



Norman Y. Mineta
International Institute for
Surface Transportation Policy Studies
Created by Congress in 1991

Analysis of Policy Issues Relating to Public Investment in Private Freight Infrastructure

Mineta Transportation Institute
San José State University
San Jose, CA 95192-0219

IISTPS Report 99-3

**Analysis of Policy Issues
Relating to Public Investment in Private
Freight Infrastructure**

December 1999

Daniel M. Evans
Norman Kelley

a publication of the
Norman Y. Mineta
International Institute for
Surface Transportation Policy Studies
IISTPS
Created by Congress in 1991

Technical Report Documentation Page

1. Report No. FHWA/CA/OR -99/20	2. Government Accession No.	3. Recipients Catalog No.	
4. Title and Subtitle Analysis of Policy Issues Relating to Public Investment in Private Freight Infrastructure		5. Report Date December 1999	
		6. Performing Organization Code	
7. Authors Dan Evans, J.D and Norman Kelley		8. Performing Organization Report No. 99-3	
9. Performing Organization Name and Address Norman Y. Mineta International Institute for Surface Transportation Policy Studies College of Business—BT550 San José State University San Jose, CA 95192-0219		10. Work Unit No.	
		11. Contract or Grant No. 65W136	
12. Sponsoring Agency Name and Address California Department of Transportation U.S. Department of Transportation Office of Research—MS42 Research & Special Programs Administration P.O. Box 942873 400 7 th Street, SW Sacramento, CA 94273-0001 Washington, D.C. 20590-0001		13. Type of Report and Period Covered Final Report	
		14. Sponsoring Agency Code	
15. Supplementary Notes This research project was financially sponsored by the U.S Department of Transportation's Research and Special Programs Administration and by the California Department of Transportation (Caltrans).			
16. Abstract The Norman Y. Mineta International Institute for Surface Transportation Policy Studies (IISTPS) at San José State University conducted this study to review the issues and implications involved in the investment of public funds in private freight infrastructure. After thorough legal research, the project team reached the following conclusions: LEGAL ANALYSIS: 1) The California legislature has the legal power to invest public funds in privately -owned freight infrastructure projects 2) State Highway funds, excepting gas tax revenues, may be used for investment in freight infrastructure projects. 3) Gas tax revenues are restricted to highway use by current interpretations of the California Constitution. A challenge to this interpretation is not recommended. 4) Gas tax revenues may be invested in roadway segments of freight infrastructure projects. RECOMMENDATIONS 1) An analytical system of guidelines should be developed to score and evaluate any proposed freight infrastructure project. 2) Economic development must be included in these scoring guidelines. 3) Public agencies should maintain political contacts in order to control the political short-circuits of the planning process. 4) The California Department of Transportation should develop a Freight Improvement Priority System for the purpose of prioritizing all freight improvement projects.			
17. Key Words freight transportation, goods, infrastructure, investment, legislation, regulation, shipments, policy, policy analysis, public policy, transportation policy		18. Distribution Statement No restrictions. This document is available to the public through The National Technical Information Service, Springfield, VA 22161	
19. Security Classif. (of this report) Unclassified	Security Classifi. (of this page) Unclassified	21. No. of Pages 50	22. Price \$15.00

Form DOT F 1700.7 (8-72)

Copyright © 1999 by IISTPS

All rights reserved

Library of Congress Catalog Card Number: 99-076244

To order this publication, please contact the following:

IISTPS

College of Business—BT550

San José State University

San Jose, CA 95192-0219

Tel (408) 924-7560

Fax (408) 924-7565

Email: iistps@iistps.cob.sjsu.edu

<http://transweb.sjsu.edu>

ACKNOWLEDGMENTS

The IISTPS Project Team consisted of Daniel M. Evans, J.D. —Principal Investigator, and Norm Kelley. Student assistant Denise Staudt contributed to this project.

The Project Team wishes to thank

- The staff of the Office of State Planning of the California Department of Transportation for assistance, and
- David A. Zavattero of the Chicago Area Transportation Study; Paul J. Malir of TransSystems Corp. in Kansas City; and Gill Hicks of the Alameda Corridor Transportation Authority for their personal time and guidance.

Special appreciation is also due

- Peter Beaulieu of the Puget Sound Regional Council;
- John E. Brown of the Pennsylvania DOT;
- Ted Dahlburg of the Delaware Valley Regional Planning Commission;
- Paul Flygar of L. A. Engineering;
- Alan Harger of the Washington State DOT;
- Mike Klaus of the Eastern Idaho Railroad;
- Bob Lawlor of the Mid-Ohio Regional Planning Commission;
- Jim Mallery of the Nevada DOT;
- Cliff McKinney of the Arkansas State Highway and Transportation Department;
- Loren Milligan, Supervisor of Jasper County, Iowa;
- Stefan M. Natzke of the Federal Highway Administration, Statewide and Intermodal Programs Division;
- Ralph Rizzo of the Federal Highway Administration, Rhode Island Division; and
- Carlos Ruiz of the New Mexico State Highway and Transportation Department.

We would also like to thank the IISTPS staff and Research Associate John Vargo for editing and publishing assistance.

TABLE OF CONTENTS

EXECUTIVE SUMMARY.....	1
LEGAL ANALYSIS.....	1
CASE STUDIES.....	2
RECOMMENDATIONS.....	2
LEGAL ANALYSIS.....	3
LEGAL ISSUES.....	3
SUMMARY CONCLUSIONS.....	3
COMPREHENSIVE LEGAL ANALYSIS.....	3
CONSTITUTIONAL POWER OF THE STATE OF CALIFORNIA.....	4
EXERCISE OF THE LEGISLATIVE POWER IN TRANSPORTATION.....	5
ROLE OF THE STATE IN TRANSPORTATION.....	6
THE GASOLINE TAX.....	7
GAS TAX CASE LAW.....	8
SB 45.....	10
FEDERAL LAW.....	12
CASE STUDIES.....	17
COMPLEX FREIGHT INFRASTRUCTURE PROJECTS.....	17
RAIL IMPROVEMENT PRIMARILY FOR PASSENGER SERVICE.....	29
HIGHWAY IMPROVEMENT FOR THE BENEFIT OF FREIGHT INFRASTRUCTURE.....	31
OBSERVATIONS AND RECOMMENDATIONS.....	33
OBSERVATIONS.....	33
RECOMMENDATIONS FOR CALTRANS.....	35
REPORT SUMMARY.....	39
ABBREVIATIONS And Acronyms.....	41
LITERATURE REVIEW.....	43
CHICAGO AREA TRANSPORTATION STUDY.....	43
PUGET SOUND REGIONAL COUNCIL.....	43
BIBLIOGRAPHY.....	45
ABOUT THE AUTHORS.....	49
DAN EVANS.....	49
NORMAN KELLEY.....	49
pre-publication peer review.....	50

EXECUTIVE SUMMARY

The federal Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) focused increased attention on the nation's freight transportation infrastructure and on the efficient and reliable movement of goods. This national legislative focus intensified with the passage, in 1998, of the Transportation Equity Act for the 21st Century (TEA-21). Issues have also arisen from the emergence of just-in-time delivery systems, the recent mergers involving major American railroads, the passage of the North American Free Trade Agreement (NAFTA), and the integration of railroads in the United States, Canada, and Mexico.

These developments have highlighted the economic importance of investment in freight infrastructure. However, investment of public funds in privately-owned railroad infrastructure has been very limited due to institutional, legal, political, and competitive issues. The general prohibition against use of public funds for private development or benefit may bear some re-examination in light of the national and regional economic benefits of more efficient freight movement.

The California Department of Transportation (Caltrans) requested that the Mineta Transportation Institute review these issues and make appropriate suggestions. This study will focus on the following issues.

LEGAL ANALYSIS

Before we could discuss how the State of California should engage in freight infrastructure projects, we had to resolve several legal issues to determine whether or not the State can make such investments, and which state funds can be used. We reached the following conclusions.

1. The California Legislature has the legal power to invest public funds in privately-owned freight infrastructure projects. The Legislature already has made the determination that such investment can and should be made.
2. State Highway funds, except for gas tax revenues, may be used for investment in freight infrastructure projects.
3. Motor vehicle fuel tax (gas tax) revenues are restricted to highway use by prevailing interpretations of the California Constitution. Although there are constitutional grounds to challenge the gas tax restriction, we do not recommend such a challenge. Such important changes in interpretation of the law should be made through the political, not the legal, process.

4. Gas tax revenues *may* be used to invest in roadway segments of a freight infrastructure project.

CASE STUDIES

We have identified numerous case studies in the U.S. of freight infrastructure projects that include some form of public financial support.

RECOMMENDATIONS

We make the following recommendations:

1. We suggest a system of guidelines that objectively score and evaluate quantifiable factors regarding any proposed freight infrastructure project. The analytical scoring guidelines should enable Caltrans, Metropolitan Planning Organizations (MPOs), and other agencies to set priorities among many freight infrastructure projects that compete for public funds.
2. Because economic development, including jobs retention and creation, always leads the list of rationales for a project, this factor must be included in the analytical scoring guidelines.
3. The planning process is complicated politically by "demonstration projects" and "high priority projects." Political influence is unavoidable, but public agencies such as MPOs should maintain better political contacts in order to maintain some control of the planning process. Analytical scoring guidelines should help avoid arbitrary political interference in planning.
4. Caltrans should undertake the development of a Freight Improvement Priority System (FIPS) for the purpose of setting priorities for all freight improvement projects, including intermodal projects, for potential inclusion in the State Transportation Improvement Program (STIP).

LEGAL ANALYSIS

LEGAL ISSUES

Before we discuss how the State of California should engage in freight infrastructure projects, we must address several legal issues to determine whether the State can even make such investments. We shall examine the following legal questions:

1. To what extent may the State of California invest public funds in freight infrastructure projects where the underlying property is privately-owned?
2. To what extent may the State of California use State Highway Funds for investment in freight infrastructure projects?
3. May motor vehicle fuel tax (gas tax) revenues be used for investment in such freight infrastructure projects?

SUMMARY CONCLUSIONS

1. The California State Legislature has very broad power to determine the scope of state activity. The Legislature may decide that public funds should be used to pay for investment in freight infrastructure projects where the facilities are privately-owned. To a great extent, the California Legislature already has done so.
2. Unless specifically restricted, State Highway Fund resources may be used for freight infrastructure investment.
3. Revenue specifically derived from gas taxes is specifically restricted and may not be diverted from highway uses. However,
 - (a) "Highway uses" may be broadly defined to include road-related aspects of a freight infrastructure project.
 - (b) There are constitutional grounds to challenge the gas tax restriction. We do not, however, recommend such a challenge. Such important changes in the interpretation of the law should be made through the political, not the legal process.

COMPREHENSIVE LEGAL ANALYSIS

The primary legal issues regarding public investment in private freight infrastructure arise under California state law and federal law.

CONSTITUTIONAL POWER OF THE STATE OF CALIFORNIA

There is no prohibition *per se* under California law that might restrict the ability of the State of California to invest in freight infrastructure owned by private entities.

Unlike the federal government, a state has very broad legal "sovereignty." The federal Constitution specifies what the federal government may do. The state Constitution only specifies what the state government may not do; everything else is allowed. Article IV, Section 1, of the California Constitution gives the "legislative power" in California to the Legislature. Several Gold Rush era decisions of the California Supreme Court emphasized this power:

The Legislature can pass such laws as it may judge expedient, subject only to constitutional prohibitions." People v. Brooks, 16 Cal 11 (1860)

"...(I)t is competent for the Legislature to exercise all powers not forbidden by the Constitution, delegated to the general government, or prohibited by the U.S. Constitution" People v. Coleman, 4 Cal 46 (1854).

"The Constitution is not, as in the case of the Federal Government, a grant of power to

the Legislature; but from the organization of a State, all its powers not elsewhere invested or expressly interdicted, became lodged in the Legislature." Smith v. Judge of Twelfth Dist. 17 Cal 547 (1861).

This principle remains California law today:

"The entire lawmaking authority of the state...is vested in the legislature, and that body may exercise any and all legislative powers which are not expressly, or by necessary implication, denied to it by the California Constitution.... (A)ny doubt as to the Legislature's power...should be resolved in favor of the legislature's action....Unlike the federal Constitution, which is a grant of power to Congress, the California Constitution is a limitation or restriction on the powers of the legislature." City of San Jose v. State of California, 45 Cal.App. 4th 1802 (1996).

This analysis of state powers is consistent with the federal system of government. The Tenth Amendment to the Constitution of the United States reads, in full, as follows:

"The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people."

However, this broad power may be exercised only if there is some "public purpose" involved, some "public benefit" to be gained from the exercise of the Legislature's power. The Legislature cannot use taxpayers' money purely for a private enterprise:

"The Legislature has no power to impose taxes for the benefit of individuals connected with a private enterprise." People v. Parks, 58 Cal 624 (1881).

For this reason the Legislature recites the "public purpose" or "public benefit" of any major legislative action that invests public money. The Legislature makes its own rules regarding public benefit and the legitimate scope of the power of the State. Furthermore, the Legislature may give an administrative officer or board great discretion to carry out policies set by the Legislature.

EXERCISE OF THE LEGISLATIVE POWER IN TRANSPORTATION

The California Legislature has determined public benefit and set public policy by enacting California Government Code Sections 14000 et seq., which set policies for the Department of Transportation. The Legislature included freight infrastructure in official policy. Government Code Section 14000(c) states, in part:

"A goal of the state is to provide adequate, safe and efficient transportation facilities and services for the movement of people *and goods*...." (emphasis added).

Rail transportation is included in Government Code Section 14038.2(b), which states:

"It is the policy of the Legislature...to give significance and importance to the state rail passenger program equal to that of the state highway program, and to that end, to provide the department with the appropriate powers."

The Legislature specifically contemplated that the Department of Transportation would carry out the Legislature's policies by investing in *privately-owned* freight facilities, such as railroad tracks and signals owned by railroad corporations. Government Code Section 14038(b) allows the Department to: "...acquire, lease, design, construct, and improve track lines and related facilities."

If a privately-owned railroad corporation refuses to cooperate with the Department, the California Public Utilities Commission (CPUC) may order the railroad to allow the improvements. Furthermore, California Government Code Section 14040 states, in full:

Section 14040. Ownership of tracks and signals

The department may provide by contract with a railroad corporation that any tracks or signaling devices constructed, improved, repaired, or acquired with funds made available

by the state on property owned or leased by the railroad corporation shall become the property of the railroad corporation.

We have found no case law that interprets Section 14040; the statute appears to be uncontroversial.

In summary, the State of California has every right to invest funds that are not specifically restricted in the improvement of private freight infrastructure, such as investment in railroad tracks and intermodal facilities. The problem arises not in the legal ability, but rather in restrictions on specific funds.

ROLE OF THE STATE IN TRANSPORTATION

For many years the only transportation infrastructure investment by the State of California was in the form of roads and highways.

Rail infrastructure was the responsibility of the private railroad companies (heavily subsidized by the federal government), while harbor and airport development was considered a local issue (also heavily subsidized by the federal government). The Federal Government invested in such infrastructure because railroads and harbors promoted interstate commerce (Article I, Section 8 of the Constitution of the U.S.), and often were perceived to have military significance. Federal investment in the first "transcontinental" railroad dates from the Civil War, in part to tie California to the Union by a *union* Pacific route to the northern states rather than a *southern* Pacific route. As the railroads consolidated their power, they became subject to federal regulation (and price-fixing) in the form of the Interstate Commerce Commission (ICC). California railroad regulation was subject to federal ICC dominance, and usually did not involve any expense of state funds for railroad purposes.

Contrary to railroad history, roads and highways developed as a *state* matter. The federal government only became active many years after the states began to develop state highway systems. Over the years, the investment by the State in the roads and highways of California became investment financed exclusively by gasoline taxes and other charges paid by car and truck drivers; state transportation investment thus became a user-financed matter. The state used gasoline taxes, not general funds, to pay for road and highway investment.

THE GASOLINE TAX

This user-financing principal was set into the California Constitution in 1938, and eventually became Article XIX to the Constitution. Article XIX, Section 1(a), as amended, now reads as follows:

Section 1. Fuel taxes; use; streets and highways; mass transit

Section 1. Revenues from taxes imposed by the state on motor vehicle fuels for use in motor vehicles upon public streets and highways, over and above the costs of collection and any refunds authorized by law, shall be used for the following purposes:

(a) The research, planning, construction, improvement, maintenance, and operation of public streets and highways (and their related public facilities for non-motorized traffic), including the mitigation of their environmental effects, the payment for property taken or damaged for such purposes, and the administrative costs necessarily incurred in the foregoing purposes.

In other words, these Section 1(a) gas tax funds may only be used for public roads and highways. This exclusive use of gas tax money was loosened in 1974, when Article XIX, Section 1(b) was added to allow some investment of gas tax money for environmental purposes and for mass transit. Section 1(b) reads as follows:

(b) The research, planning, construction, and improvement of exclusive public mass transit guideways (and their related fixed facilities), including the mitigation of their environmental effects, the payment for property taken or damaged for such purposes, the administrative costs necessarily incurred in the foregoing purposes, and the maintenance of the structures and the immediate right-of-way for the public mass transit guideways,

but excluding the maintenance and operating costs for mass transit power systems and mass transit passenger facilities, vehicles, equipment, and services.

However, Article XIX, Section 4 specifies that gas tax money may not be used for mass transit unless the voters of the affected counties approve, by a majority of votes cast, of the use of the funds for the specific mass transit project.

The apportionment of gas tax money among the cities and counties of California is outlined in Article XIX, Section 3. This section was amended in 1974 to read, in part, as follows:

Section 3. Allocation of revenues; determination of another basis for distribution: statutory revision

...Any future statutory revisions shall provide for the allocation of these revenues...in a manner which gives equal consideration to the transportation needs of all areas of the state and all segments of the population consistent with the orderly achievement of the adopted local, region, and statewide goals for *ground transportation*...in the California Transportation Plan. (emphasis added).

It would appear that the 1974 amendment was intended to allow gas tax funds to be used for the *entire* ground transportation plan of the state, not just for roads and highways. Arguably, gas tax funds could be used to carry out a priority freight infrastructure project in the California Transportation Plan (CTP). So far, we have found no authority that interprets this aspect of Article XIX, Section 3.

GAS TAX CASE LAW

There is relatively little case law that interprets the exclusive use of state funds derived from the gas tax.

The leading case is the February 1998 decision of the California Court of Appeal: Professional Engineers in California Government v. Wilson, 61 Cal. App. 4th 1013 (1998). In 1994 the California Legislature had shifted money from the State Highway Account (SHA) to the General Fund to pay debt service on some rail bonds. The gas tax is included in the SHA. Shortly thereafter, Caltrans announced layoffs due to lack of funds. The Professional Engineers (PECG) and the California State Employees Association detected a connection between fund diversion and layoffs, and filed a lawsuit to block the fund diversion. The court concluded that the portion of the transferred funds that could be traced to gas tax funds could not be diverted by the Legislature. "...the effect of...Article XIX, Section 1(b)...is to forbid the use of motor vehicle fuel tax revenues for [mass transit guideway] projects related to rail transportation...unless the money is spent on a project which has been approved by the voters...in the area...." (Ibid., pgs. 1026-1027).

However, the court declared that the Legislature did have the power to divert SHA money that was not traced to gas tax funds. In this case, most of the funds diverted from the SHA were traced to rental property income and other "miscellaneous income" sources, and therefore could be used elsewhere.

Reverse reasoning of the same principle prevailed in Short Line Associates v. City and County of San Francisco, 78 Cal. App. 3d 50 (1978). The City of San Francisco had purchased real property at Market and Powell Streets to develop Hallidie Plaza, and had used gas tax money for the purchase. Because of the use of gas tax money, the court declared that the property in question *must* be considered to be a "public street" (therefore the plaintiff developer did not need to purchase an easement).

See also Kizziah v. Department of Transportation, 121 Cal. App. 3d (1981); Amador Valley Joint Union High School District v. State Board of Equalization, 22 Cal. 3d 208 (1978).

The California Supreme Court noted the limitation on the use of gas tax funds in Santa Clara County Local Transportation Authority v. Guardino, 11 Cal. 4th 220 (1995). This decision, however, is based on a different pertinent rationale. Plaintiffs had complained that the requirement of a greater than 50 percent vote to raise a tax deprived California voters of federal "equal protection." The California Supreme Court rejected the argument, citing Gordon v. Lance, 403 U.S. 1 (1971), a U.S. Supreme Court decision

that allowed state law to require 60 percent voter approval to increase bonded indebtedness.

Several opinions of the California Attorney General touch on Article XIX. One opinion (70 Op. Atty. Gen. Cal. 119, 1987) is that bus-carpool transit ways are not "exclusive public mass transit guideways." but can be financed by the gas tax as part of the highway system. Another opinion declared that San Francisco could use highway users tax funds from the SHA to build an asphalt plant to supply asphalt for highway purposes; the asphalt plant is a "related facility." (22 Ops.Atty.Gen. 49, 1953). A third opinion allowed surplus highway land, which had been purchased with gas tax funds, to be turned into a city park (58 Ops.Atty.Gen. 844, 1975). A city may not transfer gas tax funds to other accounts (20 Ops.Atty.Gen. 224, 1952).

A recent unusual state court decision in South Carolina held that the state could divert gas tax funds to the general fund of the state, despite a state constitutional restriction on the use of gas tax funds (Myers v. Patterson, 315 S.C. 248, (Supreme Court of South Carolina, 1993). This South Carolina decision is not binding precedent in California, but is interesting as a legal development.

SB 45

In 1997 the California Legislature passed Senate Bill 45 that, among other things, amends Sections 163, 164, and 167 of the California Streets and Highways Code. Section 163 of the Legislature's policy for use of transportation funds, now reads, in part, as follows:

The Legislature, through the enactment of this section, intends to establish a policy for the *use of all transportation funds* that are available to the state, including the State Highway Account, the Public Transportation Account, and federal funds... (emphasis added).

(d) Annual expenditures for local assistance shall be the amount required to fund local assistance programs required by state *or federal* law or regulations, including, but not limited to, railroad grade crossing maintenance, bicycle lane account, congestion mitigation and air quality, regional surface transportation programs... (emphasis added).

(e)...remaining funds shall be available for capital improvement projects to be programmed in the state transportation improvement program.

This enactment logically follows the 1974 enabling amendment of Article XIX, Section 3 of the California Constitution.

Streets and Highways Code Section 164, Use of funds available for transportation capital improvement projects, now reads, in part, as follows:

(a) Funds made available for transportation capital improvement projects under subdivision (e) of Section 163 shall be programmed and expended for the following program categories:

(1) Twenty-five percent for interregional improvements.

(2) Seventy-five percent for regional improvements.

....

(d) Funds made available under paragraph (1) of subdivision (a) shall be used for transportation improvement projects that are needed to facilitate interregional movement of people *and goods*... (emphasis added).

(e) Funds made available under paragraph (2) of subdivision (a) shall be used for transportation improvement projects (which)...may include...*intermodal facilities*. ... (emphasis added)

Section 167, Priorities for use of funds in State Highway Account, now reads, in part, as follows:

(a) Funds in the State Highway Account in the State Transportation Fund shall be programmed, budgeted subject to Section 163, and expended to *maximize the use of federal funds* and shall be based on the following sequence of priorities:

- (1) ...state highway system.
- (2) Safety improvements...
- (3) Transportation capital improvements that expand capacity or reduce congestion...
- (4) Environmental enhancement and mitigation programs (emphasis added)

It appears that the Legislature intended to reorganize priorities in state transportation planning, and intended that all transportation funds - presumably including the gas tax - be applied according to the reorganized priorities. It appears that the Legislature wished to give some priority to goods movement and to intermodal facilities, i.e. investment in freight infrastructure. This is consistent with the 1974 enabling language of Article XIX, Section 3 of the California Constitution.

This interpretation leads us back to the decision in PECG v. Wilson, *supra*, which summarily dismissed the claim of plaintiff PECG that State Highway Account (SHA) funds could be used only for highways. The court pointed out that "...Streets and Highways Code Section 182 does not limit the use of SHA moneys to highways...section 183.3 expressly contemplates that SHA funds can be appropriated not only for public mass transit guideway projects, but also for the more problematic expenditures, from PECG's point of view, on non-guideway items like rolling stock, ferry vessels and ferry terminals." (*ibid.*, 1029).

SB 45 also amended Streets and Highways Code Section 182 et seq. SB 45 added new Section 182.5, Legislative intent as to transition to new programs and procedures. Subsection (c) now reads, in part, as follows:

(c) Notwithstanding Section 164, there shall be set aside sufficient funding for *every project* that is included in the 1996 State Transportation Improvement Program.... (emphasis added).

These SB 45 amendments further reinforce the overall policy of the California Legislature that state transportation priorities have become far broader than streets and highways projects, and that all funds available should support all transportation plan priorities. Arguably, the 1974 amendment to California Constitution Article XIX opened the way for the California Legislature to use gas tax funds for the entire California Transportation Plan, not only for roads and highways. If Article XIX of the Constitution can be liberally so interpreted, then SB 45 is a valid move by the California Legislature to use the entire SHA, including gas tax funds, for the entire transportation plan.

Proponents of the principal that gas taxes can only be used for roads and highways will argue that Article XIX Section 3 is too vague to be a repudiation of the traditional gas tax rule of Article XIX, Section 1(a). If true, the gas tax limitation remains in the Constitution, and is thus superior to any enactment of the Legislature.

The more liberal interpretation of Article XIX, Section 3, which we suggest, would require court validation to be accepted, following exceedingly tedious litigation. Such litigation would be time-consuming and expensive, and the result uncertain. The only certain benefit would be for those collecting legal fees. We believe it is far preferable that the issue be clarified in the political process, not in litigation. A clear declaration by the Legislature that 'the 1974 amendment to Article XIX, Section 3 means that gas tax revenues should be used for the entire Transportation Plan' should be sufficient. Highway interests, of course, will argue that such a change can be made only by a direct amendment to Article XIX of the Constitution.

FEDERAL LAW

Federal action to promote freight infrastructure historically has been more inclusive than California state action. Article I, Section 8 (3) of the U.S. Constitution gives Congress the power "To regulate Commerce...among the several States...." This is called the "Commerce Clause." At the time of the Civil War, Congress used the Commerce Clause power to give substantial subsidies to the trans-continental railroad, including to the Central Pacific Railroad in California. Congress intended to promote passenger and freight traffic, not least, freight traffic to expedite California gold eastward. Congress enacted various subsidies over the years to promote port projects in California. As railroads came to be perceived as villains in the late 19th Century, Congressional subsidies vanished. A World War I experiment in nationalized railroads was quickly terminated at war's end. Congressional interest turned to roads and highways in the 1920s and became intense with the 1956 Interstate Highways Act.

Recent Congressional enactments have reflected increasing interest in goods movement and intermodal facilities, parallel to a similar shift in interest in the California Legislature since 1974. The "Intermodal Surface Transportation Efficiency Act of 1991," Public Law 102-240 ("ISTEA") declared a major public policy shift in Section 2. Declaration of Policy, which reads, in part, as follows:

"It is the policy of the United States to develop a National Intermodal Transportation System that...will move people *and goods* in an energy efficient manner. (emphasis added).

The National Intermodal Transportation System shall consist of *all* forms of transportation in a unified, interconnected manner... (emphasis added).

The National Intermodal Transportation System shall include a National Highway System...intermodal transfer facilities ...significant improvements in public transportation... improved access to ports and airports...

The National *Intermodal* Transportation System...will be financed...by the Highway Trust Fund...." (emphasis added).

The major policy departure for ISTEA, however, was increased attention to public transportation system, in addition to, not as a replacement of, the National Highway System.

The most recent and most important federal legislation is the "Transportation Equity Act for the 21st Century." Public Law 105-178 ("TEA-21"). Congress declares: "*...it is in the national interest to...serve the mobility needs of people and freight.*" (Section 1203(a)(1.) "(F)reight shippers, providers of freight transportation systems, private providers of transportation..." etc. are to be consulted (Section 1203(h)(1)(B)) (emphasis added).

TEA-21 contains numerous provisions regarding freight movement and intermodal terminals.

- Intermodal Freight Connectors Study.

The law requires the Secretary of Transportation to recommend ways to develop connections between the National Highway System and intermodal freight transportation facilities in order : "...to facilitate the efficient movement of freight, including movements of freight between modes." (Section 1106(d)(2)).

- National Corridor Planning and Development Program

In addition to corridors identified in ISTEA, the Secretary is to identify corridors at border crossings where freight traffic has increased since the implementation of the North American Free Trade Agreement (NAFTA) (Section 1118(b)(2)(A)).

- Coordinated Border Infrastructure Program

Federal funds will be allocated to states: "...to improve the safe movement of people *and goods* at... the border between the United States and Canada and...Mexico." (Section 1119(a)) (emphasis added).

- Innovative Surface Transportation Financing Methods

...are the subject of Section 1216, and Section 1501 et seq.

- Transportation and Community and System Preservation Pilot Program
Federal funds are to be used to help states, MPOs, and local governments improve the overall transportation structure. (Section 1221)
- Transportation Infrastructure Finance and Innovation Act (TIFIA) Congress finds that transportation infrastructure, specifically including intermodal facilities are critical to the U.S., and that new financing methods must be developed.
- Light Density Rail Line Pilot Projects
Federal grants may go to states to make capital improvements to privately-owned rail lines with multimodal function. (Section 7202).
- Railroad Rehabilitation and Improvement Financing (RRIF)
An earlier program for federal loans and loan guarantees is augmented to assist railroads to develop intermodal facilities. (Section 7203).

The underlying philosophy of Congress is found throughout TEA-21: public transportation policy now specifically includes the more efficient movement of goods. The federal government is directed to invest heavily in freight infrastructure projects, and the states are expected to cooperate.

Arguably, the federal government has priority in transportation matters under the legal principle of "preemption." Where the U.S. Constitution gives the federal government power, the states may be preempted by superior federal legislation. Interstate transportation is a federal matter by virtue of the Commerce Clause of the U.S. Constitution. Article I Section 8 reads, in part, as follows:

Section 8. The Congress shall have Power...To regulate Commerce with foreign Nations,
and among the several States, and with the Indian tribes.

It is therefore possible that federal transportation policy might "preempt" state policy, including policy set in the state constitution. We have found no case on this point.

CASE STUDIES

We have identified numerous case studies of U.S. freight infrastructure projects that included some form of public financial support. We have grouped these case studies into three categories.

- **Complex freight infrastructure projects** that involve numerous parties and a variety of financing modes. This study will focus on the public rationale for investing public funds in such projects, and on the financing.
- **Railroad improvement primarily for passenger service**, but which also benefits private freight railroads.
- **Highway improvement for the benefit of freight infrastructure projects**. All such projects can be rationalized as providing benefit to the motoring public, but the projects also improve roadway access for a freight infrastructure project.

All case studies presented serve merely as examples of various models for public investment in private freight infrastructure, not as definitive suggestions.

COMPLEX FREIGHT INFRASTRUCTURE PROJECTS

Arkansas

Arkansas/Mississippi Regional Intermodal Freight Terminal

The Departments of Transportation of Arkansas and Mississippi funded a study to develop industry and intermodal (largely harbor) freight facilities in the Arkansas/Mississippi Delta Region. The Federal Highway Administration (FHWA) also contributed funds for the study.

As one result of the study, the Arkansas State Highway and Transportation Department wants to create an intermodal (truck, rail, and water) facility as part of a regional industrial park near rural Monticello, Arkansas. The Arkansas Legislature has created a "Regional Intermodal Facilities Agency" with the power to acquire land and to plan and construct intermodal projects. The State hopes to attract Interstate 69, the future "NAFTA Highway" as part of an effort to develop southeastern Arkansas as a north-south freight center.

Public Rationale The purpose is unabashed, unapologetic economic and business development of the region, including job creation and industrial development.

Financing The new Agency can obtain industrial development bond financing together with assistance from an Arkansas Bond Guaranty Program. Specific construction and financing plans are not yet complete.

California

Alameda Corridor

This \$2.4 billion project will create a 20-mile dedicated freight rail corridor, largely in a massive subterranean trench. The project will improve freight rail traffic flow between the Ports of Los Angeles (San Pedro) and Long Beach on the south end, and the Burlington Northern & Santa Fe (BNSF) and Union Pacific (UP) rail yards east of downtown Los Angeles. The Corridor will replace three existing rail lines to the harbors, lines that are plagued by congestion and delay at 200 grade crossings.

Several years ago, the Los Angeles County Metropolitan Transportation Authority (MTA) purchased all rail lines, including the original Los Angeles & San Pedro line (1869) which is the Corridor route. Therefore, technically, the entire project will be built on public property, but the private freight railroads, private trucking companies, and private shippers will be among the direct beneficiaries.

A further stage is the "Alameda Corridor East", which will develop the rail routes from the northeast end of the Alameda Corridor to Colton, California. Major rail yards of the Union Pacific for the Los Angeles Area are located in West Colton.

Public Rationale The two harbors need the project to improve freight handling performance. The major west coast competitors, Vancouver (British Colombia), Seattle, Tacoma, Portland, and Oakland, have similar projects to speed freight transfers through the harbors. Los Angeles and Long Beach Harbors, together the largest and busiest harbors in North America, need the project to remain competitive.

Local communities and regional organizations see the need to improve economic infrastructure. Job creation is a major incentive for most public agencies, particularly since the Corridor runs through minority neighborhoods. The Alameda Corridor Transportation Authority (ACTA) estimates that construction will generate about 7,500 construction jobs and 1,500 professional and technical jobs. The ports estimate that about 700,000 long-term jobs will be indirectly created. The Alameda Corridor Transportation Authority (ACTA) intends to train about 1,000 "underprivileged" neighbors for construction jobs.

The two railroads want to speed up the highly inefficient port rail operations; trucking companies need to reduce road congestion in the area; environmentalists want to reduce air pollution by the reduction of truck movements and by more efficient road traffic flow; and shippers want better service. Because this project offers something for everybody, it has generated the necessary political consensus.

Financing The Alameda Corridor Transportation Authority (ACTA) is a joint powers agency controlled by the cities of Los Angeles and Long Beach, the ports of Los Angeles and Long Beach, and the MTA. ACTA, which is building the project, has authority to issue \$1.3 billion in bonds. About half of these bonds are tax-free and \$1 billion of them have been issued. ACTA receives other funds under a rather complicated system of federal, state and local sources, each with differing priorities and project criteria.

- The US Department of Transportation has awarded \$400 million in construction loans under the "Intermodal Surface Transportation Efficiency Act of 1991," Public Law 102-240 ("ISTEA"), Section 1105 "High Priority Corridors on the National Highway System," financed by US Treasury bonds. The federal rationales are local and area economic development and job creation.
- Other federal ISTEA sources will generate \$45 million, a result of congressional political action.
- There is a further \$2 million grant from the federal Economic Development Administration for the creation of jobs.
- The "Transportation Equity Act for the 21st Century," Public Law 105-178 ("TEA-21" Sections 1602.198, 1602.1017, and 1602.1138), has designated about \$28.3 million in "High Priority Projects" funds to build the Alameda Corridor East. "High Priority Projects" are political projects specified in Section 1602 of TEA-21. It is unnecessary to evaluate the rationale, as political congressional action trumps evaluation studies and community dialogue.
- TEA-21 has designated about \$2.5 million for further Alameda Corridor street work (Section 1602.834).
- California Department of Transportation grants will total about \$68 million. This includes traffic and congestion relief funds channeled through the Southern California Region Rail Agency and inter-city rail funds.
- The MTA will grant \$347 million, including funds from Proposition C, state Transit Systems Management (TSM) matching funds, Regional Surface Transportation Program (RSTP), Long Range Plan, and Flexible Congestion Relief. The rationale is the reduction of traffic congestion.
- The Ports of Long Beach and Los Angeles each have issued construction bonds and will grant construction funds of \$200 million each.
- The two ports also will make Corridor operations loans at 5%.
- Repayment will be from railroad user fees, including \$30 per container.

Port of Oakland Joint Intermodal Terminal

The plan is to build a 170-acre intermodal terminal to transfer containers directly between ship and rail. This project is entirely on public land, formerly occupied by the U.S. Navy and the U.S. Army, but private freight companies, such as Burlington Northern and Santa Fe Railroad (BNSF), Union Pacific Railroad (UP), and trucking companies will benefit. Currently about 70,000 truck trips per year are made on the congested Highway I-80 between the BNSF rail yards in Richmond and the existing port facilities in Oakland. Public opinion is vehement that traffic congestion on I-80 must be reduced. The project is in the environmental impact study stage.

Public Rationale The Bay Area Metropolitan Transportation Commission (MTC) has assigned a high priority for the project because it supports economic vitality, supports the environment by reducing highway truck traffic, and improves freight mobility. Like other ports, Oakland needs more efficient intermodal movement in order to remain competitive with other West Coast ports.

Financing Financing is still uncertain for the possibly \$300 million in bonds needed. Despite the highway congestion, Caltrans has not been able to reach agreement with the Port regarding the \$5 million needed for roadway access development. TEA-21 contains a "High Priority Project" designation of \$6 million (Section 1602.558). In comparison, TEA-21 also grants \$9.4 million "High Priority Project" funds to a San Francisco Regional Intermodal Terminal (Section 1602.354). This is odd because the Port of Oakland is a major world-class port and the Port of San Francisco has become insignificant as an international freight terminal.

San Diego and Arizona Eastern Railway (SD&AE)

San Diego has a good natural harbor, but it is poorly developed as a major freight terminal for a number of reasons. One reason is domination of the harbor by the U.S. Navy; another is poor rail service. The primary rail access, the former Santa Fe Surf Route, is saturated with Amtrak and commuter passenger traffic and leads through the congested North San Diego County area to the congested Los Angeles area. The alternative is the SD&AE, a tortuous rail route through Tijuana and Tecate, Mexico, which connected with the Southern Pacific in California's Imperial Valley. The line east of Campo, California, has been out of service for years and numerous tunnels and bridges are damaged. The U.S. portion of the right-of-way is owned by the public Metropolitan Transit Development Board, which used the right-of-way between San Diego and San Ysidro for the San Diego Trolley. The San Diego & Imperial Valley provide limited freight service in San Diego.

Public Rationale As U.S. Navy activity declines, the Port of San Diego wants to take advantage of its natural harbor to develop international container traffic. With an almost entirely economic rationale, the line will be developed for freight purposes only. Except for tourist operations out of Campo, no passenger traffic is planned.

Financing \$10 million of TEA-21 "High Priority Project" funds (Section 1602.35) will finance development of yards in San Ysidro at the U.S.-Mexican border, but a minimum of \$25 million is necessary to rebuild the entire line. Construction responsibility for the portion of the line located in Mexico is uncertain, and border security issues have barely been addressed.

Georgia

Port of Savannah Intermodal Facility

The Georgia Department of Transportation (DOT) conducted the "Chatham County Intermodal Freight Study" for \$600,000; 80% of the money came from ISTEA federal "Special Study" funds. The study identified a long list of projects to improve freight movement through the Port of Savannah. There was no federal or state money, however, to accomplish anything substantial.

The Georgia Port Authority and the Norfolk Southern Railroad have identified parts of the Study list that they could finance internally. The Port Authority is building a modest intermodal facility on 440 acres. The Norfolk Southern is paying for rail lines and related facilities.

Public Rationale The State of Georgia wants to develop the Port of Savannah as the major port of entry

for the southeast U.S. The motivation is economic development, although Georgia DOT did not have specific estimates of the importance of the project in terms of earnings and jobs.

Financing The Georgia Port Authority in Savannah is spending \$50 million of internal funds to build the modified intermodal facility, while the Norfolk Southern is paying for the rail lines. While the state may find the money in the State Transportation Improvement Plan to build highway access, federal highway funds will probably be re-allocated.

Waycross Transportation Improvement Program

The Georgia DOT has conducted a "Multi-Modal Transportation Study" to eliminate thirty-six highway-rail grade crossings in Waycross, Ware County, Georgia.

Public Rationale The purpose is to speed up rail traffic and to eliminate dangerous highway grade crossings. However, the Chessie Seaboard Railroad (CSX) rail line leads from Atlanta to Jacksonville, Florida, and the Georgia DOT worries that the economic development rationale may benefit a Florida port, not a Georgia port.

Financing This \$30 million project will be financed by the Georgia DOT, the City of Waycross, the County of Ware, and CSX Railroad.

Idaho

Twin Falls Intermodal Terminal

The City of Twin Falls wanted to relocate rail facilities of the Eastern Idaho Railroad (EIRR) outside of town and develop an intermodal hub and industrial park. The EIRR connects with the Union Pacific near Twin Falls, and the UP was willing to assist with design and planning. The City of Twin Falls intended to issue \$2 million in tax-increment bonds, and the Idaho Transportation Department intended to provide block grants and fund highway access. The various agencies and the railroad could not agree with each other, and the project died.

Illinois

The Chicago Area Transportation Study (CATS)

CATS is the Metropolitan Planning Organization for the greater Chicago area, and has taken a very active role in freight infrastructure planning through its Intermodal Advisory Task Force (IATF). A recent study showed that the railroad industry contributes over \$8 billion in benefits per year to the Chicago area economy (the "\$8 billion factor"). The intermodal industry alone contributed a value of \$3.217 billion to the Chicago area economy in 1996, and that figure will exceed \$8 billion per year by 2020 (Rawling, "Statistical Summary and Value of the Intermodal Freight Industry to Northeast Illinois," Chicago Area Transportation Study, July 1997). This "\$8 billion factor" is the most important criteria when Chicago Area Transportation Study (CATS) sets priorities for infrastructure projects in the Chicago area.

Chicago Area Consolidation Hub at Willow Springs

United Parcel Service (UPS) needed a new distribution hub, and Chicago wanted the business. UPS agreed to build the hub next to a BNSF intermodal yard; BNSF agreed to pay for track modifications; and Illinois DOT, the Illinois Tollway Authority, and the Illinois Department of Commerce and Community Affairs (IDCCA) agreed to fund road access improvements and a Tri-State Tollway interchange.

Public Rationale The \$8 billion benefit report motivated all parties. IDCCA was interested in economic development and the 7,000 jobs at UPS. Traffic congestion mitigation was a secondary factor.

Financing The Tollway Authority did not want any federal involvement, so no ISTEA funds were used.

Truckway on Railroad Land

CATS wants to improve freight traffic connections between eastern and western railroads in Chicago (the \$8 billion factor again), and has resurrected an old proposal to build exclusive "truckways" on

railroad properties to facilitate intra-railroad container transfers. The project is in the talking stage and there is no agreement about who pays how much for what. CATS is looking at a model project in Rotterdam, Holland.

Iowa

Newton Intermodal Yard

Maytag builds washing machines in the small town of Newton, Iowa. Maytag informed local authorities that it would build a new facility to manufacture energy-efficient washing machines in Newton only if the Iowa Interstate Railroad line and yard were moved away from Maytag's existing factory. Otherwise, Maytag would relocate to Illinois.

The city, county, and the railroad relocated the rail line and yards to a new intermodal facility on a 300-acre site one mile out of town. Maytag, a part owner of Iowa Interstate Railroad, built the new manufacturing facility on the site of the former rail line. It is hoped that the new intermodal facility will attract new industry.

Public Rationale Newton is a small town, and Maytag development is critical to the local economy. The County estimates that more than 800 new jobs have been created, in addition to the existing jobs that have been preserved. The new intermodal facility hopes to develop additional economic activity.

Financing Total project cost is about \$10 million. Iowa DOT gave a Revitalize Iowa's Sound Economy (RISE) matching grant to the County to build about \$3 million in road improvements. The railroad received a \$2.5 million "forgivable loan" from DOT to build the new rail line and yards. The loan was forgivable once Maytag, part owner of the railroad, built the new facility in Newton. The County and the City of Newton contributed \$3 million each for the intermodal facility.

Missouri

Sheffield Flyover

The BNSF main line and the Kansas City Terminal Railroad (KCT) tracks run through downtown Kansas City, Missouri, from east to west. This very busy surface track system crosses north-south main lines of the Union Pacific and the Kansas City Southern Railroad, and crosses numerous city streets. This has caused extensive delay and congestion to the railroads and to numerous city streets for over a century. KCT (which owns the right-of-way) proposed a \$75 million three-mile "flyover" system of bridges and viaducts to raise the BNSF-KCT tracks.

Public Rationale The state and the city were motivated primarily by the economic importance of Kansas City as the second-busiest rail center in the U.S. The railroads were evaluating alternative routes around Kansas City if the congestion problems were not resolved. A study indicates that the rail industry provides about 5,000 direct jobs in Kansas City, about 9,000 indirect jobs, and has an economic impact of \$841.3 million per year (compare the \$8 billion factor in Chicago!) The Missouri Motor Carriers Association, which would be expected to oppose any action that benefits the railroads, took no action on this project.

Financing Funding was problematic; KCT doesn't have \$75 million, and Missouri law prohibits the use of gas tax money for any purpose other than roads. Congress earlier approved a \$500,000 grant to study the plan on behalf of a request from the Greater Kansas City Chamber of Commerce. Kansas City is a pollution-free "attainment" city, so Congestion Mitigation and Air Quality ("CMAQ") funds under ISTEA were unavailable. The Governor of Missouri and the City of Kansas City thought they had a FHWA "Section 129" loan guarantee lined up, but the trucking lobby in Washington D.C. was able to squash that plan.

KCT and the Missouri DOT decided to form a unique Missouri "transportation corporation" (Section 238 under Missouri law) that has the power to issue bonds and to abate taxes. Seventy-five million dollars in construction bonds are being sold. The transportation corporation receives no federal tax

exemption, but enjoys state tax exemption and Kansas City ad valorem tax relief. Construction work is underway and scheduled for completion in November 1999.

Richards-Gebaur International Freight Gateway

Several years ago the U.S. Air Force closed the Richards-Gebaur Air Base south of Kansas City and turned the property over to the City of Kansas City, Missouri, for general aviation. The general aviation scheme has been unprofitable, but the land adjoins the Kansas City Southern Railroad (KCS). The railroad has positioned itself as a major north-south freight hauler to take on some of the growing traffic caused by the North American Free Trade Agreement (NAFTA). KCS has purchased control of a major rail line in Mexico, and has a marketing agreement with Canadian National Railway, which in turn recently purchased the Illinois Central. The City has decided it can make more money with an intermodal freight facility than with a general aviation airport.

The plan is to convert 300 acres of the 1200-acre city-owned airport into a mid-continent intermodal transportation hub. KCS has leased 300 acres of the City airfield property and intends to spend about \$35 million to build a modern intermodal freight yard. This issue is political, however, and general aviation interests are fighting the project.

Public Rationale The incentive is economic development for the region. The City hopes that KCS efforts to build substantial north-south freight traffic between Canada and Mexico will succeed and turn Kansas City into the U.S. transfer center for north-south traffic.

Financing KCS will pay for yard development and will make lease payments to the City. The City of Kansas City may have to reimburse the FAA for certain airfield improvements, and is pushing Missouri DOT for assistance. Missouri DOT will probably accelerate about \$20 million in major improvements to two state highways in the area and will build an interchange to Interstate-71 in order to create appropriate truck access to the KCS intermodal yard. Once again, Missouri cannot spend gas tax money on railroad property, but will build the access roads.

Nevada

Fallon Branchline Rehabilitation

The City of Fallon and the state decided to rehabilitate a 15.8-mile dilapidated Union Pacific branch line and to build a rail/truck transfer facility at the end of the line in Fallon. Local Rail Service Assistance (LSRA) program funds, state funds, and local funds were used. The state portion of the funding came from interest on State Gas Tax money. In Nevada, gas tax money cannot be used for an intermodal facility, but interest on that money can be used.

-

Las Vegas Intermodal Center

TEA-21 provides \$4.5 million in High Priority Project funds. However, we were unable to find any information on any specific project.

New Mexico

Santa Teresa Intermodal Facility

Because increased NAFTA traffic has caused severe congestion at the traditional border crossing points between El Paso, Texas, and Ciudad Juarez in Mexico, the State of New Mexico is promoting an alternative border crossing for rail and highway freight at Santa Teresa, eleven miles west of El Paso. The border crossing and the connection to Interstate 10 are under construction. The New Mexico Border Development Authority intends to build an "upscale Santa Teresa Industrial Park" and the "Camino Real Intermodal Facility" for truck, rail, and air freight transfer near the border crossing.

The project can succeed only if Mexican rail lines are built to the crossing. State officials believe that construction of the lines in Mexico will happen, because city officials in Ciudad Juarez want to reroute rail and truck freight traffic away from the city center.

Public Rationale New Mexico hopes to promote industrial growth bringing about 1,600 jobs to the area. Authorities in Texas appear ambivalent about the project.

Financing Congress specifically appropriated \$12.1 million for the crossing facilities at Santa Teresa and two other New Mexico crossing points. Other federal funds were used to complete the study. The complete intermodal facility at the border crossing will cost about \$59 million. The New Mexico State Highway and Transportation Department arranged to use "innovative financing provisions" to provide Federal Highway Act money and state highway money to promote the intermodal project, but a contractor defaulted. It now appears that another private developer will develop the intermodal facility with private funds, but with New Mexico State guarantees.

Pennsylvania

Pennsylvania Clearance Project

The Delaware Valley Regional Planning Commission (DVRPC) is the MPO for the Philadelphia area, which includes portions of the states of New Jersey and Pennsylvania. Currently, there is only one concrete project, consisting of \$83 million to increase clearances on the CSX right-of-way to allow double-stack train access to the Port of Philadelphia.

Public Rationale The Port of Philadelphia is less convenient to ocean shippers and it needs better rail access in order to compete with central Atlantic coast ports such as Wilmington and Norfolk. (Potential competition from Baltimore now seems less likely). The purpose of the project is to promote the Port and generate economic development.

Financing The \$83 million came from a combination of two-thirds private railroad funds and one-third state-sponsored bonds. Numerous highway bridge improvements that coincided with the double-stack clearance were put on the Transportation Improvement Plan and then accelerated to support this project. As a rule, though, Pennsylvania uses State gas tax funds only for warning devices, not for grade separations. This was a "demonstration" project, i.e. politically mandated, and because the political process predominates, the DVRPC gained little experience in the priority-setting planning process.

Washington - Puget Sound

One of the best-organized efforts to develop intermodal freight planning is in the Seattle-Tacoma area. The Puget Sound Regional Council (PSRC), the local MPO, is involved in freight mobility issues, largely through the Freight Mobility Roundtable, a group within the PSRC that evaluates projects, sets priorities, and advises on freight matters. The Roundtable and PSRC have developed a "Project Priority Criteria" point system for evaluating freight infrastructure projects. The system attempts to evaluate "public benefit" and "public cost." PSRC and the Roundtable emphasize a consensus, team-based approach to freight infrastructure development rather than creation of a joint power agency. PSRC projects include the following.

Freight Action Strategy for the Seattle-Tacoma Corridor (FAST)

This is a comprehensive package of fifteen grade separation and port access projects, all selected according to the point system. Among the components of the FAST plan is the North Duwamish Intermodal Access Project. The Port of Seattle has emphasized this effort to improve rail and highway freight access to the Port near downtown Seattle.

Public Rationale All agencies focus on economic development and the competitive position of the ports, issues similar to those noted in the preceding descriptions for the Alameda Corridor and for the port of Oakland. The Ports of Seattle and Tacoma together are the second largest port facilities in North America and they control about 25% of West Coast container traffic. In addition, clean air is a highly sensitive issue in the area; any effort that will reduce vehicular pollution, as will this one, is favored.

Financing Construction of the entire FAST project will cost about \$354.4 million. FAST contemplates a package of 25% local and private funding, 50% from the State, and 25% from federal TEA-21 funding.

Of the local and private 25%, BNSF has committed to fund 5% (\$18 million) of the total FAST package. This investment is separate from the \$350 million BNSF has committed to upgrade and add capacity to tracks connecting Washington State to the Midwest, including \$125 million to reopen the Stampede Pass line. King County, the Port of Seattle, and a few local cities make up the balance of the local 25%. The State of Washington's 50% funding is not yet secure, but 1998 legislation created a Freight Mobility Strategic Investment Board appointed by the Governor. This Board will utilize a project identification and ranking process, presumably similar to the PSRC Roundtable process.

Presently about \$50 million is available in Congestion Mitigation and Air Quality Improvement Program (CMAQ) federal funds for 2001-2002. The PSRC Regional Project Evaluation Committee is recommending twenty projects for the funds available.

Federal funds have paid 80% of a study of freight traffic flow in the FAST Corridor. Almost \$35 million for the projects is authorized as High Priority Projects in TEA-21 (Sections 1602.814, 1602.1279, and 1602.1480).

Trans 2000 This Washington DOT project focuses on passengers, but the Roundtable has influence to help determine funding priorities.

Pacific Northwest Rail Corridor

More than \$30 million will be invested in projects in the Pacific Northwest Rail Corridor. Amtrak service is supported in part by the states of Washington and Oregon, and many of the project costs will be shared by state, regional, and local agencies. Amtrak's plan also calls for a \$12 million contribution to a cooperative project, which may involve Washington DOT and BNSF, to upgrade track and signals between Seattle and Blaine, Washington. BNSF and its tenant, UP, will benefit. In addition, Amtrak has committed nearly \$7.5 million for station improvements.

Rhode Island

The State has several projects to increase rail clearance for double-stack trains to the Quonset Point Industrial site and seaport. Federal and private railroad money was used, together with State Bond funds. Rhode Island does not have a restriction on the use of gas tax funds; the funds can be used for projects such as the Quonset Point project or can be put in the General Fund.

RAIL IMPROVEMENT PRIMARILY FOR PASSENGER SERVICE

Numerous state-financed projects have improved track owned by private railroads. The purpose always is to improve passenger train flow, but freight traffic also benefits from improved track structure. When the private freight railroad continues to control the traffic flow, suspicions linger that the freight railroads favor freight traffic at the expense of passenger trains. For example: "While BNSF is not responsible for every late train (San Joaquin), it seems that the railroad has so far been unwilling or unable to take the necessary steps to run a more efficient operation by improving its dispatching skills or investing its own resources to meet the needs of its freight customers. Instead, BNSF freight trains are using the capacity paid for by the public." *California Rail News*, Feb-Mar 1999.

We limit our study to a few examples:

California

UP Coast Line, Moorpark-Goleta

Caltrans funded a \$38.3 million improvement program to improve 66 miles of main line between Moorpark (the west end of MTA territory) and Goleta in Ventura and Santa Barbara counties, on the former Southern Pacific Coast Line now owned by Union Pacific. The tracks are used by Metrolink commuter trains and Amtrak, as well as by UP freight trains.

There have been disputes with UP. For example, UP demanded \$430,000 a year to lease the track, plus a \$6.10-per-mile maintenance fee to be paid each time a Metrolink train passes over UP track, on the theory that the company needs to recoup its costs for allowing Metrolink to use its tracks. The Ventura

County Transportation Commission (VCTC) rejected the demand as excessive, arguing that VCTC has provided more than \$11 million to make improvements to UP tracks in Ventura County, and that UP freight trains share the benefit to the freight infrastructure.

This project also benefits development of Port Hueneme in Ventura County. The Port has received ISTEA funds for port highway access. The County has purchased old rail rights-of-way for \$8.7 million to develop freight rail service to the Port. Of this amount, \$7.7 million came from federal funds, while \$1 million was from local funds.

Oakland-Sacramento

Caltrans sponsored a \$65 million upgrading project, funded by state bond money, in order to improve passenger train speeds between Oakland and Sacramento. UP freight train operations also benefit.

Altamont Pass

The Alameda County Congestion Management Agency voted to transfer \$2.9 million from a road-widening project for the Altamont Commuter Express (ACE) rail service on the 85-mile Stockton-San Jose UP (former Western Pacific main line) tracks. This is UP's primary freight line from Silicon Valley to the east.

Illinois

Metra, Chicago's commuter rail system, planned to spend about \$133 million for improvements to track, structures, and signals in 1998. The improvements are funded by an Illinois bond package to cover the 20 percent regional match required by federal grants.

Metra has a five-year program to double-track the entire Wisconsin Central Railroad line north from Franklin Park to the north end of Metra operations, near the Wisconsin border. The benefit to the Wisconsin Central Railroad gained by double-tracking should far exceed the irritation caused by increased Metra traffic on the line.

Maine

The State will use \$38 million in federal grants to upgrade the track between Portland and Boston owned by Guilford railroads. The rationale is passenger service, but Guilford freight trains also will benefit.

Maryland

After difficult negotiations, CSX will allow three Maryland (MARC) commuter trains to operate to Frederick over the existing single-track freight branch, although the state will have to pay for signal upgrading.

Difficult and prolonged negotiations have led to public frustration: "For nearly 25 years, Maryland taxpayer dollars have paid for improvements to the state's rail lines. These investments have benefited both freight and passenger rail service...improvements that would benefit both CSX and the state of Maryland... as we negotiate with CSX, the following themes are guiding our discussions: commuter rail service can be compatible with freight rail service; commuter rail service must remain affordable and it must continue to respond to the needs of Maryland citizens...we hope CSX can embrace similar goals." John A. Agro, Jr., Administrator, Mass Transit Administration, Maryland Dept. of Transportation, in *Passenger Train Journal*, November 1996, pages 4-5.

Massachusetts

With the institution of Massachusetts Bay commuter rail service to Worcester, the second track was re-laid between Westboro and Worcester with state funds, aiding freight service as well.

North Carolina

The line between Raleigh (Cary) and Greensboro is the state-owned North Carolina Railroad, which the Norfolk Southern Railroad (NS) leases. Once non-passenger-related ownership and lease issues are resolved, North Carolina DOT plans to spend \$15 million on track improvements.

Oregon

Over \$5.2 million in Federal Railroad Administration funding will be used to increase track speed for passenger trains on freight railroads. The Oregon Department of Transportation will also receive technical assistance for track, structure, and signal improvements from Eugene to Portland to Vancouver, Washington, allowing faster passenger and freight trains.

Vermont

In 1996 federal transportation funding allowed Vermont to use \$3.5 million to upgrade twenty-one miles of freight railroad track between Whitehall, N.Y. and Rutland. Federal funds of \$3.5 million, \$743,000 from the state of Vermont, and \$1 million from the Vermont Railway funded the project.

Washington

A Federal Transportation Administration grant of \$1.3 million was used for environmental work and advanced planning to improve the BNSF track from Seattle to Tacoma. The purpose is to improve the track for commuter rail, but freight operations will benefit. BNSF has promised full cooperation.

HIGHWAY IMPROVEMENT FOR THE BENEFIT OF FREIGHT INFRASTRUCTURE

Most case studies involve state funds to build highway and roadway access to freight facilities. These relatively mundane projects avoid restrictions on the use of highway and gas tax funds, and therefore avoid controversy. A few examples follow.

Alaska

Access to the Port of Anchorage to the city is along a single corridor, where the Alaska Railroad tracks cross the highway five times. It was determined that moving the tracks, used only for freight, was less expensive than building grade separations or moving the road. ISTEA safety funds paid for the elimination of grade crossings.

California

Fresno

Highway access to an intermodal terminal is desired. Federal National Highway system (NHS) funds of \$4.7 million are available to fund the project.

Port Hueneme

Truck access to the Port will be constructed. ISTEA "demonstration" funds of \$8.9 million are available, and the City of Oxnard will help to pay for a Highway 101 interchange. TEA-21 High Priority Project financing of \$16.8 million is available (Section 1602.664).

Port of Sacramento

A truck access to the Port, a United Parcel Service center, and warehouses will be constructed. Federal funds of \$15 million may be available, but more is needed.

Other Areas

State funds are used to improve truck access to airport cargo facilities, at Ontario, South San Francisco, and Stockton.

Illinois

CP Bensenville Yard

The Canadian Pacific Rail (CP) main line (the former Milwaukee Road) runs through Bensenville, next to O'Hare Airport in Chicago. CP approached the Chicago Area Transportation Study (CATS) to develop the Bensenville Yard. CATS determined that it could not participate in projects on railroad property, but could finance roadway access improvements to reduce traffic congestion and improve road traffic patterns in the area. Two million dollars in CMAQ funds from ISTEA were used. CATS was motivated by traffic congestion problems, but also by the potential of Chicago as a primary interchange point for Canadian-American-Mexican traffic which is expected to develop under NAFTA. CATS

estimated that the project would generate \$2.6 million in "public sector benefits."

Intermodal Connectors

CATS has identified twenty-one rail terminals which are not near any NHS roads, and is trying to figure out how to use NHS money to develop roadway access to the rail terminals. This project is in the early discussion stage and a consultant will be hired soon.

OBSERVATIONS AND RECOMMENDATIONS

OBSERVATIONS

Observations based on our legal analysis and case studies are as follows:

- The occasional, complex, freight infrastructure very big project is possible when there is a consensus among politicians, special interest groups, carriers, and infrastructure stakeholders about the need for the project. The Alameda Corridor is a prime example. Political interest groups, rail and truck carriers, and public agencies all have good reasons to support the investment. Where there is political consensus for such a major undertaking, legal obstacles fade and a way is found.
- Planning of smaller freight infrastructure projects (grade separations, port accesses, or border crossings), which do not have a high political profile, can be improved with the use of objective scoring criteria. We suggest a system of guidelines that score and evaluate quantifiable factors such as reduction of accidents, reduction of delays, increases in capacity, and improvement in operations. The purpose of the analytical guidelines should be to optimize the use of public funds to support systems that increase the efficiency of hauling goods. Such analytical guidelines would be of great assistance to Caltrans, MPOs, and other agencies that need an objective standard to set priorities among many projects that compete for public funds.
- Economic development, including jobs creation and retention, always leads the list of reasons for a major project. For example, the "\$8 billion factor" plays a central role in the evaluation of high-profile projects in the Chicago area. Economic criteria must be factored into our suggested objective scoring criteria guidelines.
- Environmental issues sometimes tend to be secondary causes for a specific project. However, a consensus is developing that "intermodal" means, among other things, reducing high-pollution highway truck transportation in favor of steel-wheel-on-steel-rail transportation. There is a growing realization that rail transportation contributes far less pollution per ton moved than does truck transportation, and that this advantage increases with the distance traveled. Furthermore, rail movements on rail rights-of-way usually do not cause inconvenient highway congestion to the motorized, voting public.
- Although we speak of "private" freight infrastructure, the "public" usually ends up owning the portion of the infrastructure facility that has been developed. Private railroads thus become "users," not owners. This provides at least two advantages:
 - (a) Public ownership avoids any question regarding the use of public funds.
 - (b) Public ownership allows for various types of public bond financing projects that can charge user fees to pay off the bonds. Examples are the Alameda Corridor in southern California and the Sheffield Flyover in Kansas City, Missouri.
- The California Legislature has the broad legal power to invest public funds in privately-owned freight infrastructure projects. In some cases, the Legislature already has made the determination that public funds can and should be used to improve privately-owned infrastructure.
- We believe the perceived restrictions on the use of California gasoline tax revenues are too restrictive. The California Legislature has declared that public policy now includes intermodal freight transportation, and that transportation funds should support the *entire* transportation plan. Furthermore, federal legislation (ISTEA and TEA-21) have clearly declared the increased importance of intermodal freight transportation and thus set national transportation policy. The argument can be made that national transportation law preempts state law because of the federal primacy in interstate commerce.

However:

- Although there are constitutional grounds to challenge the gas tax restriction, we do not recommend such a challenge. Such important changes in interpretation of the law should be made through the political, not the legal process. Political process means either that the Legislature specifically broadens the use of gas tax revenues, or that Article XIX of the California Constitution be amended.
- Although gasoline tax revenues are restricted, gas tax money may be used for road improvement portions of a freight infrastructure project. We have identified numerous projects in other states that follow this principle. In California, for example, it is clear that California gas tax revenues legally could be used to pay for roadway access to the planned Oakland Intermodal Terminal. "Public benefit" is indicated by the projected reduction of 70,000 truck trips per year on congested I-80.
- The planning process is complicated by direct political influence in the form of "demonstration projects" and "high priority projects." It is useless to attempt to avoid such actions, but public agencies such as MPOs should maintain better political contacts to attempt to keep some control of such political short-circuits of the planning process. Our suggested system of analytical guidelines should provide the objective standards needed for the planning process.

RECOMMENDATIONS FOR CALTRANS

General

During initial project discussions, Caltrans Planning staff expressed a high degree of frustration regarding their inability to act as an effective advocate for freight projects in the context of other transportation projects competing for inclusion in the State Transportation Improvement Program (STIP). After analyzing the Caltrans program structure embodied in Coding Manual Revision 149 (March 4, 1999), we understand and appreciate this frustration.

Transportation Planning, by way of the Goods Movement Program (40.010.600), is charged with "... actions related to enhancing system capacity, reducing delay, improving safety..." To date, Transportation Planning has influenced these enhancements through a Goods Movement Strategy approved by the Governor in August, 1998. However, the actual capital programs that could effect these actions are a part of the Highway (and arguably, Mass Transit) programs. Further, the eighteen highway capital programs that could enhance goods movement are fully integrated into benefits for the non-commercial motoring public. Direct benefits to "freight" are not mentioned as a part of the existing program definitions. "Freight projects" are embedded in the Highway program elements, such as widenings, interchanges, and operational improvements. There is no discrete identification for freight projects, let alone the ability to advance or advocate such projects on any accepted analytical basis.

Practitioners in the STIP process utilize the Caltrans program structure to advance projects to the California Transportation Commission (CTC) for inclusion in the Transportation Improvement Program. Many of the highway elements such as rehabilitation, interchanges, widening, and operation improvements have scoring systems that can objectively set priorities for these projects. Objective scoring removes much of the friction in deciding the merits of one project vs. another. MPOs and Caltrans understand these systems and utilize them in their submissions to the CTC. While many of these projects benefit freight interests, these benefits are blended with passenger and transit use and their specific economic and operation benefits are not identifiable. Therefore, as MPOs and Caltrans attempt to advance a legitimate freight project, there is no structure that permits the benefit assessment of such a project and its comparison with projects embedded in the accepted program structure.

CTC staff generally agrees with these remarks and concurs with this study that a separate priority system for freight project *improvements* (emphasis on improvements, not including rehabilitation and maintenance) would be beneficial to all parties involved in the development of the STIP. We would expect that advocacy groups, such as rail and trucking interests, would readily agree.

Looking further ahead, were such an addition developed and incorporated into the program structure, in

all probability it would organizationally shift priority setting for goods movement from planning to programming since the emphasis would simply be the maintenance of a programming, priority-setting system. Along those lines, attention is also directed to the Mass Transit program that makes no mention of freight whatsoever. It is frequently argued that Caltrans funded passenger improvements to fixed guideways (railroads) also benefits freight movement where both freight and passenger modes utilize the same facility. In the process of creating a goods movement capital program, the issue of rail freight and port access should become a prominent element of Mass Transit's activities as these staffs are usually the conduit to railroad properties.

Recommendation One

Caltrans should undertake the development of a Freight Improvement Priority System (FIPS) for the purpose of setting priorities for all freight improvement projects, including intermodal projects, for potential inclusion in the STIP.

Limitations in the Development of a Freight Improvement Prioritization System

A predictable complexity factor that could be experienced in developing a FIPS is the aforementioned program structure, which already implicitly includes freight projects in many capital program elements. It could be argued that, in order to create a new program element, all of these existing programs would have to be re-defined in order to remove freight activities and avoid overlap. This in turn would create unreasonable and unnecessary delays in carrying out the recommendation. As a practical matter, policy makers will utilize the new system, and freight interests will cease to be an issue in the existing program structure.

Recommendation Two

The newly created FIPS and a freight program element should be added to the current program structure.

Learning from Others: Case Studies

This study presents the results of a multi-state survey of entities that have attempted the development of a FIPS. Some of these studies depict "one-off" mega-projects that are unique in terms of law, financing, and jurisdiction. However, some jurisdictions have taken a more comprehensive view in creating a FIPS, and we urge Caltrans to profit from these efforts. The authors find that the state of Washington has created the widest based, most comprehensive system. It is important to emphasize both the development technique and content of their product.

Washington's approach was supported by elected officials, policy makers, and professional staffs throughout the state, and by the MPOs. Washington first established a discrete fund for freight projects, to be allocated by a priority system. To demonstrate the importance of the undertaking, a policy committee was appointed by the state Administration that represented large and small MPOs, rail and trucking interests, and the ports. Support to these appointments consisted of staff supplied by Washington State DOT.

In California, we are not at the point of recommending a special freight fund, but otherwise, the experience of the Washington state structure is practical and useful. Without state Administration appointments and recognition, a collaborative effort will be relegated to low-level staff, and the effort will fail. Our results consistently emphasize the inclusion of high-level policy involvement in the creation of statewide freight policy.

Recommendation Three

California should emulate the Washington State structure and emphasis in developing a FIPS. The Deputy Director for Planning should recommend a proposed committee membership. The letter of invitation should be signed by the Caltrans Director or by an even higher level official.

Defining the Operational Role of the Policy Committee.

Although the policy committee will create the FIPS, staff and consultant assistance will be critical in presenting issues in a logical sequence and with options that have been thoroughly explored. We expect

policy makers to make clear and useful recommendations, but staff should prepare the groundwork for those recommendations.

Recommendation Four

The Deputy Director for Planning should identify professional staff for committee support. The supervisor of this staff should be adequately senior to speak for Caltrans.

Establishing a Foundation and Parameters for the Policy Committee.

We suggest that the Director address the initial meeting and make clear what is expected of the policy committee. The Committee should be creative, but as a minimum should be required to:

- a) Define threshold terms such as "freight project" and "intermodal."
- b) Provide consistency with the Governor's Goods Movement Strategy, which provides a solid foundation for a priority setting system with respect to routes, ports, borders, different types of projects, and their relative statewide importance.
- c) Provide clarity with regard to the objective of setting priorities for freight infrastructure improvements. Projects might be only incidentally beneficial to the general motoring public.
- d) Assure that the FIPS will be an objective numerical scoring system, not reliant on subjective, narrative support, and should be simple to understand and to implement.
- e) Investigate and recommend solutions to issues such as the California Public Utility Commission's (CPUC) yearly priorities for railroad grade crossing projects. Separate agency efforts should be developed in cooperation with others in a single FIPS.

Recommendation Five

The Director should establish fundamental requirements and parameters that the policy committee accepts as a foundation for its product.

The project team believes that approximately four full committee meetings will be required, spread over a period of six to ten months, to create the FIPS. The Caltrans staff work would continue during this period.

REPORT SUMMARY

Freight infrastructure issues have become increasingly important in the past ten years. The federal ISTEA legislation of 1991 substantially raised the importance of freight infrastructure issues in national transportation planning. The passage of TEA-21 in 1998 increased this new emphasis. Likewise, the passage of SB45 by the California Legislature in 1997 broadened the state's interest in transportation planning, and specifically acknowledged freight infrastructure as part of the state plan.

Both federal and California state legislation have enabled a potential increase in the use of public funds for freight infrastructure projects.

Our review of case studies from various parts of the U.S. indicates that freight infrastructure projects enjoy increasing importance in many areas, and that various means are used to harmonize freight infrastructure planning and highway funding. Most often, highway funds are used to develop highway access sectors to a freight infrastructure project.

Transportation planners in the Puget Sound region and in the Chicago area have taken the most meaningful steps towards an objective analysis and priority rating system for all transportation projects that compete for public funds. We recommend that the California Department of Transportation (Caltrans) prepare a system of objective guidelines that all public agencies in the state can use to set priorities among competing transportation infrastructure projects. To do this, we suggest that Caltrans convene an advisory group representing the various public and private interest groups with an interest in freight infrastructure. The advisory group should propose objective guidelines that would be acceptable to all concerned parties.

ABBREVIATIONS AND ACRONYMS

ACE	Altamont Commuter Express
ACTA	Alameda Corridor Transportation Authority
BNSF	Burlington Northern and Santa Fe Railroad
Caltrans	California Department of Transportation
CATS	Chicago Area Transportation Study
CMAQ	Congestion Mitigation and Air Quality Improvement Program
CP	Canadian Pacific Railway
CPUC	California Public Utility Commission
CSX	Chessie Seaboard Railroad
CTC	California Transportation Commission
CTP	California Transportation Plan
DOT	Department of Transportation
DVRPC	Delaware Valley Regional Planning Commission
EIRR	Eastern Idaho Railroad
FAST	Freight Action Strategy for the Seattle-Tacoma Corridor
FHWA	Federal Highway Administration
FIPS	Freight Improvement Priority System
IATF	Intermodal Advisory Task Force (Chicago Area)
IDCCA	Illinois Department of Commerce and Community Affairs
IISTPS	International Institute for Surface Transportation Policy Studies (the Mineta Transportation Institute)
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
KCS	Kansas City Southern Railroad
KCT	Kansas City Terminal Railroad
LRSA	Local Rail Service Assistance
MARC	Maryland Regional Commuter
MBTA	Massachusetts Bay Transit Authority
MPO	Metropolitan Planning Organization
MTA	Los Angeles County Metropolitan Transportation Authority
MTC	Bay Area Metropolitan Transportation Commission
NAFTA	North American Free Trade Agreement
NCDOT	North Carolina Department of Transportation
NS	Norfolk Southern Railroad
PECG	Professional Engineers in California Government
PSRC	Puget Sound Regional Council
RISE	Revitalize Iowa's Sound Economy
RRIF	Railroad Rehabilitation and Improvement Financing
RSTP	Regional Surface Transportation Program
SD&AE	San Diego and Arizona Eastern Railway
SHA	California State Highway Account
SP	Southern Pacific Railroad
STIP	State Transportation Improvement Program (California)
TEA-21	Transportation Equity Act for the 21st Century (1998)
TIFIA	Transportation Infrastructure Finance and Innovation Act
TIP	Transportation Improvement Plan
TSM	Transit Systems Management

UP	Union Pacific Railroad
UPS	United Parcel Service
VCTC	Ventura County Transportation Commission
WP	Western Pacific Railroad

LITERATURE REVIEW

The legal analysis is the result of a lawyer's normal, thorough research of the usual legal authorities and publications, augmented by search through *Lexis-Nexis* resources. The authorities, such as the California Constitution, the California Government Code, the California Streets and Highways Code, and case decisions that interpret these statutes, are cited. Important decisions and statutes were checked against Shepard's Citations.

The case studies reported are based only in part on the literature. We obtained extensive information from various Internet sources. Far more important were interviews, in person and by telephone. For example, valuable information about Chicago's CATS projects and the two projects in Kansas City was learned by personal interviews in Chicago and Kansas City. Telephone interviews were very helpful, particularly regarding Puget Sound. All of these sources gave us various written materials, such as:

U.S. Department of Transportation, Federal Highway Administration. *Intermodal Freight Transportation*, Dec. 1995. Vol. I: "Overview of Impediments, Data Sources for Intermodal Transportation Planning, Bibliography." Vol. II: "Fact Sheet, Federal Aid Eligibility."

CHICAGO AREA TRANSPORTATION STUDY

"Public Involvement Plan," March 1995.

"2020 Regional Transportation Plan," November 1997.

"Statistical Summary and Value of the Intermodal Freight Industry to Northeast Illinois," July 1997.

"Evaluation of the Canadian Pacific Rail System's CMAQ Project," January 1997.

PUGET SOUND REGIONAL COUNCIL

"Project Eligibility, Priority and Selection Process for a Strategic Freight Investment Program—Recommendations of the Freight Mobility Project Prioritization Committee," January 1998.

"FAST Project Report," Texas Transportation Institute for the Washington State Department of Transportation, March 1997.

Beaulieu, Peter D., "The Regional Freight Mobility Roundtable...thinking 'outside the box' about boxes," January 1997.

Beaulieu, Peter D., "The Central Puget Sound Region: An Emerging Regional Freight Mobility Strategy Addressing Partnerships and Global Logistics," 1998.

Beaulieu, Peter D., "The 3-Cs of Freight Infrastructure Capacity," May 1996.

Beaulieu, Peter D., "Ports on the Edge: Sync-ing the Strategic Plans," July 1998.

Arkansas State Highway and Transportation Department: "Intermodal Transportation Needs/Economic Development Study—The Potential Transportation Benefits and Economic Impacts of a Regional Transportation Center and Manufacturing/Freight Consolidation/Distribution Complex," August 1998.

BIBLIOGRAPHY

- Cambridge Systematics. *Intermodal Freight Transportation: Overview of Impediments*. Washington, DC: U.S. Department of Transportation, Federal Highway Administration, 1995.
- Cambridge Systematics. *Intermodal Freight Transportation, Volume 2: Fact Sheet*. Washington, DC: U.S. Department of Transportation, Federal Highway Administration, 1996.
- Crain & Associates. *Institutional Barriers to Intermodal Transportation Policies and Planning*. Washington, DC: National Academy Press, 1996.
- European Conference of Ministers of Transport. *European Transport Trends and Infrastructure Needs*. Washington, DC: OEDC Publications, 1995.
- Federal Transit Administration. *Flexible Funding Opportunities for Transportation Investments*. Washington, DC: U.S. Department of Transportation, 1996.
- Franz, J. D. *Air Quality Public Opinion Survey: Final Report, Executive Summary*. Sacramento, CA: Metropolitan Transportation Commission and Bay Area Air Quality, 1991.
- Metropolitan Transportation Commission. *Citizens Guide to the Metropolitan Transportation Commission: Basics on the Bay Area's Transportation Planning, Financing and Coordinating Agency*. Sacramento, CA: Metropolitan Transportation Commission, June 1997.
- Metropolitan Transportation Commission. *Draft Environmental Assessment for the San Francisco Bay Area Seaport Plan: Policy and Port Priority*. Sacramento, CA: Metropolitan Transportation Commission, February 1996.
- Metropolitan Transportation Commission. *Regional Transportation Improvement Program for the Nine-County San Francisco Bay Area, FY 1998/99–2003/04*. Sacramento, CA: Metropolitan Transportation Commission, February 1998.
- Metropolitan Transportation Commission. *San Francisco Bay Area Seaport Plan*. Sacramento, CA: Metropolitan Transportation Commission, March 1996.
- Metropolitan Transportation Commission. *San Francisco Bay Area Seaport Plan*. Sacramento, CA: Metropolitan Transportation Commission, March 1999.
- Metropolitan Transportation Commission. *San Francisco Bay Area Seaport Plan Update: A Collection of Transportation Reports*. Sacramento, CA: Metropolitan Transportation Commission, March 1999.
- MITRE Corporation. *Intelligent Transportation Infrastructure Benefits: Expected and Experienced*. Washington, DC: U.S. Department of Transportation, Federal Highway Administration, January 1996.
- National Academy of Sciences. *Rail and Motor Carrier Freight*. Washington, DC: Transportation Research Board, National Research Council, 1984.
- National Academy of Sciences. *Rail Freight*. Washington, DC: Transportation Research Board, National Research Council, 1983.
- National Research Council. *A Report of the Standing Committee on Public Transportation: Survey of State Involvement in Public Transportation*. Washington, DC: American Association of State Highway and Transportation Officials, 1993.
- National Research Council. *Conference on Major Investment Studies in Transportation (MIS): February 25-28, 1996, Holiday Inn Golden Gateway, San Francisco, California*. Washington, DC: Transportation Research Board, 1996.
- National Research Council. *Forecasting Passenger and Freight Travel*. Washington, DC:

Transportation Research Board, 1977.

National Research Council. *Freight Transportation*. Washington, DC: Transportation Research Board, 1986.

National Research Council. *Freight Transportation Research*. Washington, DC: Transportation Research Board, 1988.

Pucher, John R. *Path to Balanced Transportation: Expand Public Transportation Services and Require Auto Users to Pay the Full Social, Environmental and Economic Costs of Driving*. Washington, DC: Transportation Research Board, 1993.

San Diego Association of Governments. *Economic Feasibility Study of the San Diego & Arizona Eastern Railway*. San Diego, CA: U.S. Department of Commerce, March 1996.

San Diego Association of Governments. *Regional Transportation Improvement Program: 1998-2004*. San Diego, CA: U.S. Department of Commerce, August 1998.

San Diego Association of Governments. *San Diego & Arizona Eastern Railway (SD&AE) Fact Sheet*. San Diego, CA: U.S. Department of Commerce, March 1998.

Snohomish County Transportation Authority. *A Guide to Land Use and Public Transportation for Snohomish County*. Washington, DC: U.S. Department of Transportation, 1989.

Vickerman, M. John. *Overview on the Intermodal Freight Industry*. Sacramento, CA: Metropolitan Transportation Commission, 1995.

ABOUT THE AUTHORS

DAN EVANS

Dan Evans, J. D. has practiced business law for over 30 years. In addition to transportation law, his experience as an attorney includes the areas of corporate law, securities, and international investment law. More recently Mr. Evans was a guest lecturer at the Law School of the University of Gerifswald, and a Fulbright Guest Professor at the new Europa-Universität-Viadrina in Frankfurt (Oder). Since 1995 Mr. Evans has served as visiting professor for international business law and international marketing at San José State University College of Business.

Evans received his Bachelor's Degree in International Relations from Pomona College and his Juris Doctor from the University of Southern California. He was the co-editor of *The Confusing World of International Investments—Perspective on International Securities* published in 1975 by World Business Institute of Pepperdine University and *Current Legal Aspects of Foreign Investment in the United States* published in 1976 by the American Bar Association.

NORMAN KELLEY

Norman Kelley has over thirty years of domestic and international executive experience in both the public and private sectors. He is familiar with all aspects of governmental policy decision making, including capital project development, optimizing administrative and technical production, and translating conceptual policies into workable, practical products. He most recently performed consultative services to streamline a number of technical, administrative, and legal governmental processes.

PRE-PUBLICATION PEER REVIEW

San José State University, of the California State University system, and the IISTPS Board of Trustees have agreed upon a peer review process required for all research published by IISTPS. The purpose of the review process is to ensure that the results presented are based upon a professionally acceptable research protocol.

Research projects begin with the approval of a scope of work by the sponsoring entities, with in-process reviews by the IISTPS Research Director and the project sponsor. Periodic progress reports are provided to the IISTPS Research Director and the Research Associates Policy Oversight Committee (RAPOC). Review of the draft research product is conducted by the Research Committee of the Board of Trustees, and may include invited critiques from other professionals in the subject field. The review is based on the professional propriety of the research methodology.