Public-Private Partnerships: Texas Style

2008 Audit AASHTO Conference
The times, they are changing...
Growing Congestion Now at Critical Levels...
The Mobility Challenge

- Old ways of doing business are not enough
  - Booming population
  - Increasing urbanization
  - Texas is world’s 10th largest economy
  - Multi-modal freight trade

  Increasing maintenance and construction costs
  - Nearly 80,000 lane miles and 50,000 bridges
  - Aging system may exceed design life & weight
  - Staggering inflation of 62% over past 5 years

  Real decline in available funding
  - No index on state and federal motor fuels taxes
  - Diversions, rescissions and earmarks

2008 Audit AASHTO Conference
The Perfect Storm of Opportunity

- Demand far exceeds resources
- Federal reauthorization bill expires 2009
- Federal trust fund depleted 2009 - 2012
- Technology impacts fuels and toll collections
- Willing investment and delivery partners
Public-Private Partnership Objectives

- Encourage private sector innovation and investment
- Minimize public funding and maximize private investment
- Share risk
- Combine benefits of government and private business
PPPs in Texas

- PPPs are called Comprehensive Development Agreements (CDAs)
- Two phase procurement process with a Best Value selection
- TxDOT has multiple types of CDAs with different business models
- CDA types are tailored for specific project needs
- Different risk allocations between types
CDAs in Texas

• Agreement with one entity (the developer) to design, develop, construct, finance, acquire, operate and/or maintain certain kinds of facilities

• Types of facilities:
  • Highways, Turnpikes, Freight or Passenger rail, Public Utilities

• CDAs are specialty tools
  • Not suitable for all projects
PPPs & CDAs are Not Solutions for Every Problem
PPP/CDA Selection Process

- Two Step Process
  - RFQ-Request for Qualification
  - RFP-Request for Proposal
- Must be posted in Texas Register and at least one newspaper
- Submittal times vary by project
Best Value Selection Process

- Best value (BV) = Price and Other Factors
- Takes into account qualitative factors that impact the project
- Common “other factors”
  - technical design/approach
  - innovation
  - qualifications, experience, key personnel
  - minimizing public impacts (e.g., traffic maintenance)
  - QA/QC approach
  - schedule
- BV determination is made by combining price with the “Other Factors” scoring based upon a pre-determined weighting and model
CDA Evaluation Process

Proposals Received
A – Technical
B - Price

Technical Pass/Fail Reviews

Technical Subcommittee Review of Technical Proposals

Technical Evaluation Committee Reviews

Director of TTA Division Combines Cost and Tech. For Final Scoring

Pricing Committee Review of Cost Proposals

Pricing Alternatives Analysis

Technical Evaluation Committee Reviews

2008 Audit AASHTO Conference
General Conflict of Interest Standard

- A consultant providing procurement services or financial services for TxDOT on a CDA project cannot be on a proposer team for any CDA project.
Choosing the Right CDA Model

- Traditional (Design-Build) (SH 130 1-4)
- Pre-Development Agreement (Long-Term Developer) (TTC-35)
- Public Private Partnerships (Concession) (SH 130 5&6)
Risk Allocation

- CDAs delegate risk to the parties best able to manage it:
  - Assign to Owner
  - Assign to Developer
  - Share
  - Concessions differ from D/B
Risk Allocation & Contracting 
Risk Shifting Inherent in CDAs

• “Traditional” Contracts
  • Owner bears risk of constructability and efficacy of design
  • Owner responsible for QA/QC

• CDAs
  • D-B bears risk of constructability and efficacy of design
  • D-B accountable for cost
  • D-B responsible for QA/QC
Risk Allocation & Contracting
Allocating Other Risks

• Who can best control the risk?
• Who can best manage the risk?
• Are contractors willing to assume the risk?
• How much will it cost?

• Differing site conditions
• Force majeure
• Hazardous materials
• Paleo/archaeo/bio
• Permits
• Railroads
• Right of way
• Utility relocations

2008 Audit AASHTO Conference
Pricing Risk

- The Price of Risk ($) =

\[ IRR_{exp} + \sum P! + (D_{iz} + \Theta_g) + C_{i-i!} + O(s^{n-q}) \]

- \( w_e \) + \( Mk \) + \[ 3 \int_0^n E^*\Delta n-l \] + \( 3(T/\Omega^\pi)^{50} + \Delta F \]

+ \( \epsilon T\zeta \) \( * 0 + X_{waG} \)
Choosing the Right CDA Model

- Traditional (Design-Build) (SH 130 1-4)
- Pre-Development Agreement (Long-Term Developer) (TTC-35)
- Public Private Partnerships (Concession) (SH 130 5&6)
Design-Build
SH 130 Segments 1-4

Project Overview

- $1.3 billion contract awarded and issued by TxDOT
- 49 miles of 4-lane divided toll road
- Project funded by state-issued revenue bonds and toll equity (state and local)
SH 130 Segments 1-4

- Open to traffic April 30, 2008
- Project was completed:
  - On schedule
  - Under budget
  - Meeting TxDOT’s high quality standards

“…the toll road financing of the 21st century. It will be a model for others in the future.”

-Bond Buyer August 5, 2002
Choosing the Right CDA Model

- Traditional (Design-Build) (SH 130 1-4)
- Pre-Development Agreement (Long-Term Developer) (TTC-35)
- Public Private Partnerships (Concession) (SH 130 5&6)
Pre-Development Agreement CDAs

A PDA will create a Master Development Plan that is a source of potential new projects

- PDAs are master planning for complex projects
- Flexible plan that identifies building blocks for the future
- Trans-Texas Corridor is an example
  - TTC 35
  - I69/TTC
### TTC-35 MDP Near-Term Facilities

<table>
<thead>
<tr>
<th>Near Term Facility</th>
<th>Facility Cost</th>
<th>Concession Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>TTC-35 From IH 35 at Oklahoma to US 75</td>
<td>$1,185</td>
<td>$(294)</td>
</tr>
<tr>
<td>TTC-35 Eastern Loop around Dallas from US 75 to IH 30</td>
<td>$932</td>
<td>$355</td>
</tr>
<tr>
<td>TTC-35 Eastern Loop around Dallas from IH 30 to IH 35 southeast of Dallas</td>
<td>$1,504</td>
<td>$492</td>
</tr>
<tr>
<td>TTC-35 From IH 35 near Hillsboro to North of Temple</td>
<td>$1,101</td>
<td>$580</td>
</tr>
<tr>
<td>TTC-35 From North of Temple to SH130 in Georgetown</td>
<td>$1,018</td>
<td>$418</td>
</tr>
<tr>
<td>TTC-35 Southeastern Loop around San Antonio from IH 10 to IH 37</td>
<td>$1,308</td>
<td>$409</td>
</tr>
<tr>
<td>TTC-35 Southwestern Loop around San Antonio from IH 37 to IH 35</td>
<td>$422</td>
<td>$(269)</td>
</tr>
</tbody>
</table>

### Connecting Facility

- **Connecting Facility SE Dallas to Waxahachie**: Under development
- **Connecting Facility Dallas Fort Worth Southern Loop**: Under development
- **Connecting Facility SH 130 Segments 5 and 6 from US 183 to IH 10**: $1,350, $270

**Totals**: $8,820, $1,961
Master Planning the Corridor

- All facilities, locations, financing, and schedules shown in an MDP are preliminary and subject to the following:
  - NEPA process
  - Environmental approvals
  - Coordination with regional toll authorities, regional mobility authorities, counties, & other stakeholders
  - FHWA approvals
  - TxDOT review and final approvals
  - Traffic and revenue forecasts & financial modeling
Choosing the Right CDA Model

Traditional (Design-Build) (SH 130 1-4)

Pre-Development Agreement (Long-Term Developer) (TTC-35)

Public Private Partnerships (Concession) (SH 130 5&6)
SH 130
Segments 5 & 6
First Concession Agreement
SH 130 PPP
Concession Project

- 41 miles, 4-Lane tollway
- Cintra-Zachry self-performing all development, financing, and O&M
- 100% open road tolling
- 50-year concession
- $1.35 Billion project at no cost to State
- Developer provides up-front payment
- ($25 million) and revenue sharing to TxDOT (P.V. estimated at $245 million)
- Ongoing capacity improvement and hand-back standards
- Long-term source of maintenance funding – saves over $700 million of public funds
Concession Agreement
SH 130 Segments 5 & 6

Compliance Tools

• Lenders oversight and influence
• Equity investor oversight and influence
• Long term O & M responsibilities
• Handback requirements
• Non-compliance points
• Compliance auditing by IE
Facility Handback

- CDA defines performance requirements throughout lease period
- At the end of the lease period, the Developer will transfer operation, or “handback,” the facility to TxDOT
- At handback, the CDA defines the required years of residual life that components must be capable of providing
Phillip E. Russell, P.E., J.D.
Assistant Executive Director for Innovative Project Development
Texas Department of Transportation
(512) 305-9505
Fax: (512) 305-9567
prussel@dot.state.tx.us
For more information go to:
www.dot.state.tx.us or www.keeptexasmoving.org