IISTPS Report 00-1

PB2001-100503

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

Why Campaigns for Local Transportation Funding Initiatives Succeed or Fail: An Analysis of Four Communities and National Data

REPRODUCED BY: NTIS
U.S. Department of Commerce
National Technical Information Service
Springfield, Virginia 22161

College of Business
San José State University
San José, CA 95192-0219

THE MINETA TRANSPORTATION INSTITUTE

The Norman Y. Mineta International Institute for Surface Transportation Policy Studies (The Mineta Transportation Institute) was created by Congress through the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and established in the California State University system at the San José State University College of Business. The Institute continues as a University Transportation Center (UTC), reauthorized in 1998 by the Transportation Equity Act for the 21st Century (TEA 21).

The Institute is unique among UTC's in two areas. It is the only center with an outside, internationally respected Board of Trustees, and it is the only center located in a College of Business. The Board provides policy direction, assists with needs assessment, and connects the Institute and its programs with the international transportation community. The Institute's focus on policy and management resulted from a Board assessment of the industry's unmet needs and led directly to the choice of the San José State University College of Business as the Institute's home.

The Institure applies the focus on international surface transportation policy and management issues in three primary areas:

Research

The aim of Mineta Transportation Institute research is to provide policy-oriented research, available to all levels of government and the private sector, to foster the development of optimum surface transportation systems. Emphasis is on research in such areas as finance, institutional structure, social equity, environmental concerns, and legislation. Teams of certified Research Associates conduct the research. Certification requires an advanced degree, generally a Ph.D., a record of academic publications and professional references. Many of the Institute's Research Associates also hold professional certifications appropriate to their discipline. Research projects culminate in publications available in hardcopy and on the Institute's Web site.

Education

The educational goal of the Institute is to provide graduate level education to students seeking a career in the development and operation of surface transportation programs. To meet the needs of employers seeking a diverse workforce, the Institute's education program promotes enrollment to under-represented groups. The College of Business at San José State University offers an AACSB accredited California State University Master of Science in Transportation Management and a Graduate Certificate in Transportation Management that will prepare the nation's transportation managers for the 21st century. The masters degree is the highest conferred by the California State University system.

Information and Technology Transfer

The Mineta Transportation Institute's third responsibility is to develop and maintain electronic information systems to store, retrieve, and disseminate information relating to surface transportation policy studies. The Institute, with the assistance of Caltrans and the California State University Chancellor's office, created *TransWeb*. *TransWeb* provides transportation professionals, students, and individuals worldwide access to information relating to surface transportation research and policy. *TransWeb* is found at http://transweb.sjsu.edu and delivers regional, state, national, and international transportation information.

The Institute also maintains a library of periodicals and other unique publications for transportation research, in cooperation with the University library system. The catalog is electronically accessible at http://transweb.sjsu.edu/library.htm.

The Mineta Transportation Institute is jointly funded by Congress through the United States Department of Transportation Research and Special Programs Administration (RSPA) and the California Legislature through the Department of Transportation (Caltrans), and by private grants.

DISCLAIMER

The contents of this report reflect the views of the authors, who are responsible for the facts and the accuracy of the information presented herein. This document is disseminated under the sponsorship of the Department of Transportation, University Transportation Centers Program and the California Department of Transportation,in the interest of information exchange. The U.S. Government, State of California, and the Mineta Transportation Institute assumes no liability for the contents or use thereof.

Mineta Transportation Institute Report 00-1

Why Campaigns for Local Transportation Funding Initiatives Succeed or Fail: An Analysis of Four Communities and National Data

Peter J. Haas, Ph.D. (Principal Investigator)
Kristen Sullivan Massey, M.P.P.
Linda O. Valenty, Ph.D.
Richard Werbel, Ph.D.

June 2000

a publication of the
Norman Y. Mineta International Institute for Surface Transportation Policy Studies

Created by Congress in 1991

Technical Report Documentation Page

1. Report No. FHWA/CA/OR1999/19	2. Government Accession No.	3. Recipient's Catalog No.
4. Title and Subtitle Why Campaigns for Local Transportation Funding Initiatives Succeed or Fail: An Analysis of Four Communities and National Data		5. Report Date June 2000 6. Performing Organization Code
7. Authors Peter Haas, Ph.D., Principal Investigator; Kristin Sullivan Massey, M.P.P.; Linda O. Valenty, Ph.D.; and Richard Werbel, Ph.D.-		8. Performing Organization Report No. 00-1
9. Performing Organization Name and Address Norman Y. Mineta International Institute for Surface Transportation Policy Studies College of Business, San José State University San Jose, CA 95129-0219		10. Work Unit No. 11. Contract or Grant No. 65W136
12. Sponsoring Agency Name and Address California Department of Transportation Sacramento, CA 95819 U.S. Department of Transportation Research and Special Programs Administration 400 7th Street, SW Washington, DC 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

As funding from state and national sources has dwindled and demands for relief from traffic and congestion have grown, local governments and transportation agencies are increasingly left to develop their own sources of enhanced revenues. Frequently the bid to increase available revenues comprises a local ballot measure, enabling the citizens served by these governments and agencies to express their preferences for or against increased taxation in support of an improved transportation system. What determines the success of campaigns in support of such ballot measures? To answer this question, this report includes the use of two different approaches and data sources.

1) A statistical analysis of *community-level characteristics.* Data from localities across the nation, as well those within the state of California, that have conducted elections for transportation tax increase are analyzed to determine what factors seem to affect the outcome of such elections.

2) Case studies of four communities that recently conducted elections for transportation tax increases (Santa Clara and Sonoma Counties in California, and the Denver and Seattle metropolitan areas). The case studies allow for in-depth, qualitative understanding of what election strategies and other campaign elements comprise successful or unsuccessful efforts to raise local revenues.

Among the most significant findings from the statistical analysis of local elections were the following:

Efforts to fund transportation with taxes where the proportion of elderly is greater than 9 percent are more likely to succeed In communities where the percentage of elderly is greater than 9 percent, the analysis indicates that voters may be more willing to accept local transportation taxes. However, in communities where the percentage of elderly is less than 9 percent, transportation measures may require significantly more determined marketing to enhance the probability of passage.

Efforts to increase sales taxes for transportation programs will be less successful in communities with higher sales taxes.
A relatively strong and negative relationship between sales tax and support for transportation tax initiatives was identified in the national election data. This suggests that communities with relatively higher sales taxes will be hard pressed to convince citizens to support additional increases.

17. Key Words coalitions, legislation, policy, policy analysis, public policy, team building, 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	20. Security Classif. (of this page) Unclassified	21. No. of Pages	22. Price

Form DOT F 1700.7 (8-72)

Copyright © 2000 by IISTPS
All rights reserved

NTIS is authorized to reproduce and sell this report. Permission for further reproduction must be obtained from the copyright owner.

Library of Congress No. 99-076280

To order this publication, please contact the following:

Mineta Transportation Institute
College of Business BT-550
San José State University
San Jose, CA 95192-0219
Tel (408) 924-7560
Fax (408) 924-7565
e-mail: iistps@iistps.cob.sjsu.edu
http://transweb.sjsu.edu

PROTECTED UNDER INTERNATIONAL COPYRIGHT
ALL RIGHTS RESERVED
NATIONAL TECHNICAL INFORMATION SERVICE
U.S. DEPARTMENT OF COMMERCE

Reproduced from best available copy.

ACKNOWLEDGEMENTS

The Mineta Transportation Institute has received funding through the California Department of Transportation (Caltrans) and the Research and Special Programs Administration (RSPA) of the U.S. Department of Transportation to conduct policy related activities in the areas of research, education, and information sharing with a focus on United States surface transportation.

In addition to the research team and interviewees, the authors thank the many individuals who helped to complete this project, including Institute Research Director Trixie Johnson and Communications Manager Jeanne Dittman. A special thank you goes to Brian Taylor, Ph.D. and Assistant Professor of Urban Planning at the UCLA School of Public Policy and Social Research, for his invaluable contribution.

TABLE OF CONTENTS

EXECUTIVE SUMMARY **1**

INTRODUCTION: THE DEVOLUTION OF TRANSPORTATION FUNDING **3**
Organization of this Report 4
The Evolution of Transportation Funding in Metropolitan Areas 5

THE IMPACT OF COMMUNITY CHARACTERISTICS ON TRANSPORTATION FUNDING OUTCOMES **21**
Predictor Categories 23
Methodology 25
Results 34
Analysis of Datasets 41
Directions for Future Research 43

CASE STUDIES: CAMPAIGNS FOR TRANSPORTATION TAX MEASURES IN FOUR COMMUNITIES **47**
Introduction 47
Prior Research on Voter Influences Pertaining to Local Transportation Funding Initiatives 47
Recommendations for Obtaining Voter Approval of Transportation Funding Initiatives 49
Evaluation of Recommendations for Obtaining Voter Approval of Transportation Funding Initiatives 51
Case Study I 53
Case Study II 65
Case Study III 81
Case Study IV 93

CONCLUDING OBSERVATIONS AND RECOMMENDATIONS **109**
Introduction 109
Critical Success and Failure Factors: Transportation and Funding Package 111
ABBREVIATIONS AND ACRONYMS **133**
BIBLIOGRAPHY **134**
ABOUT THE AUTHORS **139**
PRE-PUBLICATION PEER REVIEW **140**

LIST OF FIGURES

Figure 2-1. Type of Funding Mechanism on Transportation Tax Measures in U.S. 44
Figure 2-2. Percentage Voting for Transportation as a Function of Funding Mechanism 44
Figure 2-3. Percentage Voting for Transportation as a Function of Population Growth 45
Figure 2-4. Percentage Voting for Transportation as a Function of Driving Alone 46

LIST OF TABLES

Table 2-1. Dependent Variable 26
Table 2-2. Independent Variables 27
Table 2-3. Regression Specification for National Dataset 28
Table 2-4. Hypotheses for National Dataset 28
Table 2-5. Dependent Variable 30
Table 2-6. Independent Variables 30
Table 2-7. Regression Specification for California Dataset 32
Table 2-8. Hypotheses for California Dataset 33
Table 2-9. Average County Population for Measures that Passed/Failed 35
Table 2-10. Model: Dependent Variable = Proportion Voting for Transportation Measure 36
Table 2-11. Summary of results: California Data 37
Table 2-12. Average County Population for Measures that Passed/Failed 39
Table 2-13. Summary of Results: National Data 40
Table 3-1. RTA Proposal 89
Table 3-2. PR Funding 91
Table 3-3. The percentage of 'yes' votes for each county in both the 997 GTR election and the 1995 TABOR override. 106
Table 4-1. Comparison of Cases on Relevant Characteristics Pertaining to Coalition Building, a Transportation and Funding Package, and Marketing and Communications Programs Targeted at Voters 109

EXECUTIVE SUMMARY

As funding from state and national sources has dwindled and demands for relief from traffic and congestion have grown, local governments and transportation agencies are increasingly left to develop their own sources of enhanced revenues. Frequently the bid to increase available revenues comprises a local ballot measure, enabling the citizens served by these governments and agencies to express their preferences for or against increased taxation in support of an improved transportation system. What determines the success of campaigns in support of such ballot measures? To answer this question, this report includes the use of two different approaches and data sources.

1) A statistical analysis of *community-level characteristics.* Data from localities across the nation, as well those within the state of California, that have conducted elections for transportation tax increase are analyzed to determine what factors seem to affect the outcome of such elections.

2) *Case studies* of four communities that recently conducted elections for transportation tax increases (Santa Clara and Sonoma Counties in California, and the Denver and Seattle metropolitan areas). The case studies allow for in-depth, qualitative understanding of what election strategies and other campaign elements comprise successful or unsuccessful efforts to raise local revenues.

Among the most significant findings from the statistical analysis of local elections were the following:

Efforts to fund transportation with taxes where the proportion of elderly is greater than 9 percent are more likely to succeed

In communities where the percentage of elderly is greater than 9 percent, the analysis indicates that voters may be more willing to accept local transportation taxes. However, in communities where the percentage of elderly is less than 9 percent, transportation measures may require significantly more determined marketing to enhance the probability of passage.

Efforts to increase sales taxes for transportation programs will be less successful in communities with higher sales taxes.

A relatively strong and negative relationship between sales tax and support for transportation tax initiatives was identified in the national election data. This suggests that communities with relatively higher sales taxes will be hard pressed to convince citizens to support additional increases.

The case studies were used to identify strategic measures that advocates of transportation tax packages could use to bolster their odds for success. Among the key findings were the following:

- A budget cap should be identified to determine the magnitude of the transportation package. This budget cap will help create a transportation package that reflects community priorities for the package.

- Priorities should be based upon information from a variety of sources. Information should be collected directly from the public through research techniques such as focus groups and surveys. Surveys can be useful in identifying voters' priorities. Involvement of a citizen advisory group in the decision-making process also can be useful in establishing priorities. Representatives from key interest groups, such as the business community and environmental representatives, should be included in these citizen advisory groups.

- A combination of highway and transit improvements should be included in a transportation package whenever it is possible to do so.

- Although opposition may not exist when effective coalition building strategies are used, such opposition usually will arise and it may come from surprising sources. Since the campaigns usually are of short duration, rapid responses to opposition are needed. Contingency planning is needed to provide effective rapid responses.

A general conclusion gleaned from the case studies is that passage of transportation tax measures is generally an uphill battle. This is so, even in the context of generally favorable conditions such as widespread recognition of the need for a public response to transportation problems.

INTRODUCTION: THE DEVOLUTION OF TRANSPORTATION FUNDING

Local governments and transportation agencies are increasingly asked to develop their own sources of funding for transit and other transportation improvements. As funding from state and federal sources has dwindled and local demands for relief from traffic and congestion have grown, local governments and transportation agencies are under pressure to develop new and creative ways to finance transportation.

Frequently, local efforts to increase transportation revenues take the form of a local ballot measure, enabling the citizens served by these governments and agencies to express their preferences for or against increased taxation to pay for an improved transportation system. No matter how dire the perceived need for more and better public transportation may be in individual communities, passing a local tax increase is never a foregone conclusion. For example, of 57 such initiatives for public transit over the past 10 years identified for this study, only 56 percent were successful. Similarly, 50 percent of all initiatives to fund public transportation (transit and other improvements) in the State of California since 1980 were approved by voters. While those percentages may seem attractive, vast amounts of time, effort, and other resources were expended in the many losing efforts.

What determines the success of campaigns in support of such ballot measures? Two general explanations are typically offered. First, it is thought that the outcome of local ballot measures is determined largely by the demographic, socioeconomic, and geographic characteristics of communities. For example, the likelihood of passing a transportation initiative might increase with the population and income of a community, all other things being equal. In such cases, the characteristics of a community could determine the success of local campaigns for transportation ballot measures, meaning that the specific efforts of local transportation funding measure supporters might be less important than the environment in which they occur.

The second explanation for the relative success or failure of such measures lies in the campaign efforts of supporters and opponents. Here the strategies, tactics, and approaches are central to the outcomes of transportation finance campaigns. From this perspective, the entire sequence and range of activities associated with devising and campaigning for a transportation ballot measure are potentially important. For example, the key to passing such a measure might lie in the crafting of ballot language and the content of the measures

themselves. Or, campaign tactics like marketing techniques and use of mass media may be more important.

Of course, both explanations probably contribute to the success and failure of transportation ballots. From a research perspective, however, the relative importance of the two explanations is not known. Many forms of community-level demographic, socioeconomic, and geographic data can be assembled or derived from existing data sources. Statistical techniques such as multiple regression may be used to simultaneously measure the influence of multiple factors in explaining the outcome of transportation tax elections. However, this approach would probably be less likely to identify the potential effect of specific campaign techniques and strategies.

A more appropriate way to identify and understand the impact of specific efforts by supporters (and opponents) of a transportation measure is the case study approach. By interviewing key officials and other individuals involved with the campaign for or against a transportation measure – as well as using other techniques – much can be learned about what "works" in the context of campaigns for such measures.

The purpose of this report is to use both approaches, statistical analysis of community-level characteristics and more qualitatively focused case studies, to explore what determines the success of local transportation-related tax measures. The report contains both a statistical analysis of local election data from California (1980-1998) and the nation (1990-1998), as well as a series of four in-depth case studies of funding initiative campaigns. The findings provide insight into which factors seem to be the most influential in determining the outcome of such campaigns.

Because many communities seek guidance in crafting successful transportation tax measures, this research was conducted primarily from the standpoint of transportation tax proponents. Nevertheless, the findings may be of use to both proponents and opponents of such measures. The authors do not endorse any particular proposal and the research contained in this report is intended to provide useful information and not to advocate any particular type of measure.

ORGANIZATION OF THIS REPORT

This report is divided into four chapters. The first chapter contains this introduction and an overview of the literature concerning the history of funding for local transportation needs. The literature review helps to establish the importance of localities raising their own funding for enhanced transportation. The second chapter contains the quantitative analysis described earlier. Both California and national data are analyzed with respect to the

impact of community-level characteristics on the outcome of local ballot measures. The third chapter consists of the findings from case studies of local transportation-related tax initiatives in four communities (Sonoma and Santa Clara Counties in California, the Seattle-Tacoma region, and Denver). The last chapter provides a collation and synthesis of the findings from both the quantitative analysis and the case study research.

THE EVOLUTION OF TRANSPORTATION FUNDING IN METROPOLITAN AREAS

This section reviews previous research on the devolution of decision making and financial authority in transportation from the federal government and the states to regional governments and counties over the past two decades, with an emphasis on the increasing role of local finance instruments for transportation.

The political and institutional context for the devolution of transportation decision making

This section explores the public finance of transportation facilities during the twentieth century, with particular emphasis on one state—California—to provide state-specific insights on devolution. Most of the conditions and developments associated with California in this discussion apply to some extent to major metropolitan areas in states across the country. The focus here is on the factors affecting *decision making authority* and *financial responsibility* for the local transportation finance plebiscites.

Financing metropolitan highways and public transit

As early as the 1920s, when the automobile emerged as more than just a pleasure vehicle, transportation planners have struggled to cope with growing automobile use and chronic traffic congestion in cities (Brown et al. 1998). In the 15 years following the end of World War II, the states and the federal government combined in an enormous financial commitment to inter-urban and intra-urban highway development. This highway development effort, of which the Interstate and Defense Highway System was the largest single component, combined with new home mortgage programs and rising real incomes to rapidly accelerate a process of residential and commercial suburbanization which dated from the turn of the century. Rapid metropolitan freeway development in the post-war era generally accommodated burgeoning automobile use until funding began to run short in the late 1960s. Significant growth in highway development costs and increasing environmental permit requirements on one hand and a dependence on inflation-vulnerable fuel taxes levied on a per-gallon basis on the other combined to vise metropolitan freeways in a cost-revenue squeeze from which they have yet to emerge (Taylor 1995).

While metropolitan road and freeway development has dramatically declined since the mid-1960s, automobile travel has continued to grow. This growth is due both to increases in population and to increased levels of automobile use. The predictable result, of course, has been chronic traffic congestion in cities. In 1996, 22 percent of lane miles in California's corridors of high economic significance were rated Level of Service (LOS) F, a breakdown of traffic flow to stop-and-go conditions (Commission on Transportation Investment 1996). Throughout much of the 1980s and 1990s, California voters and local authorities have identified transportation as one of their most pressing concerns. As a result of these concerns, voters have demanded greater participation in the transportation decision-making process and local officials have sought greater control over transportation planning outcomes.

Revenues for highway construction have not kept up with demand

The number of vehicle miles traveled (VMT) has increased steadily since the 1910s. Particularly since 1980, demand for transportation has increased considerably in California. Although VMT have increased more than 50 percent since 1980, delay due to congestion has more than doubled (ACIR 1988). Despite the increase in demand for highway access, the amount spent for California highway right of way has decreased substantially from a high of $.90 per 100 VMT in 1956 to only $.10 per 100 VMT in 1988 (Taylor 1995). The inability of federal and state governments to spend more on transportation infrastructure is due largely to the inability of the main funding mechanism, the gas tax, to keep up with inflation (Brown et al. 1998). The gas tax, currently set at just over 36 cents per gallon, has a built-in "sunset clause" associated with inflation and increasing fuel efficiency. That is, without yearly increases, the purchasing power of the monies derived from the gas tax decrease as inflation and vehicular fuel efficiency increase.

Additionally, transportation infrastructure costs have risen. This rise is due to the significant increase in the cost of rights-of-way in urban areas and larger numbers of federal and state mandates for transportation planning, such as the requirement for environmental impact review. These costs have occurred without corresponding increases in funding to pay for them and have greatly expanded costs for providing transportation infrastructure. In sum, the inability of federal and state governments to exact yearly gas tax increases, when combined with continuing increases in the construction costs for transportation infrastructure, has resulted in a revenue shortfall (Taylor 1995). It has been increasingly difficult to finance needed transportation improvements with revenue from these funding mechanisms. As a result, voter dissatisfaction with state and federal governments' ability to find solutions to transportation problems has also increased (Brown et al. 1999).

Cutbacks in federal aid compel local action

During the 1980s, the federal government's emphasis on greater local and regional responsibility for transportation decision making was limited considerably by significant cutbacks in financial aid (Zoller & Capizzano 1997). As a result, local jurisdictions were encouraged to seek local financing to fund transportation projects. Clearly, the perception that local transportation finance ballot measures are more politically feasible than statewide measures has contributed to rising levels of funding available to localities (Brown et al. 1998). Like cities and counties in most states, the cities and counties in California are not allowed to impose a gas tax for transportation (ACIR 1988). However, several counties, desperate to avoid state spending limitations on transportation, persuaded legislators to pass SB878 in 1986. SB878 authorized nine San Francisco Bay Area counties plus Fresno to place dedicated sales taxes of up to 1 percent on the ballot to finance transportation projects to be approved by a simple majority (Colman 1987). In several California counties, the public has supported the notion of local control and generally believed in the increased availability of local tax revenue, and so were able to successfully pass local sales taxes dedicated entirely to transportation (Brown et al. 1998).

To better contextualize the devolution of transportation funding in metropolitan areas, the sections below offer a short history of transportation finance in one state, California, as an example of the shifting institutional roles and responsibilities for metropolitan transportation planning and finance.

Transportation finance in California

1. 1910-1930: Increasing demand for road construction; State sponsored financing

Emergence of the automobile as more than just a pleasure vehicle

In the early years of the highway program, the automobile was regarded as a pleasure and recreational vehicle rather than an important means of transportation. Consequently, highways consisted of relatively short sections, built from city to countryside (Weiner 1986). With the surge in automobile ownership between 1900 and 1919, automobile owners organized and lobbied for better roads. Doubting the capacity of local government to generate sufficient revenue or to have adequate construction expertise, automobile clubs lobbied state legislature for direct state involvement in road financing and construction. In California, that political pressure paid off when the legislature enacted the State Highway Act of 1909 that created a 3,082 mile state highway system.

The system in California, as in many other states, relied on bond financing to be retired with general tax revenues. By 1922, however, nearly 44 percent of

all California state revenue had been devoted to the state highway program. New bond issues were not able to keep up with the demand for new roads. As a result, innovations in the current funding mechanism were investigated (Brown et.al. 1999). In 1923, a gas tax was adopted in California as it was in that era by many other states. Due to its popularity, the gas tax became the primary instrument by which revenues were raised for the construction and maintenance of the state's highway system until the 1990s.

These funding methods, however, were not without controversy. By the mid-1920s, resistance to the gas tax occurred in several states around the country as these states began to use the gas tax money for non-road-building purposes. As a result, the petroleum industry and automobile clubs waged successful campaigns to ensure that state tax revenues were not diverted from highway purposes (Brown 1998).

Recognition for the need to plan transportation projects

The need for a systematic approach to highway planning was recognized in the 1930s as rapid growth in automobile ownership and highway travel placed increased demands on an inadequate highway system (Weiner 1986). In 1934, with the passage of the Federal Aid Highway Act, Congress created a cooperative arrangement between the U.S. Bureau of Public Roads (now the Federal Highway Administration) and the state highway departments. Demand for road construction continued but the arrival of the Depression put many Californians out of work and imperiled state and local government revenue-generating sources. The legislature responded with increased financial aid in urban areas designed to put more Californians to work.

2. 1930-1960: Increasing demand for road construction; Corresponding financing available

Great public, business and political support for federal investment in highway construction

The public and many businesses were strong supporters of federal investment in highway construction. In 1947, the *California Report on Highways, Streets and Roads*, reported that "the present system does not have sufficient capacity to move existing volumes of traffic economically, safely, or conveniently" (p.4). California's response to the need described in the report was to ensure that key segments of the system were rebuilt "to modern standards of lane capacity, alignment and grade; and all tested devices for minimizing traffic hazards... be built into the system without delay." (p.4)

Nearly everyone favored the construction of the interstate highway system and the dramatic increase in federal aid that would support it (Brown et al. 1998). At that time, the advantages of automobility were so great and the potential

problems (community disruption, air pollution, noise pollution, ground water pollution, and vulnerability to international oil shocks) so speculative, that autos and highway development were almost universally popular. Highways were widely associated with economic benefits of congestion relief and the pleasurable experiences of free-flowing driving and easy access to the countryside. Furthermore, individual Americans had substantial investment in their cars and were "amenable to the suggestion that good roads were essential for their full utilization." (Altshuler 1978) Public support for highways was in part due to the lack of competition. Privately-owned public transit companies were widely unpopular in many cities, and offered little service in small towns or rural areas (Jones 1985). The automobile, in contrast, could reach rural areas and with the construction of additional roads would provide even greater freedom from dependence of poorly maintained private streetcar systems.

In addition to general public support, there was great industry support for highway construction. The automobile, trucking, oil, and rubber industries, and the labor unions campaigned and lobbied for new roads, arguing that not only would highway construction serve mobility and defense objectives, but would also help to attain many of the employment and economic objectives of the country. Such claims were not, as it turns out, farfetched; roughly one-sixth of all American businesses employing one-seventh of American employees are involved in the highway and automobile industries (Altshuler 1978). Highways and highway expansion had support from a significant proportion of the nation's largest companies – all of the top seven and 12 of the top 15 companies in *Fortune's* annual ranking of the largest industrial companies in America had ties to automobile, oil, and steel companies (Altshuler 1978).

Furthermore, there was great political support for highway construction. Businesses and workers that would benefit were spread fairly evenly across congressional districts compared to transit options which were concentrated in predominantly urban areas. About 60 percent of all transit patronage in the early 1990s were on the 10 largest public transit systems. (Taylor and McCullough 1998).

Growing demand that road money be used exclusively for roads

There was growing debate between the 1930s and 1950s about government's intent in financing transportation infrastructure using the gas tax. In California, as in all states, decisions about local transportation projects had been controlled at the state and federal level for most of the century. In California, the California Department of Transportation (Caltrans) was the agency primarily responsible for controlling highway construction projects. In fact, the California Constitution generally required that the state commit transportation

revenues to the construction and maintenance of highways, roads, and streets, or in certain cases, to the construction of urban rail transit projects.

Near the close of World War II, a system of highways designated as the "National System of Interstate and Defense Highways" was authorized in the Federal Aid Highway Act of 1944. The final route choices recommended by the U.S. Bureau of Public Roads were influenced as much by strategic necessity and other issues such as population density, concentrations of manufacturing activity, and agricultural production, as by existing and future traffic density. The importance of the system within cities was recognized; however, it was not the intent of the program that these highways serve urban commuter travel demands in major cities. In fact, it was determined "both locally and nationally, to recognize the recommended systems as that system and those routes which best and most directly join region to region and major city to major city" (Weiner 1986). In 1947, a 37,700 mile network of the most heavily traveled routes was adopted for inclusion in a National System of Interstate Highways. Funds appropriated, however, were at very low levels (with a 50 percent federal share) through 1956 (Weiner 1986).

When World War II ended, California faced a very serious shortfall of highway revenues as materials and manpower were diverted to the war effort. However, highway traffic continued to grow, especially heavy vehicle traffic used to transport war-related materials which caused enormous damage to highways and bridges designed to carry much smaller loads. In the face of the enormous postwar maintenance and construction needs, the legislature established a series of special committees to analyze the situation. In California, the Collier-Burns Act of 1947 was passed, increasing gas taxes to 4.5 cents per gallon. The act also created a Highway Users Tax Fund in California that ensured that taxes collected would be used solely for highway and street construction.

While highway departments were placing a major emphasis on arterial routes, city street congestion was steadily worsening. It was in this atmosphere that the Committee on Urban Transportation was created by Congress in 1954. Its purpose was "to help cities do a better job of transportation planning through systematic collection of facts...to afford the public the best possible transportation at the least possible cost and aid in accomplishing desirable goals of urban renewal and sound urban growth." They developed a guidebook in 1958 to help local officials establish an orderly program of urban transportation planning. It stressed the need for "cooperative action and the development of transportation systems in keeping with the broad objectives of community development." (Weiner 1986)

In 1957, the Federal Aid Highway Act increased the authorized network to 41,000 miles intending to link 90 percent of the cities with populations of 50,000 or more. Specifically, it authorized $24.8 billion over 13 years from 1957 to 1969, and this time at a much higher federal match – 90 percent. The companion act, the Highway Revenue Act of 1956, increased federal taxes on gasoline and other motor fuels, and increased excise taxes to create a Highway Trust Fund that would receive tax revenue dedicated solely for highway purposes (Weiner 1986). Thus, legislation authorized in the late 1950s, marked the beginning of the modern era of highway finance with its temptingly large federal matching grants.

While the Collier-Burn Act jump-started freeway development in California, in most other states development was simply too costly for state or local jurisdictions to fund prior to the passage of the Highway Revenue Act of 1956. As a result, and for almost two decades after 1956, the focus of attention in the urban transportation policy arena was on major capital projects (Altshuler 1979).

By 1959, the deluge of new federal highway money, combined with California's own surpluses ($110 million in 1957 and $145 million in 1958) prompted the California state legislature to embrace a superhighway system of its own, the Division of Highways' 12,000 mile Freeway and Expressway System plan. The state's program "enjoyed nearly universal support because it provided 12,241 miles of high quality roads to California motorists without asking them to pay a penny more in taxes than they were already paying" (Brown et al. 1998). From the 1930s through the 1950s, growing awareness of transportation-related urban problems led to an increase in funding for metropolitan highways

3. 1960-Present: Increasing demand for transportation; cost inflation, revenue erosion

Local control over highways has gradually increased, through a series of state and federal policy decisions, over the past two decades. Beginning in the 1980s, the use of county sales tax supplements was an early step in the direction of local control.

Recent recognition of unmet transportation needs

By the late 1960s, the urban transportation planning process was criticized on a number of fronts. Criticism was directed at the fact that the planning process did not adequately treat social and environmental impacts, was not multi-modal, and focused almost exclusively on long-range time horizons. Further, technical procedures were too cumbersome, time-consuming, and rigid to adapt to new issues quickly (Weiner 1986). As a result, in 1962, the Federal

Aid Highway Act declared that it is in "the national interest to encourage and promote the development of transportation systems embracing various modes of transport in a manner that will serve the states and local communities efficiently and effectively." (Weiner 1986)

To address concerns that the federal government was not meeting its responsibilities in providing basic mobility, the Urban Mass Transportation Act was enacted in 1964. It was designed to ensure that they provided funding to maintain service quality through transit expansion and improvements; but also mandated that "fiscal discipline" be guaranteed by requiring that operating costs be covered by fare box revenues (Altshuler 1978). For example, in 1962 voters in the San Francisco Bay area were presented with the BART proposal which assured that no operating subsidies would be required (Altshuler 1978). In 1970, the Urban Mass Transportation Assistance Act provided the first long-term commitment of federal funds for mass transportation, a federal commitment of at least $10 billion over a 12-year period (Weiner 1986).

At the 1974 Mt. Pocono Conference on Urban Transportation Planning, decision makers recommended close coordination of planning efforts as a means of achieving orderly development of urban areas and relating the planning process more closely to decision making processes at all levels of government. It urged that urban planning be strengthened through state enabling legislation and bolstered by equitable local representation. The conference report went on to urge that "this more inclusive kind of planning be supported by flexible funding from the federal government." This was to be done to prevent preference for any particular mode and to avoid an imbalance in specific urban transportation decisions that could be contrary to local goals and priorities (Weiner 1986).

Additional program requirements strained budgets

In California, the California Environmental Quality Act (enacted in 1970) altered the context in which highway design was to be conducted. In general it required that before a construction project proceeded, its effect on the natural environment must be assessed and where feasible, effort should be made to mitigate any negative effects. Similarly, any negative effects on the social or economic fabric of a community must be identified and attempts made to mitigate when feasible. Finally, Environmental Impact Review (EIR) statements were required to be circulated among interested agencies and private groups. This has resulted in a large increase in the number of participants in highway investment decisions, not all of whom share the common belief in the benefits of highway projects. The process is both complex and time consuming, perhaps made more so by the general perception that the interpretation and accommodation of the requirements of this body of

law was difficult (Commission on State Government 1983). Finally, the Federal requirements for accessibility by the disabled and elderly required manpower and time, and resulted in a need for additional financing (Altshuler 1979).

New sources of financing available to localities

In 1997, the California legislature passed Senate Bill 45, which granted regional control over 75 percent of the funds available for the State Transportation Improvement Program (STIP). In addition, counties began to use sales taxes to finance transportation (Brown, et al., 1998). In the 1980s, counties were given the option to raise additional sales tax revenue for transportation purposes resulting in 18 counties (as of 1999) which had enacted local sales taxes dedicated to transportation (Brown et al. 1998). By 1996-97, they had raised almost a quarter as much revenue as the state fuel taxes had raised for highways (approximately $400 million).

Property taxes have long been another important source of transportation funding, particularly for local streets and roads. In 1995, for example, they contributed $145 million toward local streets and roads (Brown et al. 1998).

In 1981, SB 215 instituted county minimum expenditure requirements which mandated that at least 70 percent of the funds in each county be distributed among the counties on the following basis: 75 percent of this percentage is distributed according to each county's population relative to the total population in its county group; the other 25 percent is distributed according to how many state highway miles each county has open to travel (Commission on California State Government 1983).

Revenues for highway construction decline

From the mid-1960s through the late 1980s, highway construction and maintenance costs increased, while available revenue declined in real dollar terms. During the 1960s, cost inflation began to occur, but legislators were able to mitigate this problem by extending the build-out phase of various projects rather than by enacting substantial tax increases or reducing the scale to program commitments. By the end of the 1960s, the ability of the gas tax to respond automatically to inflation became a serious issue. Mild inflation in the late 1960s due to the Vietnam War and severe inflation in the 1970s due to the oil crisis further reduced the purchasing power of gas tax revenue. Between 1964 and 1982, the gas tax entered a period of substantial decline during which its buying power was again eroded, this time by well over two-thirds. Today, if the purchasing power of the gas tax were lowered to (inflation-adjusted) 1964 levels, the current gas tax would have to be doubled (Taylor 1995).

Additionally, through the 1960s, annual gasoline consumption (and hence fuel tax revenue as a result of gas taxes), exceeded increases in construction costs. This began to change in about 1970 as construction costs began to rise. And, California's return from federal highway tax dollars dropped from a high of 85 cents of every dollar to little more than 60 to 65 cents in the 1980s (Commission on California State Government 1983).

In the 1970s, the gas tax was enormously affected by energy conservation policies. The new concern over energy policy began with the oil embargo of 1973. In only a few short years, gasoline and other energy prices tripled and concern over America's energy dependence on foreign oil became a leading public issue. A particularly salient legacy of the Energy Policy and Conservation Act of 1975 with regard to transportation financing, was the establishment of the vehicle fuel efficiency standards. As a result, automakers began building more fuel-efficient vehicles (Brown et al. 1998). More fuel-efficient cars reduced tax revenue even further by increasing the distance commuters could travel on a gallon of gas.

Between 1964-1983, California did not change the gas tax, while at the same time, cost inflation for transportation construction soared. Between 1952 and 1967 the annual rate of increase in highway construction was 2 percent. Between 1968-1973, it was 10-12 percent; between 1975-1980 it was 18 percent (Commission on California State Government 1983).

In California, the 1960s saw general inflation at an average of 2.4 percent vs. 8.2 percent for highway construction. In the 1970s, general inflation averaged 8.7 percent vs. 12.1 percent for highway construction. The rapid construction cost inflation was associated with a general rise in maintenance and construction costs, an upscaling of highway design standards, increased urban right-of-way costs, and the ongoing costs of complying with federal environmental legislation enacted in the 1970s (Taylor 1995). As a result, the 10-year approach to highway development was curtailed. In 1977, the legislature initiated new reforms when it enacted the Alquist-Ingalls Act. It created the State Transportation Improvement Program (STIP), a process which established the requirement that Caltrans develop a five year schedule of highway and other transportation investments (Commission on California State Government 1983).

In addition, states began to rely on the sales tax to finance transportation because of the need for additional revenue and the sales tax's inability to keep pace with inflation (Brown et al. 1998). In 1971, California enacted the Transportation Development Act which extended the state sales tax to gasoline, thus making new revenues available for urban mass transit and streets

and roads in rural areas. However, despite this increase in revenue, in general the state and federal governments' response to declining fuel consumption and rising inflation was to delay transportation projects. In California, Caltrans extended the scheduled completion of projects into the 1990s and reduced or eliminated some highway projects entirely (Brown et al. 1998).

In 1979 the California Legislative Analyst's Office, the California Transportation Commission (CTC), and Caltrans began warning of an impending financial crisis in transportation (Brown et al. 1998). In 1972, 13 years after the creation of the system, there was a backlog of $10 billion in projects; and the backlog was projected to reach $20 billion by 1980. As a result, Caltrans announced that the state faced a $915 million shortfall in the five year State Transportation Improvement Program. The State legislature responded by passing Senate Bill 215 in the 1981-1982 session. Drivers license fees were increased to $6.75, vehicle registration fees were increased to $22, and state, gas, and diesel taxes were increased from seven to nine cents (Brown et al. 1998). However, there was a widespread belief that this too was only a stopgap measure and that periodic increases would be necessary to keep pace with inflation.

By 1990, the California Transportation Commission and Californians for Better Transportation perceived that statewide transportation needs were close to $40 billion (Brown et al. 1998). The October 1989 earthquake, which devastated portions of San Francisco and the Monterey Bay areas, provided the motivation to authorize a series of tax and bond increases to improve transportation infrastructure with two bills. SB 300 increased the gas tax to 18 cents per gallon; AB 471 raised commercial vehicle weight fees by nearly 60 percent. These were passed along with special state sales tax increases to repair earthquake damage and an earthquake retrofit bond measure. SB 300 and AB 471 were developed to be components of a 10-year financial package called the *Transportation Blueprint for the 21st Century.* The Blueprint also called for bond measures, which authorized the state to issue $1 billion in general obligation bonds to pay for the construction of rail systems.

Since these tax increases exceeded constitutional limitations, legislation had to be submitted to voters to amend the California constitution. Voters overwhelmingly passed the amendment, named Proposition 111, the Traffic Congestion Relief and Spending Act of 1990. Voters also passed Proposition 116, which authorized the state to sell $1.99 billion in general obligation bonds to pay for intercity and commuter rail systems. The propositions increased projected transportation revenues by some $18.5 billion over 10 years through the gas tax, diesel and vehicle weight fee increases. However, this met only a part of the actual identified need ($40 billion).

A comparison of revenue generated per VMT in 1960 to revenue generated per VMT in the late 1990s, indicated that it would be necessary to increase state gas taxes by 29.9 cents just to match revenue generated per vehicle mile traveled in 1960. That is, a fuel tax of nearly 48 cents per gallon would be required to account for the erosion of the state fuel tax due to both travel increases and inflation over the period between 1960 and 1997. As a result, the cost to drive (per mile) is now much less than nearly four decades ago, although today more people rely upon and expect the safety and accessibility of roadways than in 1960 (Brown et al. 1998). Furthermore, unless taxes are increased, altered, or replaced at either the state or federal level, the purchasing power will continue to erode (Brown et al. 1998)

Federal government supports devolution

By the 1960s, a growing number of urban legislators criticized the urban transportation planning process for failing to adequately address social and environmental problems by over-emphasizing development and ignoring deteriorating public transit systems (Weiner 1986). To address these problems, a series of legislative initiatives were adopted to increase subsidies to public transit and, later, to increase local decision making authority.

Until the 1960s, the federal government established separate programs for public transit and highways. In the 1960s, the federal government began to develop objectives that were not mode specific. In 1962, a joint report on urban mass transportation identified common objectives for highways and mass transit: "Major objectives of urban transportation policy are the achievement of sound land-use patterns, the assurance of transportation facilities for all segments of the population, the improvement of overall traffic flow, and the meeting of total transportation needs at minimum cost. Only a balanced transportation system can attain these goals and in many urban areas this means an extensive mass transportation network fully integrated with the highway and street system (Weiner 1986)."

The objective of integration with the street system required the participation of local transportation authorities. Toward this end, the Federal Aid Highway Act of 1962 required that the approval of any federal aid highway projects in urbanized areas of 50,000 or more in population be based on a *continuing* and *comprehensive* urban transportation planning process carried out *cooperatively* by states and local governments (dubbed the "3C" process) (Weiner 1986).

Not until the late 1960s, however, did broad support for local participation begin to emerge. In 1970, the Federal Aid Highway Act further strengthened the influence of local officials in urban areas with the statement "No highway project may be constructed in any urban area of 50,000 population or more

unless the responsible local officials of such urban area... have been consulted and their views considered with respect to the corridor, the location, and the design of the project (U.S. Department of Transportation in Weiner 1986)."

In the early 1980s, the Reagan administration wanted to decrease the federal role in transportation even further (Smerk 1991). In 1991, federal legislation in the form of the Intermodal Surface Transportation Equity Act (ISTEA) gave regions more discretion over federal funds than ever before. Like previous acts, it authorized funding for highway programs, bridges, tunnels, rail, and safety. ISTEA was revolutionary, however, because it placed a new emphasis on intermodalism, encouraged funding flexibility, and encouraged greater local decision making. In particular, it allowed a large portion of highway funds to be used for mass transit (Brown et al. 1998). Rather than focus on a national highway system, ISTEA's authors envisioned a National Intermodal Transportation System linking intermodal facilities (Anderson 1995).

ISTEA implicitly promoted intermodal and multimodal transportation systems by emphasizing funding flexibility across modes (Anderson 1995). It delegated transportation planning and programming responsibilities explicitly to state and local governments. ISTEA encouraged greater local decision making by devolving transportation planning and programming responsibilities to state and local governments and by giving Metropolitan Planning Organizations more responsibility for developing long-range transportation improvement plans for their regions (Anderson 1995).

ISTEA made changes to the planning process, the types of projects that could be considered, and the financing requirements. In order to encourage local concerns and a variety of perspectives about the effects of transportation, ISTEA required that all Metropolitan Planning Organizations (MPOs) consider the "overall, social, economic, energy, and environmental effects of transportation decisions (Zoller & Capizanno, 1997)." Toward this end, ISTEA required that the planning process change to include greater community involvement (public agencies, citizens, and private providers of transportation) in transportation decisions. About $155 billion was made available in fiscal years 1992 to 1997.

ISTEA represented a change in how surface transportation was planned and funded in the United States. It was revolutionary because it placed a new emphasis on intermodalism and it afforded greater flexibility to states and localities, allowing them to be the primary determinants of how transportation priorities were set and how transportation funds were spent. In fiscal year 1992, a total of $16.9 billion was obligated while transfers from highways to transit totaled $302.4 million. To instill flexibility, FHWA simplified

procedures for transferring Surface Transportation Program funds between highways and transit. ISTEA encouraged states to develop cost-sharing partnerships with the private sector (Larson 1993) and placed a strong emphasis on efficiency, productivity, and environmental responsibility (Miller 1992). Most recently, the passage of the Transportation Equity Act for the 21st Century in 1998 (TEA-21) redefined intergovernmental relationships and continued the policy of giving regions greater transportation decision making authority vis á vis the federal government.

Voter resistance to new taxes

Since the 1970s, Americans have become increasingly skeptical about the local benefits of growth (and related funding priorities that encourage growth, such as transportation). As a result, voters have been resistant to new taxes for transportation (Altshuler 1993). Furthermore, voters have become more suspicious of the state's ability to govern effectively. In California, voters passed Proposition 13 in 1978 in part to limit property tax increases to pay for what they believed was suspect public investment. Proposition 13 rolled back property tax valuations to their 1975 valuations initially and set the property tax rate at 1 percent. As long as property is held by the original owner, it is valued a the 1975 rate plus a 2 percent per year inflation allowance. This trend has continued throughout the 1990s and has been replicated in many other states and localities. Throughout the 1990s, increasingly local control of government has won increasing acceptance for several reasons: Republicans have promoted the idea of government that is smaller, more efficient, and closer to the people; the Supreme Court has increasingly ruled in favor of state's rights; and robust economy has reduced the perceived need for big government (*The Economist* 1998).

Voters want government accountability

In the early 1900s, Californians wanted a state government that intervened in the welfare of its citizens. However, voters became skeptical of the state government's ability to govern effectively as local benefits became less apparent and negative impacts became more obvious (Altshuler 1993). In particular, during the mid-1970's, transportation issues began to reach a critical stage where citizens publicly resisted the negative impacts of the automobile—including air pollution, community disruption, urban sprawl, and vulnerability to reliance on international oil. Furthermore, local jurisdictions began to question the wisdom of relying on federal and state funding to finance and build road projects, particularly when these were believed to contribute significantly to negative impacts on the environment and land use. In such an environment, legislators became reluctant to raise state gas taxes to fund highway projects (Brown et al. 1998). More recently, term limits imposed by

voters have decreased the expertise of legislators, especially in technical areas such as transportation. As a result of these developments, state and federal government control in transportation decision making has steadily eroded, and in response, local governments' authority has increased.

In the last 10 years, two changes in the political system have further removed transportation decision making from the hands of elected officials and put it into the realm of voter initiatives and public polls. The first change is the imposition of term limits. Term limits have reduced the technical expertise of legislators simply because of natural limits on the amount of technical transportation knowledge that legislators can develop within their term of office. Second, elected officials are increasingly relying on public opinion to shape and confirm their own policy choices (Brown et al. 1998). As a result, public leaders have begun to hand decision making authority on highway finance policy to the voters.

In California this trend has been most recently demonstrated by the fact that the state legislature required voter approval of the last fuel tax increase. And the population of California will be consulted continually as mandated by the legislative requirement that voters approve of any county sales taxes and regional gas taxes. Citizens of metropolitan areas across the nation are being asked to do the same thing.

THE IMPACT OF COMMUNITY CHARACTERISTICS ON TRANSPORTATION FUNDING OUTCOMES

For the most of the 20th century, local transit and highway transportation authorities relied heavily on state and federal financial aid. This has been especially true since the mid 1940s, as the demand for roads increased due to the confluence of rising incomes, increasing suburbanization, and increasing automobile ownership. As a result, federal highway aid, in particular, the Interstate Highway Act of 1956, funded the largest-scale public works project in history (Lewis & Sprague 1997). At the same time, transit service declined in part because there was a decline in transit demand as a result of increased competition from the automobile but, more importantly, because transit costs had risen as a function of increased wages (Altshuler 1979). These trends led to the Urban Mass Transportation Act of 1964, which initiated funding of public transit capital investment that has continued to the present (Lewis and Sprague 1997). Although the federal government originally required that transit operating costs be covered by fare box revenue, eventually the federal government began to subsidize operating costs as well. This federal subsidization occurred as public perception of mass transit evolved and the public began to see transit as serving a national interest by providing mobility to the transit-dependent (Altshuler 1979). As a result, over the past 30 years local highway and transit transportation authorities have operated within a fiscal environment where they rely heavily on state and federal government subsidies to maintain service quality.

The challenge for local transportation authorities to meet demand and cover costs has been made even more difficult since the 1980s, when President Reagan developed objectives to decentralize financial and decision making authority (Weiner, 1986). This trend continued through the 1990s with the passage of the Intermodal Surface Transportation Act (ISTEA) and the Transportation Equity Act (TEA-21) for the 21st century, which further devolved decision making to the local level (Zoller & Capizanno, 1997). Although increased flexibility in funding and innovative project selection is encouraged through ISTEA and its successor, TEA-21, these tools have not been successful in increasing the total amount of money available for either local transit or highway transportation authorities.

Increased flexibility has increased the revenue used to finance capital transit projects, especially for rail, but not to fund operating expenses (Federal Transit Administration, 1998). The total transit operating subsidies have not changed since 1988, resulting in a decline in federal operating assistance at an inflation

rate of 3.5 percent per year (Federal Transit Administration 1998). By 1996, fare box revenues covered only one-third of operating expenses, with federal, state, and local revenues covering the rest (Levine 1998). In addition, despite the increase in demand for highway access, the amount spent for highways has decreased substantially. In California, highway right of way decreased from a high of $.90 per 100 VMT in 1956 to only $.10 per 100 VMT in 1988 (Taylor 1995), due largely to the inability of the gas tax to keep up with inflation (Brown et al. 1998).

As a result of decreasing federal and state assistance for highway and transit, local transportation authorities have increasingly had to rely on local funding mechanisms to finance improvements and maintain service quality (Levine 1998). Specifically, local funding mechanisms available to local authorities have generally been restricted to local taxes, a process that has typically required voter approval. For example, since 1985, California counties have relied primarily on local sales tax as a major source of revenue for local transportation projects (LAO 1996). As of 1996, 17 of California's 58 counties had implemented at least a half cent local sales tax to fund local transportation (LAO 1996), raising almost a quarter as much revenue as the state fuel taxes raised for highways, approximately $400 million/year (Brown et al. 1998).

As a result, the number of local transportation tax measures that have required voter approval has increased. In California, for example, the cumulative number of local transportation measures that have required voter approval increased substantially during the 1980s, from only three measures in 1980 to over 60 measures by 1998 (see Figure 2-1). Furthermore, these measures have affected an increasing number of California residents. Since 1980, the percentage of Californians affected by the passage of voter approved transportation measures has increased from 31 percent in 1980 to over 80 percent in 1998 (see Figure 2-2).

Despite the increase in local transportation tax measures, obtaining voter approval for costly transportation projects been a challenge, in part, because pollsters and planners have typically relied on anecdotal evidence or small samples and limited experience to identify factors that may influence voters. As local communities increasingly rely on local voters to approve financing for transportation improvements, it has become more important to move beyond anecdotal evidence to an enhanced understanding of factors which affect voter reaction to transportation tax measures.

A few previous studies have found that several community characteristics may be related to the successful passage of transportation and transit tax measures (see, e.g., Levine et al. 1998). As enhanced understanding is the goal of the

present study, the validity of factors identified by previous studies is examined. In addition, the scope of these previous studies is expanded by examining two datasets for which voting outcome data were available: a nationwide sample of 57 city and county transit tax elections since 1990; and a comprehensive sample of 63 California county transportation tax elections since 1980.

Based upon the predictors that were identified in previous studies (described in detail below) seven categories of demographic variables were selected. These variables were tested to determine their effect upon the number of citizens voting for transportation tax measures.

PREDICTOR CATEGORIES

Age

Based upon interviews with transportation planners in California, Colman (1987) concluded that younger voters may be more willing than older voters to vote for transportation taxes. Harmatuck (1973) offered one explanation for a similar finding based on surveys with voters in Madison, Wisconsin. He suggested that because transit benefits may take years to be realized, older voters, for whom transit taxes (and their benefits) often extend beyond their lifetimes, may be less likely to vote for transit taxes. Others have argued that older voters may not experience the need for transportation improvements as urgently as younger voters because they are better able to modify their commute schedules to avoid congestion during peak hours.

Income

In the same study, Colman (1987) concluded that higher income voters may be less willing to vote for transportation taxes than lower income voters. Similarly, Harmatuck (1973) found that those with lower incomes tended to react more positively to transit tax issues. Harmatuck attributed the support of transit taxes by lower income individuals to potentially increased use of the service.

General economic conditions

Several planners interviewed by the journal *Passenger Transport* reported that it was their perception that economic variables have affected the outcome of transit tax measures when adverse economic circumstances have existed (*Passenger Transport* 1980-1996). They suggested that poor economic conditions, including local or national economic recessions and economic instability, even when perceived generally, can affect willingness of voters to support tax increases, even for needed transit.

Taxes

Several researchers have found that sentiment regarding taxes has negatively affected the outcome of transit tax measures. Specifically, in a poll of California voters, Citrin (1999) found that nearly 40 percent of voters expressed great discontent with increasing taxes. In addition, researchers found that sales taxes are more positively evaluated by voters when they are a component of transit tax measures. Specifically, in a historical examination of the issue, Gomez-Ibanez (1999) concluded that use of sales taxes may be more acceptable among voters in part because it more clearly links charges to users. Similarly, detailed case studies of local elections in 11 states revealed that the sales tax is more popular with voters than either the gas tax or property tax (Beale, 1996). Researchers also found, predictably, that the larger the amount of the tax, the less likely its passage (Middleton 1998, Beale 1996, Colman 1987). Finally, findings also indicated that the shorter the duration of the tax, the more likely its passage (Beale 1996, Middleton 1998).

Highly automobile-oriented population

A few authors have suggested that the considerable investment by the majority of voters in owning an automobile has discouraged voters from voting for tax increases to fund public transit. Specifically, a highly automobile-oriented population was found to negatively affect the passage of transportation tax in California (Colman 1987). Similarly, Harmatuck (1973) found that a higher degree of suburbanization negatively affected the passage of a transit tax in an examination of voting behavior. Harmatuck attributed these results to self-interest: those who are most likely users of the system have the greatest propensity to vote affirmatively (Harmatuck 1973).

Demonstrated need for transportation improvements

Several researchers have found that voters would vote for higher taxes if there was a demonstrable need for transportation improvements (Gomez-Ibanez 1999, Beale 1996). Specifically, Harmatuck (1973) found that those who were inconvenienced by the lack of transit were very supportive of a transit tax. Similarly, interviews with planners revealed their belief that severe congestion in an area must be demonstrated in order to pass a transportation tax (Colman 1987). Colman (1987) also found that rapid population growth was an important variable in demonstrating transportation needs. Accordingly, Beale (1996) found that transportation taxes could be achieved only if there was a clear need for road improvements.

Offer "something for everyone"

Several researchers found that the distribution of benefits was important in passing transportation tax measures (Beale 1998, Colman 1987, Gomez-Ibanez 1999) In interviews with transit professionals, Middleton (1998) found that

when rail or bus was offered, it was important to include something of value to non-users.

METHODOLOGY

Two regression models were developed to explain the percentage of voters in favor of passage for local transportation taxes. Models were assembled with variables that the existing literature, planners, or researchers have identified as components of voting in efforts to pass local transportation tax measures. In the first model, nine variables were examined to determine voting patterns in cities and counties from the nationwide dataset consisting of 57 domestic city and county elections from 1990 through 1998. In the second regression, a comprehensive dataset of 63 California county elections that took place from 1980 through 1998 was reviewed. Five variables were examined with respect to their potential effect upon percentage voting in those 63 counties.

Below, the datasets used for the nationwide and California analyses are described, the variables are identified, and the rationale for choosing the variables explained. The first subsection describes the nationwide sample, while the second subsection focuses on the California sample.

National dataset

Sample

For the nationwide dataset, a sample of 57 U.S. city and county transportation tax elections between the years 1990 and 1998 is used. The sample was developed by identifying all city and county transit elections that reported the percentage of voters who voted to pass transit measures. These data were reported in the journal *Passenger Transport* between the years 1990 and 1998. In approximately 85% (57 of 67) of the elections examined by the journal, the percentage voting in favor of passage for transit measures is also reported. As shown in Figure 2-3, the 57 elections represented 35 counties in 11 states, and 19 cities in 9 states.

There are some inherent limitations to data extracted from a sample of this type. Most importantly, all elections reported contained at least some element of transit, whereas in the California sample, some elections contained no transit component. Furthermore, smaller cities and counties may not be as motivated as others to report election results and so may not be included in the resulting dataset. In addition, several states were potentially over-represented and some states not included at all, and so results may represent those states selected rather than the nation as a whole.

The managing editor of *Passenger Transport* has indicated that this publication has a history of reporting election results and does remind planning

organizations to report results, but does not single out any specific cities or counties to obtain information on election results.

Variable data

The analysis uses nine public choice predictor variables described in the literature and considered by planners to contribute to the outcome of transportation tax measures. These variables are included in six general categories: age, income, tax environment, automobile-dependent population, demonstrated need for improvements, and whether benefits are spread across the general population.

Table 2-1. Dependent Variable

Category Analyzed	Variable	Variable Description
Ballot Outcome	MARGINFOR	% voting for passage of a transit tax (The percentage voting for passage was chosen for two reasons. One is that it measures voting behavior more effectively and with more variance than do pass/fail data. In addition, states have differing voting requirements for passage, including threshold percentages which must be reached to enable measures to pass. The percentage voting for transit tax elections was obtained from reports to the journal *Passenger Transport* between the years 1990 and 1998.)

Table 2-2. Independent Variables

Category Analyzed	Variable	Variable Description
Age	ELDERLY	% greater than 65 years of age was obtained from 1990 Census data.
Income	INCOME	Per capita income was obtained from 1990 Census data.
Taxes	TAXBURDEN	Per capita taxes/per capita income was calculated from 1990 Census data.
Automobile Dependent Population	AUTO	% driving to work by automobile was obtained from 1990 Census data.
Demonstrat-ed Need	HOUSING	Number of housing units/population was calculated from 1990 Census data.
Commute time	TRAVELTIME	Average number of minutes to commute to work was obtained from 1990 Census data.
Population	POPULATION	Population estimates (1990) were obtained from the National Association of Counties. http://www.naco.org/counties/.
Population Change	POPCHANGE	Population change from 1980 to 1992 was calculated from 1990 Census data
Provide Benefits for All	BENEFITS	Continuous variable based upon the number of modes described in the ballot measure, from only one mode (bus or rail or road) to several modes. This variable was obtained from election reports in *Passenger Transport.*

Table 2-3. Regression Specification for National Dataset

Variable	Variable Definition
MARGINFOR	$\beta_0+\beta_1$ *(ELDERLY)* $+\beta_2$ *(INCOME)* $+ \beta_3$ *(TAXBURDEN)* $+\beta_4$ *(AUTO)* $+ \beta_5$ *(HOUSING)* $+\beta_6$ *(TRAVELTIME)* $+ \beta_7$ *(POPULATION)* $+ \beta_8$ *(POPCHANGE)* $+ \beta_9$ *(BENEFITS)*

Table 2-4. Hypotheses for National Dataset

Variable	Predicted Effect on Voting	Predicted Effect
ELDERLY	"ELDERLY is predicted to affect passage negatively (B1<0). As the percentage of elderly increases, the % voting for passage decreases"	negative
INCOME	"INCOME is predicted to affect passage negatively (B2<0). A per capita income rises, the % voting for passage decreases"	negative
TAXBURDEN	"TAXBURDEN is predicted to affect passage negatively (B3<0). As taxes/per capita income rises, the % voting for passage decreases"	negative
AUTO	"AUTO is predicted to affect passage negatively (B4<0). As the % of automobiles used to commute to work increases, the % voting for passage decreases "	negative
HOUSING	"HOUSING is predicted to affect passage negatively (B5<0). As the number of housing units/person increases, the % voting for passage decreases"	negative
TRAVELTIME	"TRAVELTIME is predicted to affect passage positively (B6<0). As the average number of minutes to work increases, the % voting for passage increases."	positive

Variable	Predicted Effect on Voting	Predicted Effect
POPULATION	"POPULATION is predicted to affect passage positively (B7>0). As the population increases, the % voting for passage increases"	positive
POPCHANGE	"POPCHANGE is predicted to affect passage positively (B8>0). As the population change between 1980 and 1992 increases, the % voting for passage increases"	positive
BENEFITS	"BENEFITS is predicted to affect passage positively (B9 >0) when the ballot measure describes funding for several modes (transit and road), the % voting for passage increases"	positive

California dataset

Sample

For the California dataset, a comprehensive sample of 63 county transportation tax elections between the years 1980 and 1998 was used. Thirty-one California counties, mostly urban, were included in the California dataset (transportation tax measures on the ballot between 1980 and 1998) but the 27 counties, mostly rural, were not included.

Variable data

Six public choice variables were identified using data that were available for each of the predictor categories identified in the literature and considered by planners to contribute to the outcome of transportation tax measures: age, income, tax environment, tax, automobile-dependent population, demonstrated need for improvements. Data were not available for the predictor category "Benefits" (whether benefits are spread across the general population) and so it was not included in the regression equation. In addition, the percentage commuting by bus rather than the percentage commuting by car was used to measure reliance on automobiles. Finally, population density was substituted for housing density to measure the predictor category "Demonstrated Need." All other variables were identical to the variables measured for the national dataset.

Table 2-5. Dependent Variable

Category Analyzed	Variable	Variable Description
Ballot Outcome	MARGINFOR	% voting for passage of a transit tax: This category was chosen for two reasons. One is that it measures voting behavior more specifically and with more variance than do pass/fail data. In addition, states have differing voting requirements for passage, including threshold percentages which must be reached to enable measures to pass. The percentage voting for transit tax elections was obtained from a compilation of data from Public Policy Institute of California, Brown et al (1998) & Todd Goldman (1999) between the years 1980 and 1998.)

Table 2-6. Independent Variables

Category Analyzed	Variable	Variable Description
Age	ELDERLY	% greater than 65 years of age: Data for this category was obtained for the years 1991 to 1998 from the National Association of Counties http://www.naco.org/counties/counties/state. For the years 1980 to 1990, the proportion of the elderly was estimated from USA Counties data available at http://govinfo.library.orst.edu/cgi-bin/usaco-state?California

Category Analyzed	Variable	Variable Description
Income	INCOME	Per capita income for year of passage was obtained by year from the Economic Census http://govinfo.library.orst.edu/econ-stateis.html.
Types of Tax Burden	LOCAL TAXBURDEN	Per capita local taxes (including property and sales and other local taxes) was obtained from the State of California's Department of Finance http://www.dof.ca.gov/html/fs_data/profiles/pf_home.htm
	SALES TAXBURDEN	Per capita sales taxes within counties was reported separately from total local taxes, and obtained from the State of California's Department of Finance http://www.dof.ca.gov/html/fs_data/profiles/pf_home.htm
Transit use	BUS	The percentage commuting to work by transit was obtained from 1990 Census data.
Transit Use continued	AUTO DENSITY	Auto Density was calculated from the total number of auto and truck registrations by county divided by total miles of streets, roads, and highways.
Demonstrated Need	POP DENSITY	Population for the year in which the measure passed/square miles for county was calculated from http://www.sco.ca.gov/govglance/9697/gaagmap.htm

Category Analyzed	Variable	Variable Description
	POPULATION	Population estimates for July 1 in the given year were obtained from State of California, Department of Finance data at http:// www.dof.ca.gov/html/Demograp/E-6cover.htm."
	TRAVELTIME	Average number of minutes to commute to work was obtained from 1990 Census data.
Types Of Population Change Variables	POPCHANGE5	Population change during the five years prior to passage of measure was calculated from State of California, Department of Finance data compiled for July 1 of each year and available at Http:// www.dof.ca.gov/html/Demograp/E-6cover.htm.
Population Variables continued	POPCHANGE2	Population change during the two years prior to passage of measure was calculated from State of California, Department of Finance data compiled for July 1 of each year and available at http:// www.dof.ca.gov/html/Demograp/E-6cover.htm

Table 2-7. Regression Specification for California Dataset

Variable	Variable Definition
MARGINFOR	$\beta_0+\beta_1$(ELDERLY)$+\beta_2$(INCOME)$+\beta_3$(TAXBURDEN)$+\beta_4$(BUS)$+\beta_5$(AUTODENSITY)$+\beta_6$(POPDENSITY)$+\beta_7$(POPULATION)$+\beta_8$(TRAVELTIME)$+\beta_9$(POPCHANGE)

Table 2-8. Hypotheses for California Dataset

Variable	Predicted Effect on Voting	Predicted Effect
ELDERLY	ELDERLY is predicted to affect passage negatively (B1<0). As the percentage of elderly increases, the % voting for passage will decrease.	negative
INCOME	INCOME is predicted to affect passage negatively (B2<0). A per capita income rises, the % voting for passage decreases.	negative
TAXBURDEN	TAXBURDEN measures are predicted to affect passage negatively (B3<0). As taxes/per capita income rises, the % voting for passage decreases.	negative
BUS	BUS is predicted to affect passage positively (B4>0). As the % commuting by transit increases, the % voting for passage increases.	positive
AUTO DENSITY	AUTO DENSITY is predicted to affect passage positively (B4>0). As congestion increases, the % voting for passage increases.	positive
POP DENSITY	POP DENSITY is predicted to affect passage positively (B5>0). As the number of housing units/person increases, the % voting for passage increases.	positive
POPULATION	POPULATION is predicted to affect passage positively (B6>0). As the population increases, the % voting for passage increases.	positive

Variable	Predicted Effect on Voting	Predicted Effect
TRAVELTIME	TRAVELTIME is predicted to affect passage positively (B7>0). As the average number of minutes to work increases, the % voting for passage also increases.	positive
POPCHANGE	Each of the POPCHANGE variables is predicted to affect passage positively (B8>0). As the population levels prior to consideration of the measure increases, the % voting for passage increases.	positive

RESULTS

In these California data, the number of measures that passed was approximately equal to the number that failed (30 passed vs. 33 failed). Table 2-9 includes population figures from the year that measures passed or failed and does seem to demonstrate that counties that passed local transportation measures had a larger mean population (1,211,290) during years of transportation measure passage than did counties that failed to pass local transportation measures (593,051.5). However, the larger average as well as the mean difference was affected by an outlier, Los Angeles County. The population of Los Angeles County (7,500,300 in 1980 and 8,897,500 in 1990) was more than three times that of the next most populous county at each time period demonstrated in these data. Moreover, Los Angeles County passed two measures in 1980 and 1990 and so this outlying population was an important component of mean and mean difference. Despite appearances, analysis of variance indicates that mean population differences have not been statistically associated with passage of transportation measures ($F=2.787$, $p=.100$).

Table 2-9. Average County Population for Measures that Passed/Failed

	No. of Measures	Ave. Population	Ave. Population Density
Passed	30	1,211,290.00	2149.5
Failed	33	593,051.50	550.6

Source: State of California, Department of Finance, Historical County Population Estimates and Components of Change, July 1, 1970-1990. Sacramento, California, December 1998. http://www.dof.ca.gov/html/Demograp/E-6cover.htm and State of California, Department of Finance, Historical County Population Estimates and Components of Change, July 1, 1990-1998. Sacramento, California, January 1999. http://www.dof.ca.gov/html/Demograp/e-6text.htm.
Density estimates were obtained from the U.S. Bureau of the Census.

Counties with larger population densities, however, were more likely to pass local transportation measures than counties with smaller population densities. Counties that passed local transportation tax measures had an average population density of 2,149.5 people per square mile during relevant election years, while counties that failed to pass transportation measures had an average population density of 550.6 people per square mile. These differences were affected by the passage of three measures in one county in which population density was five times as great as the next most dense county during the relevant time periods: San Francisco County's population density was 15,513.90 people per square mile at the time of the passage of its last two transportation measures (see Table 2-9). However, despite the appearance of this outlier, mean density (unlike population alone) is statistically associated with the passage of transportation measures. Analysis of variance indicates that counties that passed transportation measures are significantly more dense ($F=4.029$, $p=.049$).

Regression results

The results from the analysis of California data are summarized in table 2-11. Despite the initial appearance of relationships between population and population density and the passage of transportation measures, analysis of variance bears this out only in the case of the population density variable. Population density is also very strongly and significantly related to the percentage using public transit (BUS) ($r=.93$, $p<.0001$). Since population density is available by year, but percentage using public transit is available less often, population density is used in the regression.

Regression results indicate that a model utilizing population density for the year of the measure, proportion elderly for the year of the measure, proportion of population change for the five years prior to the measure, and sales tax per capita, as independent variables can explain 27 percent of the variance in margin voting for transportation measures (R^2=.27). Density, proportion elderly, and population change over the previous five years were positively associated with the proportion voting for passage of transportation measures. Sales tax per capita was negatively related to proportion voting for passage. As population density, proportion elderly, and population change increase, so does proportion voting for transportation measures. However, lower sales taxes per capita are associated with higher proportions voting for transportation measures.

Table 2-10. Model: Dependent Variable = Proportion Voting for Transportation Measure

	B	Std. Error	Beta	t	Significance
Constant	17.347	8.866		1.956	0.055
Population Density	3.056	0.001	0.695	2.478	0.016
Proportion Elderly	2.403	0.747	0.426	3.215	0.002
Population Change	93.155	33.01	0.433	2.822	0.007
Sales Tax Per Capita	-0.238	0.129	-0.486	-1.844	0.070

It is important to note that one variable was responsible for more than half of this variance: fully 15.8 percent of the explained variance can be accounted for by the variable that represents proportion of elderly. In a bivariate regression utilizing the proportion of elderly in each county as the lone independent variable, results were R^2=.158 (p<.001), meaning that the proportion of individuals over 65 in each county was significantly related to the percentage voting for the passage of transportation taxes.

MARFOR=28.4 + .398 ELDERLY

As the percentage of elderly in a community increased, the percentage of the community voting for passage of a transportation tax received a significant boost. When the elderly population in a community reached a threshold of 13 to 15 percent, the mean percentage of the community voting for passage of the tax averaged 55.3 percent; while in communities where the elderly population was greater than 15 percent the average proportion voting for transportation measures was 72.8 percent. In communities where the population of elderly was 9 percent or less, the proportion voting for transportation measures was less than a simple majority, 48.6 percent. Analysis of variance confirms that proportion voting for passage significantly varies by the proportion of elderly in the community ($F=3.838$, $p<.01$).

Interestingly, if population change in the five years prior to the measure is inserted into the simple regression equation with proportion elderly, these two independent variables predict 19 percent of the margin voting for the measure (the R^2 is increased marginally to .19 ($p<.003$)), indicating that public reaction to changes in population is a small but significant addition to perception regarding the importance of public transportation.

Table 2-11. Summary of results: California Data

Variable	Predicted Effect	Observed
Effect		
ELDERLY	negative	positive
INCOME	negative	None
TAXBURDEN	negative	negative
BUS	positive	None
AUTO DENSITY	positive	None
POP DENSITY	positive	positive
POPULATION	positive	None
TRAVELTIME	positive	None
POPCHANGE	positive	positive

Analysis of results

These results show that some variables commonly thought to affect the outcome of local transportation tax measures, including mean population, income, automobile density, use of public transit, and average travel time to work, do not predict voting behavior. However, a model containing population density, proportion elderly, population change in the five years prior to the measure, and sales tax per capita, does explain variance in the outcome of transportation taxes that are presented for a public vote. Each of these variables is of interest. Overall, however, they indicate a perception of need that is affected by evidence of increases in population density and an existing sales tax burden that is comparatively large, precisely the type of tax that transportation measures usually target.

The single variable of most interest is the proportion of elderly citizens. This variable appears to have the strongest effect in predicting the margin voting for local transportation tax measures in these data. The negative relationship that has been presented in some of the literature was not found, instead there is a strong positive relationship between percentage elderly and percentage voting for passage of transportation tax measures. Explanations for this outcome include a) the propensity of the elderly to turn out to vote in both on and off-term elections, and b) patterns of need for, and usage of, public transit among the elderly. The need for transit among this group seems to be associated with a willingness to bear additional taxes. Their significant turnout at the polls can create a critical mass in elections where they represent larger proportions of the overall population.

National dataset

Overview of national cities and counties

The national dataset includes selected demographic and ballot information for the sample U.S. cities and counties including: 1990 population; population density as measured by number of housing units per capita; change in population between 1980 and 1992; population over 65 years of age; per capita income, tax burden (per capita taxes/per capita income); per capita income; percent commuting to work by car; average travel time to work; year of ballot measure; and the passage or failure of the ballot measure.

Table 2-12 demonstrates that overall the number of measures that passed was greater than the number that failed (32 passed vs. 25 failed). In addition, counties with larger populations were more only slightly more likely to pass local transportation measures than counties with smaller populations. Specifically, those counties that passed measures had average populations of 728,428 people whereas counties that failed measures had average populations of 633,949 people.

Table 2-12. Average County Population for Measures that Passed/Failed

	No. of Measures	Ave. Population	Housing Units Per Capita
Passed	*32*	*728,428*	*0.41*
Failed	*25*	*633,949*	*0.41*

Source: U.S. Census Bureau, 1990 and http://www.sco.ca.gov govglance/ 9697/htm/allstate/population.htm

Additionally, counties that passed measures did not differ in terms of housing per capita from counties with measures that failed. Specifically, counties that passed local transportation tax measures had an average of .41 houses per capita and similarly, counties that failed transportation measures had an average of .41 houses per capita.

Regression results (national dataset)

Findings from the analysis of national data are summarized below in table 2-13. Despite the initial appearance of a relationship between population or population density and the proportion of the population that voted for transportation measures, no evidence of such a relationship was found when the regression model that predicted the percentage voting for passage was examined.

Variables in the regression equation were examined for collinearity and none of the variables considered demonstrated evidence of high collinearity (defined as r>.8). Therefore all variables were included in the regression model. A stepwise regression model explained 7 percent of the variance in voting for a measure (Adjusted R^2=.076, p=.044). However, only two of the variables significantly predicted the percentage voting for transportation taxes. Specifically, as found for the California dataset, the variable ELDERLY significantly predicted the percentage voting for the passage of transportation tax (p=.029). In addition, the variable BENEFITS significantly predicted the percentage voting for the passage of transportation taxes (p=.075).

$$MARFOR=68.7 - 1.1\ ELDERLY - 7.2\ BENEFITS$$

Thus, as the percentage of elderly in a community increased, the percentage of the community voting for passage of a transportation tax decreased. Additionally, if measures included both transit and road projects rather than just transit or just road, the percentage voting for passage decreased.

Table 2-13. Summary of Results: National Data

Variable	Predicted Effect	Observed Effect
ELDERLY	negative	negative
INCOME	negative	None
TAXBURDEN	negative	None
AUTO	negative	None
HOUSING	negative	None
TRAVELTIME	positive	None
POPULATION	positive	None
POPCHANGE	positive	None
BENEFITS	positive	negative

Analysis of the national dataset

These results showed that variables commonly thought to affect the outcome of local transportation tax measures, including income, tax burden, automobile dependency and demonstrated need for transportation improvements measured by population density, population change, and average travel time to work, predict voting behavior on local transportation tax measures imprecisely. As was the case for the California dataset, age appears to have had an important effect in predicting voting for local transportation tax measures. However, unlike the California dataset, a weak negative relationship between percentage elderly and voting for passage of local transportation taxes was found, as predicted.

In communities where the population of elderly was greater than 18 percent, 67 percent of the community voted to pass the transportation tax. Whereas, in communities where the population of elderly was between 6 and 18 percent, only 51 to 53 percent of the community voted to pass the transportation tax. These results are consistent with the results for the California dataset. However, what was unusual about the results for the national dataset was that for communities where the population of elderly was less than 6 percent, the mean percentage voting to pass the transportation tax was 71 percent, higher than in any other age category.

Additionally, as the percentage of measures that included both transit and road projects increased, the percentage voting for passage of transit taxes decreased,

which was also contrary to the original prediction. For communities that describe multiple modes of transportation on the ballot, the mean percentage voting for passage of transportation tax measures was 51 percent. However, for communities that offered only one mode of transportation, the percentage of the community voting for passage of the tax was 56 percent.

ANALYSIS OF DATASETS

Analysis of ELDERLY variable

The significance of the ELDERLY variable is particularly interesting in the national level data because of the apparent contradictory effects of proportion elderly in a community on percentage voting for transportation taxes. While the proportion elderly in California counties was *positively* related to proportion voting for passage of transportation taxes, at the national level a *negative* relationship was observed between percent elderly and percent voting for passage of transportation taxes.

This discrepancy may be due in part to differences in the range of percent elderly residing in communities. In the California dataset, the lowest proportion of elderly residing in any county was 9 percent, while in the national dataset, the lowest proportion of elderly residing in any city or county was less than 6 percent. Furthermore, when results in communities that had greater than 9 percent elderly are compared, there was much less discrepancy between the California dataset and the National level dataset. Specifically, when all communities that had elderly populations of less than 6 percent (e.g., the cities of Carrolton, TX; Garland, TX; Irving, TX; Plano, TX; and Lansing, MI) were removed, the variable ELDERLY no longer predicted the percentage voting for passage of transportation taxes. Although this result is not consistent with the California dataset, it is no longer contrary to it. As a result, there may be significant differences between cities and counties in predicting the effect of percent elderly in a community on percent voting to pass local transportation taxes.

The California findings are not consistent with findings by Colman (1987) and Harmatuck (1973), who predicted that younger rather than older voters may be more willing to vote for transportation taxes. In addition, although the national dataset results are consistent with previous findings, by removing the cities described above, that national dataset results are not consistent with previous findings. Furthermore, these findings do not support Harmatuck's conclusion that because transportation benefits may take years to be realized, older voters, for whom transportation taxes may extend beyond their own may be less likely to vote for their passage. Instead, in communities where the population of elderly was larger, voters in California tended to vote for the passage of

transportation taxes. These results are consistent with Levine (1998) who found that residents in a community in Michigan were likely to vote for transit tax measures primarily for the benefit they perceived for disadvantaged groups such as the elderly. In those communities that have a large percentage of elderly, voters may be more aware of the needs of the elderly and may be more willing to vote for transportation tax measures in part to provide benefits to the elderly.

Analysis of BENEFITS variable

Communities that fielded measures designed to provide multiple benefits (transit and road) were less likely to vote for the passage of transportation taxes than communities that fielded measures designed to provide only one benefit (transit). These results are contrary to findings reported by Beale (1998), Colman (1987), and Gomez-Ibanez (1999) who concluded that the distribution of benefits was important in passing transportation tax measures. Specifically, the results are contrary to Middleton (1998) who found that when rail or bus was offered, it was important to include something of value to non-users. Instead, in those communities that offered only transit benefits, residents were more likely to vote to pass the transportation tax. Furthermore, in those communities that offered both transit and road (Los Angeles, Santa Clara, Sonoma, and Ventura Counties), residents were less likely to pass the tax.

Two explanations are offered for these results. First, all of the counties that offered both transit and road benefits were California counties. California counties may have more difficulty than other counties in the nation passing transportation taxes, whether or not they fund multiple types of transportation projects. Second, the results, may be due to the procedure used to obtain information about transportation projects that would be funded with the transportation tax. Information was obtained about projects to be funded from election results reported in *Passenger Transport* journal. This journal relied on reports from transportation professionals to describe the ballot measure, so if the professionals did not believe that a significant component of the funding would fund road projects, they did not mention it.

Implications

Conventional wisdom suggesting that communities with greater percentages of elderly may be less supportive of transportation taxes than communities with lower percentages of elderly may be incorrect. Instead, communities with greater percentage of elderly may be more willing to support taxes for transportation than communities with a lower percentage of elderly.

In addition, conventional wisdom suggesting that transportation plans should include benefits for everyone may be incorrect. Instead, communities that have

plans to fund only transit may be just as, and perhaps more, acceptable to the public as plans that fund both transit and road projects.

Based on these implications, two finding seem plausible.

Finding 1:
Efforts to fund transportation with taxes where the proportion of elderly is greater than 9 percent are more likely to succeed

In communities where the percentage of elderly is greater than 9 percent, the findings suggest that the community may be more willing to accept local transportation taxes. However, in communities where the percentage of elderly is less than 9 percent, transportation measures will require significantly more determined marketing to enhance the probability of passage.

Finding 2:
Efforts to increase sales taxes for transportation programs will be less successful in communities with higher sales taxes.

The relatively strong and negative relationship between sales tax and support for transportation tax initiatives suggests that communities with relatively higher sales taxes will be hard pressed to convince citizens to support additional increases.

DIRECTIONS FOR FUTURE RESEARCH

The need for future research is indicated by many of the findings in these analyses. For instance, results indicate that planners and politicians prefer certain funding mechanisms for transportation projects. As shown in Figure 2-1, the sales tax is the preferred method of financing in many communities across the nation. Reflecting this preference, 66% of tax measures presented to voters have included a sales tax funding mechanism, while only 33% used the property tax, and less than 2% required a bond or payroll tax.

However, the sales tax was less effective in appealing to voters. As shown in Figure 2-2, the sales tax passed just under 50% of the time, whereas property tax measures passed just over 75% of the time. Additionally, in the California data, sales tax per capita was inversely related to proportion voting for transportation measures, indicating an unwillingness to bear more of this regressive tax if the burden is already comparatively large. For these reasons, the popularity of the sales tax in transportation measures among the crafters of transportation measures warrants further analysis.

Figure 2-1. Type of Funding Mechanism on Transportation Tax Measures in U.S.

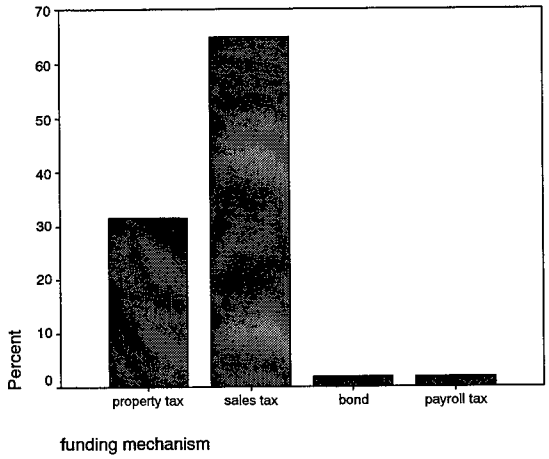
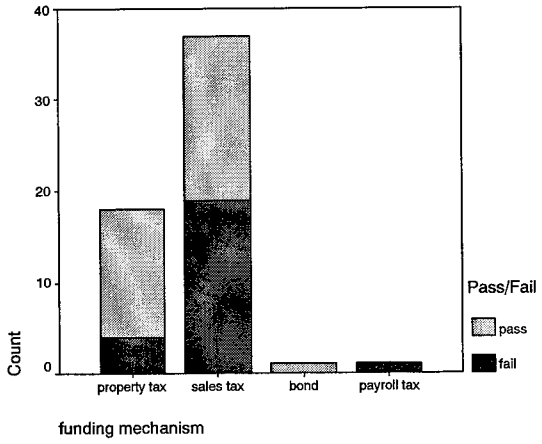


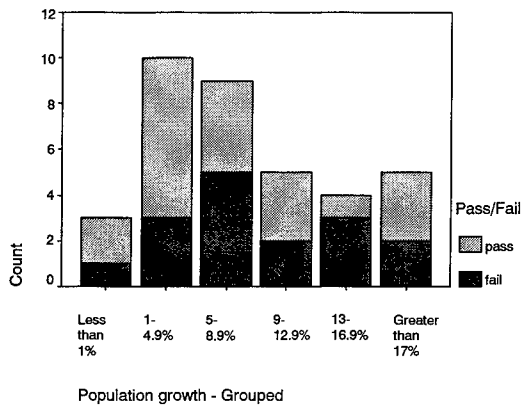
Figure 2-2. Percentage Voting for Transportation as a Function of Funding Mechanism.



Another interesting and somewhat counterintuitive finding concerns the effect of population change on the passage of transportation taxes. It might be expected that if a community's population grows substantially, its residents would be more willing to pass transportation tax increases to support the greater population size. However, as shown in Figure 2-3, in a subset of 38 counties for which population change data could be obtained, the slower a community's population growth between 1990-1996, the more likely it was that a transportation tax was passed. Communities with negative or very slow population growth (less than 5%) passed transportation tax measures

approximately 70% of the time. Whereas, communities with moderate population growth (5-13%) passed transportation tax measures about 50% of the time. Communities with high population growth (13-17%) passed transportation tax measures only 25% of the time. Communities with extremely high population growth (greater than 17%) passed transportation tax measures about 60% of the time. Preliminary conclusions from these results suggest that communities with little population growth may be able to justify transportation funding to voters based on the implied or explicit justification that improved transportation may improve their community's economic growth. Alternatively, communities who are growing slowly or not at all, may have a concerted public opinion that promotes slow growth—this type of community may have attendant support for measures designed to clean up or to keep the environment clean.

Figure 2-3. Percentage Voting for Transportation as a Function of Population Growth

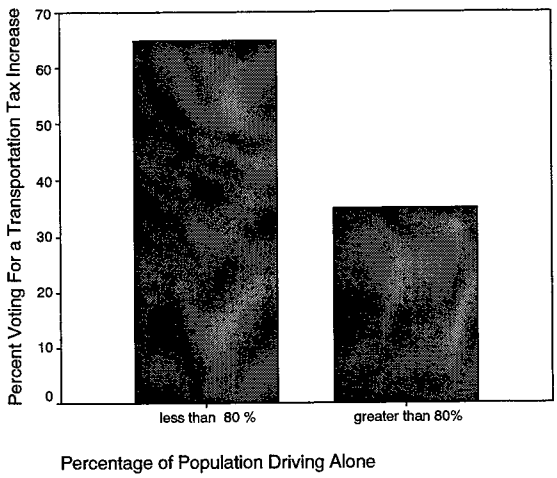


Communities experiencing moderate growth may be experimenting for the first time with alternatives to traditional highway financing. These communities may find that voters are skeptical of new modes of transportation and new methods of paying for these changes. Those communities with exceptionally high population growth may be more successful in marketing rail to voters because they may already have rail in place. Explanations for this divergence between communities may be examined in more detail as the research continues.

A final observation from this preliminary research was that transportation tax measures were more likely to pass in communities where a lower proportion of people drove alone to work. As shown in Figure 2-4, in communities where

less than 80% of the population drove alone to work, transportation tax measures were supported approximately 66% of the time. Whereas, in communities where more than 80% of the population drove alone to work, transportation tax measures were supported less than 33% of the time. This result suggests that communities in which the great majority of residents drive alone to work do not view transportation taxes as beneficial or perhaps even meaningful to them. Since none of the communities within which more than 80% of the population drove alone to work listed road projects as a significant part of their transportation plan, these populations might also see those transportation measures that have been presented to them as superfluous, simply a tax to pay for something they have no intention of using.

Figure 2-4. Percentage Voting for Transportation as a Function of Driving Alone



As communities accept greater responsibility for funding their own transportation projects, it becomes even more important to determine which factors influence community support for transportation tax measures. These results can begin to provide a window into the public mind with information that uncovers the way in which funding mechanisms, population growth, and travel behavior influence outcomes in local efforts to fund transportation costs. However, the findings presented here are of limited utility because, with the exception of sales tax burden for California, they fail to point to variables that can be adjusted by policies that decision makers can influence to help ensure the passage of such measures.

CASE STUDIES: CAMPAIGNS FOR TRANSPORTATION TAX MEASURES IN FOUR COMMUNITIES

INTRODUCTION

As an initial foray into explaining the relative success of transportation tax measures, one major conclusion from the preceding quantitative analysis, albeit an extremely tentative one, is that although community level characteristics play at least a modest role shaping electoral outcomes, much is left to explain. Assuming that these results stand up in the face of further scrutiny, two explanations are immediately plausible for the lack of extremely strong relationships between electoral outcomes of tax measures and community characteristics.

First, it is possible that other community level characteristics exist that were excluded from the preceding analysis. Such variables might ultimately prove to exhibit stronger relationships than those analyzed for this study. For example, a more accurate measure of traffic congestion, or population growth might do a better job of predicting the outcome of transportation tax measure ballots. Future research should address this possibility.

A second possibility is that entirely different kinds of variables, those linked to the specific strategies, tactics, and other efforts of transportation tax measure citizens might be more able to affect the outcome of these elections. However, modeling the potential effects of such efforts is not practical. No known dataset exists that isolates, categorizes, and provides accurate measures of the efforts of local tax campaigns. Indeed, relatively little is known about how such campaigns are planned and waged.

PRIOR RESEARCH ON VOTER INFLUENCES PERTAINING TO LOCAL TRANSPORTATION FUNDING INITIATIVES

The research reported in this chapter examines how voting results in local elections involving transportation funding initiatives are influenced by the extent and nature of both supporting and opposing coalitions, the nature of the transportation package involved with the funding initiative, and the marketing and communications campaigns used by both proponents and opponents.

Methodology of prior research

Prior research on this topic is not extensive. Both the methodology and results of the research identified are presented in this section. Two prior studies were identified which used a case-type study approach. Beale, Bishop, and Marley

(1996) conducted site interviews involving 22 cases. Additionally, telephone interviewing and unspecified documentation was used with approximately 90 additional cases. Cases in 11 states were included, with at least 75 percent of the cases occurring in the four states of California, Florida, Georgia, and Missouri. The cases discussed in this research comprise a significant amount of variance with respect to both the size and the nature of the transportation projects studied. Many of the proposals do not have a transit component. Most of the elections referred to in these cases appear to have taken place in the latter half of the 1980s and the first half of the 1990s. Beale et al did not seem to have collected a significant amount of information about the marketing and communications efforts used by proponents and opponents.

Middleton (1998 G2) "talked with several experienced transit professionals who have considerable expertise in developing, and winning, public support for transit." The recommendations from this research are based strictly on the insights of these transit professionals who have been involved in trying to obtain voter approval in their jurisdictions. Thus, the method used was essentially a quasi-case approach.

A few studies were identified that use surveys to identify factors influencing public support for transit (Forkenbrock and Stoner 1983; Trent and Bernard 1985; Levine, Park, and Wallace 1998). They have limited value in determining how to develop a successful transportation package or how to market that package to obtain voter acceptance because the dependent variables used have limited generalizability.

For example, Levine et al. used potential voters' support for a property tax earmarked for a paratransit system as a dependent variable. One of the independent variables examined was labeled a "social service" variable, measured by agreement with statements such as "public transit is a needed social service." Another independent variable, labeled as a "transit environment" variable, was measured by agreement with such statements as "public transit helps reduce road congestion" and "public transit helps reduce air pollution." The analysis discovered that the social service variable was more highly correlated with voter intentions than was the transit environment variable. This finding is intuitively consistent with voting intentions towards paratransit since this mode of transportation basically is a social service rather than a mode that potentially reduces congestion or air pollution. However, it is likely that the importance of these two independent variables would be reversed if voter intentions towards the combination of passenger rail or additional high occupancy vehicle (HOV) dedicated highway lanes were being measured. In such a case, the main potential benefit of this transportation

package could be a reduction in congestion and air pollution rather than a social service.

Since these survey-based studies have limited generalizability, the results of these studies will not be discussed in the section that immediately follows.

RECOMMENDATIONS FOR OBTAINING VOTER APPROVAL OF TRANSPORTATION FUNDING INITIATIVES

Both Beale et al. (1996) and Middleton (1998) present a number of recommendations to increase the probability of voter approval for transportation funding measures. Their recommendations are listed below, grouped into three categories:

1) The process of building coalitions and developing a transportation package

- Involve the public in the planning process through open meetings, surveys, and or focus groups (Beale et al. Middleton).
- Involve relevant representatives of various groups who could potentially support or oppose transportation packages. The groups below were identified by Middleton or Beale et al.
  - Business community and Chamber of Commerce (Beale et al.)
  - Representatives on the governmental agency voting to present the funding package to the public and other elected officials, such as mayors (Middleton and Beale et al.)
  - Environmentalists (Beale et al.)
  - Developers and automobile dealers (Beale et al.)
  - Taxpayer associations (Beale et al.)
  - The elderly and handicapped (Beale et al.)

2) The transportation package

- Funding should be specifically earmarked for specific transportation projects (Beale et al., Middleton).
- "Provide something for everyone," (Middleton) by advancing a package that combines highway improvements with transit. Beale et al. also discuss this issue but present a conditional recommendation, indicating that this decision should depend on local conditions.

- Fund "projects throughout the area" (Beale et al.) or "provide sub-area equity" (Middleton).
- The cost of the package should be inexpensive enough to have both an acceptable tax level and sunset period (Beale et al.). The authors give an example of .005 being a threshold level for a sales tax and suggest that a sunset date of 10 years or even 2 to 5 years may be needed.
- Leverage state and federal state funds into the funding package (Beale et al.).
- Because additional funding measures will need to be approved in the future, realistic costs, time frames, and outcomes should be developed. In other words, the success of future funding measures depends upon successfully meeting expectations and predictions with the current package (Beale et al.).

3) The marketing and communications campaign

- The campaign should not be run directly by transit officials with a vested interest in the outcome (Middleton).
- The timing of the election must be considered carefully (Beale et al). Middleton recommends avoiding recessions and elections with other funding measures.
- The public should be educated over an extended period through involvement in an open planning process (Beale et al.); detailed information of all the projects and their costs ought to be presented prior to the election (Middleton).
- Open communications with the public should continue after a successful election, assuming that additional funding measures will need to be approved in the future. Post-election communications should include realistic measures of progress against performance measures (Middleton).
- The benefits of transit to transit non-users ought to be demonstrated (Middleton).
- Ballot language should be carefully formulated, using specific and informative rather than vague and legalistic language (Beale et al.).
- Benefits should be formulated and articulated early in the process and taxes mentioned as little as possible.

EVALUATION OF RECOMMENDATIONS FOR OBTAINING VOTER APPROVAL OF TRANSPORTATION FUNDING INITIATIVES

The above recommendations provide a reasonable initial framework for those attempting to obtain voter approval of transportation funding initiatives. At the same time, however, modifications and additions to these recommendations can be made.

Some of the above recommendations could be more specific. In fact, some of them are goals rather than strategies and tactics for achieving goals. For example, both Middleton and Beale et al. identify groups that should be included in a coalition. However, the means of building a coalition of groups that have different, and even conflicting, perspectives towards transportation packages and funding mechanisms are not discussed in any depth. Furthermore, both Middleton and Beale et al. identify the importance of identifying transportation packages that are not overly costly. However, basic strategies for developing these transportation packages are not identified, nor are means of prioritizing components of these packages.

Modifying the above recommendations to focus on strategies and tactics for achieving the goals stated in the recommendations reveals several difficult issues and challenges. For example, it is a major challenge to develop a transportation package that is not too expensive for voters while at the same time providing geographical equity and also satisfying the demands of both automobile and transit advocates.

Although prior research has identified recommendations with some relevant components of a marketing plan, other critical components have not been identified. For example, no recommendations were made about how to respond to opponents arguments, nor has much been said about how different information sources are used to present a combination of both general themes and specific information on some rather complex issues. One such complex issue involves describing the specific components of a large transportation package.

To summarize, the prior case research has tended to emphasize breadth rather than depth, both in the nature of the cases studied and with the amount of information gathered with each case. This broad approach is appropriate at the onset of research on a topic.

Methodology

Now that prior research on local transportation funding initiatives has developed a broad framework, a more in-depth case study approach is appropriate. Perhaps only by examining interviews with individuals involved

with specific transportation tax measures can an understanding be gained of how their efforts potentially influence the election outcomes. The case study approach adopted for this study provides depth, which complements the broad approach taken in prior research. Such an approach has two characteristics.

First, the cases used in this research have a more specific focus that those used in prior research. Each of the cases included in this report has an estimated cost of at least $1 billion and includes a passenger rail component. In addition, since developing a systematic understanding of the marketing campaigns used by both proponents and opponents is an important goal of this research project, cases have been selected in which opponents or proponents actually used such campaigns. For example, proponents spend at least $400,000 on marketing in each of the cases studied.

Second, a significant amount of information was collected for each case. On-site interviews with a number of people representing a variety of perspectives were conducted. In addition to these interviews, relevant studies were examined as were newspaper articles and editorials. Post-election surveys were conducted in both of the unsuccessful cases and these results have also provided important insights.

However, the use of case study methods implies several weaknesses from the standpoint of analytic rigor. Most notably, inclusion of a sufficient number of case study sites to create a random probability sample that would generate robust findings is frequently impossible due to resource constraints. Case study data, which typically include interviews with key respondents, as well as observation and document review, may generate misleading findings based on an insufficient number of observations.

Nevertheless, given the overall lack of definitive information about how transportation tax measure campaigns work, four case studies were conducted in support of this project. Four communities with recent transportation tax measure elections were selected. Resource constraints precluded a random sampling approach; instead sites were selected with a purposive sampling strategy. Purposive sampling is used to develop a list of cases that will generate useful qualitative insights by means of cases that share characteristics of interest to the researcher. In this case, sites were selected purposively based on the following criteria:

1) Successes and failures. Two of the cases involve measures that passed, and two concern those that failed.
2) Range of transportation proposals. The cases represent a fairly wide range in both the cost of the transportation proposal and the mix of highway to transit improvements. At the same time, the cost of each

proposal was greater than $900 million and each proposal had a significant passenger rail component.

3) California representation. Because of the special circumstances involved with passing tax initiatives in California (particularly the supermajority requirement for most earmarked tax increases), as well as the pervasive traffic problems that plague California cities, two cases were drawn from the "Golden State."

4) Jurisdiction variety. The cases represent a variety of jurisdictions and settings in which to investigate the campaign process, including both intensely urban and more rural communities as well as counties and regional jurisdictions.

5) Formal marketing and communications efforts by proponents. Proponents spent at least $400 thousand during the campaign. The cases represent some range in opponents' campaign efforts. Organized opposition existed in three of the four cases.

The case study site visits typically consisted of the following activities:

1) On-site visit and telephone interviews with key officials and individuals including: sponsors and opponents of transportation tax measures; campaign consultants and staff; members of local business and environmental communities and other interested parties; and elected officials and other individuals with insight into the campaign process.

2) Review of relevant documents, and other documentation of outcomes associated with transit coalitions, including newspaper coverage.

Each site visit was used to generate: an overview of community's demographics, fiscal and economic background, and relevant historical and political background; identification of major transportation challenges and problems; description of strategies, techniques, approaches, etc., that were used to achieve (or failed to achieve) public support; and evaluation of effectiveness of each effort.

CASE STUDY I

Santa Clara County Measures A & B (1996)

Santa Clara County, which comprises the heart of "Silicon Valley," is an area long renowned for its traffic and congestion. In November of 1996, the county voters narrowly approved a nine-year, $1 billion sales tax. Proceeds from the tax are being used to fund a variety of transportation improvements in the county, including road widening and repair, traffic light synchronization, and public transportation, including added light rail service.

The plan to significantly boost funding for public transportation and the other improvements was complicated, due to the state's constitutional requirement that specific tax increases be approved by super-majorities of two-thirds or greater. Only by linking a more generalized tax increase to an advisory measure, a move likely to confuse or alienate many voters, could such an increase avoid this requirement. This case study illustrates the impact of successfully building a pro-transportation coalition on a successful campaign to create transportation funding. It also provides specific examples of marketing research and related strategies that appeared to help the measure pass. However, the fact that the measure ultimately passed by a thin margin despite a paucity of organized opposition serves to accentuate how difficult it is to gain public acceptance of tax increases to support transportation.

Among the individuals interviewed for this case were: members of the county board of supervisors; the campaign director and lead consultants for the proponent's campaign; and staff from the local transportation agency.

Background: transportation and traffic

As the geographic center of the Silicon Valley, Santa Clara County has experienced longstanding and continually worsening problems with traffic and congestion. As the technology sector has mushroomed with employment opportunities, the construction of housing has lagged, particularly housing within easy reach of Silicon Valley employment centers. Many commuters face drives of greater than one hour each way to their places of employment. Public opinion surveys have repeatedly indicated that residents consider traffic and transportation problems to be among the important, and frequently the *most* important issues facing the area.

Before the 1996 measure came up for consideration, the county, with federal assistance, had already funded and constructed a light rail line, essentially a single north-south commuter line. The county transportation agency also operated an extensive county bus service. Commuter rail service also existed, transporting commuters north and south along the peninsula to San Francisco. Several freeways were contained HOV lanes. However, at the time of the 1996 proposal, a recent upturn in the high tech industry had fueled even more economic expansion, employment, and therefore traffic. Frustration with traffic and congestion had reached the point where many residents were sympathetic to a public response to the problems.

Santa Clara County has exhibited support for past transportation-related tax initiatives. In 1976, a half-cent sales tax, open-ended, with no expiration date, for transit projects was passed by county voters. The tax increase was earmarked for the construction of a light rail system. The measure received

56% of the vote in a special election in which only 17% of registered voters participated. The board of supervisors put this item on the ballot. The campaign was led by a member of the board, who helped to form a coalition consisting of the League of Women Voters, builders, organized labor, environmentalists, and business leaders. Forty thousand dollars was spent to help promote its passage.

Passage of the 1976 tax was preceded in 1975 with a series of public hearings about light rail. A master plan for transportation was proposed and this plan required a public vote of approval every four years, although it did not really bind any public action. However, each vote created an opportunity for publicity about the transit projects included in the plan. Consultants were hired to run the public meetings that discussed the master plan. Since that time, these plans have passed by a 70 percent or greater margin. Transit supporters on the board of supervisors believe that the plans helped to get people used to thinking about, and voting for, transportation initiatives. They also consider the public participation generated by this process to be an important source of input for planning and packaging transportation-related initiatives.

Again in 1984, a transportation tax initiative, Measure A, was placed on the county ballot. It authorized an additional half cent sales tax that would be used to improve key local highways 101 and 237, and to build the long envisioned Highway 85. This tax had a 10-year life span. The measure was proposed in response to federal and state funding cuts and to appease supporters of highway construction. A county supervisor, Zoe Lofgren, led campaign for this measure, which passed easily.

In 1992, with the old (1984) Measure A due to expire, a Measure A extension was placed on the ballot. It passed with a 55 percent majority. It would have created a 20-year tax (also a one half-cent on sales), of which 80 percent would have been earmarked for transit. Opponents of the tax successfully sued, claiming that the tax violated the state's constitutional requirement for a supermajority for specific tax increases.

In 1996, a new strategy for packaging transportation measures on local ballots was devised and initiated. Based on the so-called "Mill Valley" model, the strategy involves passing two measures, one of which is a non-binding plan for spending increased tax revenues, the other a general sales tax increase. This approach makes transportation tax increases easier to pass, at least in theory, because general tax increases require only a normal majority of votes. This measure was successfully passed, along with the non-binding spending plan, and survived a court challenge.

The tax had a 9-year life span, and earmarked 60 percent for transit and 40 percent for highway construction. Measure A described the spending plan, Measure B included the tax itself. The campaign to pass these measures cost $1 million, of which 80 percent came from the Silicon Valley Manufacturers Group (SVMG). (The SVMG and its role in this case is described more completely in the following section.) The funding ratio (60/40) was a subject of compromise between those who advocated transit and the SVMG.

Background: political history

The Santa Clara County Board of Supervisors is the legislative decision making body with responsibility for transportation policy in the county. The Valley Transit Authority (VTA) is the County's branch of Caltrans, the California State transportation agency. It is the executive agency charged with implementing and managing most transportation policies. Its board of directors consists of twelve members and five alternates appointed as follows:

- Five city council members and one alternate from the City of San Jose.
- Three city council members and one alternate selected from among the cities of Los Altos, Mountain View, Palo Alto, Santa Clara and Sunnyvale and the town of Los Altos Hills.
- One city council member and one alternate selected from among the cities of Campbell, Cupertino, Monte Sereno, and Saratoga and the town of Los Gatos.
- One city council member and one alternate selected from among the cities of Gilroy, Milpitas, and Morgan Hill.
- Two members and one alternate from the county board of supervisors.

In an area where high technology (high-tech) industries dominate the economic landscape, leaders of industry may be expected to be at least informally influential in shaping transportation policy. Additionally, environmental groups often seek to influence transportation policies.

Although voter concern and dissatisfaction with the then current state of transportation in Santa Clara County was widespread at the time of the 1996 proposal, a lack of clear consensus existed about what, if anything, ought to be done about the problems facing the area. This is perhaps best illustrated by the fact that public opinion polls taken several months before the ballot indicated that the tax increase measure was supported by only about 30% of the

electorate (*San Jose Mercury News* November 11, 1996). Passing a transit-related tax was to be an uphill struggle.

Developing a transportation coalition

Leadership in support of a new transportation initiative came from two major sources: the VTA Board, which included members of the county board of supervisors, and the Silicon Valley Manufacturers Group (SVMG). Led by the SVMG, supporters were recruited to include 300 organizations and key individuals.

The significance of the support and leadership offered by the SVMG cannot be overemphasized. Founded by high-tech pioneer David Packard in 1978, with the support of 30 high-tech Chief Executive Officers (CEOs), the SVMG represents 130 Silicon Valley employers, almost exclusively in the private sector, as well as 250,000 jobs, or one-third of employment in the Silicon Valley.

As in many areas, consensus about the need to "do something" about traffic and congestion was not matched with an agreement about what specifically ought to be done. The coalition of elected officials and industry adopted the following approach toward developing a consensus for action.

(1) "95-5." The coalition believed that consensus did exist among the community on most major issues (the "95%") but that past political dialogue had instead focused on the remaining details where disagreement persisted (the "5%"). The coalition leadership strove to focus discussion on those areas where there was broad agreement.

(2) "Build ripples." Coalition leaders consciously attempted to enlarge the movement in support of the measure "from the center out."

(3) "Replace dogma with data." The leadership agreed on the strategy of relying heavily on survey and other market analysis data. This included allowing potential opponents the opportunity to help design survey instruments, as described below.

Due to the efforts of the initiative supporters, opposition to the 1996 measure was sparse and isolated and an opposition coalition did not emerge. Supporters banded together under the group identity of "Citizens Coalition for Traffic Relief" but the contribution and leadership of the SVMG were paramount.

Creating a transportation initiative

According to interviews with former members of the Board of Supervisors, the selection of projects was largely predetermined from the status of, and progress

on, prior projects, going back to the development of the first master plan developed in 1974. For the most part, therefore, the initiative was not designed to fund radically new transportation modes or routes, instead, it tended to build on existing plans, facilities, and routes.

Perhaps of greatest importance was the nature of the last measure approved by voters, the 1992 Measure A, which focused on transit. The main reason for this was that there were significant improvements made in the county highway system during the late 1980s as a result of a measure passed in 1984 that focused exclusively on highways. Thus, there was little reason or demand to make significant highway improvements in 1992. At the same time, many believed that funds were needed to move forward on transit, particularly light rail along corridors identified in previous master plans.

Surveys were conducted and focus groups formed to determine the characteristics of a successful initiative. Interestingly, the supporters of the initiative actively invited potential opponents to collaborate on the design of the various survey instruments. The effect of this was to allow those perceived as "extremists" to have their ideas tested (and ultimately rejected) in polls. Supporters of the measure believe that this eventually co-opted much of their potential opposition, as well as serving to help make the surveys more convincing.

One major consequence of relying on surveys to shape the design of the proposal was that the amount of funding in the 1996 measure was significantly less than the level requested in 1992, primarily due to the length of time involved: the 1996 measure was for nine years and the 1992 measure was for 20 years. Consultants who helped research public for the initiative indicated that survey results determined the maximum possible time frame and that 10 years was a threshold at which voting support diminished significantly.

Given that the funding level was to be significantly lower in 1996, the key issue was to determine which projects involved in the 1992 measure should be cut from the 1996 measure. The proposal could thus be viewed as an incremental adjustment to the older initiative and not an entirely new proposal. Because almost all the funds in the failed 1992 measure went to transit, it made more sense to cut funds from transit. Essentially all of the highway projects from 1992 carried over to the 1996 proposal. In fact, a few additions were made for highways. Survey results suggested that highway improvements would make the proposal more popular with voters. Such low cost projects as filling potholes and signal synchronization proved to be popular with survey respondents, and could be viewed as "pot sweeteners" for the overall package.

For a variety of reasons, the 1996 proposal did not generate much disagreement among potential opponents, particularly those who would advocate exclusive emphasis on highway construction. One important reason is the historic sequence of transportation initiatives. The first time that the public was asked to vote for funding for transit in the county was 1976. Because highway funding was provided separately by the state and federal government, it is possible that highway advocates did not see the local funding source for transit as a direct threat, particularly since highway improvement projects had been approved for funding at the federal and state level.

The next election involving voter approval of funding for transportation was in 1984. Two significant developments occurred between 1976 and 1984. First, federal and state funding for approved highway projects diminished significantly beginning in 1980 during the Reagan administration. Second, the county was able to obtain federal funds for transit in 1982. As a result of these two events, with the exception of some environmentalists, transit advocates realized that a strong case could be made for additional local funding for highways. Thus, transit advocates did not stand in the way when a coalition consisting of the Chamber of Commerce, the SVMG, civil engineers, and a key member of the board of supervisors placed a sales tax measure on the ballot that provided funding only for highway projects.

The above two elections served to establish a pattern of alternating between measures that supported transit and measures that supported highways. This pattern continued in 1992 where the vast majority of the requested revenues were earmarked for transit. However, once the 1992 measure failed to obtain the super majority that the courts determined was needed, the pattern of alternating between transit and highways was broken. This pattern may have served to push designers of the 1996 proposition toward an approximately equal balance between transit and highway funding.

An important strategic decision was to spread proposed construction of light rail across the county to three existing lines, rather than focusing funds on completion of a single line. Survey results suggested that such an approach increased support for the proposal. Additionally, by blending highway spending into the proposal, a more distributive package was created. Voters from each part of the county could therefore identify specific provisions that would benefit them, combating the perception that funds were focused on centralized light rail enhancements.

Overview of transportation initiative

The resulting proposal included the following provisions:

- construction of sections of three additional light rail lines

- widening of several key freeways, including additional HOV lanes
- synchronization of expressways
- increased commuter rail service (on existing tracks)

The preceding items were described in the advisory-only Measure A. The actual tax increase was included in the companion Measure B, which called for:

- a nine year, one-half cent general sales tax increase, and
- revenues over the nine year period of approximately $1 billion (approximately $363 million to be paid by businesses and $737 million by consumers)

Additionally, Measure B called for creation of an independently appointed "Citizens' Watchdog Committee" to ensure that funds collected by the sales tax increase were properly spent, along with published audits of the tax expenditures.

Devising and implementing a marketing and campaign strategy

The overall strategy was to "work towards consensus." This was to be achieved by giving certain powers to members of the coalition, so that they could bring in their constituencies. The following efforts were made to elicit a broad based coalition of support.

1) Finance Committee (Co-chaired by a county supervisor and an executive from a major computer hardware manufacturer)

Each member of the committee was responsible for raising a certain amount of money. This was a critical aspect of the effort to "empower" each participant. Presumably, individuals who had helped to raise funds would be more ardent supporters who would help elicit support from their respective constituencies. Ultimately the group raised more than $1.1 million, 80 percent more than had been raised for the failed 1992 measure. Although many contributions came from individuals, environmental groups such as the Greenbelt Alliance and the League of Conservation Voters also made donations. Funds from large, high-tech companies, which comprised nearly 90 percent of the donations and 18 of the top 20 donors, were critical to the success of the fundraising effort.

2) Speaker's Bureau

The coalition created a speakers' bureau that could personally deliver the message about the ballot initiative. According to coalition leaders, coalition members made 200 appearances, to audiences totaling 10,000. The speaker

was "marketed" to fit the audience such that an appropriate speaker was identified for each group.

3) Editorial Board

The editorial board wrote editorials for 35 newspapers and received endorsements from 34. Again, an effort was made to "market" the writer to the individual audience served by each paper. Editorial authors were matched by backgrounds to the publications selected for the campaign.

4) Marketing within companies.

Campaign supporters directly addressed 103 companies who represented 250,000 employees. A previous internal lobbying effort by the SVMG to combat frivolous lawsuits against high-tech companies had recently received a lot more publicity, but according to coalition leaders the effort to pass Measure B was much bigger and more intense. The campaign consisted of nine "loaned" executives who appealed to their corporate colleagues through email, voicemail, corporate newsletters, and payroll mailings, each appropriate to the individual corporate culture. They also conducted in-house employee education campaigns.

5) Mass marketing

In addition to "free media" (e.g., press conferences), the campaign relied heavily on, direct mail, television, and radio ads. More details about this aspect of the campaign follow.

The general strategy was to target "yes" and swing voters, and to avoid "no" voters (so as not to "energize" them). The message was designed to tease out the existing motivation to support the tax. This was achieved by identifying what voters wanted and making sure they heard a coordinated message. The emphasis was to be the "carrot" (improvements) and not the "stick" (higher taxes).

The campaign was directed by consultants from the firm of Townsend, Raimundo, Bessler, and Usher. Another firm conducted a series of surveys and focus groups that were used in ways discussed later in this section. Great care was devoted to both the wording of the paired measures and to the wording of measure descriptions in promotion and advertising.

There were three general key tactics.

1) The sequence of projects described in Measure A. The ballot language was constructed so as to place popular projects in the proper sequence in the description of Measure A. The research suggested that the most important ones were the first, second, and last ones indicated. Thus first item mentioned was

fixing streets and potholes. The second one was a link to the regional BART transit system, and the last one was improved transit for seniors and disabled people. One of these appealed to drivers, one to transit users and supporters, and the other for "disadvantaged" groups that tend to be viewed sympathetically.

2) An emphasis on accountability in Measure B. The second key tactic was to emphasize accountability in Measure B, since it was a general tax measure. This was achieved in a number of ways. The term "mandatory restrictions" was used to describe spending under Measure B. To assure accountability, a "citizens watchdog committee", selected independently, would conduct yearly audits and report the results to the public.

The specific expiration date was also intended to reassure voters. Research discovered that the expiration date needed to be fewer than ten years but that there was little sensitivity between a nine year expiration date and shorter expiration dates. The surveys and focus groups played an important role in determining the description of the measures and the transportation projects listed.

3) Avoid mention of "taxes." The third key tactic involved avoiding the term "tax" unless it was absolutely necessary to use the term. The basic concept involved stating that both measures A and B needed to be passed "in order to get traffic relief." Descriptions of Measure B indicated that it provided the funding for the transportation projects.

The use of selective targeting was combined with a selective message. This selective targeting was implemented through the heavy use of direct mail. Voters likely to support the measure were targeted to encourage them to actually vote. The second group targeted was swing voters. Mailers were not sent to those likely to vote against the paired measures. (This was part of the "run silent, run deep" philosophy discussed in more detail under the next success factor.) The underlying reason for this philosophy was to avoid stirring up the opposition. The characteristics and identities of these two groups of targeted voters were determined through the surveys conducted.

Direct mail was emphasized because it reaches a selective target with a selective message. Six different mailings were used. The first one, which was sent approximately one month prior to the election was a general message. The second one was targeted to five separate age categories and had age-specific photos in each mailer. The third and fourth mailers were sent to 30-35 geographic segments. They included local projects and were from a "neighbor" supporting the measure. The fifth mailer emphasized the endorsement of the *Mercury News* along with other supporting organizations. The surveys were

used to help determine which organizations to include in the mailing. The sixth mailer provided a summary.

Television advertising also was used, although the campaign consultants did not believe it would be effective. In fact, use of television arguably ran somewhat counter to the "run silent, run deep" strategy adopted by the campaign. However, the television advertising used was very general and did not mention the tax increase, but instead pointed out that the measure would fund the repair of potholes and reduce congestion.

Market research efforts were central to the supporter's campaign. Research was first used to determine the wording and positioning of the measures. Then, during the campaign itself, survey research helped to determine the wording and positioning of the mailers, including which endorsements to emphasize, and the sequencing of the endorsements listed. Finally, research helped to identify, along with the precinct data, which positive and swing voters to target with the mailings.

Voters were asked how they would vote under both different wordings of the measures as well as under different arguments for and against the measures. Respondents who continually indicated they would vote for passage were classified as positive voters and those people who varied their vote depending on the specific wording used and the arguments presented were classified as swing voters. Correlation analysis was used to determine links between voting tendencies and a variety of personal characteristics, in order to determine what personal characteristics were most highly correlated with voter tendencies. Finally, voter-specific personal characteristics were linked to precinct lists to identify the specific households to send the mailers to.

Opposition efforts

Due to the pointed efforts of the coalition in support of the measure described earlier, organized opposition was scanty. Some local environmentalists supported the measure, some remained on the sidelines. Opposition was largely confined to taxpayer groups, who routinely oppose nearly every local tax proposal but typically lack sufficient funding and organizational resources to mount effective campaigns.

Media coverage concerning the election was limited, presumably due to interest in the various concurrent state and national elections. The local newspaper did endorse the twin measures, although it did print opposing views. For the most part, however, the coverage of measure was neutral and even favorable and included articles that documented (accurately enough) business support for the measure (see, e.g., *San Jose Mercury News* October 13, 1996). Because of this limited and primarily favorable coverage, supporters

of the tax measure were operating largely in a vacuum where their viewpoint would not receive a serious challenge.

Outcome evaluation

On November 5, 1996, voters in Santa Clara County approved of both measures A and B. Whereas the advisory measure A, which described the uses of the new funding, passed 76%, the actual tax measure B passed by only 52%. By contrast, Measure A in 1992 had passed by 54% amid the economic backdrop of a serious recession. Exit polling revealed that, the nonpartisan character of the initiative process notwithstanding, Democrats voted for the tax increase 63% to 37%, while Republicans voted against it 57% to 43% (Gerston 1977). The exit poll also revealed that wealthier individuals tended to favor the measure, and vice versa.

Thus, although the passage of Measures A and B was a nominal success for its supporters, the small margin of victory, achieved in a context wherein nearly every possible intervening circumstance was favorable, is equally notable.

Indeed, the Santa Clara County case illustrates the great difficulty advocates of public transportation tax initiatives face, particularly in the instance of a general sales tax. Consider that proponents in this instance were working with the following advantageous circumstances:

- Lack of well-organized opposition
- Historical support for transportation initiatives and a liberal-minded electorate
- Local economic boom
- A general election environment
- Support and leadership from the local business community, included a million dollar campaign fund

Nevertheless, careful consideration of the Santa Clara case suggests that the effectiveness of certain strategies that may be applicable to other communities, including the following:

1) Co-option of potential opposition. The public transportation supporters were able to achieve this in several ways. First, they invited potential foes to participate in the market research that helped shape the final ballot measure. Once convinced that their own proposals had no chance with the public, opponents were more likely to stand aside or even support the proponent's approach. The mixture of highway and transit spending placed on the ballot helped minimize opposition from ardent highway supporters.

2) Use of targeted direct mail. The proponents campaign consultants used survey research data to fine tune their message to various demographic groups. Speakers and guest editorials were also targeted to match the messenger to the audience.

3) In-house direct marketing. Supporters marketed the initiative to their own employees in major companies in the Silicon Valley, a strategy that gave the measures great credibility in a key demographic segment.

4) "Run silent, run deep." Initiative opponents eschewed direct mass media publicity for the measure, focusing their efforts on direct mail and in-person appeals to potential voters. This approach lessens the possibility that voters will be exposed to potentially dissuasive information.

Although the effectiveness of these strategies cannot be verified, it is plausible to expect that without each of them the Santa Clara County tax measure might well have failed, despite the many favorable circumstances it faced.

CASE STUDY II

Sonoma County: Defeat of funding for highway widening and rail (1998)

For reasons discussed previously in the Santa Clara County case, Sonoma County used the paired measure approach in attempting to obtain voter approval for transportation improvements. One of the measures involved a half cent sales tax for general county purposes with a 20-year expiration date. The paired advisory measure identified the recommended transportation projects. The major projects involved widening Highway 101, the one major corridor in the county and implementation of a passenger rail service running along the same corridor. The advisory transportation measure passed by a vote of 104,129 (72.4%) to 39,763. However, the sales tax measure failed with 68,062 voting in favor of the tax (47.6%) and 75,051 voting against it.

This case has some interesting lessons pertaining to a) coalition building, b) selection of a transportation package and funding mechanisms, c) marketing strategies and tactics, and d) the impact of a state political structure dealing with funding and taxes.

Interviews with key participants and documents provided the information for this case. Interviews were conducted with members of the citizens' coalition of business people and environmentalists that developed the transportation package presented to the county board of supervisors, supporters who worked to pass the paired measures, and opponents who worked to defeat the measures. In addition, the political consultant interviewed specifically for the Santa Clara County case also represented the proponents in Sonoma County. Key documents used include a) the final report of a Sonoma and Marin County

Multi-Modal Transportation and Land Use Study, b) copies of direct mail used by both sides, c) newspaper articles and editorials in the newspaper with the largest circulation in the County, d) results from post-election questionnaire, and e) a breakdown of expenditures by proponents of the paired measures.

Background: geography and population profile

Sonoma County is immediately north of Marin County and which is immediately north of the Golden Gate Bridge. With a population of 443,669, the number of people in the county is significantly less than the number in the other three case areas studied. Santa Rosa is the largest community in the county with a population of 138,742 and has increased by approximately 100 percent since 1970.

Geographically, Sonoma County is quite large and rather sparsely populated. The main corridor, Highway 101, runs approximately 50 miles from the northern county border to the southern county border and about 50 miles from the ocean to rural areas of the wine country. Approximately 70 percent of the population live very close to the 101 corridor (DuBay August 2, 1999).

Interviewees described the population as not having a strong anti-tax philosophy and also having a strong environmental and anti-growth perspective. This assessment of the population is supported by both a survey conducted about one month after the election and by a vote in 1990. In 1990, the voters approved a 20-year increase in the sales tax of one quarter of a cent to fund open spaces protection and enhancement in the county. This result demonstrates a willingness both to pass a significant tax and to protect the environment and control growth. In the survey conducted after the election, 62% of the 400 respondents responded "yes" to a question asking if they considered themselves to be an "environmentalist" and 72% considered themselves to be either no-growth (39%) or slow-growth (33%). At the same time, the population does not seem to exhibit a high level of trust in government. Although the post-election survey did not directly ask respondents to indicate their degree of trust in government, it did ask people to identify whether each of 17 reasons presented were major, moderate, or minor reasons for the sales tax failing. The reason with the highest percentage of responses in the "major" category was "people didn't trust government's ability to follow through on its promises" (63%).

Background: transportation and traffic

Highway 101 corridor is the major corridor in the county. This is a separated highway with two lanes in each direction. No HOV lanes currently exist on 101 within Sonoma County but they do exist in Marin County. In 1995, two segments of 101, approximately 10 miles each, were classified as having an

"F" level of service during commute hours. This is an overcapacity classification with stop-and-go traffic (Calthorpe 1997). By comparison, virtually all of 101 in Marin County is classified at a "F" service level during commute hours. Due to the number of popular tourist and recreational destinations within the county, 101 is usually congested on the weekends (Calthorpe 1997).

Bus transit is available in the county. The mode split for transit currently is two percent, which is quite low (Calthorpe 1997). Work commuting is mostly within the county: Eighty-two percent of employed county residents work in the county, compared to fifty-nine percent for Marin County (Calthorpe 1997). Given that the vast majority of residents work within the county, commutes tend to be short to moderate in length. Although many of the jobs, as well as most of the residents, are close to the 101 corridor, job locations are not highly clustered (Calthorpe 1997).

The 101 corridor transportation system in place prior to the election was similar to the system that existed during the 1970s and the 1980s, when the population was about 220,000 less than it was at the time of the 1998 election.

Background: relevant historical events

In 1990 an attempt had been made to obtain voter approval for a one-quarter of a cent increase in the sales tax for transportation improvements. The money would have been used primarily for capacity improvements on 101. The business community actively supported this measure and perceived that they needed the environmental community to at least stay neutral on the transportation tax. They worked with the environmental community to try to achieve this goal by having a second proposition submitted for voter approval that the environmental community strongly supported. This second proposition involved a one-quarter of a cent sales tax to fund open spaces. The business community thought that the environmentalists would stay neutral on the transportation measure but many environmentalists actively opposed the transportation measure and it lost by a 54 percent to 46 percent vote.

The primary conclusion developed from this failed attempt appears to have been that success would be likely in the future if a transportation package acceptable to both the business and environmental community could be developed. At the same time, interviewees indicated that the 1990 election made it very difficult for the business and environmental community to work together to obtain local funding for transportation for a number of years.

In 1995, the California Transportation Commission approved more than $60 million to purchase the Northwestern Pacific Railroad (NWPRR) right-of-way and provide infrastructure improvements along the railroad tracks. This event

was significant because it created the opportunity for a mixed transportation package including both rail transit and highway improvements. Thus, according to three people interviewed, people representing both the business and environmental communities began to work together to develop a second transportation package.

Also in the mid-1990s, Caltrans, the Sonoma County Transportation Authority, and the Marin Countywide Planning Agency decided to sponsor a two county (Sonoma and Marin) transportation and land use study along the 101 corridor. The final report of this study, completed by Calthorpe Associates, was published in 1997. It identified four transportation improvement alternatives and conducted a cost/benefit analysis of these alternatives. The recommended package included implementing a rail transit system with feeder bus service and widening Highway 101 by one lane in each direction in some segments within the county. The extra lane would be used as a HOV lane during rush hours. This recommendation had elements appealing to both business and environmental interests. The Sonoma County components of the package recommended in this report were used as a framework for the citizen task force working on a transportation package and funding plan. The Calthorpe report also was helpful in providing cost and use projections with both a baseline system and each alternative scenario.

The successful passage of Measures A and B in Santa Clara County, previously discussed in detail had significant impact on the 98 measures in Sonoma County. The success in Santa Clara County created a sense of optimism for transportation proponents in Sonoma County. In addition, the Santa Clara framework and marketing approach were used as a model for Sonoma County. One component of the Santa Clara model was the development of a transportation package by a citizens' coalition. Members of the Sonoma County citizens' coalition met with Carl Guardino who helped lead the coalition in Santa Clara. The Sonoma Coalition concluded that they should use this approach.

In conclusion, although the 1990 election created a temporary split in a business and environmental coalition, events in 1995 and 1996 gave this coalition both the motivation and the means to work together to make a second attempt at obtaining voter approval to fund transportation improvements. This coalition, which called itself the Citizens for Traffic Relief (CTR) decided to develop a transportation package and funding mechanism that would be presented to the county board of supervisors for approval. If approved, the package, with possible modifications from the Board, would then be presented to the voters for approval.

Development of the transportation package by the CTR Coalition

Once the Calthorpe study was completed in mid-1997, the CTR coalition was able to reach closure quickly and easily. This was because this study had components that were viewed positively by both groups. In addition, according to a co-chair representing the business community, business representatives seemed to believe in smart and controlled growth and were supportive of transit. Coalition representatives from both segments also were pragmatists committed to developing a package.

In addition, the CTR coalition commissioned a survey in late 1997 to test reaction to the Calthorpe study's recommended package. The study results reinforced the prevailing view that both a highway and a rail transit component were needed for voter approval. According to a co-chair interviewed, respondents' approval ratings dropped below 50 percent if either the highway widening or the rail transit components were omitted.

During the course of their meetings, the CTR coalition became aware that one group, the County Taxpayers Association, would not support the package (Ellman August 2, 1999).[1] They were in favor of widening 101 but were opposed to HOV lanes and to the rail transit line. They also were in favor of congestion pricing of some sort and thought that much of the financing should be through the gas taxes to the state and federal governments. A leader of this group indicated that they probably would not have opposed the measure if transit had been excluded and if the new lanes on 101 had not been restricted to HOV use during commute times. Of course, the environmental representatives in the coalition would not support this position and the taxpayers association did not appear willing to compromise.

The measure presented to the county board of supervisors consisted of the following components:

- Widening of 101 by one lane in each direction through most of the County but excluding both a segment in the north and one in the south. The extra lanes would be dedicated to HOV use during commute hours.
- Improving or constructing 12 interchanges along 101.
- Providing safety improvements to Highway 116, both west and east of 101.

[1]Two other groups did oppose the measures but the CTR coalition had little reason to be aware of their opposition during their deliberations (Ellman August 2, 1999). One group was the Environmental Defense Fund (EDF) and the second group consisted of some local environmentalists who did not seem to be leaders in any of the formal environmental groups.

- Implementing rail service on the NWPRR line by upgrading the tracks, constructing stations, purchasing commute trains, and providing operating expenses. Both freight and passenger service would be provided.
- Expanded bus service with emphasis on feeder lines with the rail line.
- Building and improving bike and pedestrian paths.

The above package was quite similar to the package recommended in the Calthorpe report. However, Calthorpe recommended less extensive use of HOV lanes. The report also stated that a "bus/HOV lane is the least cost effective transit investment" (Calthorpe 1997 p.128) and later stated on the same page that "the benefits of HOV lanes vary along the corridor."

Unanimous approval of a modified package by the County Board of Supervisors

The County Board of Supervisors has five members who are elected through geographic district elections. According to a proponent interviewed, the Board consisted of one environmentalist, one conservative person from the southern part of the County, and three moderates during the relevant time period.

The Board added some things to the package that increased the projected costs by approximately $183 million to a total of $948 million (Sonoma County Citizens for Balanced Transportation "Fact-Pack," 1998). More specifically, it added widening of 101 from Petaluma to the southern county line (a projected cost of $89 million) along with storm repair, safety, and street maintenance improvements in parts of the County both east and west of the 101 corridor (a projected cost of $94 million) (Ellman August 2, 1999). These changes allowed each board member to indicate that the package included something for voters in their district.

The most controversial modification was the widening of 101 south of Petaluma. This issue was discussed in a series of articles in the *Santa Rosa Press Democrat* in the first quarter of 1998.[2] Even environmentalists in the CTR coalition were quoted as being opposed to this widening believing it would result in population growth. Many voters were strongly in favor of this widening. The board developed a compromise that added the highway widening but also added a county measure to the November ballot that

[2]The *Santa Rosa Press Democrat* is the main newspaper in the county and it had an important role in the campaign that will be discussed in more detail later in the chapter. The abbreviated name of the *Press Democrat* will be used for this newspaper.

restricted population growth south of Petaluma (Wilford July 23, 1999). The board voted unanimously to approve the modified package in May of 1998.

Cost projections for each of the major components of the transportation package approved by the Board are identified below (Sonoma County Citizens for Balanced Transportation "Fact-Pack" 1998).

- Highway 101 widening - $382 million
- Highway 101 interchanges - $186 million
- Highway 116, streets and roads - $130 million
- Rail, bus and bike - $250 million

The campaign strategy used by proponents of Measures B and C

The proponents used the political consultants who were used by Santa Clara County in their successful attempt to fund a combination of highway and transit improvements using the paired measure approach. The consultants essentially used the same strategy and tactics in Sonoma County as they used in Santa Clara County.

According to the political consultant, the basic strategy involved running a stealth campaign that tried to prevent vocal opposition from forming. This strategy was based largely on the result of a survey done months prior to the election. In this survey, a significant majority indicated they would vote for both measures (DuBay August 2, 1999). If organized vocal opposition could be minimized, voter intentions would remain stable through the election as they did in Santa Clara County (Bessler December 9, 1998). This was a reasonable initial strategy. However, since vocal and effective opposition cannot be prevented, developing a contingency response plan if this opposition developed would have been prudent. Proponents indicated that a comprehensive aggressive contingency response plan did not exist.

Direct mail was the primary component of the campaign for two reasons. First, since it was a less public medium than television, radio, or newspaper, it was more consistent with the stealth concept. The sales tax increase would be reduced from .004 to .002 once the bonds were retired. Different bond retirement dates were identified, with the earliest date being 2020 and the latest being 2035 (*Denver Post* October 17, 1997).

The direct mail campaign in Sonoma County was very similar to that used in Santa Clara County. Since this campaign already has been described in the Santa Clara case, it will be only briefly described here. Five mailers were involved with the first one sent about one month prior to the election. They were sent to 95,000 households representing about 130,000 registered voters

who were likely to vote in the November, 1998, election, based upon past voting behavior. Except for the last mailer, which was a postcard, the mailers had a great deal of information on them. The main points were that the paired measures were supported by both environmentalists and the business community, and that voting for both measures was needed and would provide traffic relief. In addition to making these points directly, they were supported by a) rather long quotes from supporters in the business and the environmental communities, b) a list of organizations from both camps that endorsed the paired measures, c) a somewhat complicated map of where improvements would be made with a list of projects, starting with the highway 101 improvements and passenger rail service.

One component of the stealth campaign involved trying to keep the issue out of the news (Bessler December 9, 1999). Thus, according to proponents interviewed, they made little, if any, effort to obtain news coverage in either the *Press Democrat* or the broadcast media.

The campaign strategy used by opponents of Measures B and C

Three groups of opponents worked together to defeat the paired measures. One group was the Sonoma County Taxpayers Association. Although proponents had some reason to hope that this group would not actively oppose the measure, since over two-thirds of the money involved highway projects, which this association supported, their opposition was not a surprise. A second informal group consisted of local environmentalists. Their active involvement started in August, according to one of the members. Given the heavy emphasis on highway capacity increases, particularly south of Petaluma, which environmentalists had actively opposed, it should not have been surprising that some individual environmentalists opposed the paired measures. The third group opposing the measures probably was both the most critical and surprising group.[3] This was the Environmental Defense Fund (EDF). Their involvement was surprising both because they had little prior involvement in Sonoma County and because they had become actively involved in opposing only one prior campaign, and that one, Alameda County, was in early 1998. The basis for EDF's involvement is described below.

EDF believes in user fees for automobiles, such as congestion pricing. They tried without success to persuade different communities to implement congestion pricing. They then decided to use a new tactic to accomplish their objective, namely active opposition to voter packages that did not include congestion pricing. The June, 1998 election in Alameda was their first effort at

[3] Although they did not oppose the paired measures, two major environmental organizations, the Sierra Club and the Greenbelt Alliance, remained neutral in the campaign.

such opposition. Their only involvement in Sonoma County prior to the 1998 election was a study of congestion pricing on 101 conducted by the Metropolitan Transportation Commission. (This commission is involved in transportation in nine counties in the larger Bay Area, including Sonoma County.) The study apparently concluded that using the new lanes on 101 for free HOV use, combined with paid use by solo drivers, was "financially, physically, and operationally feasible." (*Press Democrat* July 9, 1999)

EDF probably would not have opposed the paired measures in Sonoma County if congestion pricing had been used to help finance the transportation improvements. The primary reasons stated by proponents interviewed for not including congestion pricing to help fund the transportation improvements were that it would not have raised sufficient revenues by itself to fund the improvements and that voters were opposed to the concept. Both of these arguments can be questioned. The first argument does not explain why congestion pricing was not *part* of the funding package. The second argument possibly could have been countered since it would have been less restrictive than what was included in the paired measures. In other words, giving solo drivers the option of using HOV lanes at a known price, rather than not allowing them to use the lane under any conditions, seems to be something that voters might not oppose if it were appropriately positioned. At the same time, although the congestion pricing study seemingly began in 1997 and proponents certainly were aware of the study, it may have been too late to incorporate this recommendation of the study into the paired measures, given that the study was not published until after the county board had already approved the measures presented to the voters.

Since congestion pricing was not included in the paired measures, EDF decided to become involved in the opposition to the paired measures and their involvement started sometime during August and September. All opponents interviewed, as well as proponents, indicated that the EDF played a critical role in the defeat of the paired measures. More specifically, all agreed that they organized the opponents through weekly meetings. In addition, their research skills, combined with their name, helped the opposition obtain some prominent coverage in the *Press Democrat* during the last few weeks prior to the election.

Since the opposition raised only about $15,000, they had to rely on unpaid methods to communicate their opposition. The only exception to the unpaid means involved one direct mailer to about 50,000 households (Hall and Taylor August 2, 1999). The unpaid means involved concerted efforts to have the *Press Democrat* publish articles in the news section that presented their arguments, grass roots efforts such as debates and visits to organizations in the county, letters to the editor, and ballot arguments.

The opposition used a shotgun approach in opposing the paired measures. In other words, they presented a number of different reasons for voting against the measures. This approach made it somewhat difficult for the proponents to respond and also may have appealed to a larger segment of voters. The arguments used by opponents are presented below.

- The paired measure approach involved having a transportation projects measure that was merely advisory since the money raised by the sales tax went into the general fund. This was the main message in the direct mail campaign with the headline that "Measure C is a $650 million blank check." A check for $650,000,000 with a notation that the revenue could be used for whatever the board of supervisors wanted was under the headline. As discussed in more detail in the next section, this argument was reinforced frequently in articles in the *Press Democrat*.
- The costs of the transportation projects would have been significantly higher than projected since debt financing would have been needed and it was not included in estimates. This was the primary focus of a press conference held by EDF at which a position paper was presented. This topic was the focus of an article in the *Press Democrat* shortly after the press conference. It also was suggested that, as a result of insufficient revenues, the passenger rail project would not be finished.
- The passenger rail line project was incompletely developed and would have no more than a minimal impact on 101 congestion due to low ridership. This was the primary focus of a press conference held by EDF at which a second position paper was presented with ridership estimates presented, based upon population and occupation destinations. The projections were lower than those in the Calthorpe report. This "waste" argument was reinforced by the name used by the opponents. They called themselves "Citizens Against Wasting Millions."
- The 101 widening would increase the rate of population growth more than it would reduce congestion on 101. This argument was made in a guest editorial by Laura Hall that appeared in the *Press Democrat* in August. It also was made in a ballot argument signed by Laura Hall and four other local people affiliated either with an environmental organization, or an institution of higher learning. This same argument also discussed the need for a "viable transit program that gets the priority it deserves and operates frequently

enough to reduce traffic; and express carpool lanes paid for by road users, not HOV lanes paid for by sales taxes." It is interesting that this ballot argument also spoke negatively of the passenger rail transit component as the "slow train to nowhere."

- A sales tax is a poor and unfair way to finance transportation projects. This was a ballot argument prepared by the taxpayers association. This argument also talked about using the new lanes on 101 as free for HOV use but toll lanes for solo drivers. It also reinforced the message that the funds would go into the general fund.

Newspaper coverage

Based on a review of their web site, the *Press Democrat* had extensive coverage of the transportation issue in the news section of the paper while the package was being developed in the latter half of 1997, in the first quarter of 1998, and in the last two months prior to the actual election. For example, 13 articles written from the middle of September, 1998, through the end of October were identified. Additional articles probably were written that research did not find.

The articles covered a number of specific topics and were balanced. However, virtually every article researched mentioned two characteristics that reinforced themes used by opponents. First, almost every article indicated that the sales tax went into the general fund and could legally be used for purposes other than the transportation projects listed in the companion measure. Second, many articles mentioned that the paired measure approach was used to get around state law on special taxes requiring a two-thirds vote.

The focus of one article written within a week of the election (*Press Democrat* October 31, 1998) was intriguing and certainly could have helped opponents more than proponents. This article indicated that Sonoma County would receive $594 million from gas taxes over the next 20 years. Of course, this article also included quotes from opponents indicating that the sales tax was unnecessary with this significant infusion of gas tax revenue.

Geographical distribution of voting

The issue of whether transportation packages involving a significant tax need to provide benefits to geographical segments roughly proportional to tax revenues in each segment has been raised in prior cases. Given that most of the sales tax revenue raised in Sonoma County would have gone to the 101 corridor, including the passenger rail line, an analysis of the geographical distribution of votes is relevant here. This distribution indicates that voting tendencies definitely were correlated with the distance of the voter from the

101 corridor. In the communities along the 101 corridor where the widening was proposed, 50.5% of the 80,740 votes supported the sales tax measure. In the communities not along the 101 corridor, in unincorporated areas, which generally are not along the corridor, and in a couple of small communities on the 101 corridor but not where the widening was proposed, 43.7% of the 62,293 votes supported the sales tax measure. Thus, the results in Sonoma County are consistent with the interpretation that voter tendencies are based partly on the extent that their geographical area gets benefits roughly proportional to the taxes paid by the area.

One person interviewed compared the voting results in areas not on the 101 corridor in 1998 to those in 1990. He indicated that the results were virtually identical even though no benefits were provided to these regions in 1990 while about $130 million was supposed to go to these regions in 1998. Although this comparison does not begin to approximate a controlled experiment, the results are consistent with the hypothesis that providing less than proportional benefits to a geographic segment seems to have little impact on voter tendencies compared to offering no benefits to the segment.

Reasons for voter rejection

Survey Results: A random survey was conducted for the proponents about one month after the election. Through both open- and close-ended questions, along with scales, this survey provides direct responses from voters about their voting behavior. Thus, it is an excellent starting point for understanding why people supported and rejected the paired measures. Some of the key findings are cited below, followed by an interpretation.

- In response to an open-ended question on the transportation package measure, some "yes" voters mentioned highway improvements while others mentioned transit improvements. Highway improvements, however, with an emphasis on highway 101 widening, were mentioned by significantly more proponents (54 responses) than transit improvements (seven responses).
- In response to the same open-ended question, "no" voters tended to have different views than "yes" ones towards highways, growth, and transit. Here a larger number of "no" voters were opposed to the highway widening or growth perceived to be generated by the widening (15 responses) than opposed to the transit component (four responses).
- In response to an open-ended question on the sales tax measure, "no" voters' responses essentially could be put into three categories, excluding the most common response, which was a

vague negative statement about taxes. The most common response was that the gas tax already imposed should be used rather than an additional sales tax (14 responses). The next most common response was a lack of trust that the tax would be used for transportation (nine responses). Four respondents indicated they were opposed to highway widening.

- The two most common sources of information checked in response to a close-ended question were literature in the mail (70%) and newspapers (64%). These results are consistent with the prior discussion of heavy coverage in the primary newspaper plus use of direct mail by both proponents and opponents.
- Respondents were presented with 17 possible reasons for the sales tax measure failing and asked to indicate with each reason whether it was a major, moderate, or minor reason for failure. As mentioned previously in the background section, the reason with the largest percentage of "major" responses was the statement "people didn't trust government's ability to follow through on their promises" (63%). The statement "transportation plans should be funded by the gas tax or some other type of tax, not by a sales tax" had the second highest percentage of responses in the major category (52%). Thus, the two most important negatives with this close-ended questioning format are consistent with the two most common reasons cited in the open-ended question asking voters who voted against the sales tax why they did so. Since these two reasons were the most important ones identified in the post-election survey, each is discussed in more detail below.
- One of the main arguments used by the opposition was that the rail line would be a waste of money and have little impact on highway congestion due to low ridership. Since this argument is consistent with the perceptions of at least some segments of the population, it could have been hypothesized that this would have been mentioned by some "no" voters as a primary reason for their vote. However, this reason was rarely given in the open-ended responses. Unfortunately, none of the 17 possible reasons for the loss of the sales tax measure involved a statement about the rail line probably having only a small impact on highway congestion. Thus, both the credibility and salience of this argument on voter tendencies remains uncertain.

The paired measure concept combined with voter distrust of politicians
Voters realized that the sales tax would go into the general fund and that the vote on the transportation package was advisory only. As indicated in the survey discussed above, many voters seemed to doubt that the sales tax revenue would be used solely for transportation projects or that all the transportation projects listed would be funded with the sales tax revenues raised.

Given that the paired concept succeeded in Santa Clara County with the same marketing and communications strategy as used in Sonoma County, it is relevant to discuss why it succeeded in the former county but failed in the latter one. Two plausible explanations exist. First, unlike Santa Clara County, organized opposition existed in Sonoma County and this opposition focused heavily on the "blank check" and likely cost overrun arguments in their direct mailer, a press conference, and in ballot arguments. Second, the primary newspaper in Sonoma County had extensive coverage of the paired measures with frequent mention of the nonbinding nature of the paired measures. Given the very close vote in Santa Clara County, the paired measures may not have passed there if organized opposition or extensive newspaper coverage had existed.

Although the nonbinding nature of the sales tax measure was the primary reason given by voters for opposing it, some of these voters probably would have voted in favor of the tax if they perceived no additional problems with the measure and also saw significant benefits. In other words, many voters probably weighed the pros against the cons in determining how to vote on the sales tax measure. For example, some of the voters who gave their primary reason for opposing the sales tax measure as uncertainty that the money would be spent on the transportation projects may also have had a general opposition to higher taxes and also perceived that rail transit is an inefficient use of public expenditures.

Since a two-thirds vote would have been needed if the paired measure approach had not been used, the latter was a better approach to use even though it failed. Since the paired measure approach seems to be the best legal option currently available in California, it is relevant to examine whether proponents could have effectively countered this information.

The use of a "stealth" campaign by the proponents suggests they realized it would be difficult to counter arguments such as the nonbinding nature of the sales tax once they were raised. The one direct attempt to counter this argument involved having the county board of supervisors take a pledge to only spend the sales tax revenue for the transportation projects listed in the

advisory measure. If anything, this attempt probably made things worse by calling more attention and press coverage to the nonbinding nature of the sales tax. Even if voters believed that the board members who made the pledge would honor their word, which is unlikely given general voter distrust of politicians, they would have realized that these members would not be on the board during the entire 20-year period that the tax would exist. Assuming that it was best for proponents to avoid directly countering the nonbinding issue, the only reasonable response seems to have been the one used in Seattle. This involves attacking the opponents as not having a solution to a transportation problem that was bad and would get even worse and more expensive to fix if not fixed promptly. This attack was made in an editorial in the *Press Democrat* shortly before the election, but it might have been more effective if it had been made more repetitively through a media campaign.

The gas tax issue

Some "no" voters thought that the gas tax money they were already paying for transportation, estimated at about $70 million per year, should be sufficient to pay for some, if not most, of the transportation improvements. In other words, they perceived a combination of a significant gasoline tax plus a half-cent sales tax for 20 years to be too expensive for benefits that opponents said would be minor and short-term. Although this gas tax issue was not directly mentioned by opponents in their ballot arguments or their direct mailer, it was mentioned many times in the *Press Democrat*, including an article within a week of the election. In addition, opponents indirectly focused on this issue through their arguments that neither the highway widening nor the rail transit line would lessen congestion on 101 to any significant extent. This is a relevant indirect response because it addresses the issue of value of the "additional" tax.

The gas tax issue is one that probably could have been addressed more effectively by proponents in their marketing and communications campaign. For example, no mention was made in their mailers that approximately one-third of the costs would be funded by gas tax revenues with two-thirds being funded by the sales tax. They also could have effectively argued that they were likely to get a greater infusion of gas tax revenue if they agreed to share the costs through a sales tax.

The gas tax issue might have been indirectly diffused if a smaller transportation package had existed. The gas tax revenue would have covered a larger percentage of the funding with the sales tax covering a smaller percentage with a less costly package. In addition, a shorter sunset package could have been used with a smaller and less costly transportation package. Since uncertainty tends to decrease with shorter time frames, voters might have

felt more confident about how the board would spend the money, as well as more certain about costs, with a shorter sunset period. This issue will be discussed in more detail in the concluding chapter.

Inclusion of both highway widening and transit elements

Responses to the survey discussed previously suggest an underlying dilemma in developing a transportation package that will obtain voter approval and also minimize organized opposition. This dilemma is that public perceptions towards modes of transportation are somewhat polarized with some people being anti-transit, and others being anti-highway.[4] People in both extremes voted against the sales tax because it included the component to which they were opposed. Since most of the revenue raised would have gone to highway improvements in Sonoma County, the anti-highway people were more likely to vote against the sales tax measure than the anti-transit people. Organized opposition also came from both groups. Local environmentalists who worked to defeat the measures were strongly opposed to the highway widening. The leader from the taxpayers association who was interviewed indicated that their group was strongly opposed to the rail transit component.

Given the polarization identified in the previous paragraph, it seems unreasonable to assume that opposition to any transportation package will not occur. Thus, although a "stealth" campaign may be appropriate before opposition develops, it is critical to have a contingency plan when and if opposition does develop. This concept will be developed in more detail in the concluding chapter.

The polarization of views toward modes of transportation also created a challenge in developing a transportation package. Given the number of supporters of highway widening, it definitely was necessary to have this component to obtain voter approval in Sonoma County. Although very few supporters of the measure indicated in the survey that they did so because of the transit component and although opposition to the measures came from environmentalists, it also probably was wise to include the transit component in the package. This conclusion is made for several reasons. First, very few opponents indicated that their primary reason for opposition was the transit component. Second, the transit component was not particularly costly in this situation since much of the system had already been constructed.

[4] Many people are not in either of these two groups. More specifically, many are pro-highway and neutral on transit, pro-transit and neutral on highways, or both pro-transit and pro-highway. The first point discussed under the survey indicated that a much larger number of people are pro-highway than pro-transit.

Evaluation of marketing and communications campaign used by proponents

It is easy to critique a failed marketing and communications campaign after the fact. Proponents interviewed did so in this situation and some indicated they did so during the campaign. Certainly, as discussed previously, some things could have been done more effectively, such as responding more aggressively in the newspaper once opposition surfaced. However, given the underlying problem with the paired measures approach discussed previously, combined with the lack of data from the Calthorpe study supporting an argument that congestion on 101 would be significantly reduced in the long term with the transportation package, some fine-tuning changes in the marketing approach probably would not have changed the final outcome although they could have closed the margin of defeat. If proponents truly believe that a different marketing approach will change the outcome, they would have hired a new consultant and would be shortly presenting the same package to the voters. Proponents interviewed indicated that this will not be done.

Summary of lessons learned

- An effective coalition of business people and environmentalists can be developed through a transportation package that has both a significant highway and a transit component when representatives from both groups are involved in developing the package.
- It is difficult to generate support for a package with a significant increase in a sales tax with a long sunset date. The 20-year tax period in Sonoma County was extremely long.
- It is difficult to overcome voter distrust without a specific plan, funds specifically allocated for the plan, or a prior track record of accomplishing plans within budget.
- Even when effective efforts are established to minimize opposition, such opposition is likely to develop, sometimes from surprising sources. Contingency plans are needed for such opposition.
- Providing small benefits to some geographic segments seems to have little impact on voter tendencies.

CASE STUDY III

Seattle: Funding for regional public transit (1996)

In November of 1996, voters in the Puget Sound region of Washington state passed a $3.9 billion tax increase for the funding of a comprehensive, multi-modal, regional, public transit system. The initiative included funding for

transit improvements, including light rail and commuter rail, as well as expanded express bus service, and high occupancy vehicle (HOV) lanes for existing freeways. Funding for these improvements was culled from increases in local sales and motor vehicle excise tax rates. Despite the fact that a similar initiative had failed the previous year, the 1996 plan passed by a substantial majority (56.6% in favor regionwide), including majorities in each of the three counties included in the Puget Sound Region. The 1996 ballot measure represented the largest transportation tax and public works project ever approved by popular vote in the state's history.

This case represents an example of how public officials can learn from past mistakes and refashion an initiative to maximize public support. It also provides evidence that strategic use of marketing techniques can help buttress an effective campaign and confirms the strategic importance of building effective political coalitions for public transportation.

Among the individuals interviewed for this case were the staff from the local transportation agency, several consultants associated with the campaign, Chamber of Commerce staff, and individuals associated with an earlier, unsuccessful transportation tax measure. Key documents consulted included a report issued by the local transportation agency (Central Puget Sound Regional Transit Authority 1997), one issued by the campaign's consultants (Gogerty and Stark 1997), and coverage from the *Seattle Times*.

Background: transportation and traffic

Regional transit has been a concern for the Seattle area since at least the late 1960s. Citizen frustration with growing congestion, fueled by urban sprawl, has long been present in the area, although comprehensive attempts have typically failed. Survey data concerning citizen attitudes toward transportation issues are not readily available but the sources consulted for this review unanimously support the conclusion that most, if not nearly all, area residents were very concerned about traffic and congestion and their impact on the livability of the Seattle area. Empirical data suggests that this concern was legitimate.

While Seattle consistently tops listings of the nation's most-livable cities, it has also regularly placed high in surveys of cities with the worst congestion problems. In 1996, Seattle had the third-highest average round-trip commuting time: 60.3 minutes (*Seattle Times* November 1, 1996). The Texas Transportation Institute ranked Seattle as the sixth most congested city in a recent ranking of 50 urban areas nationwide.

The population has increased from 1.8 million in 1970 to 2.8 million in 1999 in King, Pierce, and Snohomish counties, which make up the Central Puget

Sound Regional Transit Authority (RTA) service area. Residents of the region are living farther and farther away from where they work. In 1980, 11.6 percent of employees in the region worked in one county while living in another; in 1990, that number had increased to 15 percent. Many households have two people working outside the home, meaning more trips per household. From 1971 to 1987, the average number of daily trips per household increased 28 percent.

A great deal of the congestion is associated with commuting to the workplace and more and more commuters are driving to work alone. According to the 1990 Census, the proportion of workers in the region who drove alone to work increased from 64 percent in 1980 to 73 percent in 1990. While total daily transit trips rose between 1961 and 1990, the proportion of transit trips compared with all trips dropped from 5.2 percent to 3.3 percent. This figure, however, obscures the fact that transit is a key component of regional transportation.

The state Department of Transportation found that vehicle miles traveled increased by more than 80 percent between 1981 and 1991, from 30 million to 55.2 million. During the same period, the region's population grew by just over 20 percent, indicating that traffic grew at nearly four times the rate of growth in the population. The traffic growth resulted more from the increasing number of miles traveled by each person than from the increasing number of people or jobs, the study concluded.

Available data suggest that the traffic and congestion woes of the area will worsen in the future. Since 1990 alone, the average number of automobile trips has doubled (*Newsweek* July 19, 1999, p.25). The population in King, Pierce, Snohomish, and Kitsap counties is expected to increase from about 2.7 million in 1990 to 4.1 million in 2020. The number of jobs in those counties is projected to grow during the same period from 1.4 million to 2.2 million.

Prior to the passage of the 1996 transportation initiative, transportation in the Puget Sound region was essentially limited to buses operated by various agencies throughout the area and, of course, individual automobiles. At least three ambitious mass transit plans failed to receive adequate support from voters over the thirty-year period preceding the passage of the 1996 ballot measure.

Background: political history

The primary entity with decision-making authority for regional transportation in the Puget Sound area is the Central Puget Sound Regional Transit Authority (RTA). Creation of regional transit authorities was enabled in 1992 by the state legislature, partially in response to the inability of its predecessors to conduct

effective regional transportation planning. In 1993, county councils in King, Pierce, and Snohomish authorized creation of the RTA. RTA board members and staff are the primary agents responsible for the transportation plans recounted in this chapter.

These three counties represent a large, disparate portion of northwestern Washington, including the cities of Seattle, Redmond, and Bellevue (King County), Tacoma (Pierce County), and Everett (Snohomish County). Many smaller suburban and exurban communities fall within the three counties that comprise the district.

The RTA board is comprised of 18 members, including the state secretary of transportation (*ex officio*) and 17 locally elected officials nominated by each of the three county's executive official and confirmed by the respective county councils. Each board position represents 145,000 voters, and one-half of the board are also members of local public transit agency boards. Thus, although the Board is tied to the political process, it is not directly elected and is closely associated with public transit agencies.

The enabling legislation that created the RTA charged it with the duty of creating and presenting to voters a regional plan within two years. This placed enormous pressure on the RTA to devise a plan in a limited time period. The resulting plan was an extremely ambitious one: in October of 1994, the RTA Board submitted a $6.7 billion, 16-year, multi-modal transit proposal to be voted on in March of the following year. Only two of the 18 RTA Board members opposed the plan, including the mayor of the district's most northern community, Everett.

According to interviews conducted for this report, this plan was necessarily assembled in haste in order to meet the legislature's mandate. The eventual failure of the plan to obtain the necessary majority of votes may be attributed to a variety of factors. This report focuses on a subsequent proposal but the fate of the 1995 proposal is instructive in a number of ways. A widely held view among those close to the passage of the subsequent measure is that transit proponents learned from the mistakes associated with the earlier project.

Among the circumstances associated with the failure of the 1995 proposal are the following:

1) A lack of lead time to conduct campaign. The proposal was required by law to be approved by each county. Approval was not achieved until approximately December of 1994, leaving proponents only three months before the March, 1995 election to advance their cause. Opposition to the plan was well organized, and preceded formal completion of the ballot measure

(2) The perceived "Seattle-centric" nature of proposal. Many of the proposed improvements involved projects in and around the downtown core of Seattle, including an expensive rail tunnel. The light rail line proposal stopped two miles south of Everett.

(3) A special election ballot. In order to meet the legislative mandate for a vote on a regional transit plan within two years, RTA was forced to submit the proposal for a special, off-year election. Such elections are thought to attract lower turnout and higher percentages of older or tax-resistant voters.

(4) An under-funded campaign in favor of passage. Proponents budgeted a $1.2 million campaign, but were only able to raise a little more than half of that amount.

(5) Lingering effects of economic recession. The economy of the region was threatened by a coincidental announcement from the largest employer, the Boeing Company, that it would lay off 6,700 workers. Much of the rest of the local economy was also down.

One other aspect of the campaign warrants special emphasis. The election for the 1995 proposal was a special one, with no other elections measures appearing on the ballot. Some scholars have argued that the electorate for special elections, nearly always smaller, is more fiscally conservative than that associated with general elections, particularly presidential ones. For that reason, some observers believe that the 1995 ballot measure would have passed had it been offered during a general election.

During the brief campaign, opponents of the measure attempted to depict the plan as elitist, a creation of "top-down" bureaucrats, out of touch with the local citizenry. Some observers feel that the opposition successfully defined the issues and controlled the campaign, focusing attention to the details of the plan rather than the urgency of the need for a regional approach to transportation issues. In any case, the negative synergy created by these factors was apparently sufficient to doom the proposal. On March 15, 1995, voters in the RTA district rejected it by a vote of 53 percent to 47 percent. Voters from outside of Seattle were much more likely to oppose the plan. In northern Snohomish county, opponents outvoted supporters by 65 percent to 35 percent.

Developing a transportation coalition

The failure of the 1995 ballot initiative notwithstanding, support among key business and political institutions was, by all counts, fairly strong if not manifest in financial support for campaigning. Organized opposition to the measure was led, at least nominally, by narrowly focused interest groups in communities furthest from the center of the region, downtown Seattle.

However, although it did little or nothing to oppose the plan, neither was the greater business community an enthusiastic supporter of the plan. Some funding to oppose the 1995 plan was contributed by pro-highway and environmental groups. As proponents of a second initiative planned their next move, efforts were made to court leaders of these groups.

Perhaps of greater significance was the marked increase of support by the Boeing Company, the largest employer of the region. This development was probably not solely due to efforts by supporters of a transportation plan; instead, it was apparently the fortuitous result of the arrival of a new CEO at Boeing (Phillip Condit) who took a more active interest in public affairs than his predecessor. Boeing's importance to the regional political landscape is even greater than that suggested by its corporate size. Traditionally, the rest of the business community looks to Boeing for leadership, and tends to scale donations to political campaigns according to that offered by Boeing.

Creating a transportation initiative

Transit advocates used a multi-faceted strategy to create a new transportation initiative that could attract majority support from the region's voters, including the following components.

- Dividing the region into five areas, in order to create a plan that would have more widespread support
- Extensive public outreach
- Initial release of "guiding principals," rather than specific plan

Disaggregation of service area. Faced with the perception, perhaps valid, that the original (1995) regional transportation was too "Seattle-centric," RTC decided to divide the region into five sub-areas: Snohomish County, Seattle, Pierce County, East King County, and South King County. Each sub-area would, in effect, help fashion and submit its own plan and the consequent set of plans would be reformulated into a regionwide plan. This approach, although it risked creation of an incoherent regional transportation strategy, helped to ensure that the emergent regional plan would reflect the needs and interests of the entire constituency. Dividing the region in this way implicitly acknowledged that passing a transportation initiative "boils down to local politics." As the plan for the 1996 ballot initiative took shape, proponents were able to demonstrate to each part of the region how many resources would be brought to bear on improving transportation in their area.

Public Outreach

Concomitantly, the RTA created the Regional Outreach Committee to help ensure that a new ballot measure would appeal to the entire RTA service area. Members of this 15-member group represented each of the five subareas and were tapped from existing transportation boards and commissions. The group met regularly, with meetings open to the public and news media. Informal meetings with constituent groups, city councils, and other community leaders were also conducted throughout the sub-areas identified by RTA. Opponents to the 1995 plan were also invited to participate in various outreach events, some organized by independent groups. Over the course of the year, thousands of public outreach meetings were conducted.

Release of "guiding principles."

Rather than merely scale down the spending called for by the rather massive 1995 plan, the RTA Board endeavored to commit itself to a fresh approach. Before it set to work on the specifics of the new plan, the board released a set of "guiding principles" that would oblige it to create a significantly different plan. Of paramount significance, the board acknowledged that enhanced bus service would have to be part of the new plan, since rail transit could not practically serve all suburban areas of the service district. Among the principles the RTA Board committed to were:

1) The new proposal would be regional, yet would address local needs in each of the five sub-areas.

2) Spending in the sub-areas would correspond to the taxes raised in each.

3) The proposal would create high capacity transit with a multi-modal approach, including rail, bus, access ramps for high occupancy vehicle lanes, and general traffic improvements.

In sum, the board's approach to transportation planning was significantly different than that associated with the 1995 plan. It reflected the political and fiscal realities of the time. By publicly adhering to these principles, the board was much more likely to create a plan that would attract majority support regionwide. Although some public opinion polling was used to determine the overall level of support for a new initiative, yielding encouraging figures, the details of the plan itself were the result of public outreach in light of the "guiding principles" listed above. More intensive use of research techniques did not begin until the new proposal had solidified.

Overview of transportation initiative

After consideration of the various forms of public outreach and the "guiding principals" the RTA Board had established for itself, a draft plan was released in March of 1996. Release of the proposal inevitably fueled more intense debate about the details of the final plan among the various groups and interests whose support was important to the success of the final campaign. With some minor changes the final plan adopted by the RTA board two months later (May 1996). Of the 18 board members, only two King County Council members (from the suburban areas east of Seattle) voted against the plan. The board voted to submit the measure for the November 1996 ballot, which allowed five months for the campaign to pass it.

The proposal included the following major components.

- A ten-year, $3.9 billion regional transportation plan funded with sales and motor vehicle excise tax increases
- Light rail in the region's densest areas and commuter rail using existing railroad tracks in other areas
- Enhanced access to HOV lanes
- Regional express bus service
- "Seamless" fare integration between regional transit components nd
- An independent citizen review panel to oversee RTA and construction of the system

Compared to the 1995 plan, this proposal was much more modest in scale. Major differences between the two plans are summarized below. The difference in cost between the two proposals is primarily the result of a less elaborate commuter and light rail system in the 1996 proposal. By substituting less expensive alternatives (bus and HOV access ramp construction), the less costly 1996 plan appears to directly serve more of the RTA region than did the 1995 proposal.

Clearly, the 1996 package was intended to address the perceived political weaknesses of the 1995 measure. For example, it eliminated rail transit in East King county, where opponents had criticized the 1995 plan. The addition of HOV lanes would help make the plan more attractive to those who believed that the 1995 proposal would do little to alleviate traffic congestion. Light rail service from between Tacoma and Seattle was eliminated in favor of a short link between central Tacoma and the Tacoma Dome commuter rail station.

Table 3-1. RTA Proposal

	1995 Proposal	1996 Proposal
Cost	$6.7 billion	$3.9 billion
Life span	16 years	10 years
Commuter Rail	Yes	Yes
Light Rail	Yes	Yes
Express Bus	No	Yes
HOV Access Ramps	No	Yes

Devising and implementing a marketing and campaign strategy

In May of 1996, the campaign committee hired the polling firm of Evans and McDonough to conduct a public opinion survey about issues associated with the new ballot measure. Results from the poll indicated that a majority of respondents were highly concerned with the issue of traffic and congestion and were supportive of a publicly funded solution. More specifically, the research showed that about three out of four prospective voters thought "traffic/ transportation was the most important problem facing the region and that a public solution should be a high priority." Moreover, 58% of those polled would vote in favor of "a public solution." However, results from the poll also suggested that support for public funding decreased when focus was applied to the details of the plan.

With these results in mind, the campaign committee hired the consulting firm of Gogerty and Stark to conduct the campaign, including supporting research activities. Although much of their more recent work has been for private sector concerns, Gogerty and Stark had been conducting campaigns since 1968. They were assisted by a media consultant who created the specific advertisements used by the campaign.

The general research strategy used by Gogerty and Stark was to use focus groups as a cost-effective means of understanding voter response to the campaign, and a series of surveys to monitor voter support. One major consideration in formulating the campaign was to avoid the perceived mistakes of the failed 1995 campaign. In the view of the consultants, one of the reasons that campaign had failed was that opponents were successfully able to make the details of the plan the campaign's main issue. However, principals from the firm also believed that, generally speaking, such initiatives do better after

initial failures. The public seems to be wary of initial proposals, and collectively "waits for a better deal" that comes with subsequent proposals.

Focus groups were the linchpin research activity for the campaign. Through a series of focus groups, conducted with prospective voters from various parts of the region, Gogerty and Stark were able to fashion what turned out to be a successful campaign strategy. The insights from focus groups were gathered as follows:

1) Participants were asked about the most important problem facing the Seattle area. In each group, an average of 8 out of 10 respondents replied "transportation." In every group except one, a majority "passed" the actual ballot language.

2) Respondents were then shown the details of the 1996 regional transportation proposal in the form of informational brochures and diagrams and asked to discuss it. As the details of the plan became known, the number of questions and concerns increased. In most of the groups, within half an hour, most participants moved from support for the plan to opposition because they learned it did not benefit them individually.

3) Additional arguments in favor of the measure (such as, "It's time to do something!") left a positive impression with participants, but did not affect their support for their measure. On the other hand, exposure to opposition's arguments against the plan (e.g., "The plan won't reduce congestion") seemed to cause respondents to "step back and look at the whole picture" and reignited support for it.

From this pattern of responses, Gogerty and Stark formulated a "counter-intuitive" communications campaign for the measure. Rather than emphasizing and extolling the virtues of the details of the plan, the strategy was based on drawing attention to the opposition and its apparently overplayed message. The campaign would actually use the opposition's arguments against themselves. This approach had the secondary benefit of not allowing the opposition to focus debate back on the details of the plan, which had been part of the downfall of the 1995 plan.

The "strategic communications plan" devised by Gogerty and Stark reflected the results of the focus group research along with a media strategy that would maximize voter contact. According to Gogerty and Stark, the objectives of the plan were:

1) Inoculate against the opposition's anti-arguments by presenting them to voters first and countering with a positive theme.

2) Explain the general merits of the proposal without getting buried in the details.

3) Inform voters that the opposition had no plan for an alternative solution.

4) Compare the RTA plan to the "do-nothing" alternative.

5) Ask the voters the question that the proposal answered: "Do you want to get started on solving our region's transportation problem?"

6) Establish the message that, "It's time to do something," and that, "The RTA plan is the right first step in solving the regions transportation problem."

Proponents for the measure had raised $850,000, of which 80 percent was allocated to citizen contact, as indicated in table 3-2:

Table 3-2. PR Funding

Expenditure Category	Amount	% of total	Units purchased
Television ads	$549,000	81.5%	2,000 gross rating points
Direct Mail	$91,000	13.5%	169,000 pieces
Leaflets	$4,000	.5%	15,000 pieces
Radio Advertising	$16,000	2.3%	4 stations; 6-8 times per day; 5 days
Yard Signs	$13,000	1.9%	5,000 signs

The conscious strategy was to focus on mass media advertising, particularly television, to create an "impact campaign." This decision was apparently based on the corporate philosophy at Gogerty and Stark, which believes that it is nearly impossible to win this type of campaign without mass media. The funds budgeted to television ads were intended to ensure that each member of the target audience of registered voters saw an ad 21 times.

None of the ads or other media used in the campaign were targeted to specific demographic groups or regions, although survey research had suggested that women were more likely to support the measure and that opposition was stronger in the further reaches of the region. Instead, the campaign sought to

saturate the public with the pre-emptive attack on the opposition's lack of a viable alternative and its own positive message, "It's about time."

Opposition efforts

Opponents of the measure again raised campaign funds from road construction and suburban real estate interests, but were much less successful in doing so than for the previous (1995) campaign. They raised several hundred thousand dollars less than the RTA campaign. Using the acronym "COST" (Citizens Opposed to Sitting in Traffic), the opposition apparently played into the hands of the Gogerty and Stark strategy by raising the same issues, and the same negativism, that had been so successful for them in the earlier campaign. Unlike the RTA campaign, the opposition relied more heavily on direct mail and radio spots, presumably because that they lacked the funds to match the RTA's television ad blitz. As in 1995, the local news media gave significant publicity to the opposition, but without the same effect. However, two local newspapers endorsed the measure.

Outcome evaluation

The election occurred on November 5, 1996, and the measure was adopted by a sizeable 56.5 percent majority. Perhaps more impressively, the measure won a majority of votes from all three counties in the RTA service area, whereas its predecessor had failed in the two suburban counties. How can the success of the measure best be understood?

First, it is possible that the success of the 1996 initiative can be nearly entirely explained by the fact it was contested during a high turnout Presidential election, whereas its predecessor lost during a special election. Given the insights gained by research during the 1996 campaign, which revealed that focus on proposal details was generally detrimental to its support, this interpretation seems even more plausible. During the special 1995 election, the local news media and proposal opponents drew attention to debate of proposal specifics in the absence of other elections and issues. The successful proposal received less attention of this sort.

Second, while the first proposal was in some ways the victim of unfortunate circumstances, the successful measure benefited from the opposite. The arrival of a new, more public affairs-oriented CEO at the Boeing Corporation, as well as the general upswing of the local economy, created a more favorable environment for a transportation plan of this scale.

That being said, the value of "lessons learned" from the unsuccessful 1995 proposal cannot be overemphasized, and is perhaps the single most important factor in accounting for the success of the 1996 ballot measure. No single,

critical "lesson" can be identified, but proponents clearly gained from the hindsight of the 1995 campaign. Among these lessons were the following:

- The need for a longer lead-in time for the campaign, in order to raise adequate funds and plan.
- The need to make the plan attractive to all parts of the region, and to lessen the perceived Seattle bias of the 1995 proposal.
- The need to move the focus of the campaign from a debate of the proposal specifics to the general need for a public response to the region's transportation problem.

Of equal importance, at least in the minds of RTA officials, was the rethinking of the planning process that anchored the creation of the successful ballot measure. Rather than presenting the public with a plan, the RTA made significant efforts to conduct public outreach and solicited input from all areas within the region. The move was apparently successful in reshaping public perceptions about the nature of project planning at RTA. Concomitantly, the agency's decision to recast the region into five sub-areas helped ensure that the resulting plan would be perceived as fair to each.

Finally, the strategic approach of Gogerty and Stark was apparently effective. Focusing the campaign on the opponent's failure to propose a reasonable alternative to RTA's plan made it difficult for the opposition to repeat its attacks on the RTA's new proposal. Interestingly, the campaign strategy did not, for the most, rely upon demographic analysis or other forms of market segmentation, instead a general mass media approach proved successful.

The Seattle experience should provide encouragement to localities that have suffered setbacks in passing transportation initiatives. Careful consideration of past defeats can help ensure the success of future efforts.

CASE STUDY IV

Denver Metropolitan Region: Defeat of guide the ride (1997)

Overview

Guide the Ride (GTR) consisted largely of a proposal for light and heavy rail lines to be constructed along four or five corridors in the Denver Metropolitan Region, some feeder bus routes, and unspecified transit modifications on two or three additional corridors. All the transit improvements covered by GTR were within the Regional Transportation District (RTD). Prior to GTR, the RTD district received .006 of sales tax revenues within the RTD for the transit system. The proposition on the ballot in November of 1997 asked voters to approve a sales tax increase of .004 to fund GTR. No specific sunset date was

established for the tax. The sales tax increase would be reduced from .004 to .002 once the bonds were retired. Different bond retirement dates were identified, with the earliest date being 2020 and the latest being 2035 (*Denver Post* October 17, 1997).

GTR was rejected by a vote of 222,163 (57.8%) opposed and 162,196 (42.2%) in favor. About 29 percent of registered voters voted on the GTR proposition (Ciruli 1998 p.6). Although the people interviewed were not in agreement on the most important reasons for the measure failing, many indicated that the transportation package was too large and had components that were not specific enough. The lead opponent also developed and implemented a very effective campaign with very limited money. He was able to get a divided board to take actions that generated a significant amount of negative publicity in the newspapers about GTR, and generated voter distrust of the agency that would need to implement GTR.

The information pertaining to GTR was developed largely through personal and telephone interviews plus some documents, particularly newspaper articles from the *Denver Post*. The people interviewed included editorialists from local newspapers, board members (which included opponents of GTR) and managers from the RTD, the campaign's political consultant, and other knowledgeable observers and participants.

Background: the RTD

The RTD includes parts of six counties and covers a large geographic area. Boulder, which is approximately 25 miles from Denver, is in the northwest part of the district. About half of Douglas County, including parts approximately 30 miles southwest of Denver is included.

The RTD Board consists of 15 elected members. Even though it uses the word "transportation" rather than "transit," it is responsible only for transit. Each member represents a designated district and each district has approximately the same population. A nonpartisan election process is used. Elections are often not strongly contested and some representatives have been elected without opposition. Voters often know little about the candidates and they tend to appear at the end of the ballot during U.S. presidential elections. These circumstances can result in some surprising representatives. For example, Boulder, which has rather liberal voting tendencies, elected Jon Caldara, who was the leader of the opposition, to the board in 1994. Two people interviewed indicated that Caldara's views were not well known to the voting public in Boulder prior to his election.

Members on the board during the time of the GTR vote were elected in 1994. Proponents interviewed acknowledged that they did not work aggressively in

this critical election to recruit and elect candidates likely to be supportive of GTR. On the other hand, the Independence Institute, a free-market think tank that opposes light rail, worked hard to recruit and elect like-minded candidates to the board in 1994. In the absence of an organized effort by transit advocates, the efforts of the Independence Institute were successful. Even though the population generally viewed traffic congestion as a bad problem that was getting worse and had positive attitudes towards light rail, five light rail opponents were elected to the Board in 1994. After the defeat of GTR, an organization entitled Metro Transit, affiliated with the Chamber of Commerce, was formed to recruit and elect pro-transit people in the 1998 election. These results appear to have been successful as five out of the seven less-than-enthusiastic supporters of GTR were replaced by pro-transit representatives in 1998.

Background: the transportation system and voter attitudes

Prior to GTR, the transit system consisted of buses, including some express buses using expressways and freeways, and one 5.5 mile light rail system in Denver that opened shortly before GTR. In addition, a light rail system along the southwest corridor had been started prior to GTR without the need of additional taxes. An attempt was made in 1980 to raise sales taxes to fund a light rail system, but it was defeated (Ciruli 1998, p.6).

Only limited improvements in the highway system were made in the 1980s and 1990s. The only change was the addition of HOV lanes on I-25, which runs due north from Denver, and on C-470, which runs in an east-west direction south of Denver. The metropolitan area had a designated non-attainment status until the mid-1990s, which precluded significant highway improvements.

All people interviewed for this report indicated that the public viewed traffic congestion as a high priority problem. In 1995 commute drive times along the approximately 20-mile I-25 corridor, which is the most congested corridor, were about 45 minutes in each direction without unusual incidents that slowed down traffic. This time was projected to increase to 66 minutes by 2020 (Carter and Burgess 1997 p.4-32). In addition, surveys indicated that people generally supported light rail (Carter and Burgess 1997 p.3-8). A poll taken in May, 1997, found that 59 percent of those surveyed supported GTR even when they were informed of its approximate construction costs (Ciruli 1998 p.10).

In general, Colorado voters seem to be rather middle of the road. Roy Romer, a Democrat, was governor from 1986 until 1998 when a conservative, anti-tax, Republican, was elected by a very small percentage. Statewide tax increase elections have not fared well in the 1990s. For example, then-Governor Romer presented a one-cent sales tax initiative to the voters in 1992 for K-12

education which was defeated by 10 percentage points. Local level tax issues, however, were often passed during the 1990s. During that time there were 10 proposals that involved overrides of the Taxpayer's Bill of Rights (TABOR). Although these involved permission to spend tax revenue already collected, rather than to increase taxes, 9 of the 10 override elections passed (Ciruli 1998 p.2).

The transportation package and the process used to determine it

The package involved a comprehensive hub-and-spoke rail system with all except one rail line converging in downtown Denver. Since major investment studies had not been completed on two northern corridors, the improvements in these corridors were not specified in the package. This lack of specificity was one of the major criticisms of GTR advanced by opponents. The package also did not involve any increase in highway capacity, except for the possibility of HOV lanes along the northern corridors.

Different estimates of the costs existed and this was attacked by the opponents. The cost estimate advanced by proponents was about $8 billion, about half of this figure involving construction costs. The remaining half consisted of financing and operating costs. The lead opponent, Jon Caldara, who also was on the RTD Board, used a figure of 16 billion dollars. He was successful in getting the Board to accept, by an 8 to 6 vote, the 16 billion dollar figure as the official estimate of the Board.

Regardless of which figure was used, the costs were quite high. To put this in perspective, GTR involved an increase in the sales tax of .004, from .006 to .01, that would last until the debt was fully repaid, which was estimated to be in 2020. Once the debt was paid, the tax would be reduced by .002 to .008. Thus, although no specific sunset date existed, an estimated date of about 20 years existed on half of the .004 sales tax increase. The remaining half of the tax increase, .002, was a permanent sales tax increase. The combination of this increase in the sales tax and no specified sunset date made this package significantly more costly than the other cases examined in this project. The lack of a specific sunset date may have combined with different cost estimates to reinforce the perception that voters would be writing a blank check.

Interviews indicated that the decision to focus almost exclusively on transit was largely the result of jurisdictional responsibilities. The RTD Board was only responsible for transit while the state had the primary responsibility for highways and the non-attainment status of the region precluded significant highway improvements during the time frame.

The decision to have a comprehensive but expensive package was based on a variety of factors. One critical factor was the perceived need to offer something

for each geographic region. As one proponent interviewed indicated, the package ended up being a "Christmas tree." As one example of this desire to offer something for each corridor, GTR included unspecified transit improvements on two northern corridors even though no corridor studies had been completed for them. The board also realized that a systematic and comprehensive package would be cheaper in the long-run than a more incremental approach and also would generate a larger increase in ridership, since people take trips across corridors. Although it was not mentioned by any of the people interviewed, a concern might have existed that an incoming governor was more likely to be less supportive of transit than Romer was. This scenario did occur with the election of the new governor in 1998.

The transportation package was selected by RTD staff using major investment studies. A number of public hearings were held as part of the Management Information Systems (MIS) process and the transportation package was expanded by approximately $1 billion.

As a result of these public hearings. The board voted 9-6 to approve the transportation package that was presented to the voters.

Given the lack of a strong consensus on the board regarding the GTR package, the proponents could have tried to modify the package to gain more Board support. However, it is unlikely that more than one additional vote of support could have been generated. As mentioned previously, according to multiple people interviewed, five board members elected in 1994 were opposed to increased taxes and also opposed to light rail. On the other hand, seven or eight board members were strong proponents of light and heavy rail.0 Given this polarization between these two groups, obtaining consensus through a compromise was virtually impossible. Certainly a package involving a combination of transit and increases in highway capacity would not have created a stronger consensus.

It is interesting that surveys of voter preferences for different transportation options were not considered in formulating the transportation package. According to the general manager of the RTD, some general polling was completed prior to putting the package together and the results indicated a general approval of light rail. However, another source indicated the RTD had a survey conducted in 1994 testing tax tolerance levels and these results indicated that a .008 tax was the highest level the public would support (Ciruli 1998 p.7). The GTR package, consisting of a .01 sales tax (a base of .006 prior to GTR plus a proposed increase of .004 to fund GTR), was greater than the .008 level suggested by this RTD survey. The general manager may not have

been aware of this 1994 study since he did not start his work with the RTD until 1995. At any rate, the results of the study were not heeded.

Proponents acknowledged, after the fact, that chances of voter approval would have been greater with a different package. The proponents interviewed indicated that it was a mistake to put forward a package that did not have a defined solution along two northern corridors. None of these proponents, however, felt strongly that voter approval would have occurred with a cheaper package, nor did any indicate that they should have presented a package involving a mix of highway capacity improvements and light rail.

According to the general manager of the RTD, voters in the district will be asked to vote on a transportation package in the November 1999 election, and this package will be significantly different than the package with GTR. The differences suggest that proponents have used the failure of GTR to reformulate the transportation package. This $800,000 transit package does not involve any additional taxes and it involves only one additional light rail line along the southeast corridor. General agreement exists that this is the most congested remaining corridor. In addition, the governor has put a statewide $2.3 million dollar package for highway improvements with no new taxes on the November 1999 ballot. This package includes lane additions to I-25 along the same southeast corridor. Although these are two separate proposals, the governor's office is working closely with the RTD Board to obtain passage of both propositions. Thus, for all practical purposes, voters are being asked to approve a package consisting of both highway and transit improvements along the SE corridor. A poll taken in June 1999 generated voter approval ratings of over 70 percent with each of these two packages and these approval ratings are significantly higher than GTR received at a similar point prior to the election (*Denver Post* June 22, 1999 p.A-1).

The campaign strategy used by opponents of GTR

A summary

The campaign to oppose GTR was organized and implemented by little more than one person with no political consultants, no voter research, and with very little money. This person was Jon Caldara, who was also on the RTD Board. The proponents, as well as the three newspaper people interviewed all agree that Caldara was very effective as an opposition leader. He worked tirelessly to defeat GTR, and he is a persuasive individual.

Caldara's message focused on the high costs, the minimal reduction in traffic congestion, and the vagueness of GTR along a couple of corridors. According to proponents, he did not present an alternative transportation package to the public. The basic challenge he faced was how to present this message with

very little money available for paid advertising. His strategy consisted of establishing credibility for his arguments by getting the RTD Board to vote for propositions he presented to the board and obtaining frequent newspaper coverage prior to the election with an emphasis on characteristics of GTR that would work in his favor even with balanced coverage. These two major components were interrelated. More specifically, he was correct in assuming that the two major newspapers would write articles about the board's actions, particularly given that the election took place in an odd-numbered year in which GTR essentially was the only political issue on the ballot.[5] Thus, by using his position on the board to bring controversial proposals to it for a vote that could generate voter doubt about GTR, Caldara was able to generate many articles in the two newspapers about the board's actions. To increase the chances that the newspapers would provide extensive coverage of the Board's actions, Caldara contacted the transportation news writers of each paper frequently. In contrast, according to one of the reporters, proponents rarely initiated communications with the newspaper to obtain coverage. Each of these two major components of Caldara's strategy is discussed in some detail below, followed by a discussion of some additional elements of his strategy.

Influencing the Board to take two actions

Caldara had to persuade two board members to switch sides, since he started with a coalition of six members and he needed eight votes. Without getting into a detailed discussion of possible reasons for two members switching sides, it should be noted that interviewees thought the defections could have been prevented if proponents on the board had made a more concerted effort to maintain their majority. More important, as stated previously, Caldara could have been prevented from getting a majority if proponents had made a more concerted longer-term effort to prevent the five libertarians from being elected in the 1994 election.

The first proposal that Caldara brought to the board was entitled "Guide the Ride is Not for Sale."

> "Let it be resolved, that in the event the "Guide the Ride" sales tax referendum wins passage, the district will not enter into any financial or contractual relationship, until the year 2015 with any individual or entity who donates more than $100.00 after August 1, 1997, in a contribution or a contribution in kind as defined by

[5] According to two newspaper people interviewed, one from each of the two major newspapers, both papers would have had significantly less coverage of GTR if there had been other political issues on the ballot.

> Colorado Statute 1-45-103, directly or indirectly, to any campaign whose purpose was to effect the outcome of the referendum."

This resolution passed by a vote of 8 to 6 on August 19, 1997. It was declared unconstitutional prior to the election, appealed, and the appeal upheld the lower court's decision. Although this resolution probably hurt the fund raising efforts of proponents, the main effect may have been the generation of negative news coverage. A front page news article in the *Denver Post* focused on the resolution the day after it passed. The initial article was followed by eight or ten articles on the same topic in September. These articles were balanced with quotes from both sides. Caldara, along with the two board members who shifted, including the board chair, were consistently quoted in support of the measure and their basic argument was that most of the contributors were contractors and bond firms which had a vested interest in the measure passing. They positioned themselves as insuring a fair election. The other side was basically quoted as saying it was unconstitutional to prevent people with a vested interest from making contributions. Clearly, the opponents had a position that the voting public was likely to support. Equally important, voters may have gotten the impression from this series of articles that groups with a vested interest in having GTR passed were the only groups that strongly supported GTR.

In the middle of October, Caldara presented another resolution that required the RTD to issue a press release announcing the official cost of GTR as $15.609 billion. In addition, this resolution required the RTD to use a cost of $199.36 per year for a family of four with the .004 sales tax increase, even though RTD staff had estimated the cost at $59 per year. This resolution also passed with eight members supporting it. Again, a series of front page articles in the *Denver Post* focused on this cost issue. The articles explained the different assumptions involved in the conflicting figures. Given the high costs of GTR with even the lowest cost estimate, this focus on costs also was not beneficial to proponents.

Newspaper coverage

The impact of these resolutions on voters probably would have been minimal if the newspapers had not focused extensively on the funding and cost issues. Yet the newspapers did focus extensively on these issues, others involving GTR. A database search conducted by one of the newspeople interviewed identified 185 articles that focused either in their entirety or in part on GTR in the *Denver Post*, with at least 10 of these were lead front-page articles.

A content analysis of the newspaper articles suggests that the topics were more favorable to the opponents than to the proponents. Most of the articles dealt

with the previously mentioned contributions and cost issues. The cost estimates were presented in virtually every article in the *Post.* Given that even the lowest cost estimate was $2.1 billion, combined with an increase over time in the estimated costs, the focus on costs was beneficial to opponents of GTR. The articles also focused on the conflict within the RTD Board, particularly those in the *Rocky Mountain News*. In contrast, only one article was found that focused on current levels of congestion with predictions of significantly higher levels without action being taken. This latter focus certainly would have been the one most preferred by proponents. The newspaper people who made decisions on what dimensions of GTR and the board to emphasize were not attempting to influence voters. Their decisions, however, might have been different if proponents had made active efforts to obtain more coverage on aspects of GTR that would have been more favorable for them.

Advertising

According to a newsperson interviewed, Caldara did raise about $45,000, mostly from anti-tax people and car dealers. He spent money for radio ($17,000) and TV advertising ($14,000) (*Denver Post* November 5, 1997 p.A-1). The slogan of the radio ads was "Guide the Ride sounds good but it'll put a big dent in your wallet - not traffic." (*Denver Post* October 31, 1997 p.B-4). One of the proponents remembered the TV advertising of the opponents even though very little money was spent. He described it as consisting of visuals comparing congestion on I-25 with and without GTR and the views were virtually identical. It is interesting that this same person could not remember the advertising message for the proponents even though they spent a lot more on advertising.

The description of the opponents' strategy may have created the impression that Caldara and other board members were the only public officials who opposed GTR. This impression would be incorrect. An article in the *Post* shortly before the election (November 2, 1997 p.A-1) indicated that 31 public officials endorsed a no vote on GTR. It is interesting that this same article did not identify the corresponding number who supported GTR. Prior articles tended to balance a positive endorsement from an elected official with a negative endorsement from another elected official. Thus, at least toward the end of the election, Caldara was far from being the only elected official who recommended a no vote on GTR. In addition, one of the two major newspapers, the *Rocky Mountain News* had a series of editorials recommending a "no" vote. Their editorial position will be discussed in more detail under the proponents' strategy.

The campaign strategy used by proponents of GTR

A political consultant was hired around June 1997 to develop a campaign strategy. Thus, the campaign got off to a late start.

Advertising: Advertising was the major communications component used by proponents. According to the *Denver Post* (November 5, 1997 p.A-1), proponents raised $550,000. The political consultant had developed a budget of $970,000 so the fund raising campaign did not reach its goal. Caldara's resolution preventing organizations that contributed more than $100 from obtaining any contracts resulting from GTR probably was a critical factor in the fund raising shortfall. As a result of this shortfall, the amount of money spent on TV advertising was cut back significantly. The proponents ended up spending $250,000 on direct mail and $185,000 on radio and television (*Denver Post* November 5, 1997 p.A-1).

The major message in the media campaign was that traffic congestion was bad and getting worse and that it would be lessened for everybody, including drivers, by taking cars off the roads. For example, a radio ad consisted largely of testimonials of people currently taking transit. One of the people was quoted as saying "I find it mind-boggling that it takes an hour to go 15 miles." (*Denver Post* October 16, 1997 p.B-3) Proponents appeared to be reluctant about presenting numbers to support their message. Although it was never explicitly stated by any proponents or the political consultant, proponents probably did not want to encourage media coverage, believing that it would give opponents a platform, even if the coverage were balanced. This aspect of their strategy will be discussed in more detail later in this section.

The political consultant thought they could have had a better theme that grabbed the voters. When asked what such a theme would be, however, he did not identify one. It is not surprising that he could not develop such a theme given the nature of GTR. The underlying problem was that MIS studies suggested very little benefit to continuing drivers with GTR. More specifically, the key issue here was whether their commute time would be significantly reduced. According to the MIS studies, commute time would not be significantly reduced. For example, the MIS study for the southeast corridor, which is the most congested one, predicted a driving time of 68 minutes along this corridor with no capacity increase compared to a driving time of 66 minutes with light rail (Carter and Burgess 1997 p.4-28). It was difficult to make a strong case in advertising when such a case cannot be made realistically on an issue of critical importance to many voters.

The direct mail was targeted at those who voted in at least two of the three most recent odd year elections and also voted in the 1996 election. The

consultant estimated that this campaign reached 68 percent of those who voted in the 1997 election on GTR. Three mailers were sent to all the targeted voters and a fourth piece was sent to a subset of the target. Each piece gave a descriptive overview of GTR, but emphasized the components most directly relevant to voters in each county. In addition, local testimonials were used that differed for each county. The first mailer was sent about two weeks prior to the election although the schedule varied depending on whether voters in a county could vote by mail.

Publicity

Proponents seemed to hope that news coverage would be minimal. This hope was reasonable, as such coverage would tend to be balanced and give the opposition a platform. Unfortunately for the proponents, they could not realistically prevent news coverage, particularly in a year in which no other political issues were on the ballot. They neither tried to actively influence the news coverage nor aggressively respond to it even when it became evident both that substantial coverage existed and that Caldara was very effective in this arena. Two proponents were critical of this media approach.

Another relevant component of publicity involved the attempt to obtain editorial support for GTR. More specifically, the proponents may not have realized the importance of preventing either of the two major newspapers from recommending a "no" vote. Given the composition of the editorial board of the *Post*, the proponents would have had to be very ineffective to not gain their editorial support. They were successful in not losing this support. The *Rocky Mountain Times* position was more of a challenge. Caldara acknowledged the importance of obtaining editorial support from the *Rocky Mountain News* for his position and he worked hard to obtain their support. They did end up supporting the opponents, after remaining uncommitted during the first part of the campaign. The member of the *Rocky Mountain News* editorial board who was interviewed indicated that the editorial board was quite undecided about their position prior to meeting with representatives of both proponents and opponents. He also indicated that the representatives for the proponents who appeared before the editorial board did a very poor job of presenting their case. He thought they basically dealt with platitudes such as it being civically responsible to support GTR and that they were not prepared to counter charges of it being too expensive, poorly defined, not having a sunset date, and having only a limited impact on congestion and pollution. Largely as a result of the ineffective performance of proponent representatives with the editorial board of the *Rocky Mountain News,* the board decided to recommend a "no" vote. Once they made this decision, they presented a number of editorials with this recommendation. Their basic reasoning was that GTR was too expensive given

the relatively small impact on congestion and pollution, too vague on cost estimates, and did not have a reasonably short and specific sunset date. Since the person interviewed indicated that he is in favor of light rail for the southeast corridor, the newspaper's editorial position was not based on fundamental opposition to transit and light rail.

Results of a post-election survey

Since proponents made a number of mistakes, information from voters is helpful in identifying the most critical mistakes. Fortunately, in this case, as well as in the other failure case studied, Sonoma County, opposing voters were surveyed shortly after the election about the primary reason for their opposition. The results of a response to an open-ended question are identified below (Ciruli 1998 p.9).

Plan too vague, don't know what it costs/ costs keep changing	33%
Too expensive/too big a project/taxes too high	31%
Don't trust board to manage it/too much board conflict	15%
People won't use it/light rail doesn't work/won't reduce congestion/won't reduce pollution	11%
Our area doesn't get benefits/ doesn't help suburbs/our area doesn't get light rail	9%

Since all five of the above reasons were identified by opponents and also identified in a series of editorials in one of the two leading newspapers in the region, one question is whether voters would have identified these reasons on their own. Would GTR have been successful if opposition had not developed or the newspapers had not raised questions about the costs, vagueness, the board, and the benefits? Although the answer to this hypothetical question cannot be known with certainty, it appears that the vagueness and the high costs were readily apparent with even a basic knowledge of the measure's characteristics.

As discussed in the prior chapter, previous research has indicated that successful passage is lessened by both a transportation package consisting only

of passenger rail and a package that does not provide geographical equity. Given that these two reasons were fourth and fifth in the percentage of responses, the relevant question is whether this package would have succeeded if it had consisted only of light rail lines on one or two corridors. This incremental approach certainly would have reduced the costs of the package. It also would have provided a more specific package with more stable cost estimates. In other words, such an incremental approach would have eliminated the two top reasons cited by almost two-thirds of the opposing voters in the survey. If the opposing voters, who selected one of the top two reasons as their primary reason for opposing GTR, had no additional reasons to oppose the measure, then such an incremental approach probably would have succeeded. At least some of the opposing voters, however, who identified one of the top two reasons as their primary one, also perceived that at least one of the last three reasons existed. Thus, it is difficult to determine whether an incremental passenger-rail-only transportation package would have succeeded.

County-by-county voting percentages

It is relevant to compare the county-by-county voting results for several reasons. First, since congestion was not equal on all corridors in the region, this comparison can examine the issue of the extent of a correlation between voting results and the amount of congestion. For example the amount of congestion was greatest for residents in Douglas and Denver Counties. Second, no specifically defined transportation projects were identified for either Boulder or Adams County. Thus, a county-by-county comparison can examine the amount of correlation between voting results and the vagueness of transportation projects.

County comparisons in the GTR election in 1997 can be better understood with a base level for each county. A measure of change in voting results within each county from an election comparable to GTR provides such an understanding. Fortunately, such a comparable election exists. A TABOR election override took place in 1995 that would allow already collected surplus revenues to be used for transit in the district. The percentage of "yes" votes for each county in both the 1997 GTR election and the 1995 TABOR override transit election is identified in Table 3-3, followed by an interpretation (Ciruli 1998 p.6).

The percentage change results indicate that a correlation exists between voting patterns and a) whether transportation improvements within a county were clearly specified and b) the extent of congestion in the county. Adams and Boulder were the two counties in which the transportation improvements were not clearly specified and the greatest percentage change existed with these two counties (-23% and –17.3%). The percentage change was the lowest in the two

counties, Denver and Douglas, in which congestion was the worst (-.6% and –8.4%).

Table 3-3. The percentage of 'yes' votes for each county in both the 1997 GTR election and the 1995 TABOR override.

County	95 TABOR Override	97 GTR	Percentage Change
Adams	41%	23.70%	-17.30%
Arapahoe	55%	44.80%	-10.20%
Boulder	63%	40.00%	-23.00%
Denver	51%	50.40%	-0.60%
Douglas	55%	46.60%	-8.40%
Jefferson	52%	43.30%	-8.70%

Implications

Since GTR lost by a large margin, the lessons learned involve understanding things that proponents did not do that should have been done, along with things they did that should not have been done. In general, proponents could have done a better job of involving both the public and stakeholder groups in the process of developing a transportation package, developing a specific transportation package with a reasonably short sunset date with documented benefits, and planning and conducting an effective marketing and communications campaign when effective opposition existed.

- When direct elections are used to determine the composition of the governmental agency responsible for developing the transportation package, proponents should organize to nominate and elect representatives likely to be supportive of their agenda. In this case, five libertarians were elected to the RTD Board in 1994, some with very little opposition from transit advocates.
- An underlying institutional structure can make it difficult to develop a transportation package likely to be approved by a majority of voters. In this case, the RTD Board could not develop a transportation package with both a highway and a transit component.

- Funding initiatives with a long or indefinite sunset date are problematic. This problem is magnified when published cost estimates keep increasing by a significant amount, the agency responsible for spending the money is divided and has no prior experience demonstrating their capability to implement a complex transportation package within budget, and some components of the transportation package are not specifically identified. A significant amount of voter mistrust will tend to exist with this combination of factors.
- The attempt to provide geographical equity across a large and heterogeneous region easily can result in a transportation package that is prohibitively costly, unless energetic efforts are taken to control costs. Energetic efforts were not taken in this case. As indicated in the body of the chapter, the RTD Board did not use the results of a survey, conducted a few years prior to GTR, which identified a sales tax threshold of .008. The lack of energetic cost control efforts is also demonstrated by the high cost of this plan. It was at least $4 billion more than the cost in the Puget Sound region, even though both regions are comparable in size.
- Relying almost exclusively on corridor studies to develop a transportation package will tend to result in packages that are less than optimal from a voter perspective. The RTD Board did not use any voter research techniques to help develop their transportation package. Although they had conducted survey research indicating that voters had positive attitudes towards passenger rail transit and also were dissatisfied with highway congestion, they did not seem to use this research to set priorities needed to control costs. If they had done such research, they probably would have discovered, as surveys in Sonoma and Santa Clara County did, that voters would be hesitant to support a very expensive package that consisted almost exclusively of passenger rail transit.
- Do not develop an expensive transportation package unless corridor studies indicate that the package will provide significant highway congestion relief. In this case, opponents used findings from the corridor studies to support their contention that GTR would have very little impact on highway driving times during the commute periods. Proponents could only respond to this argument with generalizations or statistics not directly relevant, such as the number of cars taken off the roads. A discerning press can and usually will identify the flaws with this response.

- Although it may be fortuitous for proponents when extensive media coverage does not exist because opponents have very little money to spend and when early tracking surveys predict voter approval, contingency plans are needed when extensive coverage does occur. One component of this plan involves identifying the specific issues that are more favorable to proponents than opponents and proactively encouraging the media to cover these issues.
- Coalitions should be developed while the package is being formulated by involving relevant groups in the decision-making process. If more representatives from various geographic segments had been involved in this process, the problems experienced in having a package with undefined components on some corridors would not have existed. In addition, if elements from the business community had been more enthusiastic about GTR, the proponents would not have had to rely for funding so extensively on contractors and lending companies, who were perceived as having a vested interest in the outcome.

In the next chapter the findings from the preceding case studies are analyzed and synthesized.

CONCLUDING OBSERVATIONS AND RECOMMENDATIONS

INTRODUCTION

What lessons may be culled from the case studies presented in the previous chapter? How can advocates of transportation measures apply these lessons to their own jurisdictions?

This chapter presents a comparison of the four cases on a number of characteristics: 1) the nature of coalitions formed, along with the process used to form these coalitions, 2) the process used to formulate a transportation and funding package, along with the nature of the package, and 3) the marketing and communications strategy and tactics used by both proponents and opponents to try to influence voter approval. The collected characteristics of each case study are presented in Table 4.1.

A discussion of critical success and failure factors follows Table 4.1. Many, but not all, of these factors differentiate at least one of the two successful cases, (Santa Clara County and the Puget Sound region in Washington State) from at least one of the two unsuccessful ones (Sonoma County and the greater Denver metropolitan area).

TABLE 4-1. Comparison of Cases on Relevant Characteristics Pertaining to Coalition Building, a Transportation and Funding Package, and Marketing and Communications Programs Targeted at Voters

	Santa Clara	Seattle	Sonoma	Denver
Outcome	Won 52%	Won 56%	Lost 48%	Lost 42%
Transportation Proposal Characteristics				
Type and amount of tax increase	General sales tax (1/2 cent)	Auto excise tax (.3%) General Sales tax (.4%)	General sales tax (1/2 cent)	General sales tax (.4%)
Duration	9 years	9 years	20 years	No sunset
Gross revenues (estimated)	$1.1 billion	$3.6 billion	$1 billion	$8–16 billion

	Santa Clara	Seattle	Sonoma	Denver
Type of election	General	General	General	General
Projects spread across district	Yes	Yes	Yes	Yes
Multipurpose projects	Yes	Yes	Yes	No
Campaign Characteristics				
Campaign consultant hired	Yes	Yes	Yes	Yes
Use of surveys (to design proposal)	Yes	Yes	Yes	No
Use of surveys (for campaign)	Yes	No	No	Yes
Use of focus groups (to design proposal)	Yes	Yes	No	No
Use of focus groups (for campaigns)	No	Yes	No	Yes
Received newspaper endorsement	Yes	Yes	Yes	Yes and No
Media coverage (volume)	Light	Light	Heavy	Heavy
Outreach effort	Yes	Yes	Yes	No
Use of mass media (by proponents / by opponents)	Yes	Yes	Yes	Yes
Use of direct mail (by proponents / by opponents)	No	No	Yes	Yes

	Santa Clara	Seattle	Sonoma	Denver
Coalition Characteristics				
Unanimous support from executive board	Yes	Yes (virtually)	Yes	No
Organized opposition	No	Mild	Yes	Yes
Prior defeat	Yes (1994)	Yes (1995)	Yes (1990)	No
Key industry support	Yes	Yes	Yes	Yes
Environmental group support	Some	Some	No	Yes

CRITICAL SUCCESS AND FAILURE FACTORS: TRANSPORTATION AND FUNDING PACKAGE

The analysis begins by examining characteristics related to both the nature of the transportation projects and the process used to select the projects. Coalition building implications related to the transportation package also will be discussed in this section.

Sunset date for the tax

Both Middleton (1998) and Beale et al. (1996) recommend that a reasonably short sunset date is needed to obtain voter approval of transportation funding initiatives. The four cases described in this study provide support for this recommendation.

Each of the four cases relied either primarily (Puget Sound) or entirely on the sales tax as a funding mechanism (Santa Clara County, Denver, Sonoma County), with sales tax rates of .004 or .005. However, the two successful cases both had sunset dates of approximately 10 years, while both unsuccessful cases had a sunset date of at least 20 years. These results provide strong support for the hypothesis that sunset dates of ten years or less are needed to obtain voter support when sales tax rates are approximately .005.

The case analyses also demonstrated the difficulty of designing a transportation package that has a sufficiently short sunset date. This difficulty

is demonstrated in both of the unsuccessful cases wherein the cost of the final transportation package presented to voters was significantly higher than the cost of the initial packages considered. The size and corresponding cost of the transportation package increased over time because the easiest way of satisfying different constituencies is to provide additional benefits. For example, in the Denver case, unspecified projects were added for the two corridors north of Denver to try to get approval of voters living in counties along these corridors. These additions increased the cost of the transportation package while having no apparent positive impact on voting results in these two counties.

Establishing a budget constraint

One of the key characteristics of a disciplined process to minimize the costs of a transportation package involves starting with some sort of budget constraint. Essentially, this was done in both of the successful cases but was not done in either of the unsuccessful ones. In the Santa Clara County case, the budget constraint was established through a survey of voter attitudes towards various combinations of sales tax rates and sunset dates. This research identified a sunset date threshold at 10 years and a sales tax rate threshold of a half cent. A budget cap was determined using these results by simply forecasting the sales tax revenue likely to be raised with a half cent sales tax in nine years.

The RTA in the Puget Sound case did not start with a firm budget cap. However, they did start with a goal of significantly reducing the cost of the package from the prior package, which was defeated. In addition, they appeared to have a process that constrained the package to meet a sunset date of approximately 10 years.

Identifying priorities

In successful cases, the use of a budget constraint was accompanied by a systematic process of prioritizing components of a transportation package. Starting with an appropriate framework may prove useful in helping establish priorities, as this was done in both successful cases and in the Sonoma County case.[6]

The most difficult step in establishing priorities involves prioritizing specific components of a transportation package. This step should involve using 1) cost/benefit information based upon corridor studies, 2) voter preferences, attitudes, and priorities based upon surveys, focus groups, and outreach

[6] Although an appropriate underlying framework was established in the Sonoma County case, this framework was not used to prioritize transportation projects within a budget constraint in this case.

programs, and 3) input from key interest groups through a citizen advisory committee.

It is possible that all three of the above sources are part of a successful campaign, as they are potentially complementary. Corridor studies may prove insufficient without using at least one of the other two sources. Although these studies claim to examine cost/benefit ratios, it is very difficult to determine the added value to the public of a more expensive option that seems to delivers more benefits compared to a less expensive option with fewer apparent benefits. The mistake of relying almost exclusively on corridor studies was demonstrated in the Denver case. Although that campaign did include extensive public hearings, no systematic voter research was conducted to identify priorities and comparative perceptions and apparently nothing was done to integrate interest groups into the planning process through a citizen task force.

On the other hand, all three sources were used in the successful Santa Clara County case. Establishing priorities was a significant challenge in this case because not all viable options could be funded within the budget constraint. In other words, the final transportation package presented to voters was smaller than the starting package. One of the specific sources of information about voter preferences involved a survey that presented respondents with a number of specific transportation projects and asked for prioritized responses. This seems to be a very useful tool to use in the prioritization process.

Different approaches were used to reduce the costs of the transportation package in the two successful cases. The 1996 Puget Sound package substituted the combination of HOV lanes and express buses for some more costly passenger rail lines that existed in the 1995 package. An incremental strategy was used to cut costs in Santa Clara County. Parts of some light rail lines were eliminated with the understanding that voters would be asked to approve extensions of these lines in the future. Although this incremental approach had been used previously in the county with success, it does involve a risk: it could be positioned by opponents as having a longer sunset date than it appears since it may be difficult to pull the plug on a partly completed project. Since opposition was poorly organized in Santa Clara County, additional research is needed to help determine the significance and magnitude of this potential risk. On the other hand, voters might prefer the incremental approach because it allows them to observe whether a first phase of a project is successful prior to committing to additional phases. Judging the quality of plans created through such a process is beyond the scope of this research, however.

Geographic equity

Middleton (1998) and Beale et al. (1996) have identified geographical equity as a critical success factor in obtaining voter approval of transportation funding initiatives. The case analysis lends support for this conclusion but also identifies an important risk and challenge in trying to provide meaningful equity. In each of the two successful cases, concerted and successful efforts were made to provide transportation projects to each geographic segment roughly proportional to the sales tax revenues likely to be generated in each segment. This was a high priority goal in the Puget Sound case since one of the primary reasons for failure in 1995 was a lack of geographic equity. A decentralized planning approach was used to accomplish this goal.

On the other hand, geographical equity did not exist with the two failed cases as well as with the failed 1995 attempt in the Puget Sound case. In each failed case, some effort was made to achieve such equity but these attempts probably did more harm than good. In the Denver case, the attempt to include all relevant corridors resulted in vague plans with some of the corridors where corridor studies had not been completed. In addition to not gaining support in these corridors, the attempt probably increased the percentage of "no" votes in other corridors because the vagueness of the overall plan was a central point made by opponents.

In the Sonoma County case, the County Board of Supervisors added some projects off the 101 corridor to try to increase the geographical equity. Since the voting results off the 101 corridor were no different in 1998 than in 1990, when all the funds went to the 101 corridor, this partial attempt at obtaining geographical equity seemed to have little positive effect. It may have hurt by increasing the cost of the transportation package by about 30% of the amount to be financed by the sales tax.

Obtaining true geographical equity can be extremely difficult when multiple corridors exist with significantly different degrees of congestion on each corridor. In this situation, providing equal benefits in each geographic segment based on tax revenues probably will be perceived as being inequitable by people who use the more highly congested corridors. This situation existed in both the Denver and Sonoma County cases. A viable solution in such a situation might be to have at least part of the funding consist of user fees, such as congestion pricing. Although this funding approach does not provide strict geographical equity, it does result in having those who benefit from the transportation improvements incur the costs of the improvements.

Finally, focusing on geographical equity over "true" transportation needs may expose a proposal to the charge that it is based on "politics" rather than sound

planning principles. However, most respondents in Seattle and Santa Clara were quite pleased with the soundness of the plans that were derived from an equity approach. Whether addressing concerns about equity affects the soundness of transportation proposals remains an open and an intriguing question.

Determining the mix of highway and transit

Both Middleton and Beale et al. suggested that voter approval of transportation projects with a transit component is increased by including a mix of highway and transit, particularly when highway congestion exists. Transit only projects may be perceived as offering limited congestion relief to the many voters who would continue to drive, even with higher speed rail transit.

The four case studies examined do not support the contention that a reasonably balanced mix of highway and transit improvements increases the probability of voter approval. The transportation packages in two of the cases studied, Puget Sound and Denver, consisted primarily of transit. One of these cases won by a large margin and the other one lost by a large margin. In the two cases with a somewhat balanced mix of transit and highway capacity increases, one won by a small margin (Santa Clara County) and the second lost by a moderate margin (Sonoma County). Of course, because these four cases were different in a number of ways not pertaining to the mix of highway and transit, it is not surprising that a strong correlation between the mix of highway to transit and voting results has not been discovered.

As indicated in the previous paragraph, no systematic correlation exists in the four cases between voter results and the ratio of highway to transit improvements. However, a comparison of Puget Sound's unsuccessful attempt in 1995 to their successful attempt in 1996 suggests that a mix of highway to transit can increase the probability of voter acceptance. The unsuccessful attempt in 1995 was essentially a transit only package, while the successful 1996 package was modified to include a highway component. Yet, here also, other factors changed from 1995 to 1996 in this case that could have caused the different results.

Determining the specific mix of highway and transit improvements is made more challenging by interest groups that have conflicting views on modes of transportation, as well as different views on growth. Environmental groups tend to be anti-highway and anti-growth while taxpayer groups tend to be anti-transit. The difficulty of developing a transportation package satisfactory to both anti-highway and anti-transit groups is demonstrated in the Sonoma County case. Even though a citizen advisory committee was formed, consisting of pragmatic representatives from both groups who made

compromises to satisfy the other group, opposition developed from both the anti-highway and anti-transit groups.

The business community is another important interest group. This community is the primary potential source of funds to run a campaign. It also can provide important consulting support and leadership to campaign efforts. However, this group does not make developing an acceptable mixed transportation package more difficult. The business community in each case did not seem to be either anti-transit or anti-highway. In addition, representatives in this group seemed to advocate smart and controlled growth and also tended to have a more pragmatic perspective than some representatives of environmental and taxpayer groups.

Citizen advisory committees, incorporating both anti-transit and anti-highway groups, were used in both Santa Clara County and Sonoma County. Yet, these similar efforts generated different results in these two cases. The efforts were successful in Santa Clara County but unsuccessful in Sonoma County. A combination of luck and long-term coalition building seem to account for more successful coalition building in Santa Clara County than in Sonoma County. The EDF, which was a critical opposition group in the Sonoma County case, did not decide until after the Santa Clara County election to get actively involved in opposing transportation measures. Thus, EDF's lack of involvement in Santa Clara County can be attributed largely to happenstance. At the same time, a longer-term strategy of coalition building existed in Santa Clara County than in Sonoma County. In Santa Clara County, this attempt started in the 1970s and was successful over time. On the other hand, coalition building started in Sonoma County in 1990 and this attempt did not succeed.

In summary, an analysis of the impact of the highway to transit ratio on voting results does not support any generalized optimal ratio. At the same time, the ratio probably has a significant impact on voting results. Thus, careful case- or situation-specific planning and research probably is needed to determine the appropriate ratio of highway to transit improvements.

Funding sources

Each of the four cases relied on a combination of already existing state and federal gas tax revenues and increases in the local sales tax of .004 or .005.[7] In each instance, voter approval was needed for the increase in the sales tax. Once the decision is made to rely on an additional revenue source to the already existing gas tax, a sales tax seems to be appropriate. The obvious advantage of

[7] A motor vehicle excise tax rate increase was included along with a sales tax increase in the Puget Sound case.

a sales tax is a small cost per household, both because the tax is spread across all households and because the aggregate expenditure base is quite large. However, supplemental funding sources also should be seriously considered. One additional funding source is considered here, namely the use of toll lanes only on additional lanes constructed in the transportation package. This source has been discussed and analyzed previously from a number of different perspectives. The analysis perspective used here is the impact of toll lanes on voter acceptance, both directly and also indirectly by influencing the nature and extent of opposition to funding initiatives.

Using toll lanes as one version of user fees and congestion pricing was studied in Sonoma County. As mentioned in the Sonoma County chapter, a study commissioned by the Metropolitan Transportation Commission proposed this as a serious option for Sonoma County. On the other hand, a survey conducted in the county suggested that the toll lane concept would have a negative impact on voter approval.

Given the limitations of survey methodology, it is premature to conclude on the basis of survey results that a toll lane concept will have a negative impact on voter acceptance of transportation funding initiatives. Although surveys often can be used to measure attitudes and opinions, they may not provide valid and reliable measures of attitudes that are not strongly held. Many political issues have this characteristic, as evidenced by the rapid change in some political attitudes discovered through tracking surveys. These attitude changes occur because attitudes may not be strongly held and because voters are often exposed to frequent arguments presented by proponents or opponents.

If the negative attitudes of voters towards toll lanes, discovered in surveys, may not be strongly held, these attitudes could improve over time if the issue is framed properly. Negative attitudes may be based on perceptions that a toll lane would result in long lines at a toll booth, that it would be an unavoidable tax, and that it is unfair to tax drivers who depend on their cars and are already paying high gas taxes. The first two of these perceptions could be modified through reasonable counter-arguments. Technology exists to determine toll charges electronically without toll booths. In addition, it would, in fact, be an avoidable tax. Solo drivers would have the option of driving in already existing congested lanes or driving in a newly constructed and less congested toll/HOV lane.

Even if voter acceptance of transportation funding initiatives will not be negatively influenced by the inclusion of a toll lane in the initiative, its inclusion probably would not have a direct positive impact on voter

acceptance. However, it could have an indirect positive impact by minimizing opposition from two groups that historically tend to oppose transportation funding initiatives, namely taxpayer associations and environmental groups. Interviews conducted with representatives from both groups in the Sonoma County case, which is the only case in which organized opposition existed from both groups, suggest that opposition would not have existed if the new lanes on Highway 101 would have been a combination of HOV and toll lanes. Of course, since these expressed views were based on a rather vague hypothetical situation, it is difficult to say with any certainty whether either group in the opposition coalition would have dropped out of the opposition if the toll lane concept had been included.

To summarize the above discussion of using toll lanes, this concept could have a neutral direct impact on voters but have a positive indirect impact by minimizing opposition from environmental or taxpayer groups. Additional research is needed to evaluate the wisdom of using the combination of toll/ HOV lanes as a supplemental funding source.

Marketing and communications approaches

Developing contingency plans for opposition or extensive news media coverage

In the Puget Sound, Santa Clara County, and Sonoma County cases, a number of apparently effective and appropriate steps were taken to both develop a working coalition and to try to minimize effective opposition. At the same time, when opposition did develop in the two unsuccessful cases, Denver and Sonoma County, apparently no contingency plan existed for responding to opposition. Since an important lesson of the cases is that opposition frequently develops, developing a contingency plan to react to such opposition, as well as possibly preempting this opposition, may be critical aspects of the campaign. Contingency planning is needed when reaction times are short and such is the case in political campaigns with transportation funding initiatives.

Even if opposition does not surface, the media, particularly newspapers, can lessen voter support for a transportation package initiative, even with relatively balanced coverage, depending on the issues of focus. Extensive newspaper coverage existed in the Denver and Sonoma County cases, which almost certainly lessened voter support. In both of these cases, the opposition focused their efforts on obtaining extensive coverage since they had very little money for advertising. Although their efforts probably were successful in influencing the nature of the coverage, interviews with newspaper people suggest that coverage would have been extensive in both cases even without the efforts of organized opposition. Extensive newspaper coverage in Sonoma County started months before the opposition surfaced. No information collected in any

of the cases suggests that the proponents had a contingency plan for extensive newspaper coverage, whether the coverage was stimulated by opposition or occurred without any competition. Efforts were made in Santa Clara County to expose high level executives of the leading newspaper in the county to successful light rail projects. A lesson learned, however, in both Sonoma county and the Denver case is that the news division may provide extensive balanced coverage even when leaders of the editorial group are strong supporters of transportation measures.

Assuming that contingency plans should be developed to deal with both effective opposition and extensive news coverage, the substance of the contingency plan must be formulated. A starting point in developing a contingency plan is anticipating the arguments that are likely to be used by opponents or appear in the news. The cases in which opposition existed suggest that many of these arguments can be predicted. Three such arguments, 1) high costs, 2) minimal impact on traffic congestion, and 3) double taxation, are discussed below.

High costs

One opposition argument used in all three cases in which competition surfaced was the high cost of the transportation package. This argument was frequently reinforced in the newspapers, which focused on the total cost of the package with very little mention of the cost per household. Obviously, proponents should try to emphasize the cost per household rather than the total cost of the package. It was reasonable for proponents to initially avoid any mention of costs, since the packages were all expensive, with the least expensive one being about $1 billion. Nevertheless, once opposition begins to emphasize costs, proponents should seriously consider aggressive efforts to encourage news sources to cite the cost per household rather than, or in addition to, the total cost.

Limited highway congestion relief

Another common opposition argument of passenger rail is that it will not take a sufficient number of drivers off the roads to have a significant impact on highway congestion. A television advertising campaign in the Denver case showed rush hour traffic on the most congested highway corridor both with and without passenger rail on the corridor and the results were virtually identical. It is not surprising that opponents focus on this issue. First, the highway congestion relief issue is important to voters when tied to expensive transportation packages with a significant passenger rail component, which was a characteristic in all four cases studied. Second, since proponents focused

heavily on this congestion relief issue in each case, opponents basically were forced to address this issue.

Given that voters are unlikely to approve an expensive transportation package with a significant passenger rail component unless they perceive that highway congestion will be lessened, it is critical to develop an appropriate response to opponent claims of limited congestion impact or newspaper scrutiny of this issue. Since proponent claims of congestion relief will usually be challenged by opponents, proponents must have some logical basis and support for their claims. The impact of transportation projects on traffic congestion usually is projected in corridor studies commissioned by those developing the transportation package. Thus, opponents can use these corridor studies to identify unsubstantiated or vague claims. The Denver case provides an example of this approach and it is likely to be used elsewhere by opponents given its success in this case. Here opponents used corridor study predictions of very limited travel time differences between the GTR package and the baseline package to counter proponents' claims that the passenger rail system would provide traffic relief to automobile as well as to transit users. This case also demonstrates that opponents are smart enough to realize that the critical statistic for voters is reduction in travel time for drivers rather than proponents' statistics such as the number of cars taken off the highways by the introduction of a passenger rail system.

The impact of a transportation package on congestion relief depends in large part on the nature of the package. Some mix of highway and transit improvements, possibly combined with careful land use planning, is needed to provide real relief in highway congestion. Survey research conducted in Sonoma County after the election provides support for the integration of land use planning and transportation planning. One of the arguments made by opponents in this county was that an increase in highway expansion, without corresponding growth restrictions, would result in population increases that would negate the impact of increases in highway capacity.

Assuming, as discussed above, that proponents can support claims of significant highway congestion relief resulting from the transportation package, the response to this argument should depend upon the particular combination of factors that exist. The plausible responses are identified below, followed by a discussion of the different situations in which each response probably should be used.

All plausible responses include making general claims of highway congestion reduction in paid advertising. The responses differ in the identity of an added element or elements. One plausible added element involves attacking

opponents for not having an alternative plan. This approach was used successfully in the Puget Sound case. A second plausible element involves a rather general response in the news media. Such a response would tend to focus on successful uses of passenger rail in other counties and regions. This approach was used unsuccessfully in the Denver case. As discussed below, however, this approach could be successful in certain situations. A third approach involves making more detailed responses and explanations in the news media. These detailed responses probably would involve projections from corridor studies, but there is a risk that the projections will be questioned as happened in the Sonoma County case.

If opposition either does not have a specific plan or has an inferior plan, this should be brought to the attention of the public. This approach can be particularly effective when current highway congestion is perceived as being severe, as was the situation in the Puget Sound case. In this situation, voters probably tend to desire an immediate public solution, as long as the costs are reasonable and the package will have an impact on congestion.

If the media does have even one article on the traffic congestion issue, some response is needed and it should be prepared ahead of time since response time will tend to be quite short. The most difficult decision is whether to provide a general or specific response in the news media once it becomes evident that the media will focus on this congestion relief issue. A closely related and difficult decision is whether to proactively approach the news media and encourage the media to focus on the traffic congestion issue. Some of the variables that influence these two difficult decisions are the extent that voters seem to believe this opponent's claim of limited impact, the extent that corridor studies support a case for significant reductions in travel time on the highway with the proposed transportation package, the current amount of highway congestion, voter perceptions of the cost of the transportation package, and the extent of media coverage of the highway congestion issue.

A necessary condition for a detailed response is the quality of the information existing to support the response, realizing that opponents and possibly the media will challenge the information and predictions. If the predictions in corridor studies are not inflated and if they incorporate acceptable modeling techniques, data, and assumptions, then a detailed response might be appropriate. Given, however, that any projections can be questioned, a detailed response in the media should be used only when voters perceive that the current package might be too costly, as was the case in both Denver and Sonoma County, or when the existing level of highway congestion is not sufficient in magnitude to cause voters to want an immediate solution.

Proponents should approach the news media actively about the highway relief congestion issue when voters

- have doubts about the transportation package's impact on congestion,
- do not perceive that current congestion is severe enough to create a strong need for an immediate attempted solution, or
- are concerned about the package being too expensive.

When these conditions exist, voters may tend to opt for temporarily accepting a less than severe status quo transportation system rather than taking a risk on an unproven and costly transportation package. This voter tendency might be magnified by a perception that rejecting a costly package with uncertain benefits will tend to cause the county or region to resubmit a less costly package. This situation seemed to occur in the Puget Sound case, in which the 1996 package was significantly less costly than the 1995 package which the voters rejected. This situation also occurred in Denver, where the decision has been made to build a light rail line, estimated to cost less than $1 billion, on the most congested corridor only. This compares to the 1998 GTR package that cost between $8 and $16 billion.

Countering charges of double taxation

Although the double taxation issue of a gas tax plus a sales tax was not an explicit opposition argument in any of the three cases in which competition surfaced, a post-election survey conducted in Sonoma County indicated that this was an important issue to many "no" voters. Since anti-tax sentiments are not as prevalent in Sonoma County as in many other counties and regions, this double taxation concern may be quite common. As proponents in Sonoma County realized after the election, this concern can be countered by indicating that 1) the gas tax is not intended to fund all transportation projects, 2) gas tax revenue is more likely to be provided to a county or region if a separate local revenue source is used, and 3) when appropriate, what are the past and likely future uses of gas tax revenues in the county or region. Trying to communicate this message through the news media probably is more appropriate than doing so through advertising for a couple of reasons. First, paid advertising probably should focus on positives rather than countering negatives. Second, adequately addressing the double taxation issue involves some complexity and detail. The news media, particularly newspapers, provide a better means for presenting a complex message than paid advertising.

Dealing with the media

Extensive news media coverage existed in both of the unsuccessful cases. In contrast, very limited news media coverage existed in both of the successful cases. A simplistic conclusion from this pattern is that extensive news coverage of transportation initiatives will result in a failed initiative while limited coverage will result in a successful initiative. Although this conclusion is overly simplistic, it may be appropriate for proponents to avoid taking steps to encourage news coverage of transportation initiatives. Particularly when proponents are able to raise significantly more campaign money than opponents are, extensive news coverage will be the opponent's most effective alternative for presenting their message to the voting public. In addition, proponents correctly realize that media news departments usually will attempt to provide balanced coverage even when editorial departments strongly support the transportation measures. Balanced coverage is likely to be viewed negatively by proponents when they have a big spending edge. Proponents in each of the four cases examined seemed to use this logic. No active attempts were made in any of the cases to encourage coverage in the news media.

It may often be prudent for proponents to avoid encouraging news media coverage. At the same time, as soon as it becomes apparent that coverage will exist, they should consider 1) making strong efforts to influence the topics of emphasis in the media, 2) having arguments ready to present to the media, and 3) having effective spokespeople who take the initiative in contacting the media rather than waiting for the media to contact them. These recommended steps were not taken in either of the two cases in which extensive coverage existed. The failure to follow these steps is difficult to explain, given early warning signs in both the Denver and Sonoma County cases that coverage would be extensive even if opposition had not surfaced. Both newspapers in Denver had news reporters whose primary assignment involved covering transportation issues and coverage of the RTD Board was extensive prior to the commencement of the campaign in the summer of 1998. Coverage in the leading newspaper in Sonoma County also began months before opposition surfaced.

A final issue that proponents could encourage the media to focus upon is the magnitude of the problem with the existing transportation system combined with projections of the problem exacerbating if no action is taken.

The degree of specificity of information presented by proponents

The transportation package in each of the four cases studied had multiple components. This complexity requires a decision about the degree of specificity to provide to voters concerning the nature of the package and cost estimates.

Both Beale et al (1996) and Middleton (1998) proposed that detailed information be provided. The four cases studied in this research project suggest that the relationship between the amount of specific information and voter approval is more complex than described in earlier literature.

Specific information was not publicized in Santa Clara County and yet that campaign was successful. In this case, proponents ran a "stealth" campaign. Although avoiding specifics worked in this case, it is a risky approach that depends on a combination of factors that often do not exist. Neither organized opposition nor media scrutiny forced proponents to be more specific in this case. In addition, since prior transportation packages, approved by voters, had been completed in Santa Clara County, voters may have had some confidence and trust in the planning process. When the stealth approach is used, it is necessary to have a contingency plan to counter organized opposition and media scrutiny.

The successful Puget Sound case demonstrates that determining the degree of specific information is a complex decision. Both focus group and survey research suggested that support for the funding measure decreases when attention is focused on the details of the plan. Based on these results, the majority of the proponents' information campaign in this case involved television advertising that did not present specific information. Proponents did present specific information about the transportation projects and costs in an eight-page direct mail piece. This was apparently done to demonstrate that a detailed plan existed without calling attention to the details.

The Puget Sound case is important because it used a sophisticated and integrated multi-media marketing communications approach, with different messages and objectives in each medium. At the same time, this approach is quite expensive and is dependent on the ability to raise a significant amount of money. Since such funding may not exist, it is relevant to discuss a model different than the Puget Sound one. One alternative model, not used in any of the four cases, involves presenting detailed information on the Internet. The interactive nature of this medium, along with increased public access, suggests that it is an excellent means for presenting detailed and specific information on project components and costs. Limited funds can then be used for media advertising that does not focus on these details.

Miscellaneous issues

Mistakes were made in at least one of the unsuccessful cases that can be identified and easily discussed due to the lack of complexity or controversy. An underlying concept of the marketing and communications campaigns is the need to do detailed planning, including contingency planning. Planning needs

to begin well in advance of the start of the campaign. Little evidence of advanced planning exists in either of the unsuccessful cases. In each instance, the transportation package was finalized only months prior to the election, which provided little time for planning. In addition, to carefully control indirect costs, political consultants were hired only a few months prior to the election in both the Denver and Sonoma County cases.

If political consultants are hired more than a few months prior to the relevant election, their fees will increase unless proponents share in the strategic planning, ideally on a volunteer basis. Many people in the business community have more planning expertise than political consultants. Identifying a team of proponents a year or so prior to the election and charging the team with developing a strategic campaign plan, including critical contingency plans, is a reasonable step to consider. A team typically consists of local politicians with expertise in the transportation area along with dedicated proponents from the business community. Recruiting qualified volunteers should not be that difficult due to a perception in the business community that a strong transportation infrastructure is needed for economic development and competitiveness.

Although strategic planning can be effectively conducted with a reasonably large group, such is not the case with tactical planning. Even with comprehensive contingency planning, some tactical adjustments will need to be made during the course of the campaign. These adjustments usually need to be made quite quickly. Very small groups, if not designated individuals, should have responsibility for tactical planning during the campaign. Steering or coordination committees used by proponents in both of the unsuccessful cases were far too large to make effective tactical decisions quickly.

Opponents tend to prefer extensive media news coverage while proponents prefer very limited coverage since the latter group almost always will have a spending advantage. Although proponents cannot control the amount of coverage, they may be able to reduce extensive coverage by presenting the transportation package to the voters during an election in which many other important issues are involved. Representatives from both major Denver newspapers indicated that the amount of coverage of the Guide the Ride measure would have been reduced if presented to the public during a presidential election with a large number of competing issues and candidate selections.

Some potential voter concerns are rather predictable, such as the extent that passenger rail will reduce highway congestion, whether geographic equity exists, and whether all projects will be completed because of costs being

underestimated or tax revenues being overestimated. Other voter concerns, however, would have been difficult to predict during the campaign without tracking research. One example of a more unpredictable issue was the double-taxation issue that arose in Sonoma County. Another example from Sonoma County was the issue of the potential impact of the transportation package on population growth. It would have been easy to either overestimate or underestimate the importance of this issue to voters without some sort of tracking research. The basic point is that tracking research should be seriously considered to help determine the need for tactical adjustments.

Summary and conclusions

Four county or regional cases have been examined. Each case involved a sales tax of either .004 or .005 to fund a complex and expensive transportation package that was presented to voters for approval or rejection. Voters approved the package in two of the cases and rejected the package in the remaining two cases. All of the cases were quite recent, with two occurring in 1996 and two in 1998. Each package had a significant passenger rail component and three of the four had a significant highway component. In each case, proponents spent at least $400,000 in a marketing campaign. Opposition also organized a campaign in three of the cases, even though they had significantly less money to spend than proponents.

In each case, attempts were made to identify characteristics of the coalition building process, the transportation package and the process used to develop the package, and the marketing and communications campaigns used. These characteristics were studied to generate insight about factors influencing voting results.

Some of the insights presented are consistent with those in the literature. However, a number of insights not identified previously in the literature have been generated by the current research. Many of these new insights involve the marketing and communications campaign used by those trying to obtain voter approval of a transportation funding measure. Insights about contingency planning were developed in response to opposition or media scrutiny that had not been presented in previous literature.

Some of the action and process implications of the case research have been identified in this chapter. The action and process implications should be interpreted with caution since a small number of case studies provide the information base for these implications. The fact that two efforts failed in an otherwise favorable environment, however, suggests that proponents of such measures would do well to consider implementing these suggestions, because any omission might be critical.

Summary of action and process recommendations

- A budget cap should be identified to determine the magnitude of the transportation package. This cap usually should be no greater than projected sales tax revenues for a ten-year period at a sales tax rate of no more than .005. Lower budget caps should be established, depending on the magnitude of voters' degree of dissatisfaction with the existing transportation system, and voters' attitudes towards taxes. A budget cap usually will force developers of a transportation package to prioritize potential components of the package.
- Priorities should be based upon information from a variety of sources. Corridor studies should be used but should not be the sole source of information. In addition, information should be collected directly from the public through research techniques such as focus groups and surveys. Surveys can be useful in identifying voters' priorities, as demonstrated in one of the successful cases. The involvement of a citizen advisory group in the decision-making process also can be useful in establishing priorities. Representatives from key interest groups such as the business community and environmental representatives, should be included in these citizen advisory groups.
- In one successful case, priorities were established by identifying the less critical segments of some passenger rail lines and eliminating them from the transportation package. Additional cases need to be examined to determine the feasibility of this incremental approach.
- A combination of highway and transit improvements should be included in a transportation package whenever it is possible to do so.
- Although opposition may not be visible when strategies are planned, such opposition usually exists and it may come from surprising sources. Since the campaigns usually are of short duration, rapid responses to opposition are needed. Contingency planning is needed to provide effective rapid responses. The most common themes used by opposition are identified below along with possible responses.
    - "The transportation package costs too much." This can be countered by framing the costs on a per household per year or per month basis.

  - "Gas taxes that voters are already paying should be used as the primary funding source rather than creating an additional sales tax." This argument involves a more complex response. The amount of gas tax revenue being used to fund the current package should be identified along with suggesting that using another funding source will tend to result in more gas tax revenue being provided.
  - "Commute times on the highways will not be significantly reduced by a passenger rail system because an insufficient number of drivers will switch to passenger rail." As discussed in the body of this chapter, the response to this argument should be different in different situations.

- The news media, particularly newspapers, should be used to counter opposition. Advertising is not a good way of presenting complex and detailed information, which may be needed in each of the three situations identified. These efforts should include attempts to have the media focus on issues favorable to proponents, such as the amount of current congestion that exists with the current transportation system.
- In some situations, the opposition should be criticized for not presenting any solution, presenting only vague solutions, or presenting inferior solutions. This approach is most effective when voter dissatisfaction with the existing transportation system is very high. In this situation, voters will be inclined to vote for an immediate solution, even when they are uncertain about the extent of improvement generated by the transportation package.
- Even when opposition does not exist, the news media, particularly newspapers, may provide extensive coverage related to the transportation package. Advanced planning needs to be conducted for this contingency.
- Because of the complexity involved in developing appropriate contingency plans, planning should begin about one year prior to the election. Tracking research should be conducted when funding permits, to help in both the strategic planning and the tactical adjustments that often need to be made quickly during the course of the campaign.

Important and difficult issues involving the transportation package

Only one of the above enumerated items deals directly with desired characteristics of the transportation package. Although it may not be reassuring to those attempting to construct a package acceptable to voters, it was learned that it is difficult to provide specific recommendations about characteristics of an acceptable transportation package.

Some of these characteristics probably will not be resolved even if additional research is conducted. Given the trade-offs with these characteristics, it is unlikely that any reliable conclusions across situations can be determined. The second recommendation above dealing with citizen advisory groups and systematic voter research during the planning process is particularly critical, given the difficulty of developing a general template for a transportation package.

The geographical distribution of benefits

Prior research stressed the need to distribute transportation projects over multiple corridors in an approximate proportion to the revenue raised along each corridor. This recommendation has merit, both from the perspective of voter and local political support. On the other hand, one of the lessons learned in the four cases studied is that this recommendation is risky when the transportation problems, such as congestion, are not equal across corridors. The attempt in Denver to distribute benefits to each corridor demonstrates these risks. First, this attempt resulted in a very expensive transportation package. Second, this attempt was susceptible to opponent's charges that some of the corridor improvements were expensive and would have only limited benefits.

The ratio of highway to transit improvements.

Although the cases suggest that voter approval is unlikely for an expensive transportation package without increased highway capacity, no ideal ratio seems to exist. The conflicting views of special interest groups towards highway and transit complicate the process of determining a ratio. Environmental groups tend to be opposed to highway capacity increases while tax groups and some conservative groups, such as the Independence Institute in the Denver case, usually oppose rail transit.

The nature of highway capacity improvements.

For a variety of reasons, including jurisdictional issues, highway capacity increases in each of the cases studied involved HOV lanes. Voter attitudes towards HOV lanes might be becoming more negative through experience. If voters perceive that HOV lanes are underutilized and do not encourage many

people to switch to carpooling, which is not an unreasonable perception, voter dissatisfaction with HOV lanes may increase. Three recent actions taken by transportation agencies in California are consistent with this possible shift in attitudes toward HOV lanes. First, Caltrans has requested a study of non-pricing methods to optimize HOV lane usage. These methods would allow some solo drivers to use an HOV lane on a given day, with access determined by such things as the last digit on a license plate. Second, the Metropolitan Transportation Commission studied congestion pricing on HOV lanes in Sonoma County. Third, the MTC also recently converted lightly used HOV lanes on Interstate 580 in Richmond CA to unrestricted lanes (*San Francisco Chronicle*, September 11, p.A20.).

Although highway capacity increases involved HOV lanes in the two successful cases studied, Puget Sound and Santa Clara County, this approach may be less successful in the future due to shifting public attitudes toward HOV lanes. At the same time, any shift away from using highway capacity increases for HOV use will likely provoke more organized opposition from environmental groups. Thus, the extent that highway capacity increases involving HOV is a difficult issue that will require careful analysis and research in each individual situation.

Linking population growth restrictions with transportation funding initiatives

Growth restrictions were not bundled with the transportation funding initiative in any of the four cases studied. However, opponents argued in both of the unsuccessful cases that the transportation improvements would do more to stimulate population growth than to reduce congestion. Although post-election surveys did not indicate that this was a primary concern for most opposing voters, it was a concern expressed by some opposing voters in Sonoma County. Particularly if a tax on development were used for partial funding of a transportation package, including growth restrictions could reduce the tax burden on current residents as well as generate support from no-growth and slow-growth voters. On the other hand, this bundling of growth restrictions and growth-related taxes with transportation funding initiatives could generate opposition from growth-oriented segments of the business community.

Since conflicting views of growth exist, a decision to link growth restrictions with transportation funding initiatives will require careful analysis and research in each individual situation.

Use of an incremental approach

An incremental approach was taken in Santa Clara County to maintain geographic balance while reducing the cost to a level that could result in voter approval. This approach eliminated some segments of proposed rail transit lines, with the expectation that the segments eliminated from the 1996 package would be included in a future package. This approach has both positive features and risks compared to the alternative of completing lines on the highest priority corridors. It is an approach that should be analyzed and researched in individual situations.

A final word

The cases studied have demonstrated that obtaining voter approval of transportation packages is very difficult, particularly when a basic bus transit system exists and the proposed transportation package is expensive. Even when early polling identifies a significant margin of voter approval, the final result may be rejection by a significant margin, as was the case in Denver. Voting intentions can be quite unstable in this type of election, which is not based heavily on liberal or conservative ideologies or partisan affiliations. The case methodology used in this study demonstrates that a great deal can be learned from this systematic research.

ABBREVIATIONS AND ACRONYMS

Caltrans	California Department of Transportation
CEO	Chief Executive Officer
COST	Citizens Opposed to Sitting in Traffic
CTC	California Transportation Commission
CTR	Citizens for Traffic Relief
EDF	Environmental Defense Fund
EIR	Environmental Impact Report
GTR	Guide the Ride (Denver Campaign)
HOV	High Occupancy Vehicle
ISTEA	Intermodal Surface Transportation Efficiency Act
LOS	Level of Service
MIS	Management Information Systems
MPOs	Metropolitan Planning Organization
NWPRR	Northwestern Pacific Railroad
RTA	Regional Transit Authority (Central Puget Sound)
RTD	Regional Transportation District
STIP	State Transportation Improvement Program
SVMG	Silicon Valley Manufacturing Group
TABOR	Taxpayer's Bill of Rights
TEA-21	Transportation Equity Act for the 21st Century
VMT	Vehicle Miles Traveled
VTA	Valley Transit Authority (Santa Clara Valley)

BIBLIOGRAPHY

"A Tax Boost Even a Business Could Love," *San Jose Mercury News,* 13 October 1996.

Advisory Commission on Intergovernmental Relations. *Significant Features of Fiscal Federalism: Volume 1: Budget Process and Tax Systems.* Washington: Advisory Commission on Intergovernmental Relations M-197: 1995.

Altshuler, A. "The Decision-Making Environment of Urban Transportation," *The Urban Transportation Problem.* Cambridge: MIT Press, 1979.

Beale, H., Bishop, E. and Marley, W. "How to Pass Local Option Taxes to Finance Transportation Projects," *Transportation Research Record* 1558 (1996): 74-82.

Blumenauer, E. "ISTEA and Rail-Volution," *Intermodal Surface Transportation Efficiency Act* 24, no. 3 (June 1998): 50.

"Both Sides Driven in Rail Campaign: Guide the Ride called a Boon, Boondoggle," *Denver Post,* 2 November 1997.

Brown, J. et al. "The Future of California Highway Finance." MA thesis: funded by the California Policy Seminar and the University of California Energy Institute, Berkeley, 1998.

California State Board of Equalization. *Tax Tips for Transit Taxes: Sales and Use Taxes*. Sacramento, CA.: 1985.

California State Controller's Office. "Government at a glance (1996-1997)," www.sco.ca.gov/govglance/9697/gaagmap.htm Sacramento: California State Controller's Office, (1999).

Calthorpe Associates Consulting Team. *Sonoma/Marin Multi-Modal Transportation and Land Use Study.* Berkeley, CA: Calthorpe Associates, 1997.

"Campaign Near Road's End: Foes Air Drive-Time Radio Spots," *Denver Post,* 31 October 1997.

Camph, D. "Transportation, the ISTEA, and American cities," www.transact.org/reports/mono/city.htm Washington, D.C.: Transportation Policy Project, n.d.

Carter & Burgess, Inc. *Final Report: Southeast Corridor Major Investment Study.* Colorado: Carter & Burgess, Inc., 1997.

Central Puget Sound Regional Transit Authority. *From No to Yes: Regional High-capacity Transit for the Central Puget Sound Region.* Central Puget Sound: Central Puget Sound Regional Transit Authority, 1997.

Ciruli, F. *The Loss of Transit in Metro Denver and the "Culture of Opposition."* Denver: Ciruli Associates, 1998.

CIS Annual Legislative Histories. "Intermodal Surface Transportation Efficiency Act of 1991," *Public Law* 102, no. 240 (105 Stat. 1914): 291-294.

Citrin, J. "How will it play in Peoria? (Or Monrovia? Or Milpitas?) What Do Voters Want and What Are They Willing to Pay For?" Session 8, Arrowhead Symposium, Los Angeles, California, January 1999.

Colman, S. "Letting the People Decide: Getting Voter Approval of Transportation Sales Taxes." Proceedings of the ITE District 6 Annual Meeting, Reno, Nevada, 1987.

Commission on Transportation Investment. *Final Report.* California Commission on Transportation Investment, January 1996.

Coogan, M. *Transportation Politics in Atlanta: the Mass Transit Bond Referendum of November 1968: with Comparisons to Referenda in Los Angeles, San Francisco, Seattle, Washington, D.C.* Cambridge, MA: United States Department of Housing and Urban Development and Harvard Law School. Urban Mass Transportation Study, 1970.

Demery, Leroy W., Jr. "A retrospect of rail financing votes in the U.S., 1962-1994: Part 1: Metropolitan regions outside of California." *Headlights* vol. 58, no. 1-2 (1996): 3-12.

Federal Transit Administration. "Funding Strategies for Public Transportation." *Transit Cooperative Research Program* Report 31, vol. 2. Washington, D.C.: Federal Transit Administration, (1998).

Flem, L. and Schiermeyer, C. "Rail Transit: the People's Choice." *Railway Age* 198, no. 9 (Sept. 1997): 71-80.

Forkenbrock, D. and Stoner, J. "Support for a Local Transit Tax." *Transportation Research A* vol. 18a, no. 3 (1983): 243-252.

Fulton, W. "Chapter 5, The Money Train," *The Reluctant Metropolis.* Point Arena, CA.: Solano Press Books, 1997.

"Gas Tax Forecast Triggers Debate," *Santa Rosa Press Democrat,* 31 October 1998.

Gerston, Larry N. "County Voters March to Own Beat," *San Jose Mercury News,* 10 November 1986.

Gogerty and Stark. *Regional Transit Authority Campaign Summary,* n.p., 1997.

Gomez-Ibanez "Financing the Future: Setting an Agenda for the Next Decade," Session 9, Arrowhead Symposium, Los Angeles, California, January 1999.

"Guide the Ride Derailed: Metro Voters Say No to Transit Proposal," *Denver Post,* 5 November 1997.

Harmatuck, D. "An Analysis of Bus Transportation Referenda Voting in Madison, Wisconsin." Ph.D. Dissertation, University of Wisconsin, 1973.

Hill, E. *Developing and Funding an Efficient Transportation System.* CA: Legislative Analyst's Office, (5 March 1998).

Hoover, J. "How to Build Community Support for Transit." *Mass Transit* 24, no. 5. (Sept.-Oct. 1998).

"Hwy. 101 Toll Lanes Feasible, Study Concludes," *Santa Rosa Press Democrat,* 9 July 1998.

Jones, D. *Urban Transit Policy: An Economic and Political History.* Englewood Cliffs, NJ: Prentice-Hall, 1985.

Jones, D. "Voting with Our Wheels," Arrowhead Land Use Symposium, Los Angeles, California., 1998.

Kemp, J. "Santa Barbara County Measure D: a California County Meets its Transportation Funding Needs Through a Local Sales Tax," *Third National Conference, Transportation Solutions for Small and Medium Sized Communities: conference proceedings* (1991): 253-267.

Legislative Analyst's Office. "*1996-97 Budget Analysis: Transportation, Cross Cutting Issues.*" www.lao.ca.gov/a96acc.html#A1 CA: Legislative Analyst's Office.(1996)

Levine, J., Park, S., and Wallace, R. "Public Choice in Transit Organization and Finance: The Structure of Support." Paper presented at the Association of Collegiate Schools of Planning Conference, Pasadena, California, November 1998.

"Light-Rail Ads Stress Commuter Appeal," *Denver Post,* 16 October 1997.

"Measure B's Road to Success," *San Jose Mercury News,* 11 November 1996.

Middleton, W. "Why Some Voters Say Yes; Why Some Say No." *Railway Age* 199, no. 2. (February 1998): G1-G8.

Pagano, Michael A., *Devolution of Federal Aid Highway Programs: Cases in State-Local Relations and Issues in State Law.* Washington, D.C.: Advisory Commission on Intergovernmental Relations, 1988.

Smerk, G. *The Federal Role in Urban Mass Transportation.* Bloomington: Indiana University Press, 1991.

Sprague & Lewis. *Federal Transportation Policy and the Role of Metropolitan Planning Organizations in California.* San Francisco, CA: Public Policy Institute of California, April 1997.

"Sprawling, Sprawling," *Newsweek,* 19 July, 1999, p. 25-29.

Taylor, B. *When Finance Leads Planning: the Influence of Public Finance on Transportation Planning and Policy in California.* Ph.D. Dissertation, University of California, Berkeley, 1992.

Taylor, Brian. "Public Perceptions, Fiscal Realities, and Freeway Planning: The California Case." *Journal of the American Planning Association* 61, no. 1 (1995): 43-56.

Taylor, Brian D. and William S. McCullough. "Lost Riders." *Access* 13 (1998): 26-31.

"Traffic: Slow and Slower," *Seattle Times,* 1 November 1996.

Trent, R. B. and Bernard, H. R.. *Journal of Advanced Transportation* 19, no. 3 (1985): 237-249.

U.S. DOT. "Public Involvement Techniques for Transportation Decision-making." U.S. DOT (September 1996). www.fhwa.dot.gov/reports/pittd/cover.html.

University of California, Berkeley. Institute of Governmental Studies. [California general election materials, 1986 (Nov. 4), Alameda county Measure B and Contra Costa County Measure C, sales tax increase for transit projects; newspaper clippings and ephemera], 1986.

"Valley Firms Heavily Fund Effort to Pass Transit Tax," *San Jose Mercury News,* 30 October 1996.

Wachs, M. *The Evolution of Transportation Policy in Los Angeles.* n.p., 1977.

Weiner, E. *Urban Transportation Planning in the United States, an Historical Overview.* Washington, D.C.: U.S. Department of Transportation, 1986.

Womack, James and Pucher, John. *The Urban Transportation System: Politics and Policy Innovations.* Cambridge, MA: MIT Press, n.d.

Zoller, T and Capizzano, J. *Evolution and Devolution: a National Perspective on the Changing Role of Metropolitan Planning Organizations in Areawide Intermodal Planning.* Virginia Department of Transportation, June 1997.

ABOUT THE AUTHORS

PETER HAAS, PH.D., PRINCIPAL INVESTIGATOR

Peter J. Haas is a Professor in the Department of Political Science at San José State University. The author or numerous scholarly and professional articles, he recently co-authored a text on policy research and was team leader for the 1998 Mineta Transportation Institute publication, *Capital versus Operating Grants for Transit: Economic Impacts for California*.

KRISTEN SULLIVAN MASSEY, M.P.P.

Kristin Massey recently earned a Masters degree in Public Policy with a concentration in transportation from the University of California, Los Angeles. She also has a Masters Degree in Applied Cognitive Psychology with an emphasis in driver behavior from the Claremont Graduate University. After her participation in the current research was complete, she accepted a position with the Office of Inspector General in the U.S. Department of Transportation.

LINDA O. VALENTY, PH.D.

Linda O. Valenty is Assistant Professor of Political Science at San José State University. Dr. Valenty's research has focused upon public policy (including environmental, telecommunications, and transportation policy), psychological profiling, behavioral prediciton, and conflict resolution.

RICHARD WERBEL, PH.D.

Richard Werbel is a Professor of marketing at San José State University. Prior to his current focus on transportation, he conducted research in a number of application areas, generally research methodology. He has published numerous articles and papers including some that have received outstanding paper awards.

PRE-PUBLICATION PEER REVIEW

San José State University, of the California State University system, and the Mineta Transportation Institute Board of Trustees have agreed upon a peer review process required for all research published by the Institute. 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 Mineta Transportation Institute Research Director and the project sponsor. Periodic progress reports are provided to the Research Director and the Research Associate 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.

MINETA TRANSPORTATION INSTITUTE BOARD OF TRUSTEES

• **Hon. Bud Shuster**
Chair, Transportation & Infrastructure Committee, House of Representatives, 9th District, Pennsylvania

• **Hon. James Oberstar**
Ranking Member, Transportation & Infrastructure Committee, House of Representatives, 8th District, Minnesota

•• **Hon. Norman Y. Mineta**
Vice President Special Business Initiatives, Lockheed Martin Corp., Bethesda, Maryland

◊ **Paul Toliver**
Director, King County Department of Transportation, Seattle, Washington

◊◊ **Michael S. Townes**
Executive Director, Peninsula Transportation District Commission of Hampton Roads, Hampton, Virginia

* **Hon. Rod Diridon**
Executive Director, IISTPS, San José, California

Donald H. Camph
President, California Institute for Technology Exchange, Culver City, California

Dr. David Conrath
Dean, College of Business, San José State University, San Jose, California

Susan M. Coughlin
Director/COO, American Trucking Association (ATA) Fnd., Alexandria, Virginia

* **Lawrence D. Dahms**
Executive Director, Metropolitan Transportation Commission, Oakland, California

Hank Dittmar
President/CEO, Great American Station Foundation, Las Vegas, New Mexico

Bill Dorey
Vice President/COO, Granite Construction, Watsonville, California

John Horsley
Executive Director, American Association of State Highway & Transportation Officials, Washington, DC

Celia Kupersmith
Gerenal Manager, Golden Gate Bridge, Highway and Transportation Authority, San Francisco, California

Thomas D. Larson
Administrator (Ret.), Federal Highway Administration, Lemont, Pennsylvania

Bob Lingwood
President/CEO, British Columbia Ferry Corporation, Victoria, British Columbia

Brian Macleod
Vice President, Marketing, Gillig Corporation Hayward, California

William W. Millar
President, American Public Transit Association, Washington, DC

James P. Molinelli
President/CEO, California State Auto Association, San Francisco, California

William C. Nevel
Chair, National High Speed Ground Transportation Association, Washington, D.C.

Hans Rat
Secretary General, Union Internationale des Transports Publics, Brussels, Belgium

Lawrence Reuter
President, New York City Transit Authority, Brooklyn, New York

Vickie Shaffer
General Manager, The Tri-State Transit Authority, Huntington, West Virginia

David L. Turney
Chair/Pres./CEO, Digital Recorders, Inc., Research Triangle Park, North Carolina

George Warrington
President/CEO, Amtrak, Washington, DC

Edward Wytkind
Executive Director, Transportation Trades Dept., AFL-CIO, Washington, D.C.

• *Hon. Co-Chairs*
•• *Hon. Co-Chair (Emeritus)*
◊ *Chair*
◊◊ *Vice Chair*
* *Past Chairs*

Research Associates Policy Oversight Committee

Dr. Richard Werbel, Chair
Professor, Dept. of Marketing, Management Information Systems & Decision Sciences
San José State University

Dr. Jan Botha
Professor of Engineering
San José State University

Susan Liu
Librarian, Clark Library
San José State University

Dr. Abdel El Shaieb,
Professor, Dept. of Organization & Management
San José State University

Dr. Dongsung Kong
Associate Professor of Political Science
San José State University

Dayana Salazar
Assistant Professor, Urban & Regional Planning
San José State University

Staff

Hon. Rod Diridon
Executive Director

Trixie Johnson
Research Director

Glenn Shephard, Ph D.
Education Director

Jeanne Dittman
Communications Manager

Sunshine Shepard
Education Program Assistant

Rita Freitas
Executive Assistant

Industry/Education Advisory Committee

Peter Cipolla, Chair
General Manager
Santa Clara Valley Transportation Authority

Ralph Qualls, Vice Chair
Public Works Director, City of San José

Phil Couchee, Chief of Operations
Green Valley Disposal Company

Terry Stambaugh, Vice President,
Human Resources, Viking Trucking Company

Tony Fisher, Manager, Govt. Affairs
NUMMI

Amy Dean, CEO
South Bay AFL-CIO Labor Council

John N. Sterns, Director
Project California

Katherine Strehl, Manager, Govt. Affairs
Lockheed Missiles & Space Co.

IISTPS

Norman Y. Mineta
International Institute for
Surface Transportation Policy Studies
College of Business
San José State University
San José, CA 95192-0219