State of North Carolina

Office of The State Auditor

Beth A. Wood, CPA

Department of Transportation

I-77 HOT Lanes P3 Project – Termination for Convenience Calculation

Raleigh, North Carolina

Legislative Request for Auditor Assistance

January 2016

NCOSA

The Taxpayers' Watchdog

STATE OF NORTH CAROLINA
Office of the State Auditor

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AUDITOR'S TRANSMITTAL

January 6, 2016

Requesting Members of the North Carolina General Assembly
Fiscal Research Division Staff

Ladies and Gentlemen:

The General Assembly requested the Office of the State Auditor review the contract the State has between the NC Department of Transportation (NCDOT) and I-77 Mobility Partners, LLC (Cintra) for the Public Private Partnership for I-77 Hot Lanes project and to determine the costs to the state for termination of the contract. This report represents the results of this assessment and was delivered to Fiscal Research on December 17, 2015.

Pursuant to N.C.G.S. § 147-64.7(b)(1) the State Auditor contracted with a subject matter expert to accomplish this assessment. The Auditor chose Clary Consulting, LLC of Tallahassee, FL. The consultant was selected based on their qualifications, experience, credentials, and reputation. Clary Consulting, LLC has a well-established history in the development and delivery of complex transportation projects. They specialize in infrastructure finance for federal agencies, state governments, local municipalities and private entities. They have extensive experience in a variety of financial solutions including public/private partnerships and design/build finance. Clary Consulting was assisted by the law firm of Bryant Miller Olive (BMO) for legal review and interpretation of the contract. BMO has extensive experience in infrastructure procurement, contracting, project finance and P3 projects.

The results of this assessment are those of the subject matter expert. In addition, this assessment was undertaken pursuant to N.C.G.S. 147-64.5(b) as a request from the Legislature for Auditor assistance and was conducted by a subject matter expert with oversight by the General Counsel to the Office of the State Auditor. As such this engagement is not an audit, examination, or a review as described in professional standards governing those types of services.

We wish to express our appreciation to the staff of the NC Department of Transportation and of Cintra for the courtesy, cooperation, and assistance provided us and our contractor during this assessment.

If you have any questions regarding this report please contact my General Counsel, Tim Hoegemeyer at tim_hoegemeyer@ncauditor.net or 919-807-7670.

Respectfully submitted,

Beth Wood, CPA
State Auditor

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Executive Summary

Clary Consulting was contracted by the State Auditor to calculate the costs to the North Carolina Department of Transportation (NCDOT) for a termination for convenience of the I-77 HOT Lanes P3 Project (P3 Project). A termination for convenience is exactly what it sounds like in that it represents a situation where the “public owner”, DOT, decides to terminate the P3 Project Comprehensive Agreement. Specific options related to this action are defined within the Comprehensive Agreement and defined the approach to this calculation.

In accordance with the Scope of Services (detailed below), Clary Consulting reviewed background materials, such as the Comprehensive Agreement, financial documents supplied by both NCDOT and the Developer and project status reports. Clary also met with key officials at the Office of State Auditor, NCDOT and the Developer. After meeting with the appropriate officials and reviewing the supplied materials, Clary developed a Termination for Convenience Costs Calculation Model in accordance with the specific terms and conditions as set forth in the executed version of Exhibit 15 of the Comprehensive Agreement.

The findings of the Termination for Convenience Costs Calculation Model show a high and a low range of potential compensation amounts based on the steps outlined in Exhibit 15 of the Comprehensive Agreement. Under an actual Termination for Convenience, the greater of the two compensation amounts would be the amount paid to the Developer assuming there was a determination that a Fair Market Value had been established. For this analysis the assumption is the fair market value is based on the final financial model provided at closing by the developer. We calculated both amounts to give a complete picture of the potential results with Fair Market Value being the upper range at $300.2 million and the Senior Debt Termination the lower range at $82.1 million. Based on previous experience it is logical there would be room for negotiations depending on the stage of the P3 Project at which the Termination for Convenience occurred and the potential for litigation if this option was implemented. Our scope did not include an effort to estimate either a settlement amount or potential cost for litigation as part of this analysis.

The Termination for Convenience calculation date was as of October 31, 2015 and all materials were provided as of October 31, 2015. All other assumptions are consistent with best practice standards or are reflective of Clary Consulting’s expertise in the United States P3 market.

Chapter 1 – Project Background – North Carolina Department of Transportation I-77 HOT Lanes P3 Project

1.1 – I-77 HOT Lanes P3 Project Summary Description

The I-77 HOT Lanes project will add 26 miles of variably priced managed lanes along I-77 and I-277 in Charlotte, North Carolina north through Mecklenburg and Iredell Counties. The project will provide two 17.5-mile HOT lanes in both directions from I-277 (Brookshire Freeway) near Charlotte Center City to Catawba Avenue in Cornelius and one HOT lane per direction for an additional eight miles to NC 150 in Mooresville. At the southern end of the corridor, direct connector ramps will extend the lanes an additional 1.3 miles along I-277.

The project will convert the existing HOV lanes between I-277 to north of I-485 in Huntersville (southbound) and between I-85 and I-485 (northbound) to High Occupancy Toll (HOT) operation. Second HOT lanes will be constructed on new right-of-way in both directions on this segment. The HOT lanes north of I-485 will also be built on new capacity. The project will include up to 12 points of access and egress and will utilize all-electronic tolling. The occupancy requirement for free travel on the HOT lanes will be HOV3+. Motorcycles, buses, and emergency vehicles will also be able to use the HOT lanes at no cost.[1]

Initial work on the Project started in 2015 with project construction completion expected in 2018 at a total cost of $647 million.[2]

1.2 – I-77 HOT Lanes P3 Project Comprehensive Agreement

The Comprehensive Agreement executed on June 26, 2014, between NCDOT and I-77 Mobility Partners, LLC (the "Developer") is the binding legal document for both parties with respect to any part of the Project. The Agreement outlines all of the critical elements of the project including, but not limited to, legal definitions, concession term, tolling terms, financing elements, development of the project, operations and maintenance, oversight, compensation, termination, Federal requirements and all Exhibits.

Financial Close on the project occurred on May 20, 2015, and included the following major financial elements for the project:

[1] https://www.fhwa.dot.gov/ipd/project_profiles/nc_i77_hot_lanes.aspx
[2] http://www.ncdot.gov/projects/i-77expresslanes/

Sources	$M
Series 2015 Bond Net Proceeds	100.00
PABs Premium	3.58
TIFIA Loan	189.00
TIFIA Interest capitalized	12.62
Public Funds Amount	95.73
Equity	247.96
TOTAL SOURCES OF FUNDS	**648.40**

Uses	$M
Design Build Contract Price	444.18
Right of Way	5.94
Tolling and ITS	51.20
Overhead + Advisors	52.21
PABs Interest	15.56
TIFIA Interest capitalized	12.62
Bond Interest Account	2.08
Reserve Accounts	25.00
Equity LoC and Debt Fees	16.75
Transaction Costs	22.87
TOTAL USES OF FUNDS	**648.40**

Exhibit 15 of the Agreement outlines the procedures for our analysis as well as all other termination events and the accompanying compensation terms.

1.3 – Scope of Services for Clary Consulting

The scope of services is to calculate the estimated cost to the State of North Carolina for a Termination for Convenience to the I-77 HOT Lanes P3 Project Comprehensive Agreement and to develop and deliver a white paper detailing the costs to terminate.

Clary Consulting, LLC has a well-established history and reputation in the development and delivery of complex transportation projects and in interacting with government agencies such as local governments and various Departments of Transportation. The firm brings a unique mix of skill sets and experience to bear that can provide the client with options designed to expedite and deliver the goals of the client.

Clary Consulting is being assisted by the law firm of Bryant Miller Olive (BMO) for legal review and interpretation. BMO is a well-established law firm with extensive experience in infrastructure procurement, contracting, project finance and P3 projects.

Chapter 2 – Termination Compensation Calculation as Defined in Exhibit 15

2.1 – Compensation Calculation

The procedures and calculation in the event of a Termination for Convenience by NCDOT are defined in Exhibit 15 Section B of the Comprehensive Agreement. The pertinent parts of Section B are described below:

> B. Compensation on Termination for Convenience, for NCDOT Default, for NCDOT Suspension of Work or for Delayed Notices to Proceed
>
> 1. Termination Compensation Prior to Financial Close and After Financial Close.
>
> (a) In the event of termination of the Agreement under Section 19.1 (Termination for Convenience) or Section 19.4 (Termination for NCDOT Default, Suspension of Work or Delayed Notice to Proceed) prior to Financial Close, the Termination Compensation shall be as set forth in Section H.
>
> (b) In the event of termination of the Agreement under Section 19.1 (Termination for Convenience) or Section 19.4 (Termination for NCDOT Default, Suspension of Work or Delayed Notice to Proceed) of the Agreement after Financial Close, the Termination Compensation shall equal the amounts determined as set forth in Sections B.3 below, and shall be payable by NCDOT as and when set forth in Section G.1 (a) or G.3 (a), as applicable, below.[3]

For this analysis, the assumption is Termination for Convenience effective October 31, 2015, under Section 19.1 that directs to Section B.3 of Exhibit 15 of the Comprehensive Agreement. Section B.3 refers to the specific formula for a "post Financial Close" Termination for Convenience consisting of 11 steps that culminate in the Termination Compensation Amount. Table 1.1 in Exhibit 1 at the end of the white paper outlines the 11 steps, which are discussed in greater detail in Chapter 3.

[3] Executed Comprehensive Agreement between NCDOT and I-77 Mobility Partners, LLC

Chapter 3 –Interpretation and Application of Exhibit 15 and Basic Model Assumptions

To determine the appropriate compensation amount, Section B.3.a requires the calculation of two primary calculation factors:

- Fair Market Value of the Developer's Interest, and
- Senior Debt Termination Amount

3.1 – Fair Market Value

Fair Market Value is exactly what it sounds like in that it represents the value of the asset, being the rights and interests available to and obligations of the private partner under the Comprehensive Agreement, as defined if these rights and obligations were to be marketed for sale to a third party or evaluated as an asset of the private partner. The Comprehensive Agreement defines specific parameters for defining this value as well as what specific tools, such as financial models, are to be used for this calculation. In that the developer has been performing according to schedule and in accordance with the Comprehensive Agreement, the calculation of fair market value assumes the private partner would continue to perform and as such the financial model as of Financial Close is utilized to determine fair market value as if the project was completed and put into operation as depicted in that financial model.

Under an actual Termination for Convenience by NCDOT, the determination of Fair Market Value, as defined in Section B.5 of Exhibit 15, would require the developer and NCDOT to mutually hire a third party appraiser to determine the value of the developer's interest. The appraiser would evaluate several factors to arrive at a "fair market value" including potential revenue and associated costs, what a potential buyer would be willing to pay for the revenue stream, as well as other asset sales in the overall secondary P3 market.

For this Termination Compensation analysis, Clary Consulting used the various materials provided by NCDOT and the Developer to determine the value.

3.1.1 – Determination of Fair Market Value

Under the Comprehensive Agreement the Fair Market Value can be adjusted based on actual performance of the tolled HOT lanes and also the performance by the Developer under the Comprehensive Agreement. As of October 2015, the I-77 HOT Lanes P3 Project is in the design stage and as such there is no actual performance for the I-77 tolled HOT lanes and the monthly reports for the Project reflect that performance by the Developer has been acceptable. After reviewing the supplied documents and materials, we determined the most accurate representation of the Developer's Interest to be equal to the net present value of net cash flow available to the Developer's equity interest as calculated in the Financial Close Model. This is the most logical assumption for the Fair Market Value as the Financial Model was provided by the Developer and reviewed by NCDOT at Financial Close and there is no actual performance for the HOT lanes to support adjustments to the forecasted future HOT lanes revenues and overall project expenses. Cash flow available to the Developer is comprised of gross toll revenues less operations and maintenance, major maintenance, construction payments, debt payments, and transactions costs. The formula also takes into account all financings as well as public funds. The resulting cash flow to the Developer was then discounted at the calculated internal rate of return for equity investment in the project (12.50%) to arrive at the net present value figure below.

In the Financial Close Model the net present value of cash flows available to the Developer is shown as $295 million. This number is the Developer's forecasted future amount available for equity investors in the P3 Project discounted to today's dollars as of the Financial Close.

3.2 – Senior Debt Termination Amount

Step two in Section B.3.a is to determine the dollar amount required to terminate the Senior Debt for the project. As defined in the Comprehensive Agreement as well as the Bond Documents, the amount necessary to terminate the Senior Debt is equal to all amounts outstanding at the Early Termination Date plus the costs associated with Extraordinary Mandatory Redemption related to Termination for Convenience. At the start of this analysis the only outstanding obligation is the Senior Bonds for the I-77 HOT Lanes Project. A TIFIA loan, which is a Federal loan, has been authorized for the P3 Project, but there had not been any draws on the TIFIA loan as of October 31, 2015.

The Senior Bonds were issued as Private Activity Bonds (PABs). PABs are a tax-exempt means under the IRS code for financing projects under the P3 structure. The PABs come with an Extraordinary Mandatory Redemption clause to protect the bondholders in an event such as a Termination for Convenience. This clause protects the bondholders by guaranteeing them a minimum return on investment, such as the bondholders receiving interest payments over a minimum time period. This clause is important because the bondholders have an expectation that the bonds will be outstanding for a given period of time, and without that expected return many investors would not purchase the bonds for the price the bonds received in financing the Project.

The PABs Bonds were issued May 13, 2015, titled: I-77 Hot Lanes Project (Series 2015), in the overall par amount of $100 million. Under an Extraordinary Mandatory Redemption in the Bond Indenture such as a Termination for Convenience at this stage of the Project, the Bondholders would be due five years interest in addition to the Par amount of the Bonds.

Normally the entity, in this case the State of North Carolina, under a Termination for Convenience working with the private partner would deposit into an "Escrow Account" the amount required to pay off the bonds. The amount deposited would be a combination of remaining bond proceeds on deposit with the Bond Trustee (not yet used for capital costs such as construction) plus amounts added by the State to fully reimburse the bondholders. We assume the full amount of the five years interest would be partially offset by a small amount of interest earnings on the amounts deposited into escrow account to repay the bondholders at the end of the five-year period.

In total, we assume $100 million for the Par amount of the Senior Bonds, $21 million in interest based on an average interest rate on the bonds of 5%, due to the bondholders for the Extraordinary Mandatory Redemption, and a small fee of 1% of the total compensation amount to cover any related costs for bond experts to handle the Extraordinary Mandatory Redemption.

The Senior Debt Termination amount is assumed to be $122 million.

3.3 – Other Compensation Items in Addition to Section B.3.a

Once the greater of the Fair Market Value and the Senior Debt Termination Amounts are identified, we move to Sections B.3.b – B.3.d, B.3.j and B.3.k

Section B.3.b stipulates that in addition to the amounts identified in B.3.a, NCDOT must reimburse the Developer for documented out of pocket costs as it relates to any third party and affiliate contractors. For this amount, Clary Consulting was provided the Developer's Accounts Payable for third-party contractors.

As of October 31, 2015 the Developer has accounts payable of $3.9 million.

Section B.3.c requires NCDOT to reimburse the Developer for out-of-pocket costs related to demobilization, if the Termination for Convenience occurs prior to Substantial Completion.

Demobilization is the term for breaking down a project work site and includes items such as moving heavy equipment, closing offices (terminating leases and worker salaries, etc.). Clary Consulting has assumed a demobilization factor of 20% for construction costs, 20% for operations costs and 10% for design costs of the total mobilization cost based on prior experience on similar projects in the United States in the early portion of the design-build stage of the P3 Project.

Under Section B.3.c, there appear to be three separate categories for Demobilization:

- Construction Demobilization
- Design Demobilization
- Administrative Demobilization

The Developer provided the total cost figures project life-to-date as of October 31, 2015 for each of the three categories in a spreadsheet entitled Expenditures by Vendor. We then applied a demobilization cost factor for each category and applied it to the total cost. The associated cost table is shown below.

Table 2.1: Demobilization

	Actual Expenditures	Assumed Cost to Demobilize	Notes
"Construction"	$ 8,184,324.84	$ 1,636,864.97	20% of actual out of pocket for physical demobilization
"Design"	$ 20,203,882.29	$ 2,020,388.23	10% to "demobilize" design plans
"Operations Cost"	$ 4,749,661.85	$ 949,932.37	20% of to-date Operations to demobilize

Based on the above expenditures and demobilization cost factors, the estimated total cost for the Developer to demobilize as of October 31, 2015 is conservatively $4.6 million.

Section B.3.d refers to any Developer costs associated with the training of NCDOT personnel related to the Electronic Toll Collection Equipment for the Project. This amount is assumed to be zero since the project is not complete and there is no ETC equipment at this point.

Section B.3.j refers only to Fair Market Value and stipulates that the Developer be compensated based on the calculated weighted-average cost of capital for the outstanding balance of the Fair Market Value amount between the Valuation Date and the actual Early Terminate Date. We have assumed this amount to be zero because the calculation of Fair Market Value as discussed above in Section 3.1.1 of this report accounts for a Fair Market

Value amount at a date certain and we do not have a time period to apply for a time between the Valuation Date and the Early Termination Date. The State would be obligated to pay the Developer an interest amount equal to the Developer's weighted-average cost of capital should there be a difference in the time from the Valuation Date and the Early Terminate Date.

Section B.3.k also refers only to Fair Market Value and stipulates that the Developer be compensated for the incremental tax liability of the Termination Compensation. The amount discussed above for Fair Market Value is the net present value of the net cash flows to the Developer's equity prior to taxes. The Developer would pay any required taxes from these available net cash flows and as such we assume no incremental tax liability for the Developer as a pass-through entity and as identified in the tax section of the Financial Close Financial Model.

3.4 – Items for Deduction from Compensation Amount

As part of the Compensation Calculation, Section B.3 identifies certain items that, if applicable, reduce the overall Compensation Amount due to the Developer.

3.4.1 – Items for Deduction from Senior Debt Termination Amount

Sections B.3.e – B.3.g refer to the items that are to be deducted from the Compensation Amount if the Senior Debt Termination Amount is the greater of the two items in Section B.3.a.

Section B.3.e indicates a reduction in the Termination Compensation Amount equal to all borrowed cash and credit balances with the Bond Trustee as long as these items are not double counted in the Senior Debt Termination Amount.

As of October 31, 2015, the Developer provided account statements indicating borrowed cash balances of $46 million in a PABs sub-account as well as $2.5 million in a PABs Interest Reserve account that were on hand with the Bond Trustee.

The total deduction amount under Section B.3.e is equal to $48.5 Million

Section B.3.f refers to Renewal Work the Developer is contractually liable for under the Agreement. Construction has not yet begun, so there is no renewal work for the developer to perform at this stage.

After discussions with NCDOT Personnel, it was determined this amount is not applicable at this time.

Section B.3.g refers to Compensation Amounts paid to the Developer related to cost or revenue impacts attributable to the period after the Early Termination Date.

This provision reduces the amount owed to the Developer based on payments that NCDOT has already made to the Developer for circumstances that could potentially impact project costs or revenue. NCDOT has not made any such payments to the Developer so this section does not apply to the calculation for this analysis.

3.4.2 – Items for Deduction from Fair Market Value

Sections B.3.h and B.3i refer to advance payments and distributions to third parties in violation of Section 10.5.3 of the Comprehensive Agreement and amounts received by the lenders in relation to Project Debt between the Valuation Date and the Early Termination Date, respectively.

Both sections above are assumed not applicable for this exercise.

Chapter 4 –Final Calculation of Termination Compensation Amount

Based on the information and assumptions detailed above, we have developed estimates based on both the Fair Market Value and Senior Debt Termination Amount options.

4.1 – Fair Market Value

Fair Market Value	$ 295,630,205.66
Total Demobilization	$ 4,607,185.57
Total Amount	$ 300,237,391.22

4.2 – Senior Debt Termination Amount

Par Amount of Bonds	$ 100,000,000.00
Mandatory Extraordinary Redemption	$ 22,084,027.95
Developer Accounts Payable	$ 3,930,174.92
Total Demobilization	$ 4,607,185.57
Total Before Deductions	$ 130,621,388.44
(Less)	
Borrowed Cash Account Balances	$ 48,538,765.79
Total Amount	$ 82,082,622.65

Disclaimer

This calculation is based on a hypothetical scenario and on a limited review of available financial documents assembled for this calculation and by no means rises to, or is meant to rise to the level of a full market valuation or calculation as to be prepared by a recognized and agreed upon appraiser competent in this area of expertise. In the essence of time and to remain within the bounds of the project scope of services professional judgment and assumptions based on industry experience were employed to calculate a reasonable representation of the costs to terminate for convenience in accordance with the specific tests and formula as detailed in Exhibit 15 to the concession agreement. This report is not intended for use as a legal document or as a market valuation document and has been prepared to respond directly to specific inquires related to the calculation of potential costs associated with a termination for convenience.

Exhibit 1

Table 1.2: Termination Compensation Calculation Steps

(a) = Greater of (i) and (ii)	(i) = Fair Market Value of the Developer's Interest as of the Valuation Date determined according to Section B.5 (ii) = Senior Debt Termination Amount
(PLUS)	
(b)	The amount necessary to reimburse reasonable and documented out-of-pocket costs of third party and Affiliate Contractors to demobilize and terminate under Contracts between Developer and third parties or Affiliates for performance of Work, excluding Developer's non-contractual liabilities and indemnity liabilities (contractual or non-contractual) to third parties or Affiliates
(PLUS)	
(c)	If termination occurs prior to Substantial Completion of all Project Sections, Developer's own reasonable and documented out-of-pocket costs to demobilize
(PLUS)	
(d)	The incremental increase, if any, in the costs Developer incurs under Section 19.5.10 of the Agreement over the present value of such costs under the Base Case Financial Model, but without double counting of the amounts under clauses (a), (b) and (c) above
(MINUS)	
(e)	Only where the Senior Debt Termination Amount is applicable, all Borrowed Cash and Credit Balances, except to the extent such balances are already deducted in determining the Senior Debt Termination Amount
(MINUS)	
(f)	Only where the Senior Debt Termination Amount is applicable, the cost of Renewal Work that Developer was required to but did not perform prior to the Early Termination Date
(MINUS)	
(g)	Only where the Senior Debt Termination Amount is applicable, the portion of any Compensation Amounts previously paid to Developer that (i) compensated Developer for cost and revenue impacts attributable to the period after the Early Termination Date and (ii) were not previously used to reduce Project Debt within the definition of Senior Debt Termination Amount

(MINUS)	
(h)	Only where Fair Market Value is applicable, the amount of all Distributions, and all payments to Affiliates in excess of reasonable compensation for necessary services or that are advance payments in violation of Section 10.5.3 of the Agreement, between the Valuation Date and the Early Termination Date
(MINUS)	
(i)	Only where Fair Market Value is applicable, all amounts received by the Lenders in relation to the Project Debt (including all interest, capital and Breakage Costs) between the Valuation Date and the Early Termination Date
(PLUS)	
(j)	Only where Fair Market Value is applicable, (i) in the case of Termination for Convenience, a return on the outstanding balance of the Fair Market Value amount between the Valuation Date and the Early Termination Date equal to Developer's weighted average cost of capital as of the Valuation Date (determined according to the procedures set forth in Section B.5 below) or (ii) in the case of termination for NCDOT Default or NCDOT suspension of Work, a return on the outstanding balance of the Fair Market Value amount between the Valuation Date and the date the Fair Market Value is paid in full equal to Developer's weighted average cost of capital as of the Valuation Date (determined according to the procedures set forth in Section B.5
(PLUS)	
(k)	Only where Fair Market Value is applicable, the incremental tax liability, if any, described in Section B.6