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Dear Friends:

On December 13, 2000, the University of Southern California hosted a Roundtable policy discussion at USC's Sacramento Center entitled "California's Experience with Innovations in Public Finance." The program was sponsored by a grant received from the United States Department of Transportation. The National Center for Innovations in Public Finance, located within USC's School of Policy, Planning & Development, served as the host coordinator.

As the Director of the National Center, it is my pleasure to enclose a summary of Findings, Recommendations and Proceedings elicited from the participants at the Roundtable. Approximately 75 experts, drawn from governmental, academic and business organizations within California and throughout the country, were in attendance.

The National Center for Innovations in Public Finance is dedicated to exploring how new development and financing techniques involving public-private partnerships could contribute to addressing the nation's infrastructure challenges at the national, state and local levels. We believe that many of the ideas and recommendations generated at the Roundtable could serve as important references in future public policy decisions.

For those interested in a more complete record of proceedings, a videotape of the conference as well as a summary of each speaker's remarks may be obtained through the National Center. We would welcome any comments you might have on the Roundtable. I would like to thank the entire faculty and staff at the USC Sacramento Center for their support of this valuable effort.

Sincerely,

Daniel V. Flanagan Jr.

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UNIVERSITY OF SOUTHERN CALIFORNIA

The USC School of Policy, Planning, and Development (SPPD) builds on the strengths of two premier professional schools to address the dynamic intersects of the public, private and nonprofit sectors. Launched on July 1, 1998, the new School combined the former nationally ranked schools of Public Administration and Urban Planning and Development and offers degrees in five core areas - public policy, planning, public administration, health administration and real estate development.

The School's primary mission is to cultivate leaders - the ethical men and women who will design and build our communities, reshape our governmental structures and processes and rethink the relationship between government, citizens and business. We accomplish this in three important ways: *teaching* that prepares students to lead, shape and manage in the evolving new 21st century world order; *research* that takes advantage of and contributes to Southern California, the State, the Nation and the world; and *action* that yields insights and offers solutions to pressing societal problems.

The USC Sacramento Center, located at 1800 I Street, Sacramento, offers Master programs in Public Administration, Health Administration, and Planning and Development. The Center also offers leadership training programs. For more information about the Center and additional programs, please visit www.usc.edu/sacto.

The National Center for Innovations in Public Finance was established in 1999 to promote research and instruction in the field of infrastructure finance. Housed within USC's School of Policy, Planning and Development, the National Center draws upon USC academic faculty and distinguished practitioners from the public and private sectors to teach courses, conduct research projects and provide advice on key public policy issues. The Founder and Executive Director of the National Center is Daniel V. Flanagan, Jr. who has been centrally-involved in framing national policy in the areas of deregulation of utilities and in transportation finance.

This report was prepared as part of a project sponsored by the University of Southern California with funding from the Federal Highway Administration, under the terms of a cooperative agreement. The views expressed herein are those of the conference speakers, participants and authors of this report and do not necessarily represent the views of the University of Southern California or the Federal Highway Administration.

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REPORT PREPARED BY
THE UNIVERSITY OF SOUTHERN CALIFORNIA
NATIONAL CENTER FOR INNOVATIONS IN PUBLIC FINANCE
THROUGH THE SUPPORT OF THE UNITED STATES DEPARTMENT OF TRANSPORTATION

A Roundtable Discussion of California's
Experience with Innovations in Public Finance
Implications for Financing our Nation's Infrastructure

December 13, 2000

Findings, Recommendations and Proceedings

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INTRODUCTION

Ten years have passed since the first toll road franchises were awarded by the California Department of Transportation in December 1990, under Assembly Bill No. 680 (A.B. 680). To date, only one of the four projects selected through that process—the SR 91 Express toll lanes—actually has been built and is operational. Yet this landmark legislation and other initiatives across the State for highways, seaports, transit, intercity rail, and airports have made California the nation's leading incubator for using public-private partnerships to develop, finance and manage transportation facilities and services.

The California experiment with public-private partnerships has seen a number of new approaches used to deliver and manage transportation projects. In the highway sector, in addition to the SR 91 project, three major new toll roads have combined design-build development teams, a project-finance approach, and Federal credit assistance: a second AB 680 franchise--the SR 125 toll road south of San Diego, which is scheduled to come to market during 2001--as well as two new toll roads developed in the mid-1990's by the Orange County Transportation Corridor Agencies.

In the transit sector, major new capital investments such as the BART Airport Extension and the recently awarded Los Angeles-Pasadena light rail line have drawn upon novel design-build procurement techniques. The Alameda Corridor freight rail project represents a unique joint venture between two major rail carriers, the Ports of Long Beach and Los Angeles, and numerous other local, State and Federal stakeholders. Several new private sector initiatives are being pursued across the State in the aviation sector.

Outside of California, one sees unmistakable evidence both in other states and at the Federal level of greater willingness to experiment with innovative public-private approaches to address infrastructure investment needs. Taken together, these developments indicate that the *evolution*--if not the *revolution*--is well underway in how large infrastructure investments are being developed and financed.

With a decade's experience in California, it is timely to look back and candidly assess the strengths and weaknesses of using public-private partnerships for major transportation projects.

Among the questions that need to be explored are:

- What kinds of projects are most suitable for public-private partnerships?
- Are public policy objectives adequately being served through these public-private approaches?
- Have there been demonstrable advantages in terms of expedited project completion, greater cost-effectiveness, or reduced public sector risk?
- What are the appropriate roles for the public and private sectors at various stages of each project's development?
- Does the current development process properly balance social objectives such as environmental considerations and fair labor practices with capital investment needs?
- Which institutional models and capital structures appear to work best in terms of both economic efficiency and social equity?

The lessons learned from California's experience--as well as that of other states and from recent Federal activities--could provide valuable insights into what new policies to consider for the upcoming State of California budget considerations and for the federal reauthorization of the TEA-21 transportation bill in 2003.

POLICY DRIVER I: ASSESSING THE STATE OF THE STATE

The State Economy

California's economy—really a series of major regional sub-economies—has changed dramatically in recent years. The State domestic product is now of similar magnitude to the gross national products of major Western European trading partners such as Italy, the United Kingdom, and France. Moreover, California has been the epicenter of the e-economy. And yet, as profound as the emergence of e-commerce has been, the "new" economy is very much dependent on the infrastructure of the "old"; businesses are increasingly reliant upon timely delivery of goods and services. At the same time, the mobility of e-business, which allows employers to locate their places of employment "virtually" anywhere, makes good transportation links critical if the State is to remain an attractive venue for these high value enterprises. The State's population is expected to grow by another 10 million residents by 2020, placing further burdens on aging transport infrastructure systems to move people and goods safely, quickly and cost-effectively.

Past State Investment Policy

Investment in transportation infrastructure within the State has not kept pace with either the growth of population or the increase in travel demand. California's per capita investment in transport has declined by two-thirds in real terms since the 1960's. Forty years ago, transportation spending represented 23 percent of the state budget; today, it comprises about 6 percent. One of the major reasons for underinvestment has been the fiscal constraints of the tax limitation measures enacted in the 1960's and 1970's. The current electricity crisis has also added a new uncertainty as to budgeting for transportation.

Presently, there is no exclusive dedicated State funding source for transportation, so it has had to compete with other governmental and social service programs for annual funding through the political process. Because of the lengthy lead-time required to develop major infrastructure projects, such investments are dependent upon stable and reliable long-term funding commitments. And, as with the electricity sector, new capital formation has been curtailed because of increased concerns about environmental issues. As a result, transportation services have deteriorated dramatically. For example, the time lost by the average motorist due to freeway delays has doubled over the last decade. Prospects for the future are problematic: Many of the county local option sales taxes adopted in the 1980's for transportation funding expire over the next several years, yet their extension by voters is uncertain.

Recent Initiatives

The State has taken several positive steps in recent months to address these concerns. The Governor's Commission on Building for the 21st Century will soon publish the results of its 18-month survey of California's infrastructure investment needs. The final report is expected to cite that California today has over $100 billion in unmet transportation investment needs.

Even prior to the completion of the Commission's report, the State had started leveraging its available funding through mechanisms such as the California Infrastructure and Economic Development Bank and Grant Anticipation Revenue Vehicles (GARVEEs). The Bank is a new $475 million state loan revolving fund designed to make loans to small and mid-sized transportation and other infrastructure projects. GARVEE Bonds, which were authorized by the State legislature last year, are a form of non-tax backed borrowing in anticipation of future year's grant assistance from the federal Department of Transportation. Another important advance is the enactment of bill A.B. 1473, under which the State would begin preparing annual Five-year Capital Facilities Plans to better integrate capital planning and financial policy decisions.

Yet these measures by themselves will not be sufficient to overcome past years' under-investment. Simply stated, more resources must be identified, collected and committed. And the State needs to consider how best to leverage these finite resources most effectively. California's recent electricity crisis has underscored the importance of a comprehensive State strategy that responds to market signals as conveyed through the pricing mechanism, to ensure a proper balance between supply and demand. Public-private partnerships (PPP's) can play a key role in helping solve the problem—especially for the larger, more complicated projects.

Issues to be Addressed

Conferees identified the following issues currently confronting State policymakers:

- There is a clear need for better planning of capital investments—specifically, more closely relating State transportation spending policy to State land use and housing policy. The State should integrate its planning and funding strategies for water systems, drainage, waste management and public buildings with its transportation investment decisions.

- The current allocation formula under S.B. 45 distributes 75 percent of State transportation funding to the metropolitan planning organizations and retains 25 percent to be administered at the State level. This regional emphasis, while valuable in vesting investment decision authority with metropolitan organizations, makes it difficult to address *statewide* transportation issues on a comprehensive and systematic basis. For example, it is difficult to coordinate actions for inter-regional investments such as intercity high-speed rail or regional airport systems to relieve congestion at heavily used facilities.

  As zoning is a local matter, the MPO's cannot control land use policy decisions at the municipal level. Fractionalized zoning policy at the local level often leads to a disconnect between infrastructure planning efforts and actual development activities.

- The plan of finance for new capital projects should explicitly identify not only how to finance upfront acquisition costs but also how to pay yearly operating and maintenance costs over the projects' useful lives. The financial interdependence between asset acquisition and asset maintenance must be firmly established at the outset. The initial capital investment decision should be based upon Life-Cycle Costing, taking into account the best value for money over the long-term economic life of the asset.

- To the extent tax sources fall short, the State should explore user fees, since they send a clear market signal about consumer demand for goods and services. To the extent there are "free" transportation alternatives (such as a freeway with tolled express lanes), the user charge allows individuals to make an economic decision as to whether the timesavings and convenience of the tolled facility are worth the cost. User charges also free up limited grant funds for those projects that are important for reasons of social equity or public policy, but are not financially self-sustaining. By freeing up capacity on non-tolled facilities, user charges actually may benefit those who are not in a position to pay. Ideally, these charges would reflect the user's actual consumption of transportation services, such as fees based on weight-distance or vehicle miles traveled. The challenge in establishing user charges is discerning the benefits that accrue to society as a whole from the benefits accruing to the individual user or some narrower group of beneficiaries.

- In addition to direct user charges, indirect user charges such as supplemental gas taxes, capacity charges on Alternative Fuel Vehicles, and the extension of expiring local option sales taxes also deserve consideration. Once the *underlying* funding sources are in place, policymakers can select which *tactical* financing techniques would be most effective.

POLICY DRIVER II: DEFINING ROLES AND RESPONSIBILITIES IN A PUBLIC-PRIVATE PARTNERSHIP (PPP)

For the overwhelming majority of transportation projects and services, traditional governmental ownership, operation and financing will continue to be the most appropriate approach. However for some types of projects—especially those that are large or complex—a joint venture between the public and private sectors may prove advantageous. The non-profit sector may also play a significant role in the institutional structure.

Reasons to Consider PPP's

State and local governments around the country are turning to joint ventures with private sector organizations to meet their capital needs. They are doing so for a variety of reasons, including:

- *Production Efficiency*. Oftentimes, private firms can build projects faster (if not cheaper), using design-build and other innovative procurement techniques.

- *Operating Efficiency*. Complex projects may be managed more efficiently, due to greater expertise with innovation and technology, the presence of commercial competition, and the incentive of performance-based compensation.

- *Risk Transfer*. Private firms may be willing to assume certain risks from the governmental project sponsor as concerns construction, performance, or demand for the facility. However, the private sector should not be viewed as the ultimate repository for *all* project risks—only for those exposures which are of a business (as opposed to regulatory or political) nature.

- *Access to New Sources of Capital*. Private firms may be able to help identify new sources of project revenues that can be monetized. In addition, the private sector partners may be willing to invest directly in projects or draw upon other funding sources not typically employed in conventional municipal financing of projects.

- *Simplified Project Management*. Out-sourcing responsibilities to third party providers should reduce the governmental unit's need for staffing up during construction and allow the organization to maintain its institutional focus on current operations.

Features that make a Project a Good PPP Candidate

The following project characteristics lend themselves to a PPP:

- Size and/or complexity issues, which neither the public nor the private sector could resolve adequately on their own.

- Widely acknowledged need for the project (public acceptance).

- Equilibrium and trust among the various public and private stakeholders in the project. Central to achieving this goal is obtaining financial commitments from both public and private participants, to align their interests (i.e., ensure that both public and private participants are "sitting on the same side of the table").

- A governmental sponsor with the policy and legal infrastructure to see the process through.

- Clear demarcation of responsibilities of different parties for securing public approvals, environmental clearances, etc.

- A dependable and bankable revenue stream.

- The "tummy test" —an intangible sense that the project "feels right," being structured as a PPP.

Key Issues Confronting PPP's

While joint ventures can confer substantial benefits, several sensitive public policy issues need to be addressed early on in the project development process:

- *Labor Policy*. At least for larger capital projects in California, the issue in construction is not labor *wage levels*, (Davis-Bacon) but labor *availability*. There is a dearth of qualified workers to build and manage complex projects. Concerns about displacement of governmental workers in PPP's generally can be resolved.

- *Unsolicited Proposals*. The A.B. 680 program of 1990 has seen one of the four projects built and become operational (SR91 in Orange County). The second project (SR 125 near San Diego) is expected to be financed in spring of 2001. A third (Santa Ana Freeway) is still in the planning stages, and the fourth has been tabled. Each of these projects was identified and advanced by private development teams, not by metropolitan planning organizations (MPO's) or the State. Yet private sector identification and sponsorship of projects is not a problem *per se*. What is imperative, however, is that the projects be placed on state transportation plans and supported by the host governmental jurisdiction.

- *Procurement Rules.* In California (as in most states), prevailing law generally does not permit design-build procurement. For the handful of major projects done thus far in California using design-build, either special legislation was required or special legal authority was available. A.B. 680, for example, expressly authorized design-build for its four pilot highway projects. Two measures enacted by the legislature last year, A.B 958 and A.B. 2296, allow design-build to be used by transit agencies and certain counties for larger projects.

Another approach is to establish a Joint Powers Authority, which can draw upon the inherent powers of one of its sponsoring local governmental units to use design-build, as was the case with the Alameda Corridor freight rail project.

At the federal level, although TEA-21 has liberalized the procurement rules for federally assisted projects, contractors under the National Environmental Protection Act still are prohibited from having an interest in the ultimate development of a project. This rule generally prevents construction firms that assist projects in their environmental review process from continuing to be involved in design and construction. It results in a loss of continuity and discourages entrepreneurial efforts in the critical developmental phase of potential projects.

- *Environmental Risk*. Environmental permitting and governmental approvals are inherently political processes. Although private developers can play a valuable role in synthesizing the project design with the environmental review process, they are ill equipped to absorb what fundamentally are non-business risks. Moreover, in contrast to other environmental statutes such as the Clean Air and Clean Water Acts, there is no statute of limitations governing challenges to transportation projects under the National Environmental Protection Act. Unlike a decade ago, developers are now unwilling to assume the *financial risk* of public approvals in these early stages (as in SR 125).

- *Exit Strategy*. Most of policymakers' efforts thus far on PPP have been focused on developing projects and negotiating entrance strategies for private sector participation. Yet a fundamental requirement for attracting investment capital is *liquidity*. Insufficient attention has been given to the investor's exit strategy during the life of a franchise, including valuation of the asset or concession. Although there were a number of political issues surrounding the proposed sale of the SR91 franchise, at least part of the controversy was attributable to insufficient local input into evaluating the concession operator's desired exit strategy.

POLICY DRIVER III: SELECTING TOOLS TO GUIDE CAPITAL INVESTMENT

Benefits of Design-Build Procurement

As demonstrated by the two Transportation Corridor Agency toll roads built thus far (total investment of $3 billion) design-build (vs. traditional design-bid-build) can provide substantial benefits for larger projects:

- Simplified Project Management for the governmental project sponsors;

- Better Cost controls (reduced exposure to cost overruns);

- Faster Completion (a recent university study surveying major capital projects determined on average that design-build leads to 33% faster construction completion); and

- Base price of hard costs may be comparable or even slightly higher, but savings on soft costs and the other benefits described above often justify it.

Linkage between Investment and Ongoing Asset Management

The relationship between the initial project investment decision and periodic capital maintenance and renewal must be strengthened to preserve the value of the investment over time. On toll roads with a net revenue pledge, the rate covenant covers both capital recovery and operations and maintenance requirements.

For non-tolled facilities, this full-cost recovery can be achieved through synthetic mechanisms. For example, long-term performance warranties from the constructor can require that assets be maintained at a specified service level in exchange for an up-front or ongoing warranty fee.

Another approach, used in the United Kingdom and elsewhere overseas, involves shadow tolling. Under shadow tolls, an operator is paid a per vehicle fee by the governmental sponsor based on throughput, to build and maintain an asset at a defined level.

GASB Statement 34, going into effect for governmental units July 1, 2001, mandates more complete disclosure of governmental infrastructure assets, including recognition of depreciation expense if asset quality deteriorates. Warranties or shadow tolls would link capital investment with capital renewal, and help ensure that infrastructure assets are adequately maintained—both for accounting and transportation purposes.

Special Purpose Entities

California popularized the concept of creating new Special Purpose Public Agencies (like the Orange County Transportation Corridor Agencies, Alameda Corridor Transportation Authority, and LA-Pasadena Rail Construction Authority) to carry out infrastructure development on a project-finance basis. An alternative approach involves the formation of a special purpose not-for-profit corporation under Internal Revenue Service revenue procedure 63-20. For example, two recently-opened several hundred million-dollar toll roads, the Pocahontas Parkway in Virginia and the Southern Connector in South Carolina, utilized 63-20 corporations to develop and finance the facilities. Having a singular mission, these entities bring a special focus to completing the projects.

POLICY DRIVER IV: COMPARING DIFFERENT TRANSACTION TEMPLATES

Institutional Models

There are a variety of organizational forms that can be used to advance infrastructure projects. They can be viewed as stretching along a continuum, ranging at one end as conventional public projects to the other end as fully commercialized facilities. The accompanying diagram illustrates four distinct positions along the spectrum from purely public to purely private. Projects can be categorized in terms of whether public or private parties share in the risks and rewards of development, operation and ownership.

The financing component is a discrete element but also may be classified as being either public or private. Financing is considered to be *public* if either:

a. the **capital funding source** for the loan or investment is public tax dollars (e.g. a governmental infrastructure bank, revolving fund or public pension fund capitalized with public funds); *or*

b. if the **loan repayment source** is derived from or guaranteed by public tax dollars (sales taxes, State Highway Fund moneys, federal-aid supported, etc.).

On this basis, a loan funded by a state infrastructure bank, even if the borrower is a corporate entity, would be deemed "public financing." Likewise, a privately funded loan for a transit project developed and operated by a private consortium but payable from or guaranteed by the State transportation fund, would be considered public financing. On the other hand, a taxable or tax-exempt revenue bond sold into the capital markets and backed by user charges would be deemed "private," even though the obligations were issued by a public conduit (e.g. Transportation Corridor Agencies, Alameda Corridor). The ultimate determinant is whether public capital is at-risk, either in terms of the initial funding or the ultimate repayment of the obligation.

Matrix of Public-Private Transaction Templates

	Governmental Model	***Turnkey Development Model***	***Warranty/ Concession Model***	***Profit-Sharing Model***
Examples of Projects	*LACMTA; Caltrans*	*TCA ;ACTA; BART Airport Extn.*	*Hudson-Bergen; NM44*	*Las Vegas Monorail; SR 91, Dulles Greenway*
Development	Public	Private	Private	Private
Operation	Public	Public	Private	Private
Ownership	Public	Public	Public	Private
Financing	Public	Public ***or*** Private	Public ***or*** Private	Private

→ INCREASINGLY PRIVATE

INCREASINGLY PUBLIC ←

The four principal financing templates are:

Governmental Model
Starting on the left side of the chart would be governmentally developed, owned and operated projects, using public tax dollars. Examples include Caltrans highway projects or other normal public works spending, either pay-as-you-go or debt financed, with the governmental unit responsible for funding operating and maintenance costs. The vast majority of transportation projects are developed in this fashion.

Turnkey Development Model
Of greater "private" character are turnkey financings, where the projects are developed under a guaranteed maximum price and guaranteed completion date by a private design-build team and then turned over to the governmental sponsor. Because of construction risk transfer, there are financial rewards and penalties to the constructors based upon performance. In some cases, the facilities are financed principally with project-generated revenues (project-financing) such as the San Joaquin Hills and Foothill-Eastern Toll Road projects developed by the Transportation Corridor Agencies in Orange County. In other cases, such as the BART airport extension, the projects are funded conventionally with public grants and local tax dollars.

Warranty/Concession Model
Farther along the spectrum to the right would be projects that are publicly owned, but use private parties not only for development but also for operation/maintenance of the facility. Generally, the compensation is based on a flat fee or a cost-plus basis, rather than a profit-sharing formula based upon the net revenues or patronage volume. The new Hudson-Bergen light rail line in New Jersey falls into this category. Under current tax law, the term and compensation for private management contracts associated with facilities financed with tax-exempt debt is severely constrained, diluting any incentives for superior performance.

Another way to get ongoing private participation without running afoul of the IRS management contract rules is through long-term performance warranties on the physical condition of the infrastructure assets themselves. For example, the New Mexico Corridor 44 road-widening project has entered into a long-term warranty with a private firm for the pavement and bridge structures extending up to 20 years. In both the Hudson-Bergen and the New Mexico 44 projects, the pledged repayment source for debt service is public moneys, not project revenues.

Profit-Sharing Model
Finally, at the far right end are fully commercial projects, involving private development, operation, and even ownership of the facility. Financing sources are largely or entirely project-based revenue streams, rather than public or tax-backed sources. Compensation to the operator is based upon utilization of the facility and/or net income, resulting in performance-based rewards. Major examples of this are the SR91 Express Lanes in Orange County, the Dulles Greenway in Virginia, and the Las Vegas monorail, currently under construction.

No single model or structure can be said to be "the best"; rather, the most suitable model will depend on facts and circumstances surrounding each particular project. Among the factors that will determine which approach is most appropriate are:

- political support for an alternative project delivery method;
- need for project cost and completion date certainty (which is particularly applicable to project financings);
- state law considerations (especially procurement regulations);
- federal tax code implications (as concerns eligible financing instruments);
- commercial potential of the project, as reflected in capital markets acceptance; and
- degree of risk transfer to the private sector.

As noted above, projects need not be self-liquidating to benefit from a PPP approach. Concession arrangements for subsidized services such as public transport have proven successful overseas because incentivized performance for private operators can produce better service, lower public subsidy, and greater cost transparency. For instance, Melbourne, Australia achieved these enhancements in out-sourcing operations of its commuter rail network.

Nor is a commercial or "privatized" approach incompatible with a cooperative working arrangement with organized labor. In fact, both the management team and the union work force can benefit from entering into a project labor agreement at the outset of the project that squarely addresses prevailing wages, non-disruption of work schedule, and other features that will facilitate the timely, on-budget completion of a high-quality project.

Historically, most transportation projects have been funded either through governmental grants (public equity) or tax-supported municipal bonds (public debt), since these have represented the lowest cost sources of capital. However, there are alternative sources of private sector equity and debt capital that may be drawn upon for infrastructure projects with steady cash flows linked to economic growth. Low tax bracket institutional investors such as life insurance companies and non-taxable pension funds would benefit from being able to diversify into a new economic sector that presently is absent from their portfolios. Because the major financial vehicle for infrastructure has been tax-exempt bonds, it has not been appropriate for pension funds as tax-exempt entities to purchase such paper when higher-yielding corporate bonds of equal quality are available.

However, several recent developments have lowered the relative funding cost of taxable debt and equity:

- The Federal budget surplus has reduced the supply of Treasury bonds, lowering the benchmark against which taxable paper is priced, relative to municipal bonds.

- Pension funds and insurance companies have gained greater familiarity with project financings, through investing in debt and equity in overseas infrastructure projects and domestic power generation facilities. They are now willing to accept longer term debt obligations with minimal amortization in the early years, cushioning the cash flow impact on project revenues.

- New Federal programs such as TIFIA (the Transportation Infrastructure Finance and Innovation Act of 1998) provide debt capital on terms which in some cases are even more favorable than those in the municipal bond market. Other proposed legislation such as tax credit bonds would allow de-coupling of the principal from the interest portion, creating a stand-alone taxable debt instrument suitable for retirement funds.

- Finally, even though infrastructure projects are highly capital intensive, cost savings on the operating side from private participation may partially offset the higher capital costs of taxable rate financing.

Taxable Investment Funds. Together, these factors are combining to reduce the disparity in funding cost between the taxable and tax-exempt markets. As a result, project sponsors may now find that it is cost-effective to seek out pension funds and other taxable market investors to invest equity and debt capital in project financings. As corporate, union and public retirement systems represent $5 trillion in investment assets, even allocating a small portion of their portfolios to invest in U.S. transportation infrastructure could have significant ramifications. They could invest either directly or through pooled investment accounts similar to mutual funds.

"Innovative Finance" Techniques

Innovative approaches that involve PPP's to develop, operate or own transportation assets will lend themselves toward using innovative financing techniques. "Innovative Finance," while not a panacea, can help address these capital investment needs *once the underlying payment source for the project has been identified*.

Innovative Finance can be defined as the use of external financing approaches that draw upon at least one of the four following elements:

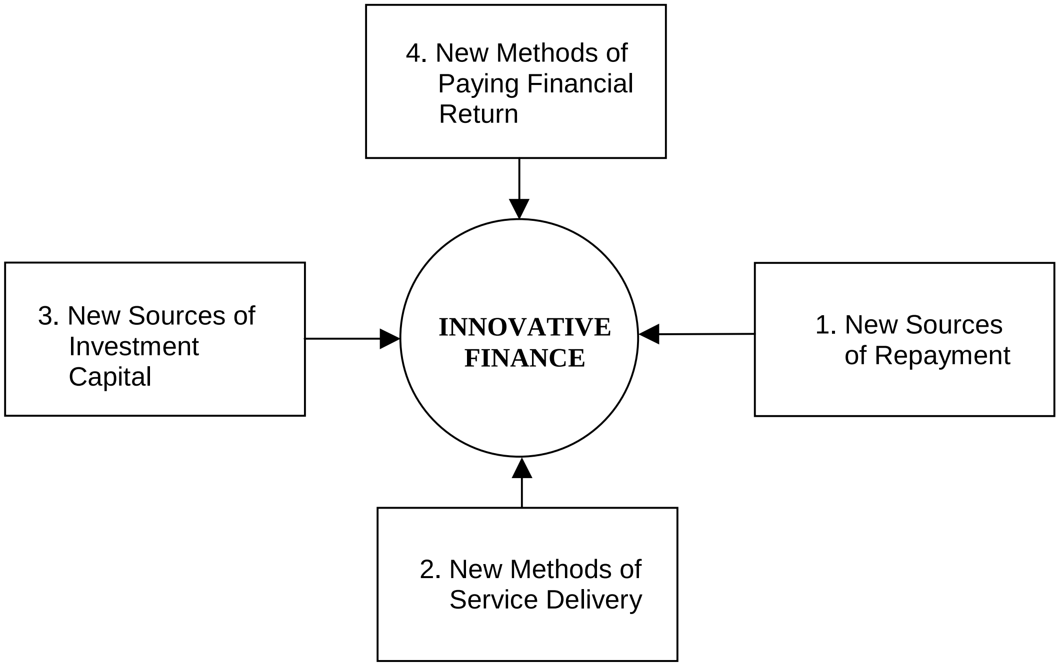
1. *New Sources of Repayment* that haven't previously been used to secure external financing.

2. *New Methods of Service Delivery* that offer development, production or operational efficiencies.

3. *New Sources of Investment Capital* that broaden the funding alternatives for transportation projects beyond conventional tools.

4. *New Methods of Paying Financial Return* to investors, that either reduce effective financing cost for the project sponsor or shift risks (such as interest rate and financial risk) to third party investors, or do both.

Diagram of Elements Comprising Innovative Finance



Participants at the Roundtable suggested a number of innovative finance ideas relating to repayment streams, service delivery, funding sources, and investment return:

New Sources of Repayment

State & Local Taxes

- Extension of Local Option Sales Tax
- New Tax on Alternative Fuel Vehicles
- Inflation adjusted Gas Tax
- Other User-related fees (e.g. weight-distance)
- Non-user related Taxes (internet/mail order sales tax, property transfer tax, etc.)
- A defined percentage of State General Fund Revenues

Other

- Shared revenue from fiber optics, etc. along state rights-of-way
- Tobacco Funds
- State version of GARVEE Bonds (using counties' share of State Gas tax allocation)
- State-aid Intercept mechanism to credit enhance local bonds
- Development Risk Insurance

New Methods of Service Delivery

- Broaden application of innovative procurement techniques such as design-build.
- Modify transit requirement 13© [consent required of DOL and local unions to proposed project labor agreements] to make it easier for transit agencies to out-source existing operations/capital improvements via tendering routes to concessionaires.
- Liberalize the management contract rules or seek tax code change (private activity bonds for highways) to allow performance-based compensation to private operators of toll facilities financed with tax-exempt debt.
- Permit outsourcing of highway maintenance activities or enter into long-term warranties to guarantee defined service standard levels of State highways under GASB Statement 34.
- Change statute of limitations under NEPA for challenges, so that it is consistent with other environmental statutes (e.g. within 60 days from the Record of Decision).

New Sources of Investment Capital

- Public (State and local) Pension Funds and Taft-Hartley (union) Pension Funds, investing either directly or through pooled accounts.
- Leveraged Leasing (domestic and cross-border tax-oriented equity).
- Extend TIFIA beyond 2003.
- Reduce threshold project size below $100 million for TIFIA assistance, to make it consistent with the lower thresholds in TEA-21 for using design-build (e.g. $50 million).

New Methods of Paying Financial Return

- Tax Credit bonds (interest paid by U.S. Treasury in the form of a tax credit to the investor).
- Shadow Tolls (per vehicle compensation to private concessionaire).
- Variable Rate bonds for State transportation borrowings to hedge interest rates.

Government Policy Tools

Historically, the public sector has used direct governmental spending to expand transportation capital investment. However, where innovative finance and public-private ventures are involved, it may be possible to generate additional investment through less costly means. To encourage the foregoing innovative finance techniques, the government sector may use these policy tools:

1. *Regulatory Incentives*—streamlining procedures, removing program restrictions, etc.;
2. *Tax Incentives*—using the tax code to encourage the free flow of capital into certain desired investment and operational activities; and
3. *Credit Incentives*—using fractional credit assistance (direct loans or loan guarantees) to leverage a larger multiple of private financing.

Each of the suggestions under the four innovative financing tools may be addressed through regulatory, tax, or credit policy initiatives.

CONCLUSION: ENCOURAGING CONTINUED INNOVATION

The following policy recommendations emerged from the Roundtable discussion:

→ *Process Streamlining*. Process reform was recommended in three areas:

- State procurement practices should be simplified for public-private partnerships;
- Regional financing protocols with Federal agencies need to be supported; and
- Environmental review processes should be consolidated with public agency responsibility.

→ *Environmental Risk.* Project-based financings must have *time-certainty* and *cost-discipline* to attract private debt and equity capital. Because securing environmental and public permitting approvals is fundamentally a governmental rather than a commercial process, the private sector is not equipped to assume the financial responsibility for obtaining the environmental record of decision. The time period for challenges to projects' environmental impact statements under NEPA should be made consistent with other environmental statutes.

→ *Co-Investment by Public & Private Sector*. User fees can be both an effective and equitable way of generating project-funding streams. However, in most cases, project-generated revenues alone will not be sufficient to fully finance the projects. Some level of public investment will be required, and it needn't take the form of contributed capital. For instance, the Alameda Corridor has four distinct layers of debt investment—first tier capital markets, second tier TIFIA loan, third tier capital markets, and fourth tier port loans—as well as lesser amounts of federal, state and local grant funding. In addition to reducing the burden on project revenues to cash flow the private investment, public co-investment is useful in that it gives all parties a financial stake in the commercial success of the enterprise.

→ *Subsidy Level*. Even where an external operating subsidy is required (e.g. public transit or freeway maintenance), the public sector doesn't have to *provide* that service. As has been demonstrated overseas, there may be substantial reductions in public subsidy required and/or enhancement of service levels through selective outsourcing of operations to private parties.

→ *Special Purpose Agencies*. Major capital projects can benefit by establishing a special purpose entity to undertake development and operations, whose sole responsibility is the project. The organization, which could be a legislatively-established new authority, a joint powers authority formed by several jurisdictions, or a private non-profit corporation formed by the principal public and private stakeholders, helps bring a singular institutional focus to completing the project on-time and within budget.

→ *Design-Build*. Larger or more complex projects often can accelerate completion and reduce construction and performance risk through design-build procurement. Yet State law may make it difficult to proceed on any other basis than design-bid-build, with its attendant delays and lack of accountability. Also, State and Federal law should allow a contractor to participate in both the environmental analysis of a project and its subsequent construction, to gain the benefit of their continued involvement from project inception to project completion.

→ *Linking Investment & Maintenance*. Reliable funding of ongoing project operations and maintenance costs must be identified at the outset, to ensure the best capital investment decision is made. Among the institutional arrangements that can foster this Life-Cycle Costing perspective are long-term franchise agreements (for toll facilities) or shadow toll agreements (for free facilities); or long-term warranties stipulating that specific asset quality levels be maintained over the life of the project.

→ *Role of Innovative Finance*. Once a project's revenue stream has been identified, innovative finance techniques can assist in capitalizing the value of the future project revenues to fund the investment today. Federal, State and local policymakers can use regulatory, tax and credit incentives to encourage the use of new financial instruments. The financial tools themselves may draw upon one or more of the following mechanisms: new repayment streams, new procurement methods, new sources of investment capital, and new methods of a paying financial return. Given that many of these financing approaches already are in use in the private sector, a more apt name for "innovative finance" might be "project-based finance."

→ *Continuing Education*. Presently, there is very little offered in the way of organized educational programs on the use of PPP's for infrastructure development. The dearth of relevant training extends both to entry-level candidates for public or private positions (Masters programs) and to mid-career corporate and governmental practitioners. An ongoing university-sponsored program on new project development and financing techniques could prove highly useful in further developing both public and private sector management skills in this growing and dynamic discipline.

APPENDIX A

AGENDA

9:00 a.m. Welcome and Introduction

Daniel A. Mazmanian, Dean
USC School of Policy, Planning, and Development

Daniel V. Flanagan, Jr., Director
USC National Center for Innovations in Public Finance

Richard F. Callahan, Director
USC Sacramento Center

9:15 a.m. Policy Driver I: Assessing the State of the State

Facilitator: R. William Hauck,
California Business Roundtable

- What are the New Economy's demands on the Old Economy's Infrastructure?
- To what extent will traditional funding sources fall short of meeting needs?
- What roles should the State, MPO's, and Counties play?
- Is there a consensus view that alternative approaches for project delivery and financing are needed?

Colloquy:
Elizabeth Hill, California Legislative Analyst
Mark Pisano, Exec. Dir., Southern California Association of Governments
Steve Szalay, Exec. Dir., California State Association of Counties
Commentator:
Sharon Greene
Sharon Greene and Associates

Observations by other conferees

10:45 a.m. Policy Driver 2: Defining Roles and Responsibilities in Public-Private Partnerships (PPP's)

Facilitator: Dean Misczynski, Director
California Research Bureau

- Is it appropriate for the private sector to identify candidate projects on an unsolicited basis?
- Who should take the financial risk of securing environmental and political approvals?
- What are the key labor & public policy issues that need to be considered?
- What role does sustainable development (popular support) play in this equation?

Colloquy:
Walter Baker, Vice President, LAEDC

Frank G. Turpin, Vice President, Bechtel Infrastructure Corporation
Douglas Wheeler, Esq., Hogan & Hartson, L.L.P.

Observations by other conferees

12:00 p.m. Policymakers or Dealbreakers?

Two Perspectives on the Governmental Role in PPP's

Speakers: Gene Conti, Ass't. Secretary for Policy, USDOT
John Ferrera, Ass't. Secretary for Transportation, BT&H Agency

1:00 p.m. Policy Driver 3: Selecting Tools to Guide Capital Investment Strategy

Facilitator: Richard Dixon, CEO
Idea Associates; former CAO, Los Angeles County

- Will GASB Statement 34 alter Capital Investment and Asset Maintenance policy?
- What techniques can encourage life cycle costing of long-term infrastructure investments?
- Is design-build a boon or bane? How can the CA SIB be used more efficiently?

Colloquy:
Brian Mayhew, Manager
Finance and Treasury, Metropolitan Transportation Commission (Bay Area)
Wally Kreutzen, Executive Director, Transportation Corridor Agencies
Larry D. Magid, CA Deputy Sec. for Transportation, Federal Liaison
Blake Fowler, Ass't. Exec. Dir., CA Infrastructure and Economic Dev. Bank

Observations by other conferees

2:00 p.m. Policy Driver 4: Comparing Different Transaction Templates

Facilitator: Henry Gardner, Financial Consultant
The Governor's Commission on Building for the 21st Century

- What are the pros & cons of the taxable corporate model vs. conventional public sponsorship? Do any of the development approaches used overseas have applicability to California?
- Is there a role for institutional investors or credit enhancers?
- How does the experience with a TCA turnkey approach compare to a SR 91 concession approach?
- What are the lessons learned from the TIFIA awards to date?

Colloquy:
Brian Corley, Vice President; Public Finance, JP Morgan
Geoffrey Yarema, Esq., Nossaman, Guthner, Knox & Elliott, LLP
Christopher J. Leslie, Division Director, Macquarie Bank
James Taylor, Managing Director, Bear Stearns
Robert Brown, Capital Markets Advisor, USDOT

Observations by other conferees

3:30 p.m. Designing The New Game Plan

Facilitators: Daniel V. Flanagan & David Seltzer,
USC National Center for Innovations in Public Finance

- What Federal and State policy changes in terms of tax, credit and regulatory initiatives are most important in advancing projects?
- Which ideas brought up at this Roundtable seem most promising?
- Why have the techniques that CA pioneered become conventional elsewhere yet are controversial here?
  Colloquy:
  Suzanne Sale, Senior Financial Advisor, US Department of Transportation
  Robert Remen, California Transportation Commission
  Observations by other conferees

4:45 p.m. Conclusion

Encouraging Continued Innovation in Formulating Transportation Policy
Role of The National Center
Need for Continuing Education
Roundtable Proceedings
Daniel V. Flanagan, Jr., USC

5:00 p.m. Adjournment/Reception

APPENDIX B

ATTENDEES

Scott Andreson
Fitch IBCA, Duff & Phelps

Walter Baker
Los Angeles County Economic Development Corporation

Andrew Bard
University of Southern California

Jeff Brown
Senate Office of Research

Robert Brown
Federal Highway Administration

Rich Callahan
USC Sacramento Center

The Hon. Eugene Conti
U.S. Department of Transportation

Brian Corley
J. P. Morgan Securities, Inc.

Tim Cremins
California-Neveda Conference of Operating Engineers

Paul Danczyk
USC Government Affairs

TyAnn DeChambeau
Federal Highway Administration

Kenneth DeCrescenzo
Caltrans

Richard Dixon
Idea Associates

Thomas Dunphy
Lamont Financial Services Corporation

Norman Emerson
Emerson & Associates

The Hon. John Ferrera
California Business, Transportation and Housing Agency

Daniel Flanagan
USC National Center for Innovations in Public Finance

Blake Fowler
California Infrastructure and Economic Devevelop Bank

Sterling Franklin
Morris S. Smith Foundation

Henry Gardner
Gardner, Underwood, and Bacon

James Gaston
GDI Traffic Management Systems

Sharon Greene
Sharon Greene and Associates

The Hon. Mark Harris
California Business, Transportation and Housing Agency

William Hauck
California Business Roundtable

Gill Hicks
Alameda Corridor Transportation Authority

Elizabeth Hill
California State Legislature, Joint Budget Committee

Grant Holland
American Transportation Development, LLC

Michael Kahn
National Education Association

Mike Kashiwagi
CalRAC Vice President, City of Sacramento

Wally Kreutzen
Transportation Corridor Agencies

Rich Leib
Lockheed Martin IMS

Christopher Leslie
Marquarie Corporate Finance (USA) Inc.

The Hon. Larry Magid
California Business, Transportation & Housing Agency

Jeremy March
Shan K. Thever & Associates

James Martling
Sperry Capital, Inc.

Daniel Mazmanian
University of Southern California

Duncan McFetridge
California Alternative Energy & Advancement Transportation Authority

Dean Misczynski
California Research Bureau

James Moore
University of Southern California

Carl Morgan
Los Angeles World Airports

Vilas Mujumdar
Concrete Masonry Assocociation of California and Nevada

Scott Nagelson
Merrill Lynch & Co.

Audrey Noda
California Commission on Building for 21st Century

Suzanne O'Keefe
University of Southern California

Albert Perdon
Albert Perdon & Associates

Richard Petrie
Caltrans

Mark Pisano
Southern California Association of Governments

Willard Price
University of the Pacific

Robert Remen
California Transportation Commission

Suzanne Sale
Federal Highway Administration

David Seltzer
USC National Center for Innovations in Public Finance

Mark Sullivan
Federal Highway Administration

Steven Szalay
California State Association of Counties

Vit Troyan
CalRAC President, City of Los Angeles

Ted Trzyna
California Institute of Public Affairs

Frank Turpin
Bechtel Infrastructure Corporation

Alan Viterbi
Del Mar Ventures LLC

Jason Weller
California Legislative Analyst's Office

Douglas Wheeler
Hogan and Hartson, LLP

Geoffrey Yarema
Nossaman, Guthner, Knox and Elliot, LLP

APPENDIX C
SPEAKER BIOS

Walter Baker

Wally Baker is Vice President and Managing Director of Consulting Services for the Los Angeles Economic Development Corporation (LAEDC) and the California Economic Research Center (CERC). Mr. Baker's leadership in the consulting practice since 1998 has resulted in significant increases to revenues, major projects and leadership strategies to the public and private sector clients of the practice. His role with the consulting practice includes leadership, strategy, and project management of large-scale projects. Before coming to the LAEDC, Mr. Baker was CEO of Internet Link Corporation (ILC). A profitable, privately held company, ILC continues operating as a communication consulting and technology services company providing connectivity, software development and community outreach communication.

Robert Brown

Robert Clarke Brown is Capital Markets Advisor at the U.S. Department of Transportation. He assists the Department in developing market-based finance initiatives, including implementation of the Transportation Infrastructure Finance and Innovation Act, the first, federal credit enhancement program for transportation. His work on the TIFIA includes both advising on program design and negotiation of the credit instruments used on individual projects. Appointed by the President of the United States, Mr. Brown is a member of the Board of Directors for the Metropolitan Washington Airports Authority.

Richard F. Callahan

Richard Callahan is Director of the Sacramento Center of USC's School of Policy, Planning, and Development. He is directing the coordination for the Innovative Financing Roundtable, and is the director of two leadership programs developed and presented by USC for senior state government executives and for finance officers. He serves on the American Society of Public Administration (ASPA) Sacramento Chapter Board and the American Planning Association (APA), Sacramento Valley Chapter Board. In the past two years, he has made presentations on management and organizations to the California Leadership Institute; visiting public managers from Indonesia, the national ASPA conference, the Association of Government Accountants, the California Municipal Finance Officers Association and the Non-Profit Resource Center; and teaches a graduate management class for USC in Sacramento. Mr. Callahan has managed governmental and non-profit organizations in Los Angeles, Northern California and New Jersey. He is writing a doctoral dissertation at USC on the impact of governance structures on agency performance in infrastructure construction.

Gene Conti

Eugene A. Conti, Jr. was nominated to be Assistant Secretary for Transportation Policy at the U.S. Department of Transportation in July 1998 and confirmed by the U.S. Senate in October 1998. As the Assistant Secretary for Policy, Mr. Conti is the principal advisor to Secretary Rodney Slater on transportation safety, environmental impacts, economic growth, technology and mobility, global positioning systems, and strategic planning for transportation's future. Prior to his appointment at DOT, Mr. Conti served as the Secretary of Maryland's Department of Labor, Licensing and Regulation from 1995 to 1998.

Brian R. Corley

Vice President, Los Angeles, joined J.P. Morgan in 1998 to open the firm's Los Angeles public finance office. Mr. Corley has spent the last eleven years providing investment-banking services to municipal governments, primarily in California and Arizona. Early last year, Mr. Corley closed a $956 million debt-restructuring package for the Los Angeles Department of Water & Power (LADWP) electric system. Currently, Mr. Corley is working on a $650 million LADWP water system restructuring and a $2.0 billion LADWP electric system refunding. Current senior manager financing engagements include structuring the inaugural financing for the Bay Area Toll Authority and the California Infrastructure and Economic Development Bank's leverage loan program. In addition, Mr. Corley recently closed a $62 million variable rate COP financing for the City of Glendale, representing the first general fund bond issue for the City since the 1970's.

Richard Dixon

Richard Dixon is Chairman of Idea Associates, a consulting consortium of senior executives. Idea Associates provides state and local governments, employee organizations, and corporations a variety of problem solving consulting services especially in financial, litigation support, employee benefit, management, and operations areas. In this role he created the popular public retirement financing vehicle know as Pension Obligation Refunding Bonds that became very popular money saving measures in the mid-nineties. Prior to joining Idea Associates in 1993 Mr. Dixon served Los Angeles County for 35 years, including 6 years as Budget Officer, 3 years as Treasurer-Tax Collector, and, his last, 6 years as Chief Administrative Officer. Among those recognized, Mr. Dixon was chosen by City and State as the Outstanding County Executive in 1987, twice managed financings chosen by the Institutional Investor as Deals of the Year, and in 1992, was honored with the Outstanding Public Service Award by the Municipal Forum of New York.

John Ferrera

Governor Gray Davis appointed John D. Ferrera as Assistant Secretary for Transportation in 1999. He oversees the California Department of Transportation for the Business, Transportation and Housing Agency. Mr. Ferrera is the Agency's policy director for the Commission on Building for the 21st Century, a task force created by the Governor and chaired by Agency Secretary Maria Contreras-Sweet. Prior to his recent appointments, Mr. Ferrera was the Legislative Director for Congressman James Barcia where he directed the Congressman's legislative operations and was the lead staff person for the Transportation Infrastructure Committee issues, trade and foreign affairs, and several other domestic issues.

Daniel V. Flanagan

Daniel V. Flanagan, Jr. established his own Washington, DC public policy advisory firm, The Flanagan Consulting Group Inc., in 1981 specializing in deregulation and industry restructuring initiatives both in the United States and overseas. Mr. Flanagan represented some thirty electric utilities in the 1992 Energy Policy Act deliberations and a number of utility companies in the development of the Telecommunications Act of 1996. He also represented – in their deregulation initiatives – railroads, trucking and natural gas companies. Mr. Flanagan began his public policy career in the late 70s overseeing Southern Pacific's Washington, DC Office. He devoted significant professional time to the Sprint effort leading to the initial divestiture of AT&T. Mr. Flanagan served as Chairman of the 1993 Infrastructure Investment Commission and has testified before Congress on a number of occasions on deregulation, innovative finance and the public-private partnership concept—emphasizing "private capital investment." Mr. Flanagan established the National Center for Innovations in Public Finance located both in Washington, DC and Los Angeles on the campuses of the University of Southern California.

Blake Fowler

Blake Fowler is the Assistant Executive Director of the California Infrastructure and Economic Development Bank, which resides in the State's Trade and Commerce Agency. He is responsible for managing the Bank's financing programs, including the new Infrastructure State Revolving Fund Program, which provides low-cost financing for a wide variety of public infrastructure projects, and the Bank's Conduit Revenue Bond Financing Programs, which have issued over $7 billion of bonds since 1995. Prior to joining the Trade and Commerce Agency in 1993, Mr. Fowler worked for Wells Fargo Bank.

Henry Gardner

Henry Gardner is currently the Managing Partner of Gardner, Underwood and Bacon where he provides municipal management consulting services, develops implementation strategies for restructuring government, and recommends financial improvements. He is also the financial consultant for the Governor's Commission on Building for the 21st Century. Previously, he was the Senior Vice President and Manager of the Western Region for Donaldson, Lufkin & Jenrette; and was the City Manager of Oakland for twelve years. Among recognitions, he was named most valuable City Manager in the country by City and State Magazine in 1990, was the recipient of the 1991 national Forum for Black Public Administrators? Mark of Excellence, and was selected fellow of the National Academy of Public Administration in 1992.

Sharon Greene

Sharon Greene is Principal of Sharon Greene and Associates, an internationally recognized consulting firm in transportation economics and finance based in Orange Country, California. She has been involved professionally for over 25 years directing and managing projects in transportation finance, corridor planning and evaluation, urban rail system development, alternative analyses, and major investment studies. Ms Greene has developed and implemented financing programs for rail systems, highways, toll roads, and freight corridors within the United States and abroad. Her professional activity has focused on identifying opportunities for public-private partnerships, including privatization of transportation services in California for the proposed High Speed Rail System; in Tel Aviv and Jerusalem, Israel, for urban transit services; and Hawaii, for potential privatization of circulator services between Waikiki and downtown Honolulu. She has also been involved in a number of toll road and congestion pricing programs, including initial studies for the Orange County Toll Roads program, HOT/HOV lanes for the Interstate 5 expansion in Southern California, and the proposed Sand Island Bypass in Honolulu.

R. William Hauck

Bill Hauck is President of the Sacramento based California Business Roundtable. The Roundtable is composed of the Chief Executive Officers of major corporations either based or doing business in the State. In existence for more than 20 years, the organization deals with public policy issues affecting the State's business climate, economic growth and quality of life. Mr. Hauck is also a major shareholder and member of the Board of Directors of Information for Public Affairs Incorporated. Prior to assuming the Roundtable position he chaired the California Constitution Revision Commission and currently serves as a member of the Board of Trustees of the California State University System. Earlier in his career, Mr. Hauck served as Chief of Staff to Assembly Speakers Bob Moretti and Willie L. Brown, Jr. as well as Deputy Chief of Staff for Governor Pete Wilson.

Elizabeth Hill

As Legislative Analyst, Elizabeth Hill serves as a nonpartisan fiscal advisor to both houses of the state Legislature, and oversees the preparation of annual fiscal and policy analyses of the State of California's budget and its various programs. Her office is also charged with the responsibility of preparing analyses for all initiatives and constitutional measures qualifying for the State's ballot. Ms Hill is an active member of the Association for Public Policy and Management, currently serving as Vice President; the National Academy of Public Administration; and the National Association of Legislative Fiscal Officers. In 1997 she was recognized as a "Public Official of the Year" by Governing Magazine. She currently serves on the advisory boards of the Public Policy Institute of California, the Goldman School of Public Policy at UC Berkeley, and the USC Sacramento Center.

Jeffrey D. Holt

Jeffery D. Holt is the West Coast Manager for the Municipal Finance Department, covering maritime and freight-rail projects nationwide, and surface transportation and infrastructure clients in the western United States. In the surface transportation arena, Mr. Holt currently leads the senior management team for the Tacoma Narrows Bridge project, a PPP between WSDOT and a private consortium led by Bechtel. Mr. Holt has recently served as the senior investment banker for Golden Gate Bridge, Highway and Transportation District and has just been named to senior-manage the commercial paper program for LAX World Airports.

Wally Kreutzen

In 1997, Wally Kreutzen was appointed Chief Operating Officer and in 1999 the Chief Executive Officer of the TCA. He is responsible for all planning, design, construction, financing, and operations associated with the Foothill, Eastern and San Joaquin Hills tollways. Starting in his professional career working for a major US oil company, Mr. Kreutzen has over 25 years of combined public and private sector experience. In 1987, he opened the western regional offices for a national financial advisory firm providing services to state and local governments in the planning and execution of capital financing. He joined the Transportation Corridor Agencies, two Joint Powers Agencies charged with implementing 67 miles of start-up urban tollways, as Executive Vice President-Finance and Administration in December 1989. In that role he coordinated the development of the initial plans of finance for the Foothill/Eastern and San Joaquin Hills Transportation Corridors. Additionally, he implemented several public-private partnerships into the TCA structure.

Christopher J. Leslie

Macquarie is an Australian headquartered investment bank with significant activities in the infrastructure sector, including management of one of the world's largest listed infrastructure funds. Chris Leslie joined Macquarie's Project and Structured Finance group in Sydney in 1992. Since that time, he has been involved in all aspects of the group's business including project financing of infrastructure, cross-border leasing, cross-border structured finance and infrastructure funds management. His experience includes development, acquisition and divestment of power stations, gas pipelines, roads and airports; US and Japanese cross-border leasing; and UK tax spared financing. Mr. Leslie is based in New York and is working on transactions in the transport and utilities sectors.

Larry D. Magid

In March 2000, California Governor Gray Davis appointed Larry Magid to serve as Deputy Secretary for Transportation in the Business, Transportation and Housing Agency. In his role as Deputy Secretary Mr. Magid focuses on federal transportation issues, goods movement, ports and airports. Prior to his appointment at BTH Mr. Magid served as Executive Director of the California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA) under the Chairmanship of California State Treasurer Philip Angelides. From

1996 through 1999 Larry Magid served as General Counsel and Director for Transportation Legislation of the National Governors' Association. From 1994 to 1996 Mr. Magid was a transportation policy analyst with the United States Office of Management and Budget. At OMB he prepared the President's budget for the Federal Aviation Administration, the National Transportation Safety Board, and the Office of the Secretary of Transportation.

Brian Mayhew

Brian Mayhew joined the Metropolitan Transportation Commission (MTC) as Treasurer/Controller in 1999. MTC is the regional transportation planning and finance agency for the San Francisco Bay Area who, since 1998, has served as the Bay Area Toll Authority responsible for administering the base $1 toll on the state-owned bridges. MTC also functions as the region's Service Authority for Freeways and Expressways. Prior to joining MTC in 1999, Mr. Mayhew was Finance Director for the City of Westminster in Southern California for 10 years. Mr. Mayhew has also been the Assistant Director in Mountain View for 5 years and the Financial Analyst for the City of Palm Springs for 3 years.

Daniel A. Mazmanian

Daniel A. Mazmanian is the C. Erwin and Ione Piper Dean of the School of Policy, Planning, and Development at USC. He is a leading scholar and frequent publisher in the fields of environmental policy and policy implementation. Dean Mazmanian began his academic career serving on the faculty of Pomona College, where he initiated its Program in Policy Analysis and received a Wig Award for Distinguishing Teaching in 1981. In 1986 he moved to The Claremont Graduate School, where he remained until 1996, serving as the first Director of the Center for Politics and Economics. In 1996 he accepted the position as Dean of the School of Natural Resources and Environment at the University of Michigan. In 1997, he received the Aaron Wildavsky Enduring Contribution Award from the American Political Science Association and, from the Policy Studies Organization, the Aaron Wildavsky Book Award and Thomas R. Dye Service Award. He has served on the Commission on Environmental Strategy and Planning of the Institute of Social Research, and is currently a senior associate of the California Institute of Public Affairs, a member of the National Advisory Board of Green Leaf, and Trustee of the John Randolph and Dora Haynes Foundation.

Dean Misczynski

Dean Misczynski is the founding director of the California Research Bureau in the California State Library. The Bureau, which began in 1991, provides policy research services to both houses of the California Legislature and the Governor's Office. Mr. Misczynski also served as principal consultant with California's Senator Office of Research and as consultant to the Senate's bonded indebtedness committees. He is best known for his work on the Mello-Roos Community Facilities Act and various assessment acts. He co-authored Windfalls for Wipeouts (about property "takings" and how to pay for them) with Donald Hagman.

Mark Pisano

Since 1976, Mark Pisano has served as the Executive Director of the Southern California Association of Governments (SCAG) which is the nation's largest regional planning agency. The purpose of this association of local governments is to provide an open forum in which region-wide problems can be solved, and comprehension plans dealing with air and water quality, transportation, regional growth and development, housing, the economy and other regional issues can be developed. Mr. Pisano is a leader and active participant in numerous civic and professional organizations, including: Resources for the Future, National Civic League, California School of Professional Psychology and LINC Housing Corporation. Additionally, Mr. Pisano is the author of numerous papers, speeches, and articles on such subjects as economics, growth, transportation, water quality, and governance.

Robert Remen

Robert Remen has served as Executive Director of the California Transportation Commission since 1989 and previously as the Commission's Chief Deputy since 1979. As the Commission's chief administrative officer, he is responsible for implementing Commission policy, for representing the Commission with the Legislature and the Administration, and for overseeing Commission staff activities and policy development as reflected in the Commission's Annual Report to the Legislature, its Biennial State Transportation Improvement Program (STIP), and its Annual Evaluation of the Caltrans Proposed Budget. Mr. Remen joined the Commission staff in September 1978, following four and a half years with the State Office of Planning and Research (OPR) where he served as co-deputy of the Planning and Policy Unit, responsible for managing the Office's evaluation of State agency plans and programs, pertaining to land use and the environment. Before joining OPR, Mr. Remen worked for the City of Davis Community Development Department, administrating its Environmental Assessment Program, and before that, for several Bay Area planning consulting firms.

Suzanne Sale

In May 1999, Suzanne Sale joined the FHWA Innovative Finance Team in the Office of Budget and Finance, serving as a Senior Financial Advisor to FHWA. In this position she has a key role in developing new project finance techniques as well as providing expertise with existing programs such as State Infrastructure Banks (SIBs), Grant Anticipation Revenue Vehicle (GARVEE) bonds, TIFIA, and the Quality Program. Ms. Sale is an active member of a number of national transportation groups, currently serving as a member of the Transportation Research Board's Taxation and Finance Committee. She also has served as a member of the AASHTO Subcommittee on Transportation Finance. Ms. Sale has been an invited speaker at numerous national conferences and meetings addressing innovative finance approaches.

David Seltzer

David Seltzer is a Distinguished Practitioner at the University of Southern California's National Center for Innovations in Public Finance, where he teaches graduate level students at the School of Policy, Planning, and Development; and conducts research. Concurrently, Mr. Seltzer serves as Principal at Transport & Infrastructure, a financial advisory consulting firm assisting public and private project sponsors in developing and implementing financial plans for major capital investment initiatives. Mr. Seltzer established the firm last year, after spending nearly 25 years in the field of infrastructure finance, working in both the public and private sectors. Prior to forming Transport & Infrastructure, Mr. Seltzer served as Senior Advisor to the Administrator of the Federal Highway Administration between 1996-1999 where he was actively involved in designing and executing new financial assistance programs. Before joining USDOT, Mr. Seltzer spent twenty years in investment banking, assembling public and project financings for transportation and other infrastructure programs. He also served as financial advisor to the federal Infrastructure Investment Commission.

Steve Szalay

Steve Szalay has served as Executive Director of the California State Association of Counties since June of 1995. CSA is a private, nonprofit association representing all 58 California counties at the state and federal governments in Sacramento and Washington, DC. The association provides a vast array of services to its member counties including: Legislative advocacy, litigation coordination, finance, insurance, human resources, training, research, publications and communications services. Mr. Szalay coaches a staff of 27 in Sacramento and oversees an office in Washington, DC. Legislative services are provided in the following program areas: health and human services; administrations of justice; government finance and operations; employment and workers' compensation, housing, land use and transportation; and agriculture and natural resources.

James Taylor

James Taylor II is a Managing Director in the Public-Private Ventures Group at Bear Stearns. He has a significant amount of experience helping public agencies and private developers create joint ventures for the development of transportation infrastructure. Mr. Taylor was one of the lead bankers on the 1995 revenue bond financing for the E-470 Toll Road Project in Denver, Colorado, a transaction recognized by Institutional Investor magazine as a "Project Finance Deal of the Year." He also assisted private and not-for-profit organizations with such projects as creating a new international air passenger terminal at Kennedy International Airport, creating revenue bond transactions in 1998 to construct and operate toll roads, and completing a debt refinancing for a toll road project.

Frank G. Turpin

Frank Turpin has thirty years experience in design and construction of infrastructure projects involving rail transit, highways and bridges, airports, buildings, pipelines and electrical generation facilities. He has worked for the past five years with Bechtel Infrastructure Corporation and is currently Vice President of Marketing and Business Development. He has been involved in a number of design-build projects and has recent experience in two public sector projects which utilized innovative financing approaches. He managed project development for a light rail extension to the Portland International Airport which incorporated joint development of real estate interests, and was project manager for the scope development phase of the Tacoma Narrows Bridge which is now in negotiation with Washington State Department of Transportation. He represents the design-builder's perspective in these projects and has worked in coordination with the financing interests of Bechtel.

Douglas Wheeler

Currently at Hogan & Hartson L.L.P., Douglas Wheeler practices principally with the Environmental Group on federal regulatory issues, with emphasis on issues pertaining to land use and growth management; endangered species habitat, wetlands, and watershed management; water supply and distribution, including infrastructure development; management of agricultural and timberland resources; and historic preservation. Mr. Wheeler served as California's Secretary for Resources from 1991-1999, and held senior executive positions for non-profit environmental and conservation organizations.

Geoffrey Yarema

Geoffrey S. Yarema is a partner with Nossaman, Guthner, Knox & Elliott, LLP, and chairs its nationally recognized transportation practice. State Departments of Transportations, turnpike authorities, transit agencies, developers and lenders seek out his 22 years of experience providing specialized expertise in the innovative development, financing and operation of large transportation projects throughout the United States and abroad.