

**REVIEW OF
THE PUBLIC-PRIVATE INITIATIVES PROGRAM OF
THE COLORADO DEPARTMENT OF
TRANSPORTATION**

by Dr. Porter Wheeler and Sasha Page

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Prepared by Infrastructure Management Group, Inc.

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Acknowledgments

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- Heather Dugan, Project Manager
- Peggy Catlin
- Mike Fitzsimmons
- Joe Mahoney
- Tim Harris
- Cally Kramer (through June 2000)



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- CDOT Steering Committee members
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Executive Summary

Objective: Identify ways to improve CDOT Public-Private Initiatives (PPI) Program

Work Steps included the following tasks:

- *Summarize OFMB Research*
 - ✓ *Prepared Innovative Financing Manual*
- *Review CDOT PPI Guidelines*
 - ✓ *Interviewed CDOT and Governor's legal counsel*
- *Outline PPI Issues*
 - ✓ *Conducted interviews with CDOT staff and project proponents*
- *Recommend Techniques*
 - ✓ *Prepared special memorandum on enabling statute issues*
- *Draft Report*
 - ✓ *Incorporate best practices from other jurisdictions*
- *Review with Steering Committee*
 - ✓ *September 25, 2000*
- *Final Report and Workshop*



Executive Summary

Findings

- PPI statute provides enabling framework and CDOT has issued guidelines.
- Several unsolicited proposals have been received but none have moved forward.
- Recent legislative actions (GARVEEs, co-development) have reinforced governmental support and boosted private interest in PPI.
- State leadership (Governor, CDOT Director) are considered amenable to further implementation of PPI.
- CDOT's HUTF and Federal funds are growing, but needs far outpace available funding.
- Private capital could help expand CDOT infrastructure development program.
- Several private sponsors and developers remain interested in developing PPI.



Executive Summary

Findings (continued)

- CDOT faces several constraints in implementing its PPI program:
 - ✓ CDOT has not dedicated funds to support a full partnership on PPI.
 - ✓ Commission seems reluctant to allocate funds for PPI project preliminaries such as environmental work, but has done so on at least two occasions.
 - ✓ TABOR amendment limits revenue growth and requires voter approval of new debt or taxes.
 - ✓ Proponents are uncertain what is wanted and feel unable to get feedback on initial ideas.
 - ✓ At times, proponents have felt CDOT to be adversarial.
 - ✓ Proponents are concerned about confidentiality of unsolicited proposals.
 - ✓ Local governments expect CDOT to carry the ball and provide the bulk of the funding.



Executive Summary

IMG's key recommendations focus on making the PPI process more pro-active and cover four main areas: policy, legislative/legal, process, and management.

- **Policy:** Develop a policy statement.
 - ✓ Enunciate what CDOT wants to see and the degree of planning and financial assistance, if any, that CDOT might provide to a PPI sponsor.
- **Legislative/legal:** Refine PPI enabling statute.
 - ✓ Work with CDOT counsel and TLRC to broaden interpretations favorable to PPI.
- **Process:** Provide central point-of-contact for PPI proponents.
 - ✓ Delegate authority to negotiate terms, be a pro-active PPI supporter.
 - ✓ Consider issuing RFP for one or more PPI projects or categories of projects.
- **Management and Training:** Revamp and upgrade PPI's stature within CDOT.
 - ✓ Provide training on applications and resultant benefits of PPI for all CDOT staff.
 - ✓ Promote outreach and public workshops on PPI.



Executive Summary

IMG's key recommendations on policy.

CDOT needs to establish and communicate clear, pro-active policies toward the PPI program and proposals received thereunder.

- Develop a policy statement identifying what CDOT will encourage and how.
- Set more explicit direction for desired PPI methods and types:
- Designate a primary point of contact for all proposals under PPI.
- Develop a matrix of partnership formats to filter and categorize proposals.
- Decide on financial support, if any, and whether to invest in project pre-planning.
- Where public benefit is clear, endorse loans or other direct CDOT participation.
- Examine development of state-wide turnpike authority under existing powers.



Executive Summary

IMG's key recommendations on legislative/legal.

Legislative/legal clarifications would make the PPI program work more effectively.

- IMG identified three areas within the established PPI authorization that warrant clarification:
 - ✓ CDOT cooperation with potential partners.
 - ✓ Encouragement of PPI proposals to meet “known requirements.”
 - ✓ Clarification of the exceptions for commercial activity and co-development.
- Other enabling issues include:
 - ✓ Identify one or more sources of financial support.
 - ✓ Establish the Office of PPI.
 - ✓ Clarify out-sourcing issues.
 - ✓ Clarify need to solicit comparable proposals.
- Find and authorize ways for proponents to look beyond CDOT or tolls for financing.



Executive Summary

IMG's key recommendations on process.

The *ad hoc* quality of PPI's procedures will improve with a pro-active policy.

- Designate the primary PPI contact and make-up of the Initial Review Committee.
- Develop a check-list of information to make the review process more consistent.
- Firm up confidentiality of conceptual proposals and conditions for solicitation.
- Seek ways to reduce risk for private proposers related to initial environmental and design efforts.
- Focus PPI on projects that are “going begging” (C470, US 36 Boulder, Powers Blvd.).
 - ✓ Consider developing a RFP for one or a group of PPI projects, giving a clear indication about project types or areas preferred..



Executive Summary

IMG's key recommendations on management and training.

The lack of acceptance of the commercially-oriented PPI program may in part reflect strains in CDOT's culture

- In general, CDOT needs a more pro-active, aggressively supportive posture for PPI.
- Regularly inform Executive Management Team about federal partnership and innovative programs.
- Provide training for central and division staff on merits of PPI program.
- Establish marketing outreach on innovative finance and partnerships.
- Brief Commission regularly on best practices in other states.
- Invite assistance of FHWA Innovative Finance Team.
- Retain on-call assistance to identify opportunities and review proposals.



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Toll schedule, SR-91 Express lanes, California 9/12/2000

1. Introduction

The Colorado legislature authorized PPI in order to fulfill unmet needs in its transportation infrastructure.

- The Colorado legislature authorized Public-Private Initiatives (PPI) Program in 1995:
 - ✓ Program was defined as a non-traditional arrangement between CDOT and one or more private or public entities.
 - ✓ It was intended to authorize partnerships to foster cooperation, sharing of resources, and exchange of public benefits for acceptance of private contributions to a transportation project.
 - ✓ PPI was focused on the need for additional infrastructure investment.
- The legislative concept was that PPI can help fund added capacity and develop alternate modes.
 - ✓ Highways dominate CDOT program and maintenance is eating up program dollars.
 - ✓ Public-private partnerships can provide a new source of capital.
 - ✓ Partnerships can obtain time and costs savings, reduce risks borne by CDOT.
 - ✓ PPI could reduce CDOT risk, take riskier projects off CDOT hands.
 - ✓ PPI is one of the several ways in which CDOT can improve its management approach.
- CDOT developed guidelines and instituted a PPI program.
- Results from PPI have not been satisfactory; none of the proposals received were deemed adequate for acceptance.



1. Introduction

This review seeks to identify ways to improve CDOT's Public-Private Initiatives Program.

- The purpose of research project is to enhance CDOT's understanding of the issues surrounding public-private partnerships.
- Scope included the following tasks:
 - ✓ *Summarize OFMB Research*
 - ✓ *Review CDOT PPI Guidelines*
 - ✓ *Outline PPI Issues*
 - ✓ *Recommend Techniques*
 - ✓ *Draft Report*
 - ✓ *Review with Steering Committee*
 - ✓ *Final Report.*



1. Introduction

This report assesses the current PPI program from the perspective of all participants and incorporates best practices in other states.

- Section 2--**Summary of Innovative Finance**--Key innovative finance tools are summarized. The summary is derived from the “Innovative Financial Manual” prepared by IMG for CDOT, and included as an appendix. The manual is intended as a reference guide for staff throughout CDOT seeking to apply various PPI tools.
- Section 3--**Current PPI Process**--CDOT’s current PPI program and processes are reviewed.
- Section 4-- **Best Practices of Other States and Entities**--Best practices of selected PPI programs in other states and jurisdictions are examined.
- Section 5--**Recommendations**--Recommendations for CDOT consideration are presented in the key areas of policy, legislative/legal, process, and management.



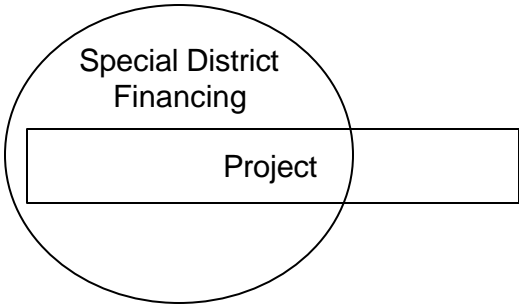
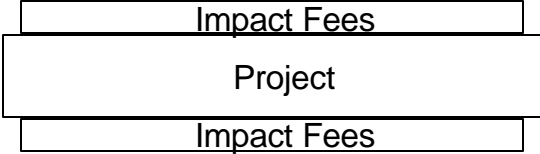
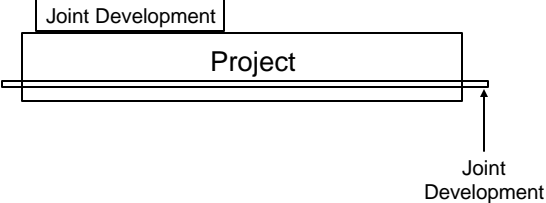
2. Summary of Innovative Finance

PPI programs can now access a number of innovative financing approaches.

<p>Creative Traditional</p>	<pre> graph TD GOBonds[GO Bonds] --> StateDOT[State DOT] GasTaxes[- Gas Taxes - Fees] --> StateDOT StateDOT --> Project[Project] FederalGrants[Federal Grants] --> StateDOT FederalGrants --> Project DiscretionaryGrants[Discretionary Federal Grants] --> Project </pre>	<ul style="list-style-type: none"> • Traditional highway programs can be stretched, including by dedicating resources to specific projects. • A number of states are dedicating non-traditional fees to highway funding, such as dedicated auto registration fees. • This option/method is most appropriate and achievable where there is a consensus for re-direction to new priorities, such as to expand SIB, provide seed money for PPI, channel funds to multi-modal projects, obtain pilot program funds.
<p>GARVEE Bonds</p>	<pre> graph TD GOBonds[GO Bonds] --> StateDOT[State DOT] GasTaxes[- Gas Taxes - Fees] --> StateDOT StateDOT --> Project[Project] FederalGrants[Federal Grants] --> StateDOT FederalGrants --> GARVEEBonds[GARVEE Bonds] GARVEEBonds --> Project </pre>	<ul style="list-style-type: none"> • GARVEE bonds enable development now by taking advantage of the future stream of federal highway grants. • GARVEE bonds have been used by several states throughout the nation for highway, bridge and tunnel projects. • GARVEE bonds are especially appropriate for large projects that otherwise would languish for years under traditional pay-as-you-go methods, as CDOT has found.
<p>Regional Taxes</p>	<pre> graph TD subgraph RegionalTaxes [Regional Taxes] Project[Project] end </pre>	<ul style="list-style-type: none"> • Regional tax financing, such as sales taxes, is an attractive finance source, especially for essential regional transportation projects like transit. • Regional/sales tax financing is often a compliment to other financing sources including property taxes and grants. • Sales taxes are generally considered reliable funding sources, assuming that the voters will accept them.

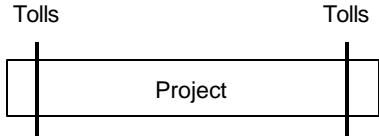
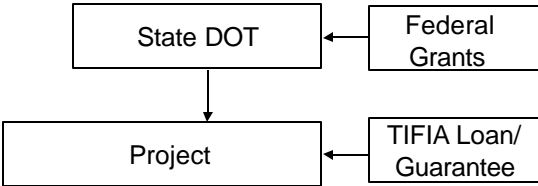
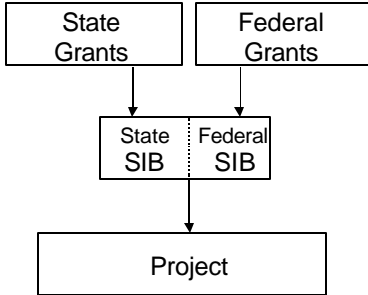
2. Summary of Innovative Finance

PPI programs can now access a number of innovative financing approaches (cont'd-2).

<p>Special District and Tax Increment Financing (TIF)</p>		<ul style="list-style-type: none"> • Special district, tax increment financing (TIF), or tax allocation financing are appropriate when the benefits of transportation improvements can be clearly delineated. • With strong development pressures, California has been a leader in tax-increment financing. • Special district/tax increment financing makes most sense for improvements in high growth areas.
<p>Impact Fees</p>		<ul style="list-style-type: none"> • Like special district financing, impact fees help capture specific, geographic benefits of projects. • The Transportation Corridor Agencies in California have successfully used impact fees in their major toll road projects. • Although they cannot serve as a credit source for bond financing, impact fees can generate significant revenues, especially in early phases of projects.
<p>Joint Development</p>		<ul style="list-style-type: none"> • With joint development projects, the immediate, adjacent benefits of transportation improvements can be captured by the developing authority. • Joint development encompasses many examples from food concessions to fiber-optic rights-of-way. • While some joint development holds significant potential, the payback often occurs many years into the project.

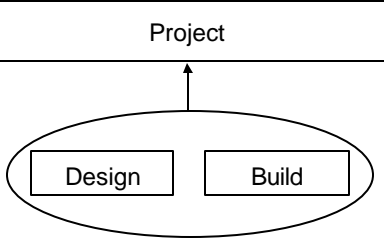
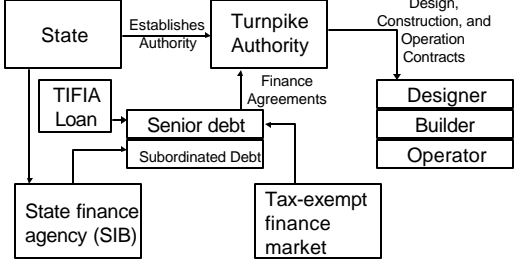
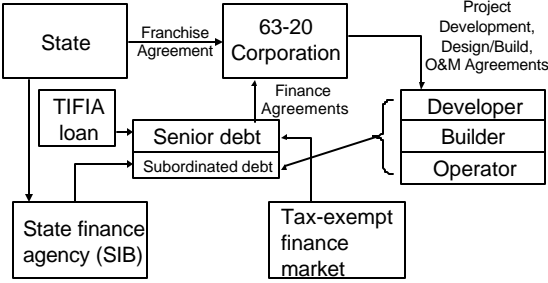
2. Summary of Innovative Finance

PPI programs can now access a number of innovative financing approaches (cont'd-3).

<p>User-based Financing (Tolls)</p>		<ul style="list-style-type: none"> • User-based financing seeks to make the primary users pay for new or improved transportation facilities. • While older, state-wide toll road systems are stable and can support new projects, start-up roads have experienced initial difficulties, most of which have been surmounted. • User-based financing is a fair and accepted financing source, although financial markets are cautious about start-up projects.
<p>TIFIA</p>		<ul style="list-style-type: none"> • The Transportation Infrastructure Finance and Innovation Act (TIFIA) is a new federal lending program from the federal government that is highly appropriate for large projects. • The first group of five TIFIA projects that have been approved, include two intermodal centers and one start-up toll road. • TIFIA projects must meet the standards of an investment-grade project, limiting the application to certain projects.
<p>State Infrastructure Bank (SIB)</p>		<ul style="list-style-type: none"> • With a state infrastructure bank (SIB), a state can better leverage funding and spur inter-project funding. • Both federally- and state-funded infrastructure banks have had success. • Currently, federal funding of SIBs is limited to four states: California, Florida, Missouri, and Rhode Island. • South Carolina has launched a successful state-supported SIB.

2. Summary of Innovative Finance

PPI programs can now access a number of innovative financing approaches (cont'd-4).

<p>Design/ Build</p>		<ul style="list-style-type: none"> • Design/Build offers cost savings through procurement economies of scale and flexible design and construction approaches. • Design/Build has been applied to a number of road and bridge projects, especially in the west. • Design/Build can be used in combination with other innovative financing methods, such as GARVEE toll financing.
<p>State Turnpike</p>		<ul style="list-style-type: none"> • A state (turnpike) authority is effective in developing a network of roads and projects. • Oklahoma has had positive experience with a statewide toll authority. • A turnpike authority is one of the best ways to achieve operating and financial efficiencies as a public entity.
<p>63-20 Corp- oration</p>		<ul style="list-style-type: none"> • Alternatively, projects can be organized under IRS ruling 63-20, as a tax-exempt corporation. • Two 63-20 projects in Virginia and South Carolina were well received by the financial markets recently. • A successful 63-20 project depends on complying with IRS and state regulations and careful crafting of agreements. • A 63-20 corporation permits more private sector involvement in development, design, operation, maintenance and finance.

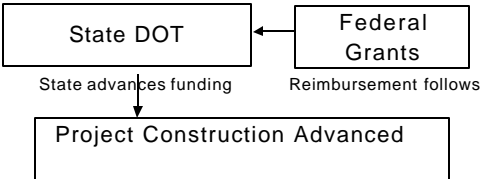
2. Summary of Innovative Finance

PPI programs can now access a number of innovative financing approaches (cont'd-5).

<p>Variable Rate Bonds</p>		<ul style="list-style-type: none"> • A combination of variable rate/fixed bonds can be an effective approach to minimize short-term carrying costs, and take advantage of long-term fixed rates. • Variable rate/fixed rate bonds are most appropriate for large projects in which there is a sponsor with a strong credit.
<p>Capital Appreciation Bonds (CABS)</p>		<ul style="list-style-type: none"> • Senior capital appreciation bonds (“CABS”) are useful for start-up projects, such as toll roads, characterized by ramp-up and other start-up uncertainty. • Large start-up toll projects, like Colorado’s E-470, utilize CABS. • CABS are appropriate when sponsors have confidence that traffic forecasts will eventually be realized, although timing is somewhat uncertain.
<p>Sub-ordinate Bonds</p>		<ul style="list-style-type: none"> • Subordinate bonds, or junior debt, add a security cushion to start-up projects. • Like CABS, the ability to float subordinate bonds depends on the project’s economics as well as the financial markets’ appetite.

2. Summary of Innovative Finance

PPI programs can now access a number of innovative financing approaches (cont'd-6).

<p>Test and Evaluation Project (TE-045)</p>	<p style="text-align: center;">Advanced Construction</p>  <pre> graph TD FG[Federal Grants] -- "Reimbursement follows" --> SDOT[State DOT] SDOT -- "State advances funding" --> PCA[Project Construction Advanced] </pre>	<ul style="list-style-type: none"> • Early FHWA initiative under ISTEA responding to President's Executive Order 12893 (1994) addressing Federal Infrastructure Investments • Provided States with ways to accelerate projects, to implement ISTEA financing flexibility, and to leverage current spending to produce additional capital investment • Several mechanisms applied, including: Advance Construction, flexible match, Section 1044 credits, and additional bond financing opportunities (e.g., GARVEEs and COPs) • TEA-21 incorporated several TE-045 techniques into the regular Federal-aid program
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3. Current PPI Process

The current PPI process is legislatively authorized and well-defined technically, but has not resulted in any new private investment in highway infrastructure.

- The program has not resulted in any privately-funded highway projects, with the exception of the ITS partnerships.
- Proponents do not understand the process or outcomes to date.
- Some proposers are uncertain about CDOT commitment to the PPI program.
- CDOT staff has some workable tools to implement PPI:
 - ✓ ROW can be dedicated.
 - ✓ Toll facilities are authorized (though not much favored).
 - ✓ Willingness to commit future allocations (GARVEEs issued in 2000).
 - ✓ Co-development is authorized for “transfer stations.”
- CDOT staff is generally unhappy with nature of proposal submissions.
- CDOT staff are looking for better analytic tools to assess proposals.
- Commission seems to need better information and higher comfort level.
- Expectations on both sides appear unrealistic.



3. Current PPI Process

There are several weaknesses that hinder PPI implementation and true partnerships.

- CDOT staff feel constrained by existing regulations and interpretations.
- Commission has not committed any ongoing funds to nurture PPI.
- Commission seems reluctant to provide funding even on an *ad hoc* basis, although it has done so on occasion.
- CDOT has issued guidelines, yet there is no policy statement to clarify CDOT priorities regarding PPI submissions.
- PPI statute raises several questions:
 - ✓ Eligibility questioned for “known department requirements.”
 - ✓ CDOT assistance to potential proposers may be restricted.
 - ✓ Co-development permissible but faces restrictions across the system.
- Department needs more tools that can aid and assist proponents of PPI.
- State environment, while improved, still poses some challenges, including:
 - ✓ High standards for proposals, TABOR amendment, outsourcing and commercial restrictions.

3. Current PPI Process: Proposals To Date

Several unsolicited proposals have been received, but have not received favorable review from CDOT staff, nor been accepted by the Commission.

- Conceptual proposals submitted:
 - ✓ Front Range Toll Road Company Eastern Multimodal Corridor Development
 - ✓ Koch Materials Reconstruction of I-76
 - ✓ Intermountain Partnership (Eagle County rail corridor)
 - ✓ CIFGA fixed guideway (paralleling I-70 from DIA to Eagle County)
 - ✓ Heavy Rail from Fort Collins to Denver
 - ✓ Several ITS projects
 - ITS projects are exception, several have been implemented under RFP process
 - ✓ Unsolicited proposal currently under review.



3. Current PPI Process: Proposals To Date

Front Range Toll Road Company proposed a major north-south route.

- Private group holds franchise rights to develop a multi-use, north-south transportation corridor just east of DIA.
- Group proposes to construct 4-to-8 lane toll road and parallel railroad freight line.
- Preliminary studies conducted at expense of private group (estimated cost \$2 million).
- Estimated project development cost \$1.6 billion.
- Financing plan or sources not yet identified, although investment bankers are said to already be involved.
 - ✓ Reported to involve special district and private railroad funding.
- Group still investigating fatal flaws and completing analyses.
- Current status: group appears re-energized in mid-2000.
 - ✓ Group has briefed Governor Owens and Director Norton.
 - ✓ Group has asked for funding for more advanced feasibility studies; also seeking added private funding.



3. Current PPI Process: Proposals To Date

Intermountain Partnership proposed development of rail corridor in Eagle County.

- Partnership proposes to develop rail passenger service over existing rail corridor.
- Provide passenger service initially between Eagle County Airport and Avon.
- Both private and local government funding participation in initial studies.
- Concept is that CDOT would construct and partnership would operate service.
- Use county sales tax (1/2 cent) to support operating costs.
 - ✓ Estimates suggest that other funding sources would be needed.
- Cohesiveness of support by local government is undetermined.
 - ✓ Eagle County Transportation Authority has not committed to project.
- Consultant (MK) asked Commission for funding to advance feasibility studies.
 - ✓ Reported to be seeking Federal funds earmark.
- Status: Commission concurred, funded next round of studies. Draft report recently submitted by sponsors. Process remains open.



3. Current PPI Process: Proposals To Date

Koch Materials proposed reconstruction and maintenance of Interstate section

- Koch proposed to reconstruct portion of I-76 using new asphalt technology.
- Offered maintenance contract and condition warranties.
- Koch financed own unsolicited proposal (circa \$100 k).
- Koch has entered comparable agreements in New Mexico.
- Project is on CDOT plan over next ten years.
- Presentation made to CDOT PPI committee.
- Status: proposal not accepted by CDOT.
 - ✓ Funding sources not clear.
 - ✓ Warranties considered controversial.
 - ✓ I-76 reconstruction is a “known requirement.”



3. Current PPI Process: Proposals To Date

Heavy rail facility proposed from Fort Collins to Denver.

- Individual submitted conceptual proposal for heavy rail development.
- Plan was regarded as not well developed.
- No feasibility or cost studies submitted.
- Alignment not consistent with MIS already conducted by CDOT for the corridor.
- Status: proposal not accepted by CDOT.



3. Current PPI Process: Proposals To Date

Intelligent Transportation Systems (ITS) projects have been implemented.

- Three distinct types of ITS projects have been implemented under the PPI:
 - ✓ Cellular towers, fiber optic cable, traffic control systems.
- Cellular towers: established valuation for three types of sites: urban, rural and mixed.
 - ✓ Issued rolling, open RFP for wireless facilities; opportunity still open. RFP sets ground rules.
 - ✓ Have entered into multiple contracts with providers.
- Fiber Optic: issued RFP state-wide, negotiated with vendors, awarded to Adesta.
 - ✓ Eighteen months exclusivity was given to Adesta.
 - ✓ Matched ROW shared against communications equipment value.
 - ✓ Barter only for fiber lines, no cash compensation, no telephone communications allowed.
 - ✓ Commission has allowed vendors on regular state highways for permit-only fees.
- Traffic Control: Lockheed effort is experiencing difficulties.
 - ✓ More like a contract awarded for automated traffic system.
 - ✓ CDOT's ITS Office has commissioned a report on status.



3. Current PPI Process: Proposals To Date

Intelligent Transportation Systems (ITS) projects have been implemented (continued).

- Status: ITS partnerships are ongoing, some parts working well, in part due to entrepreneurial CDOT manager. Key characteristics of ITS program are:
 - ✓ There is a quasi-market transaction, an exchange of value between the parties, that stimulates true partnership.
 - ✓ Commission seems split between between “no gouging” and “must be valuable if private firms are asking for it” view of these projects.
 - ✓ Commission seems to want ITS and provides funds into ITS project budget.
 - ✓ Policy direction such that compensation for ROW sharing comes only in the form of barter.
 - ✓ Private companies are assuming risk, but need more focus on risk allocation in the districts.
 - ✓ ITS forms a leading edge in changing the way CDOT does business.
 - ✓ Employees need “business” training to understand the commercial trade-offs, and encouragement to adopt a “can-do” attitude.
 - ✓ Timing and response lags are a problem for the business partners (especially communications).



3. Current PPI Process: Proponent's Experience

Proponents of unsolicited PPI proposals do not fully understand CDOT process and are disappointed in the results to date.

- Proponents are eager to move forward and have expended private funds initially.
- They perceive a lack of clarity about what CDOT wants to see, and how far CDOT may go in support.
- They experience a lack of clear feedback or partnering response from CDOT.
- There is a sense that CDOT takes an adversarial posture against private entrepreneurs.
 - ✓ Need a key designee who can be an advocate within CDOT.
- Misunderstanding about CDOT willingness to fund feasibility and environmental studies; there is no funding program, support appears to be all *ad hoc*.
 - ✓ Proponents keep asking for funds, Commission is reluctant to provide.
 - ✓ Financial feasibility of conceptual proposals has been sketchy.
- Local governmental partners are accustomed to CDOT taking over studies and construction after they marshal project support and get ball rolling.
- Proponents not assured about confidentiality of their unsolicited proposals.
 - ✓ Considerably more than thirty days passing before solicitations issued.



3. Current PPI Process: Staff Experience

CDOT is unhappy with nature of submissions.

- Initial submissions have been largely conceptual without detailed planning and feasibility analysis, but not necessarily in contradiction with PPI guidelines.
- On occasion proposers bypass CDOT and seek direct support from Colorado's Congressional delegation.
- Proposers not bringing much or any private capital to table, nor showing plan to do so.
 - ✓ Proposers are asking for funding and/or CDOT take-over of planning.
 - ✓ Proposers are seeking to tap into CDOT program funds, circumventing competitive bidding.
- It is unclear as to PPI commitment on either side (proponents or Commission).
- Submissions often unclear as to local or CDOT consensus for many of the projects proposed (e.g., Intermountain or Front Range projects).



3. Current PPI Process: PPI Framework

CDOT staff are constrained by existing PPI framework.

- Staff do not feel that there is clarity about what projects may be eligible for PPI.
- CDOT's commitment appears luke-warm from the outside.
 - ✓ Worse, many CDOT staff feel unable to assist and provide feedback.
- PPI statute raises several questions that are barriers to private participation.
 - ✓ Eligibility questioned for "known department requirements."
 - ✓ CDOT assistance to potential proposers may be restricted.
 - ✓ Co-development permissible by limited exception but faces restrictions across the system.
- Although RFPs have been issued for ITS projects, none have come forward for the provision of new transport facilities with private capital.
- Without CDOT funding and lacking commercial uses for ROW, proponents are very limited in what they can propose to take on with private capital.
 - ✓ Did anyone endorse toll collection by private entrepreneurs?



3. Current PPI Process

Findings from review of process and discussion with proponents and CDOT staff.

- State leadership is considered amenable to further implementation of PPI.
 - ✓ Private parties seem more optimistic about receptivity.
- Recent legislative actions (GARVEEs, co-development) have reinforced governmental support and boosted private interest in PPI.
- PPI process remains relatively informal and somewhat ad hoc, a constraint.
- PPI statute has several shortcomings from a private investor perspective, and could benefit from refinement or at least more supportive definitions.
- HUTF funds are growing, yet private capital could expand infrastructure program.
- State-owned ROW can be leased for private development, a major benefit.
- CDOT seems amenable to provision of pre-budgeted support and in-kind aid.
- CDOT seems amenable to commitment of future funds where public benefits warrant.
- CDOT has exception allowing commercial uses in conjunction with SE Corridor.
 - ✓ CDOT should consider expanded application of this co-development exception.



3. Current PPI Process

Findings from review of process and discussion with proponents and CDOT staff (continued).

- Yet CDOT faces constraints in implementing its PPI program:
 - ✓ CDOT needs a more coherent framework to facilitate PPI proposals.
 - ✓ CDOT has not dedicated funds to support a full partnership effort within PPI program.
 - ✓ Commission seems reluctant to allocate funds for PPI project preliminaries, yet has provided funds for further studies on at least two occasions.
 - ✓ TABOR amendment limits revenue growth and requires voter approval of new debt or taxes.
 - ✓ Proponents are uncertain what is wanted and unable to get feedback on initial ideas (no formal feedback process exists).
 - ✓ Restrictions (prohibitions) on commercial activity on state highways puts burden on projects.
 - ✓ At times, proponents have felt CDOT to be adversarial.
 - ✓ At best, proposals are being held to a high and difficult standard.
 - ✓ Proponents are concerned about confidentiality on unsolicited proposals.
 - ✓ Local governments expect CDOT to carry the ball and provide the bulk of the funds once projects have been identified.



4. Best Practices

CDOT can take advantage of a number of program best practices from states throughout the U.S.

- California: AB-680's approach to project identification, process, regulatory regime
- Oklahoma: Funding future needs in advance
- Florida: Florida Turnpike District undertakes joint public-private projects
- Alabama: Supporting private bridge projects
- Virginia and other states: Outsourcing of operations and maintenance
- Texas, Missouri and South Carolina: State Infrastructure Bank
- California, Miami and other states: Credit support for partnership projects
- Virginia and Dulles Greenway: Avoiding another tollroad "phoenix"
- South Carolina: Southern Connector 63-20 Corporation
- Ontario: Auction of Highway 407 to private consortium



4.A Best Practices: California AB-680

California's AB-680 program, one of the earliest public-private road programs in the U.S., has developed a number of PPI best practices.

- Initiated in 1988 after defeat of a major transportation bond referendum, the program was to demonstrate how private funds and know-how could foster road infrastructure.
- The identification of projects--through an extensive competition within certain parameters--was satisfactory for Caltrans and has resulted in one successful project to date.
- The franchise process was organized and directed by a central Office of Privatization with clear powers to negotiate final project agreements.
- Caltrans established a clear and workable regulatory framework at the beginning of the competition which helped reduce process uncertainty.
- In the most successful project, pre-planning costs were shared by the project's public and private partners.



4.A Best Practices: California AB-680 (continued)

Developer/operators were invited to submit project proposals--during a specified time period, and under certain conditions.

- Caltrans invited developer/operators to propose to develop new surface transportation facilities in any location in the state, with at least one project in the north and south of the state, each in 1990.



- Projects had to:
 - ✓ Harness private sector design and construction efficiencies
 - ✓ Allow for rapid capital formation to secure private funding
 - ✓ More quickly engender congestion reductions
 - ✓ Require continued compliance with environmental requirements
 - ✓ Offer alternate routes for traveling public.
- Caltrans selected four projects after an extensive competition:
 - ✓ Mid-State--a ring road in the San Francisco area
 - ✓ SR 91--highway corridor in Riverside County
 - ✓ SR 57--a road in Orange County
 - ✓ SR-125--a road in the San Diego region leading to the Mexican border.

4.A Best Practices: California AB-680 (continued)

AB-680's policy office established an unobtrusive, and clear regulatory framework.

- Developer/operator can impose tolls that cover:
 - ✓ Operating costs
 - ✓ Reimbursement to state for maintenance and police
 - ✓ Reasonable return on investment, including debt service.
- Tolls can be set to meet congestion pricing goals (see 91 Express Lanes illustration on right).
- Excess revenue paid to indebtedness incurred by private entity or to the state highway account.
- Concession term is 35-years, during which road is considered part of state highway system.
- Caltrans may provide services for which they are reimbursed for planning, environmental certification, and preliminary design.
 - ✓ In SR-91, developer paid back Orange County for planning work with subordinated loan.

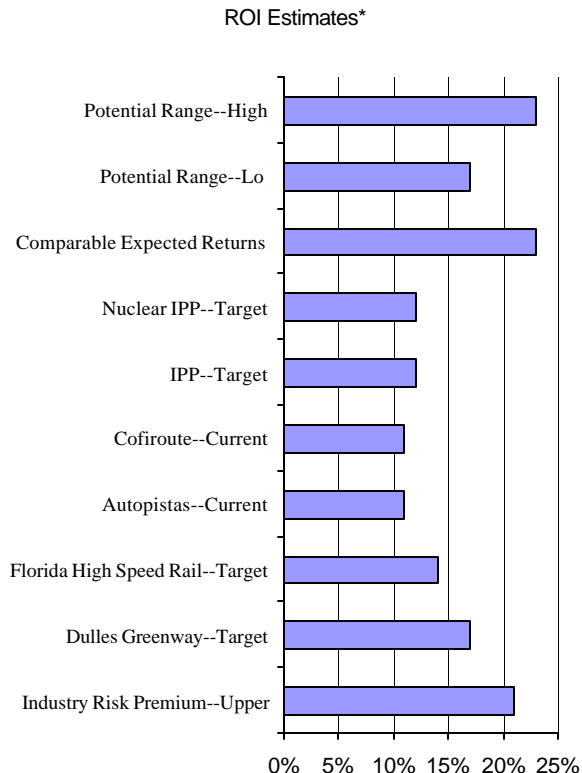
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3:00 pm	\$1.75	\$3.20			\$3.50	\$3.65	
4:00 pm		\$3.35	\$3.50				
5:00 pm					\$3.65	\$3.75	
6:00 pm		\$3.20					\$1.75
7:00 pm		\$2.25			\$3.25	\$3.50	\$1.50
8:00 pm	\$1.75	\$1.50			\$2.00	\$3.25	
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Eastbound tolls, 91 Express lanes, 9/12/2000



4.A Best Practices: California AB-680 (continued)

The regulatory mechanism determined a Reasonable Return on Invested Capital by making comparisons to a number of similar investments.



- Sought mechanism to reward developer/operator for *anticipated* return on **invested capital**, which includes combination of equity and debt.
- Research for private toll road projects, other utility project financings, similar industries (utilities, autos), and capital asset pricing showed target returns of 17-23% averaged over project life; Caltrans subsequently chose 17% as “Base Return Rate.”
- After developer/operator earned Base Return, all future returns are split 50-50 up to a limit determined by traffic increase; thereafter, all excess revenues accrue to Caltrans.
- SR 91 project indicates mechanism has basically worked:
 - ✓ Yet base return return rate was too high, since it included debt
 - ✓ Caltrans did not anticipate extent that debt could be leveraged.

*”Required Return on Investment and Mechanisms for Return Administration in the California AB 680 Projects,” September 4, 1990, Price Waterhouse.

4.A Best Practices: California AB-680 (continued)

The AB 680 program has resulted in one completed road, SR-91, which appears to have rewarded investors as expected.

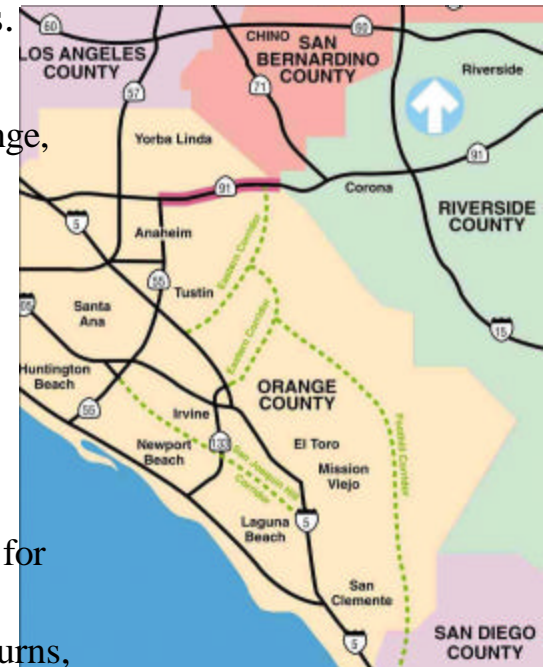
- The \$134 million, 10-mile completed project was opened in December 1995. Traffic was lower than anticipated in the first year, due to California's severe recession.
 - ✓ Developers did have to make available contingent equity that was not drawn upon.
- Traffic has increased since then, and the developer/operator reported profits by 1998.
 - ✓ Within two years, traffic increased by 63% and revenues by 184%, eliminating any early debt service payment problems
- In 1999, developer/operator (led by major partners Level 3 Communications and Granite Construction) proposed franchise sale to a not-for-profit corporation, due to new business focus (telecommunications) and desire to invest in other projects.
- The sale was unsuccessful when the state canceled a tax-exempt financing by the non-profit, 63-20 entity set up to purchase the assets, in part because of:
 - ✓ Strong public outcry against the appearance of lack of transparency in carrying out the deal.
 - ✓ Criticism of "profit gouging" and taking advantage of unanticipated tax-exempt financing.
- The developer/operators expected to earn a return on equity of 13% as a result of the \$210 million sale, after retiring debt, lower than the allowed 17% return; the lower return in part due to a settlement allowing Caltrans to build competing auxiliary lanes.



4.A Best Practices: California AB-680 (continued)

Except for a decrease in the investor return, the AB-680 program could be applied in the Colorado context.

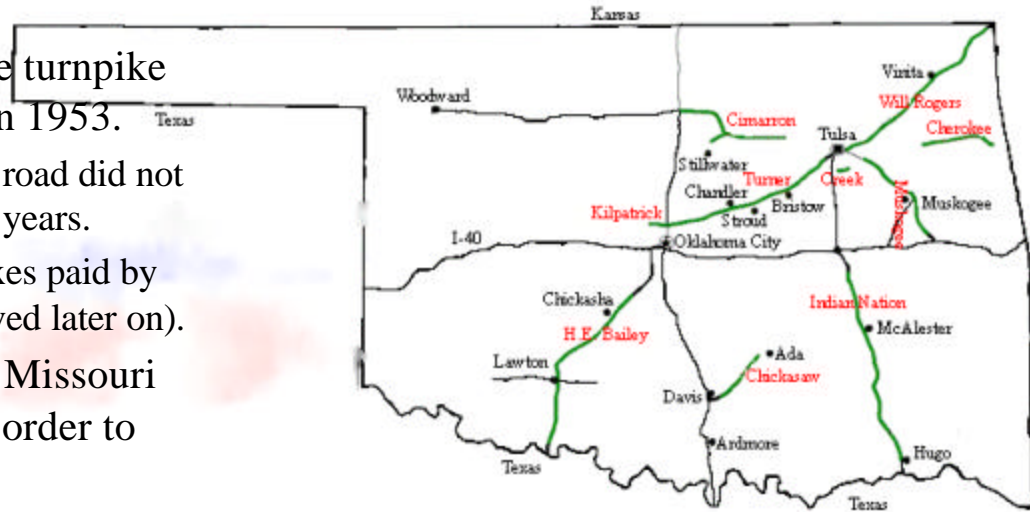
- Actively solicit submissions for a specific number of projects.
- Key parameters of projects to be specified, including:
 - ✓ Location, i.e. at least one project in Eastern Colorado, Front Range, and Western Colorado
 - ✓ Determine length of concession
 - ✓ Nature of CDOT's cooperation, including ability to pre-fund environmental and planning work
 - ✓ Rate of return mechanism.
- Rate of return mechanism should be flexible but place upper boundaries.
 - ✓ Ideally, should be a function of the competitive bidding process for each specific project, i.e., bidders offer certain rates of return.
 - ✓ Where there is no competition, CDOT should specify certain returns, lower than those in SR-91, giving maximum toll setting ability to the private operator.
 - ✓ Non-toll revenue sources should be encouraged, with recognition that valuing them may be difficult for CDOT and bidding consortia.



4.B Best Practices: Oklahoma Turnpike

The Oklahoma Turnpike is a classic case where current and future needs are funded through existing cash flows of a stable, state-wide system of toll roads.

- In 1953, Oklahoma formed a separate turnpike authority and completed a toll-road in 1953.
 - ✓ State pledged support since new toll road did not expect to cover debt service in early years.
 - ✓ State dedicated the portion of gas taxes paid by traffic using toll road (support removed later on).
- Initial road was later extended to the Missouri line and the tolls were maintained in order to finance the additional facility.
- System effect has proven very positive, as on-going toll revenues from system are used to support expansion across the state.
 - ✓ Turnpike is now well-established, having expanded to multiple-route turnpikes of 552 miles.
 - ✓ Turnpike raises \$120 million per year in toll revenue, and about 40% of drivers use the Automatic Vehicle Identification (“AVI”) system.
- Turnpike Authority has subsequently been brought back under the highway commission, although its system financing approach continues.



4.C Best Practices: Florida Turnpike Extensions and Partnerships

The Florida Turnpikes' public/private partnership program allows it to work with riskier lower-traffic projects that it might not normally build.

- In addition to bond coverage ratios (1.20) and management policies on debt service coverage (1.50), the Florida's Turnpike (FT) has an legislatively-mandated "economic test" to determine whether the turnpike can take on new projects:
 - ✓ 50% of debt service must be covered in the first 5 years by project revenue
 - ✓ 100% of debt service must be covered in the first 15 years.
- The test helps the FT to evaluate expansions to its existing roads, take over new roads, as well as whether to enter into partnerships to build new projects.
- In the Western Parkway C Project, FT joined FDOT and the Disney Company to build the \$265 million extension from I-4 to Disney property.
 - ✓ The 11 mile project provides better access to new Disney developments.
 - ✓ Since the economic test was not met, FT could only provide 53% of the project costs.
 - ✓ FDOT paid the 42% of costs and Disney the remaining 5%.
- With clear participation criteria, a public agency can have the freedom to enter into public-private agreements, yet retain the negotiating strength to realize agreements that result in a balanced role of the public sector.



4.D Best Practices: Alabama Private Toll Bridges

Alabama has encouraged the development of small, largely private bridge projects.

- Alabama obtained four new bridges developed under partnership with predominantly private funding.
 - ✓ State legislation enabled counties to license entities to develop toll bridges.
- A strong entrepreneurial proponent (United Toll Systems) moved the program along and developed two bridges in the vicinity of Montgomery.
 - ✓ United Toll Systems recognized the need, understood the state's financial shortfalls, and developed the partnerships to accelerate construction of the bridges.
 - ✓ Private company purchases or leases property, and has completed and opened three bridge projects in four years since 1996 legislation.
 - ✓ Portions financed privately have tolls; connecting public sections do not.



**Emerald Mountain Bridge Project,
Montgomery, AL**

- A fourth, larger Foley Beach Express bridge project was opened near Foley, following the same pattern, but used taxable revenue bonds partnered with a \$7 million Federal earmark (that also waived most Federal construction requirements).

4.E Best Practices: Outsourcing of Operations and Maintenance

CDOT could encourage the development of full service maintenance contracts by private vendors, as Virginia has done.



- Virginia has contracted with VMS for full service operational and maintenance (O&M) of designated segments of interstate highways.
 - ✓ USDOT and the District of Columbia (DC) government have entered into a similar contract for NHS segments of the DC road network.
 - ✓ VMS has become one of the largest private O&M firms, with O&M and facility management projects in seven states.
- Florida DOT has awarded a contract for all regular maintenance on 254 miles of I-75 to Infrastructure Corp. of America (ICA), a seven-year, \$74 million contract estimated to be 18% below FDOT cost.
- Full-service maintenance represents a novel form of partnership with large potential savings to DOTs.
 - ✓ Benefits are to free up budget and staffing for other tasks.
 - ✓ Risks include the barriers facing out-sourcing of regular tasks in Colorado.
 - ✓ Florida faced similar restrictions but has succeeded in outsourcing initiatives.



4.F Best Practices: Texas State Infrastructure Bank

Texas has made major use of SIB funding for a broad range of projects, serving as a good example of public-public partnerships.

- Texas was early participant in the SIB pilot program, passing SIB enabling legislation in 1997.
 - ✓ SIB established under the Texas Transportation Commission.
 - ✓ Texas put \$171 million in Federal funds into its SIB and had approved eight separate loans as of mid-1999.
- Largest SIB loan of \$29 million went to help finance the Laredo International Bridge, a toll bridge serving NAFTA traffic and reducing traffic congestion at and around the border crossing.
- A smaller loan to the City of West Columbia, TX, uses the SIB to leverage state funds and accelerate completion of a large construction project. The city pledged its own taxes for repayment.

4.F Best Practices: Missouri and South Carolina State Infrastructure Bank

Missouri and South Carolina have used SIBs to encourage the development of small, toll-based projects, the latter without federal funds, and restrictions.

Missouri

- Missouri one of first states to implement a State Infrastructure Bank (“SIB”) in 1996.
 - ✓ Established the Missouri Transportation Finance Corporation (“MTFC”) as a non-profit lender with power to issue revenue bonds in conjunction with SIB.
 - ✓ SIB-assisted financing now totals about \$48 million for four major projects.
- Missouri was also one of four pilot SIB states under TEA-21, which added an additional \$8 million in new funds.
 - ✓ Next SIB loan will accelerate new overpass with city contributions, public-public partnership.

South Carolina

- South Carolina SIB established without any federal capitalization.
 - ✓ SC SIB chaired by Governor’s appointee
 - ✓ Capitalized with uncommitted surplus revenues of state (initially \$65 million)
 - ✓ Receives local and county contributions (e.g., Horry County hotel tax)
 - ✓ Receives SC truck registration fees.
- Provides loans and financial assistance for qualified projects.
- No federal restrictions.



4.G Best Practices: Credit Support for Partnership Projects

Several projects have blended federal credit support from the TIFIA program: San Diego's SR-125 and Miami's Intermodal Center were among the first-year awards

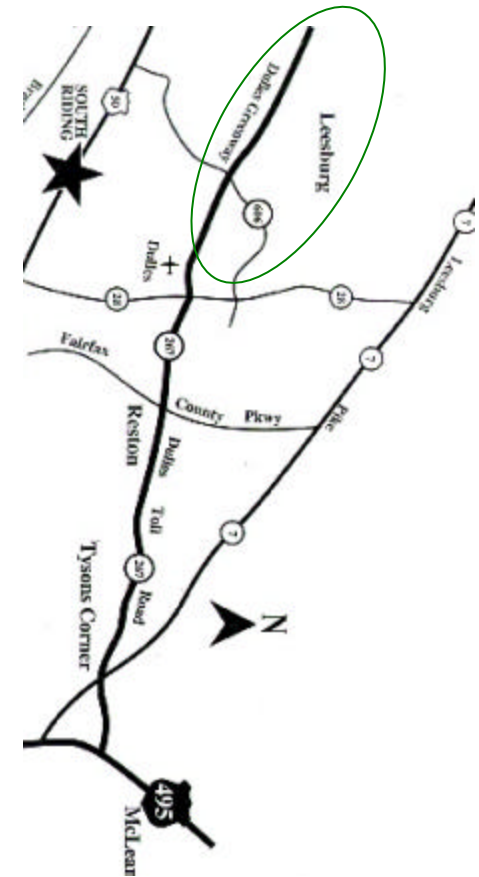
- TEA-21 Federal legislation created a new credit support program for major (over \$100 million) infrastructure improvements.
 - ✓ Loans, loan guarantees, and stand-by lines of credit can be obtained from FHWA.
 - ✓ Repayment sources must be identified and dedicated.
 - ✓ Program support is limited to one-third of the total project cost, creating a credible public-private partnership.
- Five projects were approved in the first round:
 - ✓ San Diego's SR-125 is to be privately financed toll road, one of the AB-680 projects.
 - ✓ A contingent commitment of about \$127 million was obtained to support the \$400 million project, with toll revenues pledged to support debt service.
 - ✓ The Miami Intermodal Center has obtained credit support backed by rental car revenues and other dedicated revenues.
- Two other projects received Federal credit support in the 1990s similar to but pre-dating TIFIA: toll roads of the Transportation Corridor Agencies in Orange County, CA, and the Alameda Corridor project serving the Ports of LA and Long Beach.



4.H Best Practices: Virginia and Dulles Greenway

CDOT must learn how to grow public/private ventures, and not stifle them as almost happened in the case of the Dulles Greenway in Virginia.

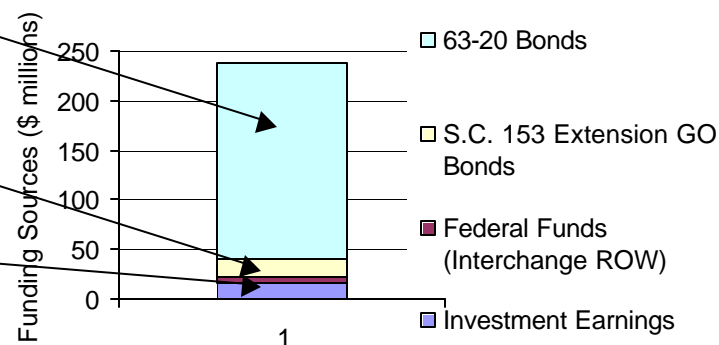
- Completed in 1995, the 14-mile toll road was built with little public support--financial or otherwise--from the Commonwealth of Virginia.
- The recession lowered realized traffic significantly below forecasts.
 - ✓ Initial traffic was below 10,000 weekday vehicle trips.
 - ✓ The project could not pay debt service on its \$300 million+ financing.
 - ✓ Significant restructuring ensued, including halving the toll rate.
- Most of the project's difficulties arose from the real estate slump.
 - ✓ VDOT's unexpected improvements to the free, competing Route 7, and lack of coordination by both parties, were blamed as well.
 - ✓ The lack of cooperation between VDOT and the Greenway has become an oft-cited example of what to avoid in establishing a public-private partnership.
- In 1999, traffic increased to 44,000 riders, so that the Greenway is adding another two additional lanes.
 - ✓ The debt has been refinanced and original investors are still involved.



4.I Best Practices: South Carolina's Southern Connector 63-20 Corporation

Giving PPI's access to the tax-exempt markets and state/federal funding for critical projects is essential for riskier, smaller projects, as South Carolina has found.

- The Southern Connector links two interstates in Greenville, South Carolina, essentially completing a ring road, planned for over 30 years.
 - ✓ SCDOT offered private consortia right to finance/design/building/operate contract.
 - ✓ 63-20 corporation set up by developer/design-build engineer/construction team.
- The Southern Connector was financed with a combination of revenue-based tax-exempt bonds, state general obligation tax-exempt bonds and Federal funds.
 - ✓ **63-20 tax-exempt**--Revenue-based financing, without state or local guarantees.
 - ✓ **GO debt**--State support for portion of project that would not be tolled, yet is important for the project's policy and financial viability.
 - ✓ **Grants**--Federal funds were received for the construction of key interchanges with state and interstate roads.



4.I Best Practices: South Carolina's Southern Connector 63-20 Corporation (continued)

Besides financial support, South Carolina's Southern Connector would not have been possible--at least in the short timeframe--without the active support of SCDOT.

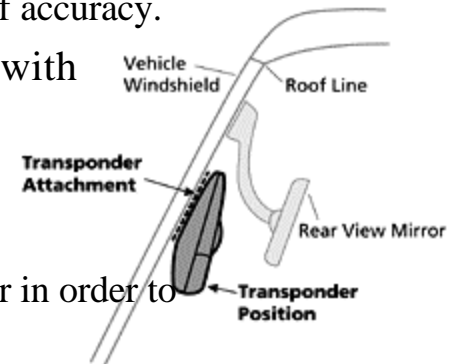
- The public-private partnership extends to the operations and maintenance as well:
 - ✓ The 63-20 corporation will operate the toll system, while the state will set the rates.
 - ✓ The state will maintain the road, receiving reimbursement for such services from the corporation.
 - ✓ Reimbursement for maintenance and a "license fee," however, are deeply subordinated to payment of debt service and operating costs.
- The success of the Southern Connector was in part derived from the cooperation--staff and financial support--from SCDOT.
 - ✓ Estimated \$2.5 million invested in predevelopment services by SCDOT.
 - ✓ Process from project development to financing completed within 2.5 years.
 - ✓ SCDOT moved from sequential decision-making to broad problem-solving.
 - ✓ SCDOT management sent staff a clear message that this was a type of project that they wanted to succeed.



4.J Best Practices: Ontario Highway 407 Auction

The Province of Ontario built the Highway 407 using design/build techniques, then, following construction, sold the road to a private consortia at a considerable gain.

- The Province of Ontario built Highway 407 in metropolitan Toronto as a reliever to the highly congested main east-west road in the region, Highway 401.
 - ✓ It applied design/build approaches to reduce costs on the US\$770 million project, as well as to insure that the road would be built in a timely manner.
 - ✓ It installed state-of-the-art video toll technology that has resulted in the first barrier-free electronic toll system in the world with very high levels of accuracy.
- The Province turned down an earlier option to finance the project with revenue bonds, that would have removed the debt from its books.
- In 1998, the Province experienced unfunded social service needs.
 - ✓ Future road extensions would need to be delayed.
 - ✓ Province moved to expeditiously sell the tolled road to a private sector in order to raise cash.
- Because of high traffic volumes, successful toll technology and a smooth auction process (see next page), the road was sold at approximately over two times book value, US\$2.1 billion.



Transponder Installation Diagram, H407

4.J Best Practices: Toronto Highway 407 Auction (continued)

The 99-year lease of Ontario’s fully electronic Highway 407 was achieved without regulating the tolls, just the level of traffic.

- The Province of Ontario views Highway 407 in metropolitan Toronto as a reliever to the highly congested main east-west road in the region, Highway 401.
 - ✓ Any relief to H401 is a benefit to all Toronto commuters.
 - ✓ To a certain extent, toll rates on H407 would be regulated by competition with H401, so that congestion relief was paramount and return regulation secondary.
- Toll threshold starts at US\$0.42/mile which increases with inflation plus 1.5-2% during first 15 years until it reaches US\$0.05/mile in real terms, a maximum of 30%.
 - ✓ When capital projects are completed, a base year peak-hour “Traffic Threshold” is established, which grows at 1-3%/year to a maximum of 1,5000 vehicles/lane/hour.
 - ✓ **At any time that the Threshold is achieved, tolls may be raised without limit.**
 - ✓ If toll rates are set higher than the regulated limit and traffic falls below the Threshold, penalties will be assessed at twice the private operator’s gain per vehicle.
 - ✓ Toll rates below the Threshold can only increase with inflation.



5. Recommendations and Conclusions

IMG's key recommendations focus on making the PPI process more pro-active and cover four main areas: policy, legislative/legal, process, and management.

- **Policy:** Develop a policy statement.
 - ✓ Enunciate what CDOT wants to see and the degree of planning and financial assistance, if any, that CDOT might provide to a PPI sponsor.
- **Legislative/legal:** Refine PPI enabling statute.
 - ✓ Work with CDOT counsel and TLRC to broaden interpretations favorable to PPI.
- **Process:** Provide central point-of-contact for PPI proponents.
 - ✓ Delegate authority to negotiate terms, be a pro-active PPI supporter.
 - ✓ Consider issuing RFP for one or more PPI projects or categories of projects.
- **Management and Training:** Revamp and upgrade PPI's stature within CDOT.
 - ✓ Provide training on applications and resultant benefits of PPI for all CDOT staff.
 - ✓ Promote outreach and public workshops on PPI.



5. A. Recommendations and Conclusions: Policy

CDOT needs to establish and communicate clear, pro-active policies toward the PPI program.

- Develop a policy statement identifying what CDOT will encourage and how.
- Set more explicit direction for desired PPI methods and types:
 - ✓ Are tolls acceptable? Are HOT-lanes welcome? Can shadow tolls be used?
- Designate a primary point of contact for PPI with sufficient delegated authority to assist private proponents and get CDOT decisions made.
 - ✓ Caltrans and WashDOT both established PPI offices with strong authority.
- Develop a matrix of partnership formats to filter and categorize proposals and to assist Commission to identify pros and cons of various proposed formats.
- Decide on financial support, if any, and whether to invest in project pre-planning.
 - ✓ Recognize that no one wants to bear up-front cost, but private sponsors might pay-back cost.
 - ✓ Develop a cost-sharing program, establishing credible partnership on CDOT's behalf.
- Where public benefit is clear, endorse loans or other direct CDOT participation.
- Examine development of state-wide turnpike authority under existing powers.
 - ✓ Local authorities are proliferating, and there is risk that they will bypass CDOT influence.
 - ✓ Florida faces proliferation of local expressways; Northwest Parkway is a follow-on to E-470.



5.B. Recommendations and Conclusions: Legislative/Legal

Legislative/legal clarifications would make the PPI program work more effectively.

- IMG identified three areas within the established PPI authorization that warrant clarification:
 - ✓ CDOT cooperation with potential partners.
 - ✓ Encouragement of PPI proposals to meet “known requirements.”
 - ✓ Clarification of the exceptions for commercial activity and co-development could provide needed revenue source; otherwise projects will depend on CDOT funds or user fees (tolls).
- Other enabling issues:
 - ✓ Identify one or more sources of financial support, either grants, loans, or in-kind services.
 - ✓ Establish the Office of PPI with decision-making powers.
 - ✓ Clarify out-sourcing issues, especially regarding state employee rights.
 - ✓ Clarify need to solicit comparable proposals.
- Find and authorize ways for proponents to look beyond CDOT or tolls for financing:
 - ✓ Develop prototypes for local and private contributions.
 - ✓ Encourage cost-sharing with private partners, such as firms with a large presence in state.



5.C. Recommendations and Conclusions: Process

The *ad hoc* quality of CDOT's PPI procedures will improve with a pro-active policy.

- Designate the primary PPI contact and make-up of the Initial Review Committee.
 - Develop a check-list of information and assessments to make the CDOT review process more consistent and coherent to the Commission.
 - Firm up confidentiality of conceptual proposals and conditions for solicitation.
 - Seek ways to reduce risk for private proposers of initial environmental and design efforts:
 - ✓ To private sector, early spending is all pure venture capital.
 - ✓ CDOT seems to want studies done by private party without making any CDOT commitment.
 - ✓ CDOT should find a way to help, such as soft SIB loans, in-kind environmental work.
 - Focus PPI on projects that are “going begging” (C470, US 36 Boulder, Powers Blvd.):
 - ✓ CDOT should consider developing a RFP for one or a group of these PPI projects, giving clear indication about project types or areas preferred.
 - ✓ RFP will focus creative private energies on CDOT priorities, i.e., what the state wants done.
 - ✓ Consider an open RFP (such as used for ITS) for specific groups of projects. For example, CDOT is studying alternative solutions for US 36 (Boulder Turnpike) at significant cost, but current 20-year CDOT plan does not appear to encompass this project.
-



5.D. Recommendations and Conclusions: Management and Training

The lack of acceptance of the commercially-oriented PPI program may in part reflect strains in CDOT's culture.

- In general, CDOT needs a more pro-active, aggressively supportive posture for PPI.
- Regularly inform Executive Management Team about federal partnership and innovative programs as they evolve.
 - ✓ Start with a management audit on PPI barrier issues and application of innovative financing options identified in this study.
- Provide training for central and division staff on merits of PPI, what CDOT should be looking for and willing to consider, in order to bolster receptivity to PPI.
- Establish marketing outreach on innovative finance and partnerships.
 - ✓ Start with SIB program, inform potential local partners and divisions together.
- Brief the Commission regularly on best practices in other states, what aspects appear adaptable to Colorado, what unmet needs are most amenable to PPI.
- Invite assistance of FHWA Innovative Finance Team.
- Retain on-call assistance to identify opportunities and review proposals as received.

