Congestion and General Purpose lanes
Local Response

CDOT  NCDOT  SCDOT  MUMPO  FHWA  CATS

Phase I: 2007

Phase II: 2008

Phase III: 2009
I-77 Managed Lanes
Mecklenburg/Iredell Counties

I-77 Managed Lanes
Mecklenburg/Iredell Counties

I-77 MANAGED LANES

North Typical Section:
Catawba Ave to West Plaza Dr

Central Typical Section:
I-85 to Catawba Ave

South Typical Section:
Oaklawn Ave to I-85
I-77 Managed Lanes

- North Carolina’s first Public Private Partnership (P3)
- NCDOT signed a contract June 26, 2014 with Cintra to design, build, operate and maintain managed lanes in exchange for generated toll revenues
- The P3 mechanism brings private equity to public infrastructure development, accelerating (20 years through normal funding) construction of this critical project
- Estimated project cost is $655 million ~ NCDOT contributes $88 million toward the project, significantly less than the projected $170 million
- 26-mile expansion divided into three sections:
  - Southern – Two managed lanes in each direction from Exit 11 to Exit 13, and a direct flyover bridge between I-77 and I-277
  - Central – Two managed lanes in each direction from Exit 13 to Exit 28. Existing HOV lanes in the corridor will be converted to managed lanes
  - Northern – One managed lane in each direction from Exit 28 to Exit 36 in Iredell County
- Construction gets underway in spring 2015, complete in 2018
Existing section at I-77/I-277 - Uptown Charlotte
Proposed I-77/I-277 Flyover Connection
I-77 proposed configuration (South)
Existing travel lanes on I-77 north of Exit 13
Proposed section including two managed lanes in each direction, including conversion of existing HOV lanes
Existing section over Lake Norman at Iredell County line
Proposed north section with one managed lane in each direction
Access Points Detail

Figure 3-9: Typical Access Point/Crossover Diagram

WEAVE TYPE INGRESS-EGRESS WITH ANCILLARY WEAVING LANE

NOT TO SCALE

Maintenance platform
Key benefits of this P3 model

- **Risk transfer**
  - Developer responsible for design, construction, financing, operation and maintenance (O&M) risks
  - Developer is responsible for cost overruns during construction and operating phases
  - Private sector accepts revenue risk
- **Accelerate schedule and improve schedule certainty**
- **Performance-based technical requirements**
- **High level of customer service**
- **Whole-life cost optimization**
- **Private capital at risk and known/capped public investment**
- **Private sector expertise and innovation**
- **Single point of contact and accountability**
Cash Waterfall in Typical P3 Transactions

- Project Revenues
- Project Operations and Maintenance
- Debt Service
- Debt Service Reserves
- Other Project Reserves (O&M, Handback, etc.)
- Return to Equity Investors
Project Structure

Tolling Authority (NCTA) → NCDOT
NCDOT Contribution ($) → Project Agreement

User → Tolls (Contract)

Financial Responsible Party → Ferrovial Agromán, S.A.

DB Joint Venture (Lead Contractor)
FA Southeast (70%)
W.C. English (30%)

O&M Contractor → Cintra Infraestructuras, S.A.

Toll System Integrator → Cintra Toll Services, LLC

Equity → Dividends

Debt Service

PABS
TIFIA

Debt Proceeds

Construction Contract

O&M Contract
# Summary of Finances

<table>
<thead>
<tr>
<th>Sources</th>
<th>$m</th>
<th>%</th>
<th>Uses</th>
<th>$m</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Funds Amount (PFA)</td>
<td>88.2</td>
<td>13.5%</td>
<td>Construction</td>
<td>448.0</td>
<td>68.4%</td>
</tr>
<tr>
<td>Senior Debt (PABs)</td>
<td>100.0</td>
<td>15.3%</td>
<td>Right of Way (ROW)</td>
<td>5.4</td>
<td>0.8%</td>
</tr>
<tr>
<td>TIFIA Debt</td>
<td>215.0</td>
<td>32.8%</td>
<td>ITS</td>
<td>51.0</td>
<td>7.8%</td>
</tr>
<tr>
<td>TIFIA Capitalized Interest</td>
<td>16.5</td>
<td>2.5%</td>
<td>Overhead + Advisors</td>
<td>54.6</td>
<td>8.4%</td>
</tr>
<tr>
<td>Interest Income</td>
<td>1.2</td>
<td>0.2%</td>
<td>PABs Interest</td>
<td>17.8</td>
<td>2.7%</td>
</tr>
<tr>
<td>Equity</td>
<td>234.2</td>
<td>35.7%</td>
<td>TIFIA Capitalized Interest</td>
<td>16.5</td>
<td>2.5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Reserves</td>
<td>25.0</td>
<td>3.8%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Equity LC and Fees</td>
<td>16.0</td>
<td>2.4%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Bid Costs</td>
<td>20.8</td>
<td>3.2%</td>
</tr>
<tr>
<td><strong>Total Sources</strong></td>
<td><strong>655.1</strong></td>
<td><strong>100.0%</strong></td>
<td><strong>Total Uses</strong></td>
<td><strong>655.1</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>
I-77 contractual documents

- Instructions to Proposers (Vol.I)
- Comprehensive Agreement (Vol.II, Book 1)
- Technical Provisions (Vol.II, Book 2)
- Specifications, Standards and Manuals (Vol.II, Book 3)
<table>
<thead>
<tr>
<th>Term</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toll Concession</td>
<td>Construction + 50 years (operations)</td>
</tr>
<tr>
<td>Revenue Risk</td>
<td>Assumed by Concessionaire</td>
</tr>
</tbody>
</table>
| Exempt vehicles      | • HOV3+  
                       • CATS Buses  
                       • Emergency Vehicles  
                       • *Trucks are excluded from the lanes* |
| Dynamic Pricing      | To be used for Congestion Management                                    |
| All Electronic Tolling | To be Interoperable with NC Quick Pass & Eastern Transponders (E-ZPass, etc.) |
| Standards            | To be met or exceeded:  
                       • OSPS - Average Speed of no less than 10 miles-per-hour under the posted speed limit on the HOT Lanes 90% of the time  
                       • Federal standards per Title 23, United States Code (USC) Section 166: Average Speed of no less than 45 mph on the HOT Lanes 90% of the time |
| Performance Standards | Linked to non-compliance system of increased oversight for the respective standards and system for liquidated damages |
Other Key Contract Terms

- NCDOT oversees the design and construction work to ascertain that it is performed in accordance with the contract.
- **General Purpose lanes maintained at same quality standard as new managed lanes**
- All right of way (ROW) will be acquired for and in the name of NCDOT, but Concessionaire performs ROW acquisition services.
- Concessionaire is responsible for acquiring permits.
- Concessionaire bears all cost and schedule risks, subject to certain exclusions.
- Concessionaire will be assessed liquidated damages for failing to achieve final acceptance of each Project Section and final completion of all Project Sections by the required deadlines.
- **Concessionaire will be assessed liquidated damages for lane closures outside of prescribed hours**
- Concessionaire is responsible for “fence-to-fence” OMR services based on prescribed performance specifications.
- Handback Requirements specify asset conditions at the end of the contract including residual life supported by (“Handback Requirements Reserve”) held by a trustee or a letter of credit.
- NCDOT is not prohibited from constructing new transportation facilities within the ROW; concessionaire may be entitled to compensation for Unplanned Revenue Impacting Facilities.
- **Concessionaire must reach financial close by the specified deadline; otherwise, the concessionaire’s $15 million financial close security will be subject to forfeiture**
- Lenders have the right to cure and step-in in the event of a default by the concessionaire. NCDOT may terminate the agreement for concessionaire default in the event the concessionaire and/or lender fails to cure within the applicable cure period. NCDOT may terminate for convenience with compensation.
NCDOT Public Funds Contribution

- Cintra’s Public Funds Amount (PFA) request of $88.2 million is below the maximum amount ($170 million) set by NCDOT

- Developer has proposed infusing the public funds at the latter stages of construction (contract only required pro rata investment)

- Cintra has also assumed a contingent Developer Ratio Adjustment Mechanism (DRAM) amount of $75 million to satisfy the rating agencies in the revenue downside case, although no DRAM is projected to be used in the base case

- Fixed annual payment ($1 Million) for maintenance of the General Purpose (GP) Lanes commensurate with current maintenance contract
## Risk Sharing – Pre Financial Close

<table>
<thead>
<tr>
<th>Term</th>
<th>Sharing</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Rate Movements</td>
<td>100% NCDOT exposure (up to 125bps)</td>
<td>NCDOT will bear the risk, up to the Interest Rate Buffer Amount (125bps), and have the benefit of any decreases in Benchmark Interest Rate(s) from Financial Proposal Due Date to Financial Close</td>
</tr>
<tr>
<td>Credit Spread Movements</td>
<td>100% NCDOT exposure</td>
<td>NCDOT will bear 100% of the risk and have 100% of the benefit of Credit Spread Fluctuation, if any, (either positive or negative) from 10 days prior to Financial Proposal Due Date to Financial Close</td>
</tr>
<tr>
<td>Quantitative Changes to TIFIA Term Sheet Assumptions</td>
<td>100% NCDOT risk 50% NCDOT benefit</td>
<td>NCDOT will bear 100% of the risk and have 50% of the benefit on quantitative changes to the TIFIA Term Sheet Assumptions (either positive or negative)</td>
</tr>
<tr>
<td>Design-Build Price after 210 days from Financial Proposal Date</td>
<td>100% NCDOT risk</td>
<td>From 210 days after Financial Proposal Due Date, NCDOT shall compensate the Developer for adjustments to the Design-Build Contract Price as a result of inflation in materials and labor rates (based on Construction Cost Index)</td>
</tr>
<tr>
<td>120-day Developer Extension of Project Financing Deadline</td>
<td>100% Developer risk 50% NCDOT benefit</td>
<td>Developer shall have the option to extend the Project Financing Deadline for an additional 120-day period. Developer shall not be entitled to any positive adjustments in the Public Funds Amount or Interest Rate Buffer Amount during such 120-day extension period. NCDOT shall be entitled to 50% of the benefit, if any</td>
</tr>
</tbody>
</table>
## Risk Sharing – *Post Financial Close*

<table>
<thead>
<tr>
<th>Term</th>
<th>Sharing</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Toll Revenue Sharing</strong></td>
<td>Tiered Bands</td>
<td>Developer shall make Revenue Payments to NCDOT to the extent cumulative Toll Revenues exceed pre-determined floor (to be dedicated to corridor improvements)</td>
</tr>
<tr>
<td></td>
<td>(NCDOT receives 0%/12.5%/25% /50%/75%)</td>
<td></td>
</tr>
<tr>
<td><strong>Refinancing Gain</strong></td>
<td>50% NCDOT benefit</td>
<td>Except for an Exempt Refinancing, Developer shall pay to NCDOT an amount equal to 50% of the Refinancing Gain according to the prescribed formula</td>
</tr>
</tbody>
</table>
Key Milestones and Activities

- **March 30, 2012** – four (4) proposers were shortlisted
- **April 6, 2012** – Issued draft RFP to shortlisted proposers with FHWA input
- **April 19, 2012** – Issued draft Comprehensive Agreement and Technical Provisions
- **May 9-10, 2012** – Round 1: Bidder one-on-one meetings
- **July 27-28, 2012** – Round 2: Bidder one-on-one meetings
- **August 7, 2012** – Submitted TIFIA LOI MAP-21 requesting TIFIA loan of $221m (based on 41% of “eligible costs”)
- **September 6-7, 2012** – Bidder T&R Workshop
- **February 6-7, 2013** – Round 3: Bidder one-on-one meetings
- **April 16, 2013** – Received approval for provisional PABs allocation of $350m
- **April 26, 2013** – Obtained initial point-in-time indicative investment grade rating from Fitch Ratings
- **September 2013** – Submitted FHWA cost estimate review
- **March 18, 2014** – Issued final RFP (Addendum 7)
- **March 31, 2014** – Technical and financial proposal due date
- **April 11, 2014** – Announce Apparent Best Value - Cintra Infraestructuras, S.A.
- **April – June, 2014** – Various Reporting and Conformance of Contract Documents
- **June, 2014** – Commercial Close
- **4th Quarter, 2014** – Financial Close
- **2015 – 2018** - Construction
Questions

http://www.ncdot.gov/projects/I-77ManagedLanes/

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