STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

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GOVERNOR

ANTHONY J. TATA
SECRETARY

April 25, 2014

TO: Senator Phil Berger
NC Senate
16 W. Jones St., Room 2008
Raleigh, North Carolina 27601-2808

Representative Tom Tillis
NC House of Representatives
16 W. Jones St., Room 2304
Raleigh, North Carolina 27601-1096

FROM: David Tyeryar
Chief Financial Officer

Rodger Rochelle
NCDOT Technical Services Administrator

In accordance with NCGS 136-89.183(a)(2), the Department of Transportation respectfully submits the attached report to the Joint Legislative Commission on Governmental Operations regarding the I-77 Managed Lanes Public Private Partnership in Mecklenburg and Iredell Counties.

Please feel free to contact David Tyeryar at 919-707-4320 or Rodger Rochelle at (919) 707-2901 with any questions.

Attachment

cc: Anthony Tata, Secretary of Transportation
Nick Tennyson, Chief Deputy Secretary
Keith Weatherly, Deputy Secretary for Legislative Affairs and Policy (w)
Jason Soper, Legislative Director (w)
Amna Cameron, Fiscal Research (w)
Clayton Somers, Executive Director, North Carolina Turnpike Authority (w)

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I-77 HOT Lanes Project
Report to the North Carolina Joint Legislative Commission on Governmental Operations
April 25, 2014

This report is in accordance with N.C.G.S. Section 136-89.183(a)(2).

Project description

In 2009, the North Carolina Department of Transportation (NCDOT), in cooperation with the Mecklenburg-Union Metropolitan Planning Organization (MUMPO), conducted a Fast Lanes Study that analyzed 12 corridors in a 10 county region. The Charlotte City council identified the I-77 corridor in Charlotte-Mecklenburg as a candidate for High Occupancy Toll (HOT) lanes, also known as managed lanes.

The I-77 corridor is critical to the region as it serves as the major North-South connection and is the only interstate connection between Charlotte and Statesville and points north. The I-77 HOT Lanes Project (Project) is critical for providing immediate travel time relief, long term travel time reliability, long-term mobility and long-term economic growth in the region. Between 2000 and 2010, Mecklenburg and Iredell Counties have grown at a rate approximately 50% above the rate of growth statewide and the rate of growth in the northern towns along this corridor have grown at a rate of roughly 60% higher than the rate of growth for Mecklenburg County. This growth has rendered the I-77 corridor one of the most congested corridors in the state, with travel time delays ranging upwards to 45 minutes. The Project scope outlined below provides a comprehensive congestion management solution for approximately 26 miles of the I-77 corridor through the use of HOV3+ policy and managed lanes and supports future expansion of transit. The Project implements managed lanes through a public-private partnership (P3). See Appendix 1 for a map of the Project corridor.

Section	HOT Lanes Per Direction	Section Limits
South	2	2.5 miles on I-77 from Exit 11 to Exit 13 and 1.25 miles on I-277 with direct managed lanes connector to I-277
Central	2	15 miles from Exit 13 (I-77/I-85 interchange) to Exit 28 (Catawba Avenue)
North	1	8 miles from Exit 28 to Exit 36 (NC 150)

Managed lanes give drivers a choice to pay a toll to avoid waiting in traffic, while helping ease congestion on the free lanes for other drivers. The proposed I-77 project includes converting the existing High Occupancy Vehicle (HOV) lanes and adding capacity to the roadway. The existing HOV lanes and new lanes will be High Occupancy managed lanes that allow free use for eligible carpoolers (three passengers or greater known as HOV3+), buses, and motorcyclists, while allowing other drivers to pay a toll to use those lanes. Tolls will vary to control the number of vehicles in the managed lanes and help ensure free-flowing traffic (within 10 mph of the posted speed limit) even during morning and evening rush hours. The price will be higher during peak periods when demand is greater, and lower during less congested periods. Drivers will always have the choice to use free lanes to avoid paying a toll. This project will not remove any existing general purpose lanes.

The Developer will utilize all-electronic tolling technology that is interoperable with NC Quick Pass, SunPass and E-ZPass. HOV3+ vehicles, Charlotte Area Transit System (CATS) buses, motorcycles and emergency vehicles are exempt from paying tolls, while commercial trucks are prohibited from using the managed lanes. A number of other states including Virginia, Florida, Texas, Colorado and California are already using managed lanes.

Tolling Roles and Duration

The Developer is responsible for the design, construction, financing, operations and maintenance of the Project. The construction period is estimated at 3.5 years to conclude in 2018, and the operations period will be 50 years to conclude in 2068. In February 2014, NCDOT signed a memorandum of understanding with the Federal Highway Administration (FHWA) approving the use of tolling for the Project.

During the 50-year operations period, the Developer will collect tolls using dynamic tolling and bear substantial revenue risk. Pursuant to N.C.G.S. 136-18(39a)(f)(3), the Developer will conduct a public hearing to address toll rates and toll setting methodology. The North Carolina Turnpike Authority (NCTA) will be responsible for toll collection, account maintenance and customer service. In exchange, NCTA will deduct specified transaction costs from each transaction prior to forwarding the revenue on to the Developer.

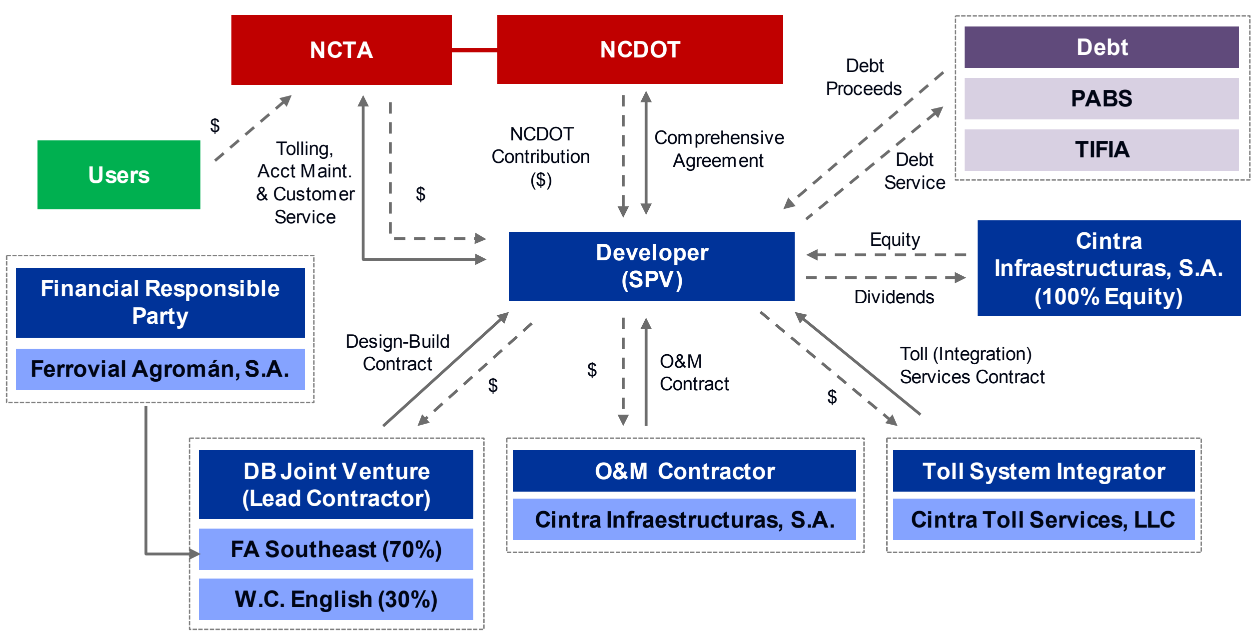
Developer (Private Partner)

The Apparent Best Value Proposer is Cintra Infraestructuras, S.A. (Cintra). Please see below for a summary of Cintra's team followed by the proposed organizational structure. See Appendix 2 for more details on financial capacity of the project team. It is important to note that numerous local and regional subcontractors, professional engineering firms, material suppliers and Disadvantaged Business Enterprise firms will be utilized in the design, construction, and maintenance of the facility.

Cintra is an internationally-recognized toll road concessionaire and operator with long-standing concessions and projects. All Cintra-managed P3 projects in the United States are toll road concessions and are a mix of existing toll roads and new construction (e.g. North Tarrant Expressway, LBJ Express, SH 130). In the U.S., Cintra has committed $1.8 billion of equity and manages $12 billion of direct private investment in infrastructure projects.

Cintra's international experience includes the the Scut-Algarve (Portugal), M-45 (Spain) and M4-M6 (Ireland) projects, which were delivered 3, 4 and 10 months ahead of schedule. In addition to numerous submission requirements (technical and financial qualifications, personnel resumes, safety records, etc.), numerous reference checks on the Company, key personnel and management staff were conducted. These reference checks were performed focusing on client satisfaction, experience, professionalism and the ability to deliver the project on schedule and budget over at least a five year period. There were no unfavorable statements made regarding Cintra, the team, or their personnel during the course of these reference checks.

Entity	Role	Location
Ferrovial Agromán	Financial Responsible Party of FA Southeast	US Headquarters: Austin, Texas
Cintra Infraestructuras, S.A.	100% Equity Member of the Developer and O&M Contractor	US Headquarters: Austin, Texas
FA Southeast, LLC	70% Equity Member of Design-Build Joint Venture	Austin, Texas
W.C. English	30% Equity Member of Design-Build Joint Venture	Lynchburg, Virginia
Cintra Toll Services, LLC	Toll System Integrator	Austin, Texas
The Louis Berger Group	Lead Design Firm	Morristown, New Jersey



Procurement Process

Four potential bidders were shortlisted and participated in more than 70 one-on-one meetings with NCDOT. These meetings led to more than 10 drafts of the final contract documents, which laid out the instructions for bidding, design, construction, and maintenance performance requirements, and the overarching agreement. These documents reflect the minimum contract requirements and public protections that NCDOT requires. In addition, NCDOT stated that the maximum contribution from state and federal funding would be capped at $170 million.

Each of the four bidders conducted exhaustive analyses to determine if they could meet these contract requirements, while ensuring that the long term contract would generate enough revenue to offset their initial investment. Bidders to varying degrees requested additional state and federal funding beyond the $170 million and/or requested relaxation of contract requirements. NCDOT continued its rigorous analysis of the project and determined that the $170 million public contribution was a reasonable cap and that the public protections contained in the contract were prudent and would not be compromised.

By the proposal submission deadline of March 31, 2014, NCDOT received one proposal (from Cintra). From April 1 through April 10, NCDOT and its advisors evaluated the proposal against rigorous financial and technical criteria as stipulated in the Request for Proposals (RFP). Upon satisfying the more than 300 pass/fail and responsiveness criteria, Cintra was announced as the Apparent Best Value Proposer on April 11, 2014.

Evaluation of the financial proposal's pass/fail and responsiveness was based on 175 criteria, including:

- Financial capacity information (e.g. profitability, capital structure, ability to service existing debt, ability to invest other commitment and contingencies and material changes from the Statement of Qualifications (SOQ) evaluation, if applicable)
- Financial Plan sufficiency (e.g. Public Funds Amount and Developer Ratio Adjustment Mechanism (DRAM) affordability, execution of the Comprehensive Agreement, achievement of financial close, approval of lead underwriter and bond counsel)
- Indicative investment grade credit ratings from two rating agencies
- TIFIA facilities in accordance with the TIFIA term sheet
- Required commitment and/or support letter
- Assurance that private equity will be in place
- Compliance with federal toll regulation
- Letters of support from a qualified surety or bank/ financial institution
- Delivery and compliance of proposal security

Evaluation of the technical proposal's pass/fail and responsiveness was based on 129 criteria, including:

- Commitment to meeting goals for Disadvantaged Business Enterprise firms utilization
- Required administrative information, certifications, signed statements and documents

- General project management approach, design-build technical solutions, and operations and maintenance technical solutions
- Letter indicating acceptance of joint and several liability for Developer's obligations under the Comprehensive Agreement (CA) Documents (if applicable)
- Executed contracts or term sheets outlining the key commercial terms between the Proposer and 1) Design-Build Contractor; 2) Lead Operations and Maintenance (O&M) Contractor (as applicable)
- Statement that the Major Participants, including Equity Members, and key personnel listed in the Proposer's SOQ have not changed since the Proposer's submission of the SOQ, or a copy of NCDOT's written consent of any change
- NCDOT's approval of the Pre-Proposal Submittals (e.g. alternative technical concepts, preliminary tolling plan, pavement designs, etc.)
- Conflict of Interest Disclosure Statement
- Certificates of insurance policies or written capability evidence from an insurance company(ies), broker(s) or agent(s) in accordance with the CA Documents

Project Finance

A plan of finance demonstrates how the Developer plans to fund construction period costs as well as operating costs, major maintenance, working capital, debt service, and investor returns. Cintra is contributing 86% of project capital ($315 million of private debt and $234 million of private equity), while NCDOT is contributing $88 million of public funds (14%). Cintra's price to design, construct and acquire right of way is $504 million, compared to NCDOT's estimate of $534 million.

The sources and uses of this total $655.1 Million investment are outlined below.

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

Highlights of Cintra's financial plan include the following:

- Cintra Infraestructuras, S.A. is committing 100% of the equity, backed by a letter of credit (LC) until funded in cash
- Excluding the Public Funds Amount (PFA), total leverage is 57%/43% (Debt/Equity) and represents a conservative structure in the P3 market. Ratio of total debt to total investment is 48%
- Weighted average cost of capital (WACC) at substantial completion is 7.4%
- Initial funding of reserves includes a $10 million Debt Service Reserve and a $15 million Major Maintenance Reserve
- NCDOT will be the conduit issuer for Private Activity Bonds (PABs) per USDOT guidelines, but not the debt obligor
- Bank of America Merrill Lynch and Citigroup will be lead underwriters for the PABs
- PABs and TIFIA received indicative ratings of BBB-/BBB (Fitch/DBRS)
- PABs average life is 22 years and duration is 13 years, assuming no refinancing
- PABs interest is paid in cash, while TIFIA interest is capitalized during construction
- No revenue is forecasted prior to substantial completion (June 30, 2018)
- Cintra has assumed refinancing (at its own risk) in the base case financial model

The requested PFA of $88.2 million is below the anticipated maximum amount of $170 million set by NCDOT. The PFA is subject to adjustment (up or down) at financial close to reflect the outcome of certain shared risks. (See section VIII).

In addition, NCDOT will pay Cintra a fixed fee of $1 million per year (escalated for inflation) during the operations period to provide maintenance services within the corridor including the general purpose lanes adjacent to the new managed lanes. This is commensurate with current practice of the outsourced maintenance contract along this corridor, rather than a new expense.

A letter of interest (LOI) for the Project has been submitted to TIFIA and an indicative term sheet negotiated. The Project and proposed financial structure have received a favorable response to this point. Now that the Apparent Best Value Proposer has been determined, the Developer has been invited to make an oral presentation to TIFIA, scheduled for May 2014, at which time the Developer will further finalize the loan process.

To support the deliverability of the finance plan, Cintra hired C&M Associates, an independent transportation consulting firm, to serve as the its Traffic and Revenue Advisor and to develop traffic and revenue forecasts of the managed lanes for the 50-year term of the concession. C&M developed its network model for the corridor using the Metrolina Regional Model (MRM) developed by the Mecklenburg-Union Metropolitan Planning Organization (MPO). C&M additionally used the MRM population and employment forecasts as the primary source for estimating traffic growth in the I-77 corridor. The model was calibrated using traffic counts, travel time data, and Bluetooth origin-destination data collected by Cintra and NCDOT.

Fitch, a prominent credit rating agency, reviewed the investment-grade C&M study and performed additional proprietary analysis to support an indicative investment grade credit rating of BBB-, which is consistent with transactions of this nature in the P3 industry.

DBRS, a nationally recognized rating agency eligible for TIFIA, also reviewed the investment-grade C&M study and projections and assigned an indicative investment grade credit rating BBB/BBB low for PABs and TIFIA, respectively, further supporting the project's capacity to repay its debt.

Project Risk Allocation

A tenet of effective P3 delivery is that risks should be borne by the party best able to manage them. Accordingly, some risks are fully transferred to Cintra, some are shared between NCDOT and Cintra, and some are retained by NCDOT.

For the Project, major technical risks that will be borne by the Cintra include the following: schedule, permitting, design and construction, toll system integration and performance, operations and maintenance (O&M) performance of the managed lanes, routine O&M work on the general purpose (GP) lanes, and traffic and revenue risks. While Cintra is responsible for routine O&M on the GP lanes, NCDOT retains responsibility for major capital rehabiliation work on the GP lanes, rendering pavement performance on the GP lanes a shared responsibility. NCDOT also retains responsibility for performing winter maintenance.

Terms of financing and responsibility to deliver committed financing rest largely with Cintra. However, prior to financial close, the following risks (and benefits) will be shared: base interest rate movements (PABs and TIFIA), credit spread movements (PABs), certain quantitative TIFIA terms, and escalation in the design-build price if financial close is delayed beyond a certain point. After financial close, NCDOT is eligible to receive revenue sharing payments from Cintra if toll revenues exceed predetermined levels and to benefit from certain refinancing gains.

Reference Appendix 3 for more details on risk allocation.

To satisfy the credit rating agencies (and in lieu of contributing additional public funds upfront), NCDOT has agreed to provide contingent funding called the Developer Ratio Adjustment Mechanism (DRAM), which may be paid to Cintra to cover shortfalls in operating costs and/or debt service if toll revenues are insufficient in a given period. Contingent DRAM funding is capped at $75 million in aggregate and at $12 million in any given year and is not projected to be needed in Cintra's base case financial model.

As a condition to commercial close, Cintra is required to post a letter of credit in the amount of $15 million to secure its obligation to achieve financial close within 210 days from commercial close (subject to extension under certain circumstances). Prior to commencing construction work, Cintra must post performance security in the amount of 50% of the design-build contract price and a payment bond in the amount of 100% of the value of the design-build contract price.

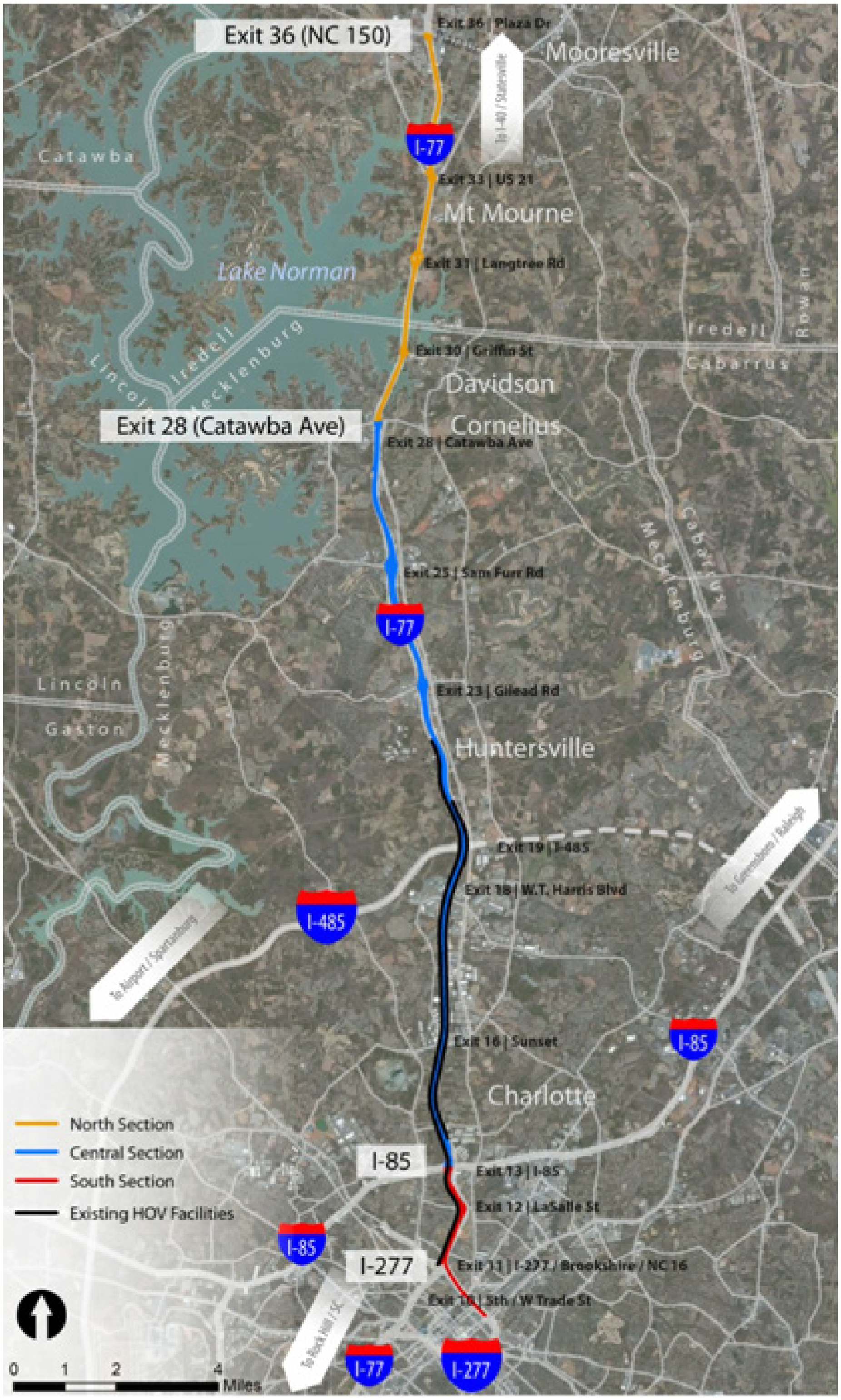
In the unlikely case of an incurable Developer default, and if the lenders to the project are unable to bring in a replacement developer, NCDOT would be responsible for termination compensation in the amount of the lesser of (a) 80% of senior debt or (b) fair market value less NCDOT's damages from the default, which damages could be significant (e.g., additional costs to maintain and operate the project for the remainder of the contract term). The fair market value of the asset in this instance is likely to be lower than the base case value and such compensation regime is commensurate with other P3 transactions. Cintra's equity would likely be fully forfeited in this case.

Next steps

Binding agreements will be accomplished in two phases: commercial close, then financial close. There are a number of interim steps along the way, summarized by the following target milestones:

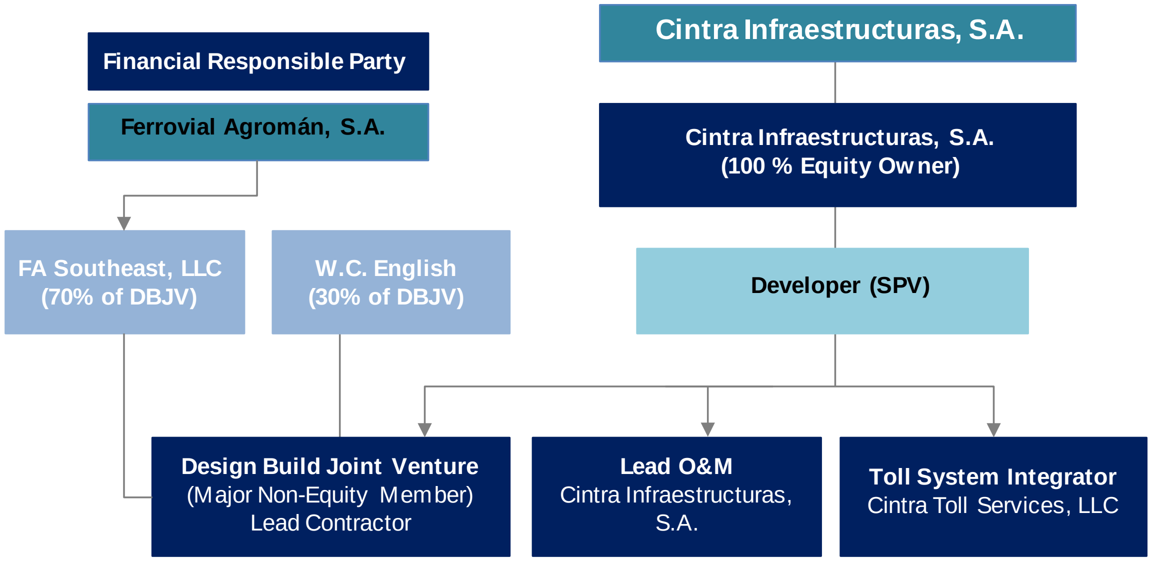
April 25, 2014	Submit report to Joint Legislative Transportation Oversight Committee
April 25, 2014	Submit report to Joint Legislative Commission on Governmental Operations
May 1, 2014	Kick-off meeting with Local Government Commission
May 15, 2014	First meeting with Cintra to finalize commercial close contracts
June 3, 2014	Second meeting with Cintra to finalize commercial close contracts
June 25, 2014	**Anticipated commercial close**
Summer 2014	Negotiation with TIFIA, finalization of credit ratings and consultants' reports, preparation for PABs issuance
Q4 2014	**Anticipated financial close**

APPENDIX 1 TO I-77 JLCGO REPORT – Project Map



APPENDIX 2 TO I-77 JLCGO REPORT – Overview of Bid Team and Financial Capacity

Overview of Bid Team:



Equity Owners: Cintra Infraestructuras, S.A.

Financial Responsible Party: Ferrovial Agromán, S.A. (for FA Southeast)

Design Build Joint Venture: FA Southeast, LLC (backed by Ferrovial Agromán) and W.C. English Incorporated

<u>Cintra Infraestructuras, S.A. (Cintra)</u>
Cintra is a corporation formed in Spain, headquartered in Madrid, with a subsidiary branch office in Austin, Texas. The company will be the principal equity investor and party with the controlling interest in the consortium. Cintra will have 100% equity ownership of the project and primary responsibility for development, operations and maintenance, and ROW acquisition.

Financial capacity highlights include:

- For FY 2013, revenue growth was up 32% over FY 2012, while EBITDA margins remained stable at approximately 23%.
- FY 2013's strong performance was reflected through the higher than industry average ROE of 2.9% vs (3.8%), respectively.
- No credit ratings for Cintra exist. In May 2013, S&P raised the corporate credit rating of Cintra's parent company Ferrovial S.A. from a "BBB-" to a "BBB", outlook stable.
- The net profit for FY 2012 and FY 2013 were not comparable with FY 2011, due mainly to the impact of divestments which took place in 2011.

- As of December 13, 2013, the planned financial commitments for Cintra for the next five years are approximately $379.0m (Currency conversion rate used is 1.38 as published by the European Central Bank as at 12/31/2013).
- November 2012: Cintra has been ranked world's number one transportation developer by invested capital, according to the magazine Public Works Financing (PWF). This ranking can be viewed in Public Works Financing number 275 from October 2012.

<u>Ferrovial Agromán, S.A. (Ferrovial Agromán)</u>

Ferrovial Agromán, founded in 1927, is a Spanish corporation headquartered in Madrid with its U.S. operations headquartered in Austin, Texas. The company will be the financial responsible party for FA Southeast, LLC in this project. Ferrovial Agromán is the parent company of FA Southeast, LLC. Both Cintra and Ferrovial Agromán are owned by Ferrovial S.A., a design, construction, financing, operation and maintenance firm which develops large-scale infrastructure projects.

Financial capacity highlights include:

- Ferrovial Agromán's operating margin grew consistently to 8.6% for FY 2013, from 5.9% in FY 2011. Operating margin for FY 2013 was higher than industry averages.
- Return on equity has remained consistently higher than industry average from FY 2011 to FY 2013.
- As of December 31, 2012, Ferrovial Agromán and its Dependent Companies had furnished bank guarantees totaling $3.8b ($4.2b in 2011). These were mainly required for construction contract performance security.
- Ferrovial Agromán for FY 2011-2013 has a significant amount of cash on hand which makes up a large portion of total current assets; the net cash position is comprised of mainly cash and bank balances and current accounts with related parties.

<u>FA Southeast, LLC (FA Southeast)</u>

FA Southeast was legally formed in 2010 (starting its operations in 2013) to provide civil engineering and construction management services in the design and construction of toll roads in the eastern U.S. The company is wholly owned by Ferrovial Agromán. FA Southeast has a 70% equity stake in the Project Design Build Joint Venture.

Financial capacity highlights include:

- FA Southeast's operations began in 2013.
- FA Southeast for FY 2013 has a significant amount of cash on hand which makes up a large portion of total current assets.
- Current ratio and quick ratio are in line with industry averages at around 1.0x for 2013. FA Southeast's operating margin was below industry average at 3.9% versus 5.8%.

W.C. English, Incorporated (English)

English, based in Lynchburg, Virginia, was incorporated in 1954 and provides construction services on a contract basis. English has a 30% equity stake in the Project Design Build Joint Venture.

Financial capacity highlights include:

- Financial statements were provided for FY 2010 - 2012, but were not available for FY 2013.
- Total revenues showed a 20.4% increase in FY 2012, whereas industry average revenue growth was only 9.4%.
- Total debt outstanding is minimal.
- EBITDA decreased from FY 2011 to FY 2012, but was higher than FY 2010. This was mainly due to increases in operating expenses over the same period.
- In 2012, various customers claimed liquidated damage liabilities of $1.76 million against the company due to time overruns related to two contracts (FY 2011 recorded claimed liquidated damage liabilities of $3.1 million related to six contracts). No further liability has been recorded nor have the related contract receivables been reduced since management believes that the probability of any loss in excess of the allowance for doubtful accounts is remote.

APPENDIX 3 TO I-77 JLCGO REPORT – Summary of Risk Sharing

Financial Risk/Benefit Sharing (Pre-Financial Close)

Risk	Sharing	Notes
Base Rate Movements	100% NCDOT risk and benefit (up to 125bps)	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) during the Interest Rate Protection Period.
Credit Spread Movements	100% NCDOT risk and benefit	NCDOT will bear 100% of the risk and have 100% of the benefit of Credit Spread Fluctuation, if any, (either positive or negative) during the Credit Spread Protection Period.
Quantitative Changes to TIFIA Term Sheet Assumptions	100% NCDOT risk 50% NCDOT benefit	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). See definition and separate table below.
Design-Build Price after 210 days from Financial Proposal Date	100% NCDOT risk	Starting 210 days after the Financial Proposal Due Date, until Financial Close, 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).
120-day Developer Extension of Project Financing Deadline	100% Developer risk 50% NCDOT benefit	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.

Financial Benefit Sharing (Post-Financial Close)

Risk	Sharing	Notes
Toll Revenue Sharing	Tiered Bands (NCDOT receives 0%/12.5%/25% /50%/75%)	Developer shall make Revenue Payments to NCDOT to the extent cumulative Toll Revenues exceed pre-determined floors, calculated as an escalating percentage of Toll Revenues above tiered bands.
Refinancing Gain	50% NCDOT benefit	Except for an Exempt Refinancing, Developer shall pay to NCDOT an amount equal to 50% of the Refinancing Gain according to the proscribed formula, which is based on change in NPV of projected Distributions.

Technical Risk Sharing

Risk	Notes
Right of Way (ROW)	The Developer will be responsible for the costs of acquiring ROW up to a pre-determined cap. NCDOT will be responsible for eligible right of way costs beyond the cap. NCDOT must approve the additional ROW prior to its acquisition.
Hazardous Materials	Risk of hazardous materials may lead to schedule delays and/or cost increase. This risk is deemed by the Developer as unlikely to occur. NCDOT is responsible for certain costs incurred by the Developer for handling pre-existing hazardous materials and NCDOT releases of hazardous materials. Further, NCDOT is responsible for handling hazardous materials released by third parties. The Developer is responsible for all other hazardous materials.
O&M and Major Maintenance Activities	Developer is responsible for O&M of both the GP Lanes and HOT Lanes except for winter maintenance, which is a retained risk of NCDOT. In addition, NCDOT will perform inspections each year of pavement condition and at a minimum every two years for bridges. If inspections determine additional O&M work is required, the Developer is responsible. NCDOT is also responsible for certain pavement renewal activities as specified in the CA Documents.
Traffic Operations	The Proposal includes ingress-egress areas with a 2000 foot minimum weave between the HOT and GP Lanes. Prior to the final design submittal, the Developer must perform traffic analysis and simulation as called for in the CA Documents. If this analysis indicates a design change is required, this change is at Developer's risk. Similarly, if in the future, operations would degrade at the ingress-egress areas to less than acceptable standards as defined in the CA Documents, the Developer can be required to fix the ingress-egress area to an improved design at the Developer's risk.
Incident Management	Incident management are shared responsibilities between NCDOT and Developer with close coordination with law enforcement.
Closure of the Existing HOV Lane for Construction	The Developer may close the existing HOV lane during construction work in that lane. For any other closure of the HOV lane, stakeholder concurrence (such as MPO technical staff and Charlotte Transit) are required. The Developer is responsible for implementing any required mitigation measures.
Permit Risk	The Developer is responsible for any NEPA required process for their proposed design and is responsible for compliance with North Carolina permitting processes. NCDOT will support the Developer in obtaining certain permits.

Other Risk Sharing

Risk	Notes
Change in Law	The risk of change in laws is also deemed by the Developer as unlikely to occur. Nevertheless, as specified in the CA Documents, general changes in law will be borne by Developer while discriminatory changes in law are borne by NCDOT.

Risk Matrix

Design and Construction Risks	Developer	NCDOT
Compliance with environmental requirements	✓	
Design/construction/O&M integration and design review	✓	
Engineering solutions and design costs	✓	
Schedule management	✓	
Construction and construction management	✓	
Operations and Maintenance and Life Cycle Analysis	✓	
Intelligent Transportation System Design, Construction, and Renewal	✓	
Intelligent Transportation System Integration	✓	
Change in material prices / escalation risk / insurance premium costs	✓	
Deviation in quantities	✓	
Obtain NEPA Documents		✓
Completion of major environmental permits applications	✓	
Obtain and Comply with environmental permits	✓	
Unknown geotechnical risk	✓	
Pre-existing hazardous materials		✓
Project equipment hazardous spill	✓	
Right of Way	✓	✓
Utility relocation	✓	
Justified delay by utility owners or railroads	✓	
Unjustified delay by utility owners or railroads	✓	✓
Public and worker safety	✓	
Operations & Maintenance Risks	**Developer**	**NCDOT**
O&M fixed costs and performance for 50 years	✓	
Major maintenance fixed costs and performance for 50 years	✓	
Changes in law and technology enhancements	✓	✓
Assignment of resources	✓	
Risk of defective performance	✓	
Hand-back risk	✓	
Unplanned revenue impact facilities	✓	✓
Interface with Turnpike Authority toll operations services	✓	✓
Lost revenue due to temporary suspension of tolling on I-77 (discriminatory)		✓
Lost revenue due to temporary suspension of statewide tolling	✓	
Force Majeure	✓	✓