies. After highly visible experiments and demonstrations, public approval and user support would in effect decide "winners." Just for the sake of discussion, assume a new technology such as "maglev" (magnetic levitation guideway vehicle propulsion). If it were the way to go for freight and passengers sharing the current Interstate system right-of-way (and somehow for urban transportation), then a simple package concept would be grasped and supported by the public. It would be more than fitting for a vision of the Twenty-First Century. Obviously, at this stage we do not know whether it is feasible and desirable on a grand scale. Without doubt, that or a similar new technology could be the surface transportation system equivalent of STAR WARS, a Mission to Mars, a base on the Moon, a low-orbital space plane/shuttle from New York City to Tokyo, or curing AIDS. As "Buck Rogerish" as these futures might be, leading edge technology may be one policy and programmatic solution.

A Credible Scenario?

If surface transportation were fully linked with non-transportation priorities, our legislative dilemma might in large measure be remedied. Increasing transportation needs and shrinking resources seem to be generally acknowledged as legitimate. It may be that the most practical approach to building coalitions is a

multiple public goal consensus.

Earlier, the thesis was stated that given present trends and more pressing public policy challenges, surface transportation would be very fortunate indeed to retain its current funding independence and levels.

If that theme seems realistic, then it would be prudent to take several steps prior to 1992:

Programs

1. continue 2020-type studies, full public discussion and agenda building activities;

2. demonstrate "credible" current highway and urban transportation needs for system maintenance, rehabilitation and restoration are in excess of all the projected trust fund receipts through 2020;

3. identify "credible," necessary new large program starts for existing highway and urban transportation systems;

4. establish powerful public-private institutional arrangements which:

* target leading edge technologies holding great promise for improving mobility, helping the economy, cleaning the environment and saving energy;

* support research, development and demonstrations of the technologies;
*announce nationwide plan and map for installing the new technologies (similar to visual political impact of Interstate map);

*develop funding and implementation program with money, policies and projects "earmarked" to specific transportation related benefits (mobility, economy, environment, energy);

5. build coalition with other interests (economy, environment, energy) to support full program and need for additional public and private funds;

Funds

1. commit existing trust fund revenue stream fully to maintenance, rehabilitation, and restoration of the 1992 surface transportation system;

2. propose new sources of public and private funds to underwrite New Vision with a firm resource "asset allocation mix" (for example):

*new freeways and urban transportation facilities:	30%
*new transportation technology systems and facilities:	30%
*transportation environmental improvement programs:	20%
*transportation energy saving programs:	20%

3. promise that the entire package will be self-supporting and will not add to the national deficit.

New funds might be generated by a surcharge on imported petroleum, or a doubling of current fuel excise taxes and fees.

In general, the above approach goes against the grain of conventional political wisdom. It is a dangerous, high risk strategy. From the current surface transportation perspective, it should be employed only as a last resort as a means to protect and increase the transportation funding base, while sharing some of the increased funds.

Once such a precedent is established, all sorts of trust fund havoc are possible. Make no mistake about it. This would be anathema to the transportation community. Inexorably though, macro forces seem to be pushing this way.

Conclusion

Generally, surface transportation bills are complex, quite technical and beyond the ken and interest of many. In large measure, the STURAA has set a deceptively simple stage for difficult future decisions. Concurrently, the field is rising to the highest levels of domestic policy debate, primarily for non-transportation reasons. More and more, major domestic legislation will not be judged by need, but by its impact on external forces and conditions.

In essence, transportation needs and programs may have little to do with our future national transportation system, if current directions continue. As with other domestic priorities, whether "people" or "things" oriented, surface transportation has now entered the most visible arena of public policy debate. The nation no longer appears wealthy enough to have "it all." Consequently, surface transportation must now fully compete with other domestic priorities for scarce resources. Even with special trust fund revenues, there is not enough.

The next legislative debate may cause an even stronger public dispute and scramble for a claim on tax dollars. But when that occurs, the competition may well be non-transportation special interests. The explicit message would be: "Transportation has had enough, it is our turn." Without a broad-based coalition as "2020" is attempting to develop, surface transportation interests will be lucky to preserve what they have.

Endnotes

1. U.S. Congress, Committee on Public Works and Transportation, A Revised Estimate of the Cost of Completing the National System of Interstate and Defense Highways; Communication from the Secretary of Transportation (Washington, D.C.: Superintendent of Documents, 100th. Cong., First Ses., Report No. 100-4, January, 1987), pp. 1, 6.

2. An estimate of $10 billion a year is conservative. The U.S. Federal Highway Administration figures, under current provisions, $12-14 billion a year will be generated.

U.S. General Accounting Office, Highway Technology, The Structure for Conducting Highway Pavement Research (Washington, D.C.: Superintendent of Documents,GAO/PEMD-88-2BR, November, 1987), p. 16.

3. Two examples of potential (and somewhat discretionary) competition for scarce federal resources are space exploration and infrastructure.

Development of space by the National Aeronautics and Space Administration may run quite high, drawing substantial funds from the General Treasury. One high-level projection, the "Ride Report," indicates a program of "Earth Observation and Mars" annual cost starting at $10 billion in 1988, rising to $20 billion by 1992, $26-28 billion by 1993, and $33 billion by 1999. These costs would extend well into the twenty-first century (at least 2035).

U.S. Congress, Congressional Budget Office, The NASA Program in the 1990s and Beyond (Washington, D.C.: Superintendent of Documents, May, 1988), pp. 51-54. See also: U.S. National Commission on Space, Pioneering the Space Frontier, An Exciting Vision of Our Next Fifty Years in Space (New York: Bantam Books, 1986), pp. 188-191.

One high-end needs study on the nation's infrastructure goes out twenty-five years at over $118 billion a year, of which transportation requirements equal $80 billion annually.

U.S. National Council on Public Works Improvement, Fragile Foundations: A Report on America's Public Works (Washington,D.C.: Superintendent of Documents, February, 1988), pp. 37-39.

4. Although always a legitimate concern for any public service, the theme was directly raised in an early discussion of urban transportation. "Adapting to the realities of energy, pollution, demography, urban lifestyles, and financial limitations will require a more effective and appropriate mix of current transportation systems."

Sheldon M. Edner and Edward Weiner, "Urban Transportation: A Time for Change," Public Administration Review (Vol. 42, No. 1, January/February 1982), pp. 84-89.

5. National Interstate and Defense Highway System, Federal-Aid Highway Act of 1956, PL 84-627.

6. Airline Deregulation Act of 1978, PL 95-504; International Air Transportation Competition Act of 1979, PL 96-192; Motor Carrier Act of 1980, PL 96-296; Staggers Rail Act of 1980, PL 96-448.

7. Pat Choate and Susan Walter, America in Ruins, The Decaying Infrastructure (Durham, N.C.: Duke Press Paperbacks, 1983); Michael Barker, ed., Rebuilding America's Infrastructure, An Agenda for the 1980's (Durham, N.C.: Duke University Press, 1984); see also any of the many popular media reports, for example: Business Week Magazine Team, The Reindustrialization of America (New York: McGraw-Hill Book Company, 1982).

8. Surface Transportation Assistance Act of 1982, PL 97-424.
See also: Stewart E. Butler and Catherine G. Schneider, Employment Impacts of the Surface Transportation Assistance Act of 1982 (Boston: U.S. Department of Transportation, Transporta- tion Systems Center; paper presented at the Sixty-fifth Annual Meeting of the Transportation Research Board, January 13, 1986); and, Peter L. Shaw, "The Surface Transportation Assistance Act of 1982: Short-Term Hopes and Long-Term Implications," Transpor tation Quarterly (Vol. 40, No. 3, July 1986), pp. 411-432.

9. The Shipping Act of 1984, PL 98-237, accomplished limited deregulation of American-flag bottoms, but the industry was still at a disadvantage compared to foreign flags. Renewal of the act in 1989, with modifications, is anticipated.

10. The list of present and future concerns is daunting. In three excellent overview discussions by the National Academy of Sciences Transportation Research Board (TRB), basic perspectives were considered.

For example: 1. better management of public capital investments in transportation; 2.improved transportation productivity; 3. priorities for improved transportation safety; 4. transportation finance; 5. changing roles of federal, state and local governments; 6. transportation and the U.S. competitive position worldwide; 7. transportation and economic health and development; 8. effects of deregulating transportation; 9. congestion of traffic facilities; 10. environmental consequences of transportation.

"TRB Identifies Ten Critical Issues in Transportation," TR News (September-October 1987), pp. 3-14; Douglas R. Porter, "The Future Doesn't Work," TR News (November-December 1987), pp. 14-15.

The TRB Executive Committee examined the future in terms of a slightly different orientation: 1. impacts of government

decisions; 2. intermodalism; 3. technology; 4. safety; 5. work force; 6. information; 7. finance; 8. externalities.

Lester A. Hoel and Peter G. Koltnow, "TRANSPORTATION: Coming Changes and Strategies," TR News (July-August 1988), pp. 2-8.

11. See : U.S. Congress, Subcommittee on Surface Transportation, Committee on Public Works and Transportation, Hearings on the Impact of the Administration's Surface Transportation Budget Proposals for Fiscal Year 1986 (Washington, D.C.: Superintendent of Documents, 99th. Cong., First Ses., Report No. 99-16, March 7, 20, 1985), March 7-pp.1-2, March 20-pp.407-408.

Congressman Anderson (chair):

> This is the first meeting of the Surface Transportation Subcommittee in the ninety-ninth Congress. It may also be among the most important.
>
> ***
>
> I have many concerns about the budget which the the Administration has submitted to Congress. There is a saying that the administration proposes and the Congress disposes. Let me assure everyone that is here today that a(sic) soon as the authorizing legislation implementing the adminstration's budget is sent to the Congress and referred to this subcommittee, it will be properly disposed with.
>
> Now, the transit proposals which have been sent to the Hill are a travesty. More than anything I have seen in 4 years, this proposal convinces me that this administration is simply opposed to public transit. And in saying that, I don't necessarily hold any of those who were to testify here today responsible. They have to work with others downtown.
>
> But let's make no mistake about it. This budget threatens the operation of all public transit systems in this country as we know them, and threatens even the very existence of some of them.
>
> ***
>
> I have heard from many transit properties around the country, from transit riders and business people around the country, and my colleagues here in Congress who represent their constituencies around the country, and I am prepared to say that this nation neither wants nor needs the Administration's transit proposals.
>
> ***
>
> In retrospect, this Administration's support for the Surface Transportation Assistance Act which became law with the President's signature just 26 months ago, was a tragic joke. It held out the promise for so much, but the Administration now wants to break that promise.
>
> This subcommittee participated in making that promise

to the American people, and we will not now participate in breaking it. So, we will surely not act upon any proposal submitted by the Administration necessary to implement its budget request.

I am from an older school of government and politics where you make commitments and keep commitments. Because the only way you can work with someone tomorrow is if you are delivering what you said yesterday.

I want to work to improve, not dismantle, transportation in that the budget request that we are considering will benefit transportation.

This is not a transportation budget. It is an anti-transportation budget and I am sorry that we even have to consider it.

12. U.S. Department of Transportation, Federal Highway Administration, Section-by-Section Legislative History - "Surface Transportation and Uniform Relocation Assistance Act of 1987" (Washington, D.C.: FHWA, internal staff document, October, 1987), pp. vii, 646.

13. Transcripts of congressional hearings and floor debates, as published by the Office of the Federal Register, are valuable sources of what officials want to appear on the record. Although apparently verbatim, they are edited by staff, insertions may be made after the event, and sometimes (rarely, it is hoped) hearings are staged.

Despite such important caveats, official documentation provides a basis for what elected officials believed were the key public points to communicate.

See: Jean Cobb, "Lights! Camera! Action! Program notes from the theater called congressional hearings," Common Cause Magazine (July/August, 1988), pp. 17-19.

12. Arguments in favor of H.R. 10660 were well stated by Congressman Fallon, author of the bill:

1. ...our engineers consider will be adequate to meet the traffic needs of the year (1975).

2. We must build this system of highways if we are to continue our economic growth and expansion.

3. ...we have built more automobiles and put them onto our highways than could be parked bumper to bumper on all the new highway miles...

4. ...traffic deaths are running 16 percent ahead of last year and have been increasing for each of the last 12 months.

5. ... the operator of a passenger car will save a cent a mile and a trucker 4 cents a mile.

U.S. Congress, Congressional Record, 84th. Cong., Second. Ses. (Washington, D.C.: Superintendent of Documents, April 25, 1956), pp. H-7116 to 7117.

13. But Senator Gore was worried about the non-Interstate needs: "I point out once again, as I did a year ago repeatedly, that only one-seventh of the Nation's traffic travels on interstate highways. We cannot ignore the other Federal-aid highways, and we must not."

Ibid., May 28, 1956, p. S-9091.

14. One congressman, Vanik, was far ahead of his times by calling for a congressional committee and hearings on safety, highway design, construction and automobiles:

> The current trend in in automobile promotion is horsepower and speed. The development of high torque and fuel injection engines, pushbutton driving, and increased horespower has not contributed one iota to the brainpower behind the wheel. Kamikaze driving has become a fashionable American pastime. A recent ad: "on display now-320 horsepower DeSoto Adventurer. You've never seen or driven the likes of the new 320 horespower DeSoto Adventurer. See this beautiful package of golden dynamite. *** Electronically clocked at the scorching speed of 137 miles per hour."
>
> What kind of fool would want to drive .... these cars? These advertisements are designed to appeal to the highway idiot.

Ibid., April 25, 1956, p. H-6966.

15. Senator Capehart was uncertain of cost estimates: "In connection with the estimates, we must realize that engineers do make errors. Sometimes the estimates are too high; sometimes they are too low. *** Why cannot we handle this matter on a scientific, businesslike basis...?"

Ibid., May 28, p. S-9078.

16. Congressman Withrow was against the once cent increase (from two to three):

Gasoline is a commodity which is already being taxed at a staggeringly high rate when compared with all other automobile products and supplies. Why should the tax on gasoline constantly go up and up - to 40 and 45 perrcent of the retail price, while all other automotive excises - which are not duplicated at State level -must be held so sacredly to a conservative level of 10 percent or less.

Ibid., April 26, 1956, p. H-7115.

17. Congressman Dingell described the situation aptly: "As we know, this bill is primarily a bill for construction of new highways, and not repair of old roads...."

Ibid., April 26, 1956, p. H-7136.

18. Congressman Allen preferred tools, or any non-new tax source: "Mr. Speaker, this bill is a momentous one; it authorizes the expenditure of gargantuan sums of money. But pay-as-you-go is acceptable compromise. I personally would prefer to see these so-called expressways, thruways, on a toll basis."

Ibid., April 26, 1956, p. H-7110.

19. Congressman Colmer was concerned about future debt on the general treasury and was against any non-pay-as-you-go funding or bonds: "...we cannot afford to burden future generations with these additional billions of dollars. It would add to the national debt and to the inflation and to the eventual collapse of the economy of this country, if that reckless spending and irresponsible financial theory is followed."

Ibid., April 26, 1956, p. H7110.

Senator Carlson was in favor of tollroads:

> The presently proposed Federal highway legislation fails to take advantage of construction of roads by means of private capital through toll revenues. The effect will be to curtail toll-road constuction almost to the vanishing point on the Interstate System.
>
> The failure to accept the principle of toll roads means the abandonment of $10 billion or more of private capital on from 10,000 to 12,000 of interstate roads, which could be built by means of temporary tolls by the State in combination with a nominal amount of Federal aid from the State's interstate allocation.
>
> The bill should..."Preserve States rights by allowing each State to choose its own method of financing and determine its own highway priorities...."

Ibid., May 28, 1956, p. S-9113.

20. Congressman Barden was against extension of Davis-Bacon prevailing federal labor wages to the state share of project funds: "This further invasion of the control of States should be viewed with caution. When you control State's money you are coming pretty close to control of the States themselves. In my opinion, it is asking right much of the governor of any State to so abdicate his position and authority that he will say: 'Here is the money, I will not have anything to do with its expenditure.'

Ibid., April 26, 1956, p. H-7111.

21. Congressman Alger strongly objected to comments in the hearing record:

> Texas has "inhuman working conditions existing today similar to the twenties...for our construction works on highways; that there are ten caravants, predatory contractors...
> ...the very worst labor laws that exist in this entire country, which would actually drive us back to slavery, exist in Texas today.***As a matter of fact, we have a marvelous State highway department, and we have no slavery conditions.

Ibid., April 26, 1956, p. H-7139.

22. Senator Capehart said: "Inasmuch as under the Gore proposal, many of the States will get far more than they can possibly use... Talk about a pork-barrel bill; we would have it in the so-called Gore amendment.

Ibid., May 28, 1956, p. S-9088.

23. Senator Bush stated:

> Mr. President, the Gore bill is monstrously unfair because it would waste at least $3,500,000,000 of the American taxpayers' money by freezing it in a highway trust fund where it could never be used. It is monstrously unfair to the American taxpayer because it could permit windfalls to certain States which could total approximately $1,325,000,000. This could result from provisions permitting transfer of up to 20 percent of interstate funds-for which the new taxes are being imposted-to other highway systems.
> The Senate need not swallow this bitter dose of medicine for the American people which is contained in the Gore bill.

Ibid., May 28, 1956, p. S-9101.

24. The Clay Commission report (Gen. Lucius D. Clay), appointed by President Eisenhower, September 1954 (Advisory Committee on a National Highway Program) set forth most of the guidelines for the bill in its January 1955 report.

Congressman Mack said it proposed using bonds for funding the new system financed over thirty years,

> by earmarking all present and future revenues from the present 2-cents-a-gallon Federal gasoline tax for use in bond retirement. Thus, under the Eisenhower bond proposal, the highway program would be carried out without any increase in present Federal highway user taxes.
>
> ***
>
> Cabinet members indicated to our committee that the President would veto any highway bill that did not carry with it a plan for financing the roads program proposed. The President preferred bonds over new taxes.
>
> These are new Democratic taxes. Republicans who want roads must vote for them against their wishes.

Ibid., April 26, 1956, pp. H-7126 to 7127.

25. The Surface Transportation Assistance Act of 1982 charts a new course for Federal policy governing highways and mass transit, greatly increasing emphasis on preservation, redevelopment, and selective expansion of the existing transportation infrastructurew that remains critical to the economic well-being of the nation. The measure reported to the House by the Committee represents a response to demonstrated needs in terms of deterioration of physical facilities and capacity overwhelmed by demand, documented in more than a dozen hearings during the 97th Congress which elicited extensive testimony from a diverse array of witnesses. At the same time, the bill provides increased flexibility enabling Stte and local officials to devise their transportation programs in response to their unique needs. And it reflects the Committee's continuing effort to make the surface transportation programs under its jurisdiction more stable, predictable, and less encumbered by red tape and inflexible requirements.

U.S. House of Representatives, Surface Transportation Assistance Act of 1982, Report of the Committee on Public Works and Transportation (Washington, D.C.: Superintendent of Documents,May 17, 1982, H.R. 6211), pp. 1-2.

26. The Consumer Price Index for all items on a national calendear year average peaked in 1980 at 13.5 percent and dropped to 3.2 percent in 1983. The reporting lag and averaging flattened out the regional, sectoral and special group highs.

U.S. Department of Commerce, Statistical Abstract of the United States, 1985 (Washington, D.C.: Superintendent of Documents, December, 1984, 105th ed.), Table 790, p.475.

In the Southern California area, for example, the CPI three month moving average for all urban consumers peaked at 18 percent in 1980 and bottomed at less than 1 percent in 1983.

Security Pacific National Bank, Southern California Monthly Summary of Business Conditions (Los Angeles: Security Pacific Bank, September, 1985), p. 4.

27. Senator Dole objected to the dual purpose of the bill:

> If we have learned anything in the past 20 years, it is that make work public sector jobs projects are not the answer to the unemployment problem. There is no reason to expect that this proposal would work and better than its predecessors.
>
> ***
>
> The proponents claim that, in addition to the highway and bridge program jobs, their package would provide employment to an extra 330,000. Even if these claims were true, the unemployment rate would be lowered by only three-tenths of 1 percent. In order to to lower unemployment to an acceptable level by this method would require a truly massive public works program, exceeding even those of the New Deal.

U.S. Congress, Congressional Record, 97th. Cong., Second Ses. (Washington, D.C.: Superintendent of Documents, December 14, 1982), p. S-14683.

28. There were other objections to how the money was to be allocated. Senator Proxmire raised several issues:

> None of the money proposed would go to fill potholes, incidentally, or do the usual kind of repair. That has been and presumably would continue to be left to local, county, and state governments.
>
> ***
>
> Does this mean that if we go ahead with this bill the highways will be in worse shape than they are in now? Well, it depends in part on what highways we are talking about. City streets? They will be in worse shape. County highways? Worse shape. State highways? Worse shape. The interstate highways? Better shape.
>
> ***
>
> So what is the hurry? What do we really accomplish? Where is the documentation to show that the Interstate

Highway System is in worse shape than the rest of our highways?

Ibid., December 13, 1982, pp. S-14421 to 14422.

29. Congressman Levitas summed up central concerns:

> Mr. Chairman, there is an expression that says, "clothes make the man" or I guess these days we say, "clothes makes the person." The relevance that the little expression has to do with this legislation today is, I think worth noting. On several occasions during the last 4 to 5 years, during the administration of the last two presidents, efforts were made to pass legislation very similar to that which we are considering today. Those efforts were not only unsuccessful but were overwhelmingly defeated. The Members of this body rejected a gasoline tax, the Members of this body rejected a highway improvement bill.
>
> ***
>
> But we have now dressed the "person" in some different clothes. It is no longer a gasoline tax; it is a user fee. It is no longer a highway bill, it is an infrastructure improvement program. And no longer is it simply to build highways with a user fee; it is a jobs bill.

Ibid., December 6, 1982, p. H-8975.

30. U.S. Congress, Congressional Record, 100th. Cong., First Ses. (Washington, D.C.: Superintendent of Documents, March 18, 1987), p. H-1438.

31. The estimates of costs to complete the Interstate were the object of intense technical, financial analysis presented in revised tables of apportionment.

U.S. Congress, Surface Transportation and Uniform Relocation Assistance Act of 1987--Conference Report to Accompany H.R. 2 (Washington, D.C.: Superintendent of Documents, 100th. Cong., First Ses., Report 100-27, March 17, 1987), pp. 137-147. See Committee prints 100-1 to 100-6.

32. Senator D'Amato emphasized:

> The administration's proposed fiscal year 1988 budget would cut 56 percent of current transit funding. It would provide a total of $1.37 billion from the mass transit account to fund the entire program. Under the administration's plan, New York State alone would lose $382 million, or 56.4 percent, of its current allocation of Federal

transit funds. I oppose this shortsighted attack on the program, and I will use my position as ranking minority member of the Transportation Appropriations Subcommittee to prevent further appropirations cuts.

Congressional Record, op. cit., February 4, 1987, p. S-1676.

33. Senator Pressler's amendment was designed to ensure that each state receive at least eighty percent of that year's estimated tax payments attributed to highway users.

> This amendment is simple in its operation. It would guarantee those States which pay into the Mass Transit account an 80-percent return of their contribution. In addition, it would allow the States to spend the guaranteed funds for either mass transit projects or general Federal highway projets giving them flexibility.... That is not now the case.
>
> Mr. President, I offer this amendment as a matter of equity. Of the 50 States that pay into the account, an astounding 32 do not get a penny back! Why is this? The answer is simple. Speaking very frankly, the mass transit account has been abused. As originally envisioned, this was to be a discretionary account. The funds were to be allocated at the professional discretion of the Department of Transportation on a needs basis. But that has not happened. Instead, the money is earmarked in the relevant committees and - as you might guess - most of it goes the States of committee members.
>
> That is something that troubles me, because the U.S. Senate is made up of 100 members, not all of whom are members of the Appropriations Committee or the Banking Committee.

Ibid., February 4, 1987, p. S-1679.

34. Daniel M. Weintraub, "Deukmejian Signs Bill for Toll Roads in Orange County," Los Angeles Times (September 30, 1987), pp. 1, 3; Jeffrey A. Perlman, "OCTC Approves Proposal for State's First Toll Road," Los Angeles Times (October 13, 1987), Pt. II, pp. 4-6. These state and local measures were implementing the special provisions in the STAA (1987).

See the growing recent literature: U.S. Congress, Congressional Budget Office, Toll Financing of U.S. Highways (Washington, D.C.: Superintendent of Documents, December, 1985); U.S. General Accounting Office, Highway Funding, Use of Toll Revenues in Financing Highway Projects (Washington, D.C.: Superintendent of Documents, April, 1986); W.A. Rusch, Toll Highway Financing (Washington, D.C.: Superintendent of Documents, National Cooperative Highway Research Program, 117, Transportation Research Board, December, 1984).

Toll roads and variable rate use charges on private roads were advocated as important strategy opportunities in a significant business editorial. "Highway Parking Lots," Wall Street Journal (September 4, 1987, Editorial), p. 14.

35. Senator Reid:

> There is currently a $10 billion unobligated balance-or reserve-that exists in the highway trust fund. Although a reserve is certainly warranted and desirable, $10 billion is excessive and, in fact, wasteful.
> ...it is a sham to use moneys in the highway trust fund to improve the overall deficit picture. All this does is temporarily hide the real deficit and delay needed highway improvements; improvements which would increase jobs and stimulate the economy.
>
> Ibid., February 4, 1987, p. S-1717.

36. Representing that point of view was Senator Roth:

> Mr. President, I rise in strong opposition to the conference report that we will be voting on today. The term "highway robbery" was never so approppriate as in describing this bill. Unfortunately the victim is the taxpayer. This bill robs our constituents of the money they deserve and the allocations they have paid for. To insert specific demonstration projects in 36 States and the District of Columbia is unwarranted and constitutes highhway robbery.
> Forty-seven of the fifty States will lose money under the formual allocation of this bill as compared to their fiscal year 1986 apportionments. There is no reason to fill this bill with frivolous and unnecessary and long-lasting pork barrel projects that may cost us over $8 billion.
>
> Ibid., March 19, 1987, p. S-3497.

37. The official position of the Office of Management and Budget was published in a letter from OMB Director, James C. Miller III to Senator Robert Stafford, January 27, 1987:

> 1. eliminate general fund financing of trust programs (refers to transit funding);
> 2. repeal special interest exemptions from highway user fees (gasohol and other special fuel producers, state and local governments, private and public bus operators);
> 3. end the transit discretionary program and administer transit's share of the trust fund equitably by formula

(funded by one cent from highway trust fund); only twenty cities benefit, receiving 80% of the funds;

4. increase the non-federal matching share for transit capital grants from 20-25 to 50% (induce wiser local investment decisions);

5. limit transit operating subsidies to areas under 200,000 in population (current law allows local officials to evade responsible fiscal management since inception--real productivity declines);

6. delete mandatory funding for the Los Angeles metro-rail project (second phase).

Ibid., February 4, 1987, p. S-1690.

38. The President said: "But you know Congress and spending. Only this week the Congress sent me a highway construction bill that was loaded with pork-barrel projects. I haven't seen so much lard since I handed out blue ribbons at the Iowa State Fair. It was $10 billion overboard."

U.S. Office of the Federal Register, Weekly Compilation of Presidential Documents, (Washington, D.C.: Superintendent of Documents, Vol. 23, No. 13, April 3, 1987), "Federal Deficit Reduction," Radio Address to the Nation, March 28, 1987), pp. 317-319.

39. Ibid., Vol. 23, No. 11 (March 20, 1987), March 23, 1987, p. 280.

40. U.S. Congress, Committee on Public Works and Transportation, "Letter to President Reagan," News from: Committee on Public Works and Transportation (Press Release, March 24, 1987), p. 1.

41. Weekly Compilation, op. cit., Vol. 23, No. 12 (March 27, 1987), March 27, 1987, pp. 310-313.

42. Ibid., p. 330.

43. On arrival in Philadelphia, April 1:

Q. What did you have to give away to win the highway veto? (Laughter)

Q. Are you going to sustain the highway bill?
The Pres. What?

Q. What are you going to do-
The Pres. It's still up in the air there. I'm waiting for it to get straightened out.

Ibid., p. 331.

April 2, Remarks Following a Meeting on Alliance Cooperation (NATO):

Reporters. Mr. President, Senator Dole says that losing this highway vote will make you a caretaker President.
The President. I have asked for permission to go up on the Hill and meet with the Members of the Senate up there to discuss my caretaker status.

Q. When are you going to do this?
The Pres. Very shortly.

Q. Today?
The Pres. Yes.

Q. Before the vote?
The Pres. Yes.

Q. Do you think you can turn it around?
The Pres. I never talk about win or lose before it happens. Just wait and see what happens.

Ibid., p. 33.

April 2, Remarks to the National Collegiate Athletic Association Basketball Champions:

Reporter. Have you been slam-dunked by your party, Mr. President?

Q. Are you going to be a caretaker, Mr. President? Are you going to be a caretaker President if you don't win this vote?

Q. Have you been slam-dunked by your own party?

Q. Because that's what they're saying, you know-caretaker President if you don't win this vote.
The Pres.. You heard what happened. I'm playing defensive ball. (Laughter)

Q. Are you winning?

Q. Are you winning?

Q. The Democrats say you were buying votes.

Q. Are you winning, Mr. President?

Q. What's at stake in this vote, Mr. President?
The Pres. Don't want to know how the score came out until the game's over.

Ibid., p. 340.

44. Rollcall Vote No. 60, Congressional Record..., op.cit., April 2, 1987, p. S-4412.

45. Ibid., March 31, 1987, p. H-1638.

46. Weekly Compilation..., op. cit. (March 28, 1987), April 2, 1987, p. 341.

47. After the veto override, Newsweek ran in its "Perspective-Overheard" Section the following:

"I dream about the questions. I say, 'Donaldson, get out of my bedroom.'"

New White House spokesman, Marlin Fitzwater, on his recent nightmares.

"You can bet your spring petunias that this congressman will vote to override. President Reagan, he ain't gonna be running in '88, but I am."

South Carolina Republican Congressman Arthur Ravenel Jr., whose district gets a $15 million bridge in the highway bill vetoed by Reagan.

There was also a cartoon showing the president (holding his highway bill veto) run over by a truck (labelled "VETO OVERRIDE"), with the driver (Congress) saying: "Pity. First time he's back on his feet in four months, and he steps in front of a truck..."

"Perspectives-Overheard," Newsweek (April 13, 1987), p. 19.

48. Glenn M. Anderson, Congressman, California, Interview (Long Beach, California, April 7, 1988.

49. Citing studies by the U.S. Federal Highway Administration, American Association of State Highways and Transportation Officials (ASHTO), and the American Transportation Advisory Council (ATAC), the U.S. General Accounting Office stated total highway investment requirements for the period 1987-1995 may reach $248.5 billion (ASHTO), "a possible shortfall of approximately $138.5 billion." The report adds, "Whether the investment shortfall is really this large is a matter of some debate." A study by the ATAC foresees 1987-1996 capital investment needs at $494 billion for highways and $82.6 billion for transit.

U.S. General Accounting Office, Highway Technology: The Structure for Conducting Highway Pavement Research (Washington, D.C.: Superintendent of Documents, GAO/PEMD-88-2BR, November, 1987), pp. 18-19.

The president of the Highway Users Federation, Lester P. Lamm, stated the Highway Trust Fund should operate at a $20 billion annual level instead of its current $14.3 billion. There should also be an "addition of 10,000 to 20,000 miles of 'interstate-type highways' to the primary system.

John D. Schulz, "Highway users group seeks larger trust fund, more road construction," Traffic World (September 26, 1988), p. 22.

The validity of such estimates was addressed in two reports: U.S. General Accounting Office, Highway Needs: An Evaluation of Performance Monitoring and Data Collection Processes--DOT's Process for Assessing the Nation's Highway Needs (Washington, D.C.: Superintendent of Documents, GAO/RCED-87-136, August, 1987), pp. 2-5; U.S. General Accounting Office, Bridge Condition Assessment, Inaccurate Data May Cause Inequities in the Apportionment of Federal-Aid Funds (Washington, D.C.: Superintend-ent of Documents, GAO/RCED-88-75, May, 1988), pp. 2-5.

50. The Council was created by Congress (P.L. 98-501, Public Works Improvement Act of 1984) to determine the situation:

> After two years of study, the National Council on Public Works Improvement (the "Council") has found convincing evidence that the quality of America's infrastructure is hardly adequate to fulfill current requirements, and insufficient to meet the demands of future economic growth and development.
>
> ***
>
> ... the Council recommends a national commitment, shared by all levels of government, the private sector, and the public, to vastly improve America's infrastructure. Such a commitment could require an increase of up to 100 percent in the amount of capital the national invests each year in new and existing public works. In 1985, this amount was approximately $45 billion.

U.S. National Council on Public Works Improvement, Fragile Foundations: A Report on America's Public Works-Final Report to

the President and Congress (Washington, D.C: Superintendent of Documents, February, 1988), pp. 1-6.

51. Transportation Research Board Conference, A Look at the Future: Year 2020 (Washington, D.C.: TRB, June 22-24, 1988); Ira S. Lowry, "Planning for Urban Sprawl," (paper presentation), pp. 1-3.

52. Ibid., Ryuichi Kitamura, "Lifestyle and Travel Demand," (paper presentation, draft), pp. 1-2.

Whatever the cause, congestion is growing in newer "urban village" areas and requires a mixture of innovative approaches.

C. Kenneth Orski, "'Managing' Suburban Traffic Congestion: A Strategy for Surburban Mobility," Transportation Quarterly (October 1987), pp. 457-476.

53. The urban village concept seems to represent, more and more, the new metropolitan form in the nation. One expert suggests that the suburban phase was a transitional era between the pre-WWII central city form and the urban village of the 1980's and 1990's. The significance to urban transportation is profound.

See: Christopher B. Leinberger and Charles Lockwood, "How Business is Reshaping America," The Atlantic Monthly (October, 1986), pp. 43-52; Edmund Newton, "'Urban Villages' Viewed as Successors to Cities," Los Angeles Times (April 16, 1987) Part II, p. 11; "The Urban Village" -Cover Story, Time Magazine (June 15, 1987); Christopher Conte, "The Explosive Growth of Suburbia Leads to Bumper-to-Bumper Blues," Wall Street Journal (April 16, 1985), Section 2, p. 37.

54. Ibid., John D. Kasarda, "Population and Employment Change in the U.S.: Past, Present, and Future" (paper presentation), pp. 1-2.

Some believe the shift to a service economy may be a stabilizing force for U.S. employment, make "manufacturing more competitive and support an ever higher standard of living." In 1986, total services accounted for 71% of the over $4 trillion American gross national product.

James Brian Quinn, Jordan J. Baruch and Penny Cushman Paquette, "Technology in Services," Scientific American (December 1987), pp. 50-58.

55. One telling model for the freight industry is a "bitter dispute between Chicago & North Western Transportation Co. and the United Transportation Union over the size of train crews..." Crews are to be reduced from three to two per train.

"Our next President must make tough transportation decisions," Traffic World (July 11, 1988), p. 7. Airlines are also reducing crew size and installing tier-wage contracts.

To date, Congress has stopped the C&NW strike twice.

"Congress Quickly Halts C&NW Strike," Rail News Update-Association of American Railroads (September 14, 1988), p. 1.

56. TRB, op.cit., Paul O. Roberts, "The Outlook for Commercial Freight Transportation," (paper presentation, draft). A large range of issues is foreseen: continued rail specialization (stack trains, bulk commodities), increased motor carrier traffic that may be greatly influenced by the tendency to larger equipment, uniform access to the Interstate, reregulation, and energy costs.

57. Whether it be more powerful batteries, computer navigation, automatic vehicles, alternative fuels, more efficient engines, lighter and stronger vehicles etc., it appears that most technological improvements will result from squeezing out known performance capability. Significant innovations are not on the horizon, except perhaps superconductivity. Whatever benefit might accrue from on-the-shelf knowledge is dependent upon public and private decision-making institution cooperation.

Ibid., Albert J. Sobey, "Technology and the Future of Transportation, An Industrial View," (paper presentation), pp. 1-2.

58. Assuming the federal government will make appropriate macroeconomic decisions, many technical options will help facilitate infrastructure investment: "freeing local government from non-goal oriented funding criteria;...use of practical cost measures that account for life-cycle costs and the timing of benefits," among others.

Ibid., David Lewis and Daniel Hara, "Economic Growth and Vitality: The Role of Public Infrastructure in the 21st Century," (paper presentation), pp. 1-2, p. 22.

Many observers are troubled by the possibility that government, collectively, will not make the macroeconomic decisions. Representative of that point of view is: Peter G. Peterson, "The Morning After: Amercia has let its infrastructure crumble, its foreign markets decline, its productivity dwindle, its savings evaporate, and its budget and borrowing burgeon. And now the day of reckoning is at hand." The Atlantic Monthly (October 1987, cover story), pp. 43-69.

59. There is growing evidence that underinvestment in public infrastructure, especially airports and highways, has been a strong major contributing factor to economic productivity declines since

1970. Also, special interest groups will not give up their "slice of the pie" in order to fund infrastructure, no matter how essential it is.

Alan S. Blinder, "Economic Viewpoint: "Are Crumbling Highways Giving Productivity a Flat?" Business Week (Column, August 29, 1988), p. 16; Gary S. Becker, "Economic Viewpoint: Why Potholes and Police Get Such Short Shrift," Business Week (Column, July 25, 1988), p. 12.

60. Certain anomalies from an energy independence point-of-view defy simple explanation. The nation is importing more petroleum (already almost half) due to cheaper costs (world energy price deflation). It is as vulnerable as ever to foreign energy shocks. Yet, the administration has recently proposed and adopted lower energy-automobile fleet standards in response to a General Motors petition stating it could not meet them without laying off employees. Also, the next energy crisis may be considerably worsened by gasoline retailer outlet consolidation.

See: Karen Pennar, "Economic Trends: How Cheaper Oil May Lead to a New Wave of Imports," Business Week (Column, September 5, 1988), p. 18; and, Joseph B. White, "U.S. Transport Chief Favors Lowering Gas-Mileage Standard for '89, '90 Cars," Wall Street Journal (August 29, 1988), p. 4; Donald Woutat, "Panic at the Pump: Fewer Stations, Slower Nozzles; and More Cars in Southland Add Up to Trouble if New Crisis Hits," Los Angeles Times (August 22, 1988), p. Pt. IV, p. 5. In an editorial, the Wall Street Journal called "automobile economy standards, easily one of the biggest regulatory lemons ever to roll off the congressional assembly line." "CAFE's Costs," (September 1, 1988), p. 18; Laurie McGinley, "DOT Chief Lowers Gas-Mileage Rule For Autos in 1989," Wall Street Journal (October 4, 1988), p. A3; U.S. Department of Transportation, DOT Moves To Enhance U.S. Competitiveness and Save Jobs By Lowering '89 Fuel Economy Standard," DOT News Press Release (October 3, 1988, pp. 1-2.

Some predict significant improvements in alternative energy sources and efficiencies. Otherwise, barring technological breakthroughs or political crises, "...the energy problem alone will not force fundamental changes in the nature of our transportation system in the next three decades."

TRB op. cit., David L. Greene, Barry McNutt, and Daniel Sperling, "Transportation Energy to the Year 2020" (paper presentation, draft), pp. 1-2.

61. New York City Department of Environmental Protection and the Mayor's Office of Energy and Telecommunications, Transit 2000; Background Paper, Energy and the Environment (Washington, D.C.: Transit 2000, American Public Transit Association Task Force on Public Transit for the 21st. Century, January 1988).

62. The business media, somewhat surprisingly, have provided very solid, far-ranging background coverage. See: "It's Time to Cool Down the Global Greenhouse," Business Week (Editorial, August 1, 1988), p. 108; Emily T. Smith, Mimi Bluestone, and Stephanie Yanchinski, "The Global Greenhouse Finally Has Leaders Sweating: As the mercury climbs, policymakers are looking for ways to cut back on fossil fuels," Business Week (August 1, 1988), pp. 74-76. Some scientists raise the possibility that the greenhouse effect is more a function of natural climatic changes than human pollution. S. Fred Singer, "Fact and Fancy on Greenhouse Earth," Wall Street Journal (August 30, 1988, guest editorial opinion), p. 18. Others indicate methane, naturally produced by flora and fauna, may be the cause: Jerry E. Bishop, "Global Threat - New Culprit Is Indicted In Greenhouse Effect: Rising Methane Level," Wall Street Journal (October 24, 1988), pp. A-1, A-7.

A recent report (not yet officially released) prepared by the U.S. Environmental Protection Agency at the request of Congress concludes that global warming will very seriously impact American coastal areas with flooding, shrink forests and move agricultural areas northward. "Global Warming Study Sees Loss in Crops, Forests," Los Angeles Times (October 20, 1988), Pt. I., p. 18.

63. TRB, op.cit., Bruce D. McDowell, "Transportation Institutions in the Year 2020," (paper presentation) pp. 8-10. Recommended are: new national goals for transportation (connected to American competitiveness); redesigned federal-aid programs; permanent transportation trust funds; and expanded research and development.

At the same time, it is cogently argued that: "Sustained economic growth and prosperity are not possible without simultaneously achieving environmental quality." Both the environmental review and planning/engineering process should be modified.

Ibid., John H. Suhrbier and Elizabeth Deakin, "Environmental Considerations in a 2020 Transportation Plan - Constraints or Opportunities?" (paper presentation, draft), pp. 1, 27-28.

64. According to Congressman Schuster, there is the possibility that the Highway Trust Fund might be moved "off budget" if funds are not spent. "I will seriously consider joining efforts that are now building to abolish the fund altogether and shoot straight with the American people."

"Leading House members criticize DOT budget for highways, transit," Traffic World (March 14, 1988), pp. 31-32.

65. Calls for gasoline tax increases (federal and state) are more publicly raised.

"Paul Volcker and Alan Greenspan agree: The U.S. should raise gasoline taxes by about 15 cents a gallon."

Edwin A. Finn, Jr., "Will Congress hike the gas tax?" Forbes (April 18, 1988), pp. 32-33.

In a widely-read statement, it was said: "A doubling of the existing (California) gasoline tax would be a reasonable and prudent investment in the state's future."

"Transportation Is a Must," Los Angeles Times (July 8, 1988), Editorial, Pt. II, p.12.

Foreseeing this danger, Congressman Glenn M. Anderson, Chair of the House Public Works and Transportation Committee, said: "...the National Economic Commission, appointed earlier this year to study means of reducing the deficit, has requested public comments in a notice published this week in the Federal Register. 'I encourage everyone to join me in contacting the council to oppose the use of gasoline taxes for deficit reduction.'"

"Anderson Calls for Opposition to Gas Tax Increase," News From:Committee on Public Works and Transportation (Washington, D.C.: Committee Press Release, June 17, 1988).

66. It is conceivable, though unlikely, that public trust funds accumulating surpluses, e.g. social security, might lend money in effect to other needy public programs. Advocates of social security say that the 1987 $20 billion surplus was used to offset the national deficit, rather than truly saved for social security in an untouchable trust fund.

Robert Kuttner, "Economic Viewpoint: What Makes the Debate Over Social Security So Curious," Business Week (Column, August 8, 1988), p. 14.

67. The possibility of toll roads was opened up by the STURAA. Yet, there is opposition.

Brent Felgner, "The Roadblocks To Toll Roads: Though private toll roads are making a comeback during this time of federal fiscal austerity, problems still remain in obtaining widespread acceptance throughout the nation," American City & County (August 1988), pp. 66-74.

68. Encouraging the private sector to assume public functions has been a well documented goal of President Reagan. Several blue-ribbon commisions, e.g., Grace Commission, looked into the matter.

In the transportation sphere, deregulation was stressed, and sale of assets studied and persued: Conrail, Amtrak, National Airport. Private provision of urban mass transportation was strongly endorsed.

President's Private Sector Survey on Cost Control, Report on Privatization (Washington, D.C.: PPSSCC, 1983); see also, President's Commission on Privatization, Privatization, Toward More Effective Government (Washington,D.C.: Superintendent of Documents, March 1988).

69. TRB, op. cit. The point was made by many conference panelists. See: Joseph R. Stowers, "Organizing and Funding Transportation for 2020" (paper presentation), pp. 26-33.

70. American Association of State Highway and Transportation Officials, Advisory Committee on Highway Policy, Brochure--Transportation 2020, America's Future Depends on it (Washington, D.C.: ASHTO, undated, est. 1988), unpaged.

71. U.S. Department of Transportation, 1972 National Transportation Report, Present Status-Future Alternatives (Washington, D.C.: Superintendent of Documents, July 1972); and, U.S. National Transportation Policy Study Commission, National Transportation Policies Through the Year 2000 (Washington, D.C.: Superintendent of Documents, June 1979).

72. Transportation 2020, TAG-The Transportation Alternatives Group (Washington, D.C.: TAG, undated, est. 1988), pp. 1-7.

73. The print media have presented solid coverage on specific aspects of transportation problems. Most often, national newspapers have been the primary sources of in-depth features (Washington Post, New York Times, Wall Street Journal, Los Angeles Times, Christian Science Monitor). Magazines such as the Atlantic, Business Week, and Insight have also provided informative discussions.

For representative coverage, see a four part cover story in: "Planes, Trains, and Automobiles: The Future of Transportation," Insight (October 10, 1988), pp. 8-19.

74. Building coalitions is not a quick, easily accomplished task. As noted by two transportation experts:

> Public infrastructure programs often reflect political balances that were designed to serve historical patterns of growth and development. Just as it took time to devise those balances, it may take time to alter them in response to change. In striving for greater productivity, transportation service

providers may find themselves saddled with institutional resistance to changing markets and economies.

Hoel and Koltnow, TR News op.cit., p.8.

75. See Stowers: TRB 2020 Conference, op.cit., pp 27-33, citing concepts advanced by Tom Larson, ASHTO, Robert Winick, American Planning Association, Bruce McDowell, National Council on Public Works Improvement, and Elizabeth Deakin, University of California, Berkeley; Linton Communications, "Special Report - Part One, SURFACE TRANSPORTATION FUTURES: Searching For A New Consensus," Washington Letter on Transportation (undated, 1988), pp. 1-4; and, John L. Hazard, "The Institutionalization of Transportation Policy: Two Decades of DOT," Transportation Journal (Fall 1986), pp. 17-32.