# Texas' LBJ Freeway Managed Lanes P3

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The I-635/LBJ Managed Lanes project in Texas marks a major milestone in the development of private sector investment in infrastructure, standing as the largest transportation greenfield P3 project in the US.

In addition to scale - construction costs standing at US$2.7 billion and more than US$4 billion over the 52-year concession - LBJ is impressive for the method in which it will be developed, as well as its unique tolling and financial characteristics.

The landmark I-635 deal [Projects Database] - along with the North Tarrant Express [Projects Database] that closed in December 2009 with the same set of project partners - is a nationally significant transaction for advancing the use of managed lanes to address congestion.

The I-635 scheme will see the long-awaited re-development and expansion of an important traffic corridor in the rapidly growing Dallas area.

Despite the continuing constrained market conditions, LBJ also represents the first US highway P3 to achieve financial close in 2010.

**Background & Procurment**

The Dallas-Fort Worth metro area has experienced a compounded annual growth rate in population of around 2.5 per cent since 2000 and has been consistently ranked in the top 10 metro areas in the US, with a median income of US$53,304 - 19 per cent higher than the average Texas median income.

The LBJ Express project will deliver the rebuilding of one of the busiest and most congested highways in North Texas.

On 28 April 2005 the Texas Transportation Commission authorised the issue of a request for qualifications for the LBJ deal and by 23 May the Texas Department of Transportation (TxDOT) published the RFQ.

The authority appointed the following advisers for the programme:

- KPMG - financial
- Goldman Sachs - financial
- Nossaman - legal
- McCall Parkhurst & Norton - legal
- LBJ Mobility Coordinator - technical
- Hatch Mott MacDonald - technical

The deadline for qualifications was set for 22 September 2005 and the following teams put forward submissions:

- Dragados-Zachry Partnership and DMJM Harris

- Macquarie 635 Partnership - Macquarie, Kiewit, Granite, J.D.Abrams and Gilbert Texas Construction
- Cintra - Ferrovial and Obayashi
- Dallas Mobility Link - Fluor, Skanska and Transurban

On 26 October 2006 the commission then authorised the issue of a request for proposals, with TxDOT issuing the RFP on 18 September 2007. TxDOT delayed the RFP issuance in early 2007 due to the state-wide toll road moratorium debate that was underway.

Final proposals were submitted on 21 January 2009 and TxDOT entered the evaluation stage throughout January and February.

Out of the four shortlisted teams, just two teams submitted bids for the concession - Cintra/Macquarie; and the Dragados-Zachry Partnership.

On 26 February 2009, the Texas Transportation Commission conditionally awarded the I-635 contract to LBJ Infrastructure Group - formerly LBJ Development Partners - to DBFOM the 13-mile LBJ-635 corridor in Dallas County over 52 years.

The winning consortium included:

- Cintra (equity partner)
- Meridiam Infrastructure Finance (equity partner)
- Dallas Police and Fire Pension System (equity partner)
- Ferrovial Agroman
- WW Webber
- Ferrovial Infraestructuras
- Grupo Ferrovial
- Meridiam Infrastructure, SICAR

The sponsor also had the following advisers on board:

- White & Case - legal
- Bracewell & Giuliani - legal
- Macquarie - financial
- Bridgefarmer & Associates - technical

By 7 May 2009, TxDOT held a public hearing concerning the disclosure of financial information for the LBJ-635 Comprehensive Development Agreement (CDA).

The department executed the CDA on 4 September 2009 with the LBJ Infrastructure Group, and on 22 June 2010 financial close was achieved.

**The Project**

The Cintra-led LBJ Infrastructure Group will DBFOM a 17 mile corridor, which includes managed lanes in the congested Dallas-Fort Worth area, featuring improvements to Interstate 35E and Interstate 635.

*LBJ Freeway Conceptual Plan (Artist Impression © TxDOT)*

The corridor will use an innovative new design that will enable a new highway to be built with minimal need for additional rights of way. Six depressed lanes (three lanes in each direction) will operate as managed electronic toll lanes, while eight reconstructed main lanes will be cantilevered above the managed lanes.

The multi-level highway system will allow drivers the choice of bypassing congestion in general purpose lanes for new, high-speed managed lanes.

The project encompasses improvements along IH-635 from Luna Road to Greenville Avenue, as well as on IH-35E between Loop 12 and Valwood Parkway - almost doubling the capacity of the current road.

It will combine the same number of general purpose highway lanes that exist today with up to 13 miles of six new express managed toll lanes, all within the same footprint of the current LBJ roadway.

The new LBJ will feature the following improvements:

- 8 rebuilt main lanes (a foot wider than they are now)
- additional shoulders on the outside of the main lanes
- continuous frontage roads (two or three lanes wide)
- 6 barrier-separated managed toll lanes located between or below all frontage roads

Managed toll lanes feature the movement of traffic at a faster, more reliable speed (50 mph) by adjusting the toll rate up and down as the number of vehicles increases or decreases respectively.

Motorists will have a choice of either paying an optimised and continuously changing toll rate to use the managed toll lanes or remaining on the improved and rebuilt free main lanes.Dynamic tolling is being used increasingly to reduce congestion on urban highways.

*LBJ Freeway - turning plans into reality (Graphics © TxDOT)*

The North Texas Tollway Authority - which will provide toll collection services - is responsible for enforcement and bears all collection risk provided the tolling technology works properly.

Construction is expected to start in early 2011 and will be completed by 2016 after a maximum five year construction period.

The LBJ Infrastructure Group partners collectively employ some 1,500 Texans and will integrate more than 100 additional Dallas-Fort Worth and Texas companies and their employees into the project.

While the construction work is not overly complex from a technical perspective, it does entail significant challenges related to traffic management and staging given the high levels of congestion on the existing lanes coupled with spacial constraints.

**Financing**

The LBJ project confirms the importance of Transportation Infrastructure Finance and Innovation Act (TIFIA) loans and private activity bonds (PABs) as financing mechanisms in the US.

The financing structure includes US$615 million in tax-exempt, unwrapped PABs - the largest amount of PABs for a US toll road concession - split across four long-term tranches underwritten by Merrill Lynch and JP Morgan, with a coupon of 7 per cent at maturity in 2040. The credit spread on 2040 bonds was 317bps over the tax-exempt Municipal Market Data (MMD) benchmark.

The deal was rated Baa3 by Moody's and BBB- by Fitch.

The bond was priced to yield 7.25 per cent for investors and the average DSCR was 2.5x. Mandatory debt service coverage is projected to rise rapidly, from 2.2x in 2016 - the first full year of operations - to 3.0x by the third year, when traffic is expected to be fully ramped up.

The project's leverage is manageable, particularly at the level of the senior bonds contributing just 23 per cent of total project costs. The high capital costs are offset by a large construction grant from TxDOT - 20 per cent of total costs - in addition to an equity contribution that exceeds senior debt.

The senior bonds also benefit from the enhanced financial flexibility from the more heavily back-loaded debt service schedule for the TIFIA loan and the ability to defer a substantial portion of the TIFIA debt service even further.

The deal includes a TIFIA loan of US$850 million - the second largest to close - while TxDOT committed US$496 million.

The sponsors are providing US$700 million in equity, split as follows:

- Cintra Concesiones de Infraestructuras de Transporte - 52 per cent - US$364 million
- Meridiam Infrastructure Finance - 38 per cent - US$266 million
- Dallas Police and Fire Pension System - 10 per cent - US$70 million

The Dallas Police and Fire Pension System is an equity partner in the private developer for both LBJ and NTE - making it the first pension fund to invest directly in infrastructure development in the US.

Equity is not contributed upfront, but instead over time from the equity partners on a pro rata basis with the amount of debt excluding the amount committed for reserves.

Toll revenue is also expected to generate US$35 million in funding for the scheme and the private developer will share up to 75 per cent of the excess toll revenues with TxDOT.

The project also benefits from a strong construction risk mitigation package, including a fixed-price, date-certain design build contract with meaningful damages and a large payment and performance letter of credit.

From an equity perspective, the LBJ risk mitigation was as follows:

- **exposure to bid cost risk** - transparency within the consortium to bear external costs jointly; trusted advisory team and developer experience; and shifted cost burden to FC
- **client risk** - ensured proper client advisory team was in place; ensured proper legislation was in place; ensured procurement framework could sustain public challenge; and confidence in TxDOT and advisory staff
- **risk of competition** - assumed one out of three bids won as a developer; and recuperated multiplier over development costs
- **execution risk** - built a robust financial structure - PABs, TIFIA, banks all analysed - acceptable to the market; and shared risk of failure with grantor
- **contractual structure** - ensured "back to back" principles with buffers between performance level and relief; appropriate compensation for termination provisions; incorporated milestone schedules to keep contractor aligned; and confidence in TxDOT understanding the importance of a well deliberated structure
- **technical and construction risk** - ensured that the contractor had the experience and know-how to perform the task in the respective project geography; and negotiated a strong security package with the contractor
- **ramp up/traffic risk** - hired a competent traffic adviser; and ran internal cases to assess the robustness of the IRR and financing structure should ramp up take longer than expected
- **financing risk** - ensured that long term financing reflects the inherent risk profile of the deal; used PABs which do not bear the risk of refinancing; and government support with subordinated TIFIA tranche to ease equity funders pressure
- **operations risk/return protection** - ensured the proper entities were involved to manage and oversee the operations; hired a robust, competent project staff; entrusted toll collection and enforcement to NTTA

Hatch Mott MacDonald was the lenders' traffic adviser, while Latham & Watkins provided legal advice.

Nixon Peabody was legal adviser to TIFIA, while financial advice came from Montague DeRose and Associates and High Street Consulting Group. Montague DeRose and Associates and High Street Consulting Group also acted for USDOT.

**Conclusion**

The I-635/LBJ Managed Lanes P3 validates toll concession P3s as a viable method for delivering much needed transportation projects in the US.

TxDOT was able to leverage US$489 million in public funds to deliver a project worth more than US$4 billion, including design, construction, operations and maintenance costs.

The landmark project includes the redevelopment and expansion of a major traffic corridor that will help reduce travel delays, enhance safety, provide mobility choices and help reduce the carbon footprint often associated with idling traffic.

It also features an innovative tolling system and financing structure that will likely stand as a benchmark for upcoming large-scale managed lanes P3 programmes.

Based on the success of a significant deal like LBJ making it away during tough financial times, the US transportation market can expect to see many more P3 toll concessions and managed lanes projects in the future.

**The project at a glance**

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| Project name | I-635/LBJ Managed Lanes P3 |
| Location | Dallas-Fort Worth metro area, Texas, USA |
| Description | The DBFOM of a 17 mile corridor, which includes managed lanes in the congested Dallas-Fort Worth area, featuring improvements to Interstate 35E and Interstate 635 |
| SPV | LBJ Infrastructure Group |
| Sponsors | • Cintra Concesiones de Infraestructuras de Transporte<br>• Meridiam Infrastructure Finance<br>• Dallas Police and Fire Pension System |
| Awarding agency | Texas Department of Transportation (TxDOT) |
| Project duration | 52 years |
| Construction stage | Starts in early 2011 |
| Construction duration | 5 years |
| Total project value | US$2,660.65 million |
| Total equity | US$700 million |
| Equity Breakdown | • Cintra Concesiones de Infraestructuras de Transporte - 52 per cent - US$364 million<br>• Meridiam Infrastructure Finance - 38 per cent - US$266 million<br>• Dallas Police and Fire Pension System - 10 per cent - US$70 million |
| Total senior debt | US$614.65 million |
| Senior debt breakdown | Private activity bonds (PABs):<br>• US$90.50 million, 22 years<br>• US$50.70 million, 23 years<br>• US$54.50 million, 24 years<br>• US$418.96 million, 30 years<br>Underwritten by Merrill Lynch and JP Morgan |
| Pricing | Coupon of 7 per cent at maturity in 2040, priced to yield 7.25 per cent for investors. The credit spread on 2040 bonds was 317bps over the tax-exempt Municipal Market Data (MMD) benchmark |
| Rating | • "Baa3" Moody's<br>• "BBB-" Fitch |
| DSCR | 2.5x average |
| Bond underwriters | • Merrill Lynch<br>• JP Morgan |
| Debt:equity ratio | 47:53 |
| Government support | US$1.346 billion<br>• US$850 million TIFIA loan<br>• US$496 million govt loan |
| Legal adviser to sponsor | White & Case |
| Legal adviser to sponsor | Bracewell & Giuliani |

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|---|---|
| Financial adviser to sponsor | Macquarie |
| Technical adviser to sponsor | Bridgefarmer & Associates |
| Legal adviser to lender | Latham & Watkins |
| Traffic adviser to lender | Hatch Mott MacDonald |
| Legal adviser to government | Nossaman |
| Legal adviser to government | McCall Parkhurst & Norton |
| Financial adviser to government | KPMG |
| Financial adviser to government | Goldman Sachs |
| Technical adviser to government | LBJ Mobility Coordinator |
| Technical adviser to government | Hatch Mott MacDonald |
| Legal adviser to TIFIA | Nixon Peabody |
| Financial adviser to TIFIA/USDOT | Montague DeRose and Associates |
| Financial adviser to TIFIA/USDOT | High Street Consulting Group |
| Date of financial close | 22 June 2010 |