PPP Highways Experiences: Chile and Mexico

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International PPP Experiences

- First Programs: France, Spain
- Pioneering Developing Countries: Argentina, Indonesia, Malaysia, Mexico
- Next Wave: Australia, Brazil, Canada, Chile, China, United Kingdom
- More Recently: India, Poland, USA
<table>
<thead>
<tr>
<th></th>
<th>Intercity</th>
<th>Urban</th>
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<tbody>
<tr>
<td><strong>Toll</strong></td>
<td>Brazil, Chile, Mexico, Hungary, early UK, etc.</td>
<td>Chile, Indonesia, Australia</td>
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<td><strong>Shadow Toll</strong></td>
<td>mid UK, Portugal</td>
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<td><strong>Availability / Performance</strong></td>
<td>Recent UK, Norway, Argentina</td>
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Latin America Experiences

- Mostly middle-income countries, rapidly developing in 1990s
- Major programs initiated in Argentina, Brazil, Chile, Colombia, Mexico
- 161 Projects for $35 billion over 20 years
- Usually follow a “concession” model (similar to BOT or ROT)
- High number of renegotiations, but low cancellation rates
Mexico: Motivations

- Contracts for the new toll roads were expected to provide an economic catalyst to stagnant construction industry.
- Government’s budgetary deficit had been growing, reducing allowable infrastructure spending/borrowing.
- Wanted to develop first-class highway system.
Mexico: Program

- Very ambitious - awarded 52 projects (25 competitively tendered) between 1987-1995 to become largest PPP toll road program in world
- By end of 1995, 34 projects with private sector equity had reached financial closure accounting for $9.9 billion in private capital commitments
- Shortest concession period would win (max 15 years), led to very high tolls
- Government partially guaranteed traffic and cost estimates (15% overruns covered if government liable)
- Concessioned roads obligated to also have a parallel toll free road
Mexico: Results

- Largest Mexican construction companies (ICA, Tribasa, and GMD) were awarded 23 concessions.
- Construction cost overruns averaged 25%.
- Average toll road fee was $0.02 per km pre-concession, increased to an average of $0.17 per km after concessioning.
- Average actual revenues were approximately 30% below projected revenues (only 5 met or exceeded projects).
- Interests rates floated, and rose during Tequila Crisis to 100%.
Mexico: Results (cont)

- Government took over 23 projects (3,400 kms)
- The government first paid outstanding debt to Mexican banks (approx $5 billion), then construction companies (approx. $2.6 billion)
- Did not compensate equity holders, estimated at $3 billion in losses
- Allowed 24 viable projects (1,600 kms) to continue
Mexico: Lessons Learned

- Were primary objectives achieved?
  - Did help construction industry and economy – briefly
  - Did achieve modern highway system – not maintained

- And at what cost?
  - Was not well organized or designed
  - Public relations were not handled well
  - Major government bailout

- Be careful of explicit and implicit guarantees

- In 2003, President Vicente Fox launched a new, more modest $1.2 billion highway PPP program that sets toll ceilings and has $800 million of public money
Chile: Motivations

- At beginning of 1990s, the Chilean Government urgently needed major infrastructure investments to ensure economic development (avg. growth of 8%).
- State did not have resources or technical know-how to carry out the public works required.
- Intercity travel important, 86% urbanized, only 17 inhabitants per square kilometer.
Chile: Program

- Between 1993-2001, 21 road concessions awarded (approx. $5.0 billion), all competitively
- 27 consortia, more than 40 Chilean and foreign companies, from 10 countries
- Over 2,000 kms of roads
- Started with smaller projects first
- Updated bidding criteria as program developed
- Systematic Approach: e.g. Ruta 5, Santiago Urban
Santiago Urban Toll Roads

- Americo Vespucio North-West
  - Section 27 kms
  - US$250 million

- East-West System
  - 37 kms
  - US$380 million

- North-South System
  - General Velasquez
  - 61 kms
  - US$440 million

- Americo Vespucio South Section
  - 24 kms
  - US$280 million
Chile: Results

- Viewed as transparent and competitive
- Approx. $150 million in government revenue
- Only 1 minimum revenue guarantee called
- Innovative Projects: e.g. Least Present Value of Revenue (LPVR), multiple variable bidding
- Local and international financing: $ bonds issued
- Survey of users, consultations with local and national leaders, and focus groups graded Concessions System at 6 on scale from 1 to 7.
- http://www.concesioneschile.cl/web_ingles/home.htm
Chile: Lessons Learned

- Transparent process with focus on creating public awareness (tolling culture)
- Government learned as program developed, and made adjustments
- Don’t be afraid to be innovative
- International firms bring more than finance – also credibility, know-how, etc.