The key findings and recommendations in this summary may not be inclusive of all the findings and recommendations in this report.
EXECUTIVE SUMMARY

PURPOSE
The objective of this audit was to answer specific questions, as listed in this report, asked by legislators about the Department of Transportation’s (DOT) I-77 Express Lanes Project (Project).

The legislative questions largely related to the following key areas:

1. The Project’s formal Request for Proposal (RFP) process
2. The construction and components of the Project’s contract
3. Inappropriate financial gain from those involved in the Project’s RFP and contracting processes

BACKGROUND
The Department of Transportation (DOT) is one of North Carolina’s largest government agencies. DOT is responsible for all modes of transportation in North Carolina, including highways, rail, aviation, ferries, public transit, and bicycle and pedestrian transportation.

The I-77 Express Lanes Project (Project) is a public-private partnership (P3) between DOT and I-77 Mobility Partners LLC to provide improvements along nearly 26 miles of the I-77 corridor north of Charlotte, including the conversion of existing high occupancy vehicle (HOV) lanes to express lanes or high occupancy toll (HOT) lanes and the construction of new HOT lanes and two major interchanges.

As of this report, the Project is under construction and is expected to reach final completion in Fall 2019.

RESULTS AND CONCLUSIONS
Auditors and the subject matter expert obtained answers to the legislative questions. See pages 3-12.

The “I-77 HOT Lanes Procurement and Contracting Compliance Review” report,¹ located in Appendix A, provides a more thorough and detailed discussion for each question item.

¹ Report prepared by Clary Consulting Company. Clary Consulting Company partnered with Bryant Miller Olive P.A. (BMO), legal advisors and Pevida Highway Designers (PHD), technical advisors. Clary and their partners have served on both the public and private sides of P3 transactions and as such brings a unique combination of skills and experience. Together, they served as the subject matter expert on this engagement.
AUDITOR’S TRANSMITTAL

The Honorable Roy Cooper, Governor
The Honorable Senator Jeff Tarte
Members of the North Carolina General Assembly
James H. Trogdon III, Secretary of the Department of Transportation
Michael S. Fox, Chairman of the Board of Transportation

Ladies and Gentlemen:

We are pleased to submit this performance report titled I-77 Express Lanes Project. The objective of this audit was to answer questions, as listed in this report, asked by legislators about the Department of Transportation’s I-77 Express Lanes Project.

The Department of Transportation’s Secretary Trogdon reviewed a draft copy of this report. His written comments are included on page 65.

This audit was conducted in accordance with Article 5A of Chapter 147 of the North Carolina General Statutes.

We appreciate the cooperation received from management and the employees of the Department of Transportation during our audit.

Respectfully submitted,

Beth A. Wood, CPA
State Auditor
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Article V, Chapter 147 of the North Carolina General Statutes, gives the Auditor broad powers to examine all books, records, files, papers, documents, and financial affairs of every state agency and any organization that receives public funding. The Auditor also has the power to summon people to produce records and to answer questions under oath.
BACKGROUND
The Department of Transportation (DOT) is one of North Carolina’s largest government agencies. The Department is responsible for all modes of transportation in North Carolina, including highways, rail, aviation, ferries, public transit, and bicycle and pedestrian transportation.

North Carolina General Statute Chapter 136-18(39) authorizes DOT to utilize the public-private partnership approach as a delivery method for its highway expansion program.

The public-private partnership (P3) approach allows DOT to transfer risks to the private sector in the areas of design, construction, operations, maintenance, tolling and revenue, while minimizing the need for large financial investments from DOT in select North Carolina public works projects.

The I-77 Express Lanes Project (Project) is a P3 between DOT and I-77 Mobility Partners LLC² to provide improvements along nearly 26 miles of the I-77 corridor north of Charlotte, including the conversion of existing high occupancy vehicle (HOV) lanes to express lanes or high occupancy toll (HOT) lanes and the construction of new HOT lanes and two major interchanges.

Upon completion of construction of the Project, motorists will be provided with a choice of driving on non-tolled general-purpose lanes or paying a toll to drive on the HOT Lanes with a more reliable travel time.

DOT expects that the benefits of the Project will include:

- Decreased fuel consumption and added time savings for motorists
- Increased incentive for motorists to carpool and take advantage of transit options
- Provide reliable, superior travel times on the HOT Lanes, especially during peak hours
- Provide revenue generation to help pay for improvements along I-77

DOT is currently investing a little more than $90 million into the Project.³ Through the public-private partnership, I-77 Mobility Partners LLC, will be responsible for the remainder of the $655 million to design, construct, operate and maintain the new optional express lanes.

As of this report, the Project is under construction and is expected to reach final completion in Fall 2019.

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² The private consortium awarded the contract to finance, develop, design, construct, operate and maintain the I-77 Express Lanes Project.
³ In the event of a vendor default, the amount of funds DOT potentially expends on the Project could increase. See question #3 on pages 3-4 for further discussion.
OBJECTIVE, SCOPE, AND METHODOLOGY
The objective of this audit was to answer questions, as listed in this report, asked by legislators about the Department of Transportation's (DOT) I-77 Express Lanes Project (Project).

The audit scope included a review of DOT activities from the issuance of the Request for Qualifications (February 15, 2012) through the period of the Project’s Financial Close\(^4\) (May 20, 2015). For items related to conflicts of interest, the audit scope was extended to review DOT activities through February 2018.

This audit scope does not include a review or evaluation of any items related to Project construction or any outcomes or projected outcomes resulting from the Project. This includes determining whether the I-77 Express Lanes Project is going to solve congestion problems. These items were outside the scope of this audit and therefore auditors express no opinion on them.

To accomplish the audit objective, the Office of the State Auditor (OSA) contracted with subject matter experts\(^5\) in the field of complex transportation projects to evaluate DOT’s Project and assist in answering legislative questions.

Additionally, to accomplish the audit objective, auditors interviewed personnel, observed operations, reviewed policies, analyzed records, and examined documentation supporting transactions, as considered necessary. Whenever sampling was used, auditors applied a nonstatistical approach. Therefore, results could not be projected to the population. This approach was determined to adequately support audit conclusions.

In total, the audit objective was accomplished using the combined effort of five subject matter experts and five auditors. More than 1,500 hours of effort was required and more than 2,000 documents related to the Project from DOT and other sources were reviewed and analyzed.

Because of the test nature and other inherent limitations of an audit, together with limitations of any system of internal and management controls, this audit would not necessarily disclose all performance weaknesses or lack of compliance.

As a basis for evaluating internal control, auditors applied the internal control guidance contained in professional auditing standards. However, our audit does not provide a basis for rendering an opinion on internal control, and consequently, we have not issued such an opinion.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.

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\(^4\) Financial Close describes the date in which Project financing has been provided.

\(^5\) Clary Consulting Company was selected to serve as subject matter experts. Clary Consulting Company partnered with Bryant Miller Olive P.A. (BMO), legal advisors and Pevida Highway Designers (PHD), technical advisors to bring a multi-disciplinary team to this audit. Clary and their partners have served on both the public and private sides of P3 transactions and as such bring a unique combination of skills and experience to the effort for North Carolina.
RESULTS AND CONCLUSIONS
1. During the formal Request for Proposal (RFP) process were all rules, procedures, protocols and guidelines followed in accordance with state and federal laws?

Yes.

The procurement process for the Department of Transportation’s (DOT) I-77 Express Lanes Project (Project) adhered to all applicable policies, procedures, and state and federal laws. Furthermore, all Project policies and procedures were found to be consistent with controlling federal laws and regulations and with practices of other state transportation departments.

See subject matter expert analysis in Appendix A pages 35-38 for further discussion.

2. Was any vendor advantaged purposefully or unintentionally over another?

No.

Based upon review of meetings, correspondence, and questions and answer sessions, all four vendors that were short-listed\(^\text{6}\) were provided the opportunity to propose or bid on an equal basis. There was no evidence that any vendor was advantaged over another.

Furthermore, two short-listed vendor teams (Charlotte Access Mobility Group and Metrolina Development Partners) provided written letters to NCDOT explaining why they did not submit a proposal. Neither vendor team cited unfair treatment or expressed feeling disadvantaged. Instead, both vendor teams identified feasibility concerns with the project in its current form. In other words, these vendor teams were not comfortable with the financing terms and structure, amount of equity at risk, toll revenue risk, etc. All of which were put in place as significant protections for the state.

See subject matter expert analysis in Appendix A pages 39-40 for further discussion.

3. In the event of an I-77 Mobility Partners LLC default, how much is the state obligated?

The subject matter expert estimates the most the state would be obligated in the event of I-77 Mobility Partners LLC default is $231 million.

This estimate assumes the default occurred in 2023, the Project was completed, the Project is open to traffic, and there have been no debt refinancings. The year 2023 was selected because it represents the highest point for outstanding debt balances and therefore represents the highest level of obligation for the state.

The amount that the state would be obligated in the event of a default depends on when the default occurs; whether during Project construction or after the Project is finished and open to traffic. These scenarios are outlined in the Terms for Termination Compensation located in Exhibit 15 of the Comprehensive Agreement.

It is also noteworthy that, assuming a default occurred after project completion, DOT would have a completed project (asset) open for tolling with an approximate value of $648 million.\(^\text{7}\)

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\(^{6}\) Shortlisting is the process of narrowing the field of potential proposer teams once the Statement of Qualifications (RFQ) have been submitted and reviewed by DOT. It is an industry standard practice when using a two-step bidding structure.

\(^{7}\) Computed from the Base Case Financial Model. The Base Case Financial Model includes assumptions and criteria for the revenues, expenditures, and financing for the Project. It is updated to reflect actual figures as the Project progresses.
There are also several methods to cure or remedy a default by I-77 Mobility Partners LLC. These are outlined in detail in sections 17.1 though 17.4 of the Comprehensive Agreement. See subject matter expert analysis in Appendix A pages 60-62 for further discussion.

a. **Would the state be obligated for all outstanding debt?**

   No.

   The state would not be obligated for all outstanding debt. However, under the Terms for Termination Compensation outlined in Exhibit 15 of the Comprehensive Agreement, there are certain scenarios in which the state could be obligated for 80% of outstanding debt.

   See subject matter expert analysis in Appendix A pages 60-62 for further discussion.

b. **Would the state be obligated to repay from portion of toll revenues?**

   No.

   DOT would be obligated to pay the termination amount as outlined in the Terms for Termination Compensation within the Comprehensive Agreement. No portion of the termination amount needs to come from toll revenues. It can come from any source necessary to make the payment.

   See subject matter expert analysis in Appendix A pages 60-62 for further discussion.

c. **Do principal payments on the debt not begin until 2033?**

   No.

   According to documents from the Project’s financial close, debt repayment for senior bonds commence in 2025 and TIFIA loan payments begin in 2023.

   By 2033, the TIFIA loan balance is estimated to be reduced by over half ($90 million).

   See subject matter expert analysis in Appendix A page 62 for further discussion

d. **Were there concerns with the vendor’s default history?**

   No.

   The Project’s vendor, Cintra, did not have a history of project defaults within the United States at the time this Project’s Comprehensive Agreement was signed in June 2014.

   There are two known Cintra projects that had financial problems: the Indiana Toll Road and the SH-130 in Austin, Texas. However, both were operating and solvent toll roads when DOT executed this Project’s Comprehensive Agreement. The Indiana Toll Road went into bankruptcy proceedings in September 2014 and SH-130 did not file for bankruptcy protection until March 2016.

   Additionally, Cintra fully disclosed their history as part of the pre-qualification process and met all criteria to be eligible and selected as vendor for this Project.

   As part of this process, Cintra submitted their financial model, assumptions, instructions, sensitivity capabilities, audited financial statements at or before the time

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8 Cintra is one of the largest private developers of transport infrastructure in the world. According to their website, they currently have a portfolio of 26 concession projects across ten countries (eight of which are located within the United States and Canada). Cintra created I-77 Mobility Partners LLC specifically for the delivery of this Project.
of bid. As protections, DOT required financial proposal securities, performance and payment bonds, parent guarantees, and equity commitments.

Other Factors Limiting Concern:

- I-77 Mobility Partners LLC invested nearly $250 million of equity at financial close that is “at risk” should the Project cost be significantly higher than expected or toll revenues significantly lower than expected.
- Under no condition would the state’s obligation be greater than $231 million in the event of vendor default.
- Assuming vendor default occurs “post completion”, DOT will have a completed project open for tolling with an approximate value of $648.4 million\(^9\) in place.
- Three separate firms performed traffic and revenue studies on the Project.

See subject matter expert analysis in Appendix A pages 62-63 for further discussion.

4. Were roads built with thinner road beds (17 inches)? Is the road depth acceptable where semi-trucks will be able to use it?

As stated in the Objective, Scope, and Methodology section of this report (page 2), the actual construction and any outcomes, including whether the I-77 Express Lanes Project would solve the congestion problem, was outside the scope of this audit. Therefore, whether roads were actually constructed with thinner road beds was not reviewed during this audit.

Based on I-77 Mobility Partners LLC’s proposed pavement design, express lanes are built to a 17 inch thickness, whereas, general-purpose lanes are built to a 24 inch thickness. Both exceed the minimum pavement structure required by the Comprehensive Agreement, which requires at least a 14 inch thickness for both general-purpose and express lanes.

The proposed pavement structure for the express lanes can handle multi-axle vehicles as they were taken into consideration when designing the overall pavement structure. However, since the express lanes were planned to restrict the use of multi-axle vehicles, if they used the express lanes, the planned design life of those lanes would decrease from a 30 year life.

Additionally, in response to inquiry, DOT stated that Project construction is constantly monitored for quality control and quality assurance. Per DOT, over 800 quality assurance tests have been performed to date with an additional 300 independent verification tests performed.

In regard to pavement thickness, assurance that construction is in compliance with contract parameters is achieved through inspections during placement, automatic grade control, and the drilling of core samples.

See subject matter expert analysis in Appendix A pages 55-56 for further discussion.

5. Did DOT pay four vendors to respond to its Request for Proposal (RFP)?

No.

There were no stipends paid. The RFP did allow for stipends to vendors if they submitted a proposal to the RFP and were not awarded the Project. Specifically, DOT would have

\(^9\) As computed from the Base Case Financial Model.
paid a stipend in the amount of $750,000 to each unsuccessful vendor who submitted a compliant and responsive proposal.

However, only one vendor submitted a proposal in response to the Project’s RFP and they were awarded the Project. Therefore, no stipends were paid.

**NOTE:** The use of stipends as an incentive for vendor teams to submit quality proposals for public-private partnership (P3) projects is common practice and is consistent with U.S. DOT guidance for P3 projects.

See subject matter expert analysis in Appendix A page 41 for further discussion.

6. **Was the Local Government Commission (LGC) told that they wouldn’t be allowed to review the contract but had to approve it (no questions asked)?**

   No.

   DOT provided documents to the LGC, including the Comprehensive Agreement,\(^{10}\) for review prior to execution of the Comprehensive Agreement.

   Minutes from a June 17, 2014 LGC special meeting expressly state that a draft of the Project’s Comprehensive Agreement had been submitted to the LGC for their review and that the CA was approved by unanimous vote.

   See subject matter expert analysis in Appendix A pages 40-41 for further discussion.

7. **Was the contracting process “skirted around”?**

   No.

   DOT adhered to all applicable laws, policies, and procedures governing the procurement and contracting for the Project.

   See subject matter expert analysis in Appendix A page 41 for further discussion.

8. **Was there an improper award of the Project to I-77 Mobility Partners LLC?**

   No.

   DOT adhered to all applicable laws, policies, and procedures in awarding the Project to I-77 Mobility Partners LLC.

   See subject matter expert analysis in Appendix A pages 42-43 for further discussion.

   a. **Did the 2\(^{nd}\) place vendor want a 6-month extension of the RFP process in order to accumulate the required equity?**

   No.

   Only one vendor submitted a proposal; therefore, technically, there was no “second place vendor”.

   The Charlotte Access Mobility Group (CAMG) could be considered as the “2\(^{nd}\) place vendor” as they were the only other vendor to submit alternative technical concepts (ATC)\(^{11}\) during the RFP process.

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\(^{10}\) The Comprehensive Agreement is the contract or partnering agreement between the public agency (DOT) and the private team (I-77 Mobility Partners LLC) that defines the business terms, financial terms, and technical requirements for the implementation and operations of the Project during the term of agreement.
However, there is no evidence that they wanted or were denied a 6-month extension of the RFP process because they didn’t have the required equity.

In a written letter provided to DOT, CAMG explained that they would not further pursue the preparation or submission of a proposal due to feasibility concerns they had with the project in its current form. Specifically, CAMG cited DOT’s maximum available funds as the primary factor in their decision. The letter goes on to state that should DOT address their concern, they would need 12 weeks to complete and submit its proposal.

See subject matter expert analysis in Appendix A page 42 for further discussion.

b. **Did DOT extend the timeframe for procurement?**

Yes.

However, delays in setting proposal due dates from vendors applied to all potential vendors. This was done to allow for the full and final development of the RFP and to allow for a thorough review of all questions and concerns raised by potential vendors during the open comment period.

See subject matter expert analysis in Appendix A page 42 for further discussion and timeline of events located in Appendix B.

c. **Did I-77 Mobility Partners LLC have to hold off on the Project for six months because they didn’t have the required equity?**

No.

The project financing deadline was extended from January 20, 2015 to May 25, 2015. However, the delay between the period of commercial close and financial close had nothing to do I-77 Mobility Partners LLC having the required equity and was beyond the control of both DOT and I-77 Mobility Partners LLC.

The cause for delay is primarily attributable to the Transportation Infrastructure Financing and Investment Act (TIFIA) loan process.

In October 2014, the TIFIA Credit Council expressed their desire to reduce the total amount of the TIFIA loan. By March 2015, all necessary negotiations, proposals, and submissions occurred so that I-77 Mobility Partners LLC could submit its application for a TIFIA loan. This application was approved on April 17, 2015.

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11 The ATC process is commonly included in P3 or Design Build procurements to inspire innovation. It provides competing vendor teams an opportunity to propose alternative solutions not contemplated with the RFP concept design.
13 The amount of DOT equity at risk vs. the amount of vendor equity at risk.
14 Commercial close describes the date in which the Comprehensive Agreement for the Project was executed. Commercial close for this Project occurred on 6/26/2014.
15 Financial close describes the date in which Project financing has been provided. Financial close for this Project occurred on May 20, 2015.
16 TIFIA provides federal credit assistance with fixed rates that are often lower than what most borrowers can obtain in the private market. By providing greater access to capital, TIFIA can help advance qualified, large-scale projects that might otherwise be delayed because of size, complexity, or uncertainty over the timing of revenues.
17 The TIFIA Credit Council is responsible for the oversight and management of all of the US Department of Transportation's credit programs (including TIFIA).
RESULTS AND CONCLUSIONS

In order to maintain the Project finance plan and make up the reduction in the TIFIA loan,\(^{18}\) I-77 Mobility Partners LLC increased their equity position in the Project by $13.79 million and DOT increased their commitment by $6.49 million.\(^ {19}\)

**NOTE:** Auditors attempted to determine why the TIFIA Credit Council decided to reduce the amount of TIFIA financing for the Project. However, the Federal Highway Administration stated that “This is deliberative information that is confidential to the government.”

See subject matter expert analysis in Appendix A pages 42-43 for further discussion.

d. **Did DOT waive all penalties for delays?**

No.

There were no delays subject to penalty through the time of financial close.\(^ {20}\)

As stated above:

(1) Early delays in the RFP process were mutually agreed to by DOT and the pool of potential vendors to allow for the full and final development of the RFP as well as to allow for a thorough review of all questions and concerns raised by potential vendors during the open comment period.

(2) As stated above, the delay from the time of commercial close and financial close was primarily due to TIFIA financing.

See subject matter expert analysis in Appendix A page 43 for further discussion.

9. **Was there a redacted letter from a DOT employee that outlined all “illegal” things that happened during the Project’s contracting process?**

Auditors and subject matter experts did not find evidence that such a letter exists.

Various memos/letters were found on social media that discussed alleged illegalities and/or perceived issues related to the project. However, none of these appear to have been authored by current or ex-NCDOT employees. Furthermore, the results of this audit do not support or reflect items contained in these letters.

See subject matter expert analysis in Appendix A page 44 for further discussion.

10. **Did parties speed up the timeline to sign the contract after the North Carolina Legislature requested to review the contract?**

No.

DOT and I-77 Mobility Partners LLC did not speed up their timeline to commercial or financial close. The parties met all legal criteria regarding the timing of the contract signing.

The timeline of the contract signing and commercial and financial Close are in line with expectations per I-77 Mobility Partners LLC proposal documents.

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\(^{18}\) The amount of TIFIA financing was reduced from $215 million to $189 million.

\(^{19}\) See Appendix A pages 30-32 for full breakdown of Project financing.

\(^{20}\) Review was limited to the time period from the initial RFP though financial close. Any penalties for delay outside of this time period were outside of the scope of this audit.
For example, the I-77 Mobility Partners LLC proposal submitted on March 31, 2014, stated an expected commercial close of June 20, 2014. Actual commercial close occurred on June 26, 2014.

See subject matter expert analysis in Appendix A pages 44-46 for further discussion and timeline of events located in Appendix B.

11. Were all procedures and processes followed during the construction, review, and approval of the Project’s Comprehensive Agreement?

Yes.

The Project’s Comprehensive Agreement was constructed, reviewed, and approved in conformance with all applicable policies, procedures, and state and federal laws.

Furthermore, a lawsuit\(^\text{21}\) that claimed that the Project’s Comprehensive Agreement violated state law was ruled in the favor of DOT.

See subject matter expert analysis in Appendix A pages 48-54 for further discussion.

12. Were the terms and conditions of the Project’s Comprehensive Agreement constructed to optimize the quality of the technical, functional and financial components to benefit and protect the interests of all citizens of the state?

Yes.

The Comprehensive Agreement appears to provide significant protections and terms favorable to the state. DOT negotiated terms and conditions in the Comprehensive Agreement to ensure both the implementation of the Project as intended and to protect the state from unintended financial exposure.

For instance:

- Low debt to equity ratio that strongly favors the state
- Vendor accepts the risk of project costs and future toll revenues
- Vendor’s equity is at risk if there are cost overruns or a major shortfall in actual toll revenues,
- Vendor is responsible to operate, maintain, and resurface the lanes (if necessary) to ensure the roadway surface meets the standards required in the Comprehensive Agreement

Additionally, a comparison of the Project’s financing metrics and terms to other public-private partnership projects of similar type and time frames indicates that the Project’s financing structure and terms were consistent with state-of-the-art contract structure and terms for public-private partnership projects.

See subject matter expert analysis in Appendix A pages 50-54 for further discussion.

\(^\text{21}\) WidenI77 v. NCDOT, 800 S.E.2d 441 (N.C. App. 2017).
13. Did the winning vendor sell an equity percentage in the Project?

Yes.

I-77 Mobility Partners LLC sold 40.9% of their equity holdings between the time of financial close (May 20, 2015) and December 31, 2016.\(^{22}\) As required by the Comprehensive Agreement, DOT was provided letters from the I-77 Mobility Partners LLC detailing the specifics of the transactions.

Section 21.2.2 of the Comprehensive Agreement requires the major equity owner to maintain majority interest in the ownership of the Project unless approved in advance by DOT.

Currently, I-77 Mobility Partners LLC maintains a 50.1% ownership in the Project.

**NOTE:** It is common practice for initial P3 developer to sell part of their share to generate funds to pursue new projects and to repay investors that invested for the “development period” of the project.

See subject matter expert analysis in Appendix A pages 56-57 for further discussion.

14. Does the Comprehensive Agreement include a provision that the state pay the vendor’s federal taxes?

No.

Section 24.1 of the Comprehensive Agreement expressly states that the I-77 Mobility Partners LLC shall pay all applicable taxes prior to delinquency.

See subject matter expert analysis in Appendix A page 57 for further discussion.

15. Did the state give away airspace rights above the highway?

No.

Section 11.2.1 of the Comprehensive Agreement expressly states that I-77 Mobility Partners LLC rights and interests specifically exclude any and all airspace and any and all improvements and personal property above the surface of the Project right of way.

See subject matter expert analysis in Appendix A page 57 for further discussion.

16. Was construction on the Project delayed until the fall of 2014 when it was scheduled to start in the spring of 2014?

No.

There is no evidence that the project was scheduled to start in the spring of 2014. Proposals from interested vendor teams were not due to be received by DOT until March 31, 2014. I-77 Mobility Partners LLC was selected by DOT as the Apparent Best Value Proposer on April 11, 2014. Commercial Close was June 26, 2014.

Furthermore, I-77 Mobility Partners LLC officially received notice from DOT granting Notice to Proceed 1 (NTP1) status on August 22, 2014. NTP1 is the official notice from DOT for I-77 Mobility Partners LLC to begin certain work within the DOT Right of Way along the I-77 corridor.

\(^{22}\) I-77 Mobility Partners had a 90% equity holding at the time of financial close.
Additionally, official notice granting Notice to Proceed 2 (NTP2) status wasn’t received from DOT until May 28, 2015. NTP2 is the official notice from DOT for I-77 Mobility Partners LLC to begin actual construction within the DOT Right of Way along the I-77 corridor.

Therefore, I-77 Mobility Partners LLC would have been unable to begin actual construction work on the I-77 corridor until May 28, 2015.

However, as stated above, there were several delays in the RFP process. None of which were the fault of I-77 Mobility Partners LLC:

(1) Early delays in the RFP process were mutually agreed to by DOT and the pool of potential vendors to allow for the full and final development of the RFP as well as to allow for a thorough review of all questions and concerns raised by potential vendors during the open comment period.

(2) The delay from the time of commercial close and financial close was primarily due to TIFIA financing.

See subject matter expert analysis in Appendix A page 57 for further discussion and timeline of events located in Appendix B.

17. Does the Comprehensive Agreement allow I-77 Mobility Partners LLC to overcharge expenses to get additional funding streams?

NCDOT is currently investing a little more than $90 million into the Project. Through the public-private partnership, I-77 Mobility Partners LLC is responsible for the remainder of the $655 million to design, construct, operate and maintain the new optional express lanes.

However, there are multiple scenarios defined in the Comprehensive Agreement where I-77 Mobility Partners LLC can ask for reimbursement of expenses. These sections are very prescriptive and pertain to specific events called “relief events”. Each proposed relief event would include a presentation by I-77 Mobility Partners LLC to be reviewed by DOT prior to any additional state funds provided to I-77 Mobility Partners LLC.

Therefore, as long as DOT is monitoring for and reviewing these scenarios properly, I-77 Mobility Partners LLC cannot get additional funding streams through the Comprehensive Agreement unless very specific, prescriptive conditions occur.

Monitoring for relief events should be incorporated into DOT’s program of monitoring for the I-77 P3 Project. See Items for DOT Consideration in Appendix A page 60.

A full list of relief events can be found in the subject matter expert’s analysis in Appendix A pages 57-60.

As of the date of this report, no such events have occurred.

Also defined in the Comprehensive Agreement are details related to scenarios in which a Developer Ratio Adjustment Mechanism (DRAM)23 event is triggered. A DRAM event is triggered when the Project revenues do not cover required expenses in a given year. Annual expenses include annual operations and maintenance costs and annual debt payments on the TIFIA loan and Private Activity Bonds.

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23 Designed as a credit enhancement to secure a credit rating that supports the rating needed for Project lenders (TIFIA loan and private activity bonds).
A DRAM event would require the contribution of DOT funds up to a maximum of $12 million in any one year and an overall maximum of $75 million over the term of the Comprehensive Agreement.

Budgets, actual annual costs and other information contained in the Project financial model should be constantly monitored by DOT to ensure that a DRAM event is not triggered.

As of the date of this report, no such events have occurred.

NOTE: Each project is unique, however, for a P3 that is revenue risk based (risk of future toll revenues) these relief events are in line with similar P3 projects.

See subject matter expert analysis in Appendix A page 60 for further discussion.

18. Were any individuals in direct employment or under contract employment with the state who worked directly on the RFP and/or contract in violation with North Carolina’s revolving door statute?

North Carolina General Statutes does not include a revolving door statute for state employees.

On March 30, 2017, the Senate proposed Senate Bill 512 titled “Stop the Revolving Door.” The bill passed the Senate but was referred to the Rules and Operations of the Senate Committee and never became law.

Therefore, auditors reviewed all individuals that were in direct employment or under contract employment with the state who worked directly on the Project’s RFP and/or Comprehensive Agreement for conflicts of interest.

No such conflicts were identified.

19. Did any individuals in direct employment or under contract employment with the state who worked directly on the RFP and/or contract directly or indirectly gain financially from their involvement?

No.

No improper direct or indirect financial gain was identified from those who worked directly on the Project’s RFP and/or Comprehensive Agreement.
APPENDIX A
I-77 HOT Lanes Procurement and Contracting Compliance Review
February 28, 2018

Honorable Beth A. Wood, CPA, State Auditor
N.C. Office of the State Auditor
20601 Mail Service Center
Raleigh, North Carolina  27699-0600

Re: I-77 P3 Compliance Review

We have completed the compliance review of the I-77 Public-Private Partnership (P3) Project, implemented by the North Carolina Department of Transportation (NCDOT.) Our review followed applicable portions of the Government Auditing Standards, issued by the Comptroller General of the United States.

The compliance review was conducted in response to the Legislative inquiry dated February 27, 2017, which requested the State Auditor to conduct the review with the following key areas identified:

First is a call to review all aspects of the formal Request for Proposal (RFP) process to ensure all rules, procedures, protocols and guidelines were followed in accordance with state and federal laws. It is imperative to ensure no single bidder was advantaged purposefully or unintentionally over another.

Second is a call to review and investigate all aspects as to how the contract was constructed, reviewed, and approved. The purpose of the review is to ensure all procedures and processes were followed and that terms and conditions were constructed to optimize the quality of the technical, functional and financial components/arrangements for said contract, so that the final project would both benefit and protect the interest of all the citizens of the State of North Carolina.

Last is a call to evaluate all individuals in direct employment or under contract employment with the state who worked directly on the RFP and/or contract, to ensure no one is in violation of the state’s revolving door statute. It is also important to confirm that in current employment or since leaving employment, no one (state employee, board member, elected official, or vendor) associated with NCDOT has directly or indirectly gained financially from their involvement with the RFP or contracting efforts.¹

The report presents our findings and conclusions for two of the three primary questions posed by the inquiry and more detailed questions under the primary questions identified in a subsequent teleconference call with legislators. The third area of primary questions was addressed by investigators from the Office of the State Auditor. See questions #18 and #19 on page 12 for OSA investigators’ results and conclusions.

¹ This area was addressed by investigators from the Office of the State Auditor. See questions #18 and #19 on page 12 for OSA investigators’ results and conclusions.
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Overview of Public-Private Partnerships

A public-private partnership, or P3, is a contractual agreement formed between a public owner/agency (such as a state or local government) and a private sector entity that allows for greater private sector participation in the delivery and financing of a government-owned project. With respect to transportation projects, P3 concessions are public–private agreements in which the public owner/agency owns the transportation facility (such as a highway) and the private sector (concessionaire) takes on some of the risks and rewards of financing, constructing, operating, and maintaining the transportation facility in exchange for the right to future revenues or payments for a specified term. The contractual arrangement between the public owner/agency and the private sector concessionaire is formalized through a long-term concession agreement. P3 concessions can dramatically accelerate construction on projects that would take decades to build without private funding.

Public owner/agencies may use P3 concessions to construct or rehabilitate highways, bridges, or tunnels that the public owner/agency would otherwise have undertaken using public funds through traditional project development. The Federal Highway Administration encourages consideration of P3s in the development of transportation improvements. Currently 16 states (Alabama, Arizona, California, Colorado, Florida, Georgia, Indiana, Michigan, Missouri, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Texas, Virginia) and Puerto Rico have P3 transportation concessions in procurement, under construction, or in operation.

P3s may be structured in a variety of ways depending on the elements and risks the public owner/agency wishes the private sector concessionaire to assume. The most common P3 structures used for large transportation projects are shown in the following table.
**Appendix A**

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<table>
<thead>
<tr>
<th>Types of Public-Private Partnership Arrangements Commonly Used for Transportation Projects</th>
<th>Risks/Activities Assumed by the Private Sector (Concessionaire)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Design-Build</strong>—concessionaire designs and builds the project; public owner/agency finances, operates, and maintains the project.</td>
<td>Design</td>
</tr>
<tr>
<td>Design-Build-Operate-Maintain—concessionaire designs, builds, operates, and maintains the project; public owner/agency finances the project.</td>
<td>X</td>
</tr>
<tr>
<td>Design-Build-Finance—concessionaire designs, builds, and finances the project; public owner/agency operates and maintains the project.</td>
<td>X</td>
</tr>
<tr>
<td>Design-Build-Finance-Operate-Maintain—“Availability Payment”—concessionaire designs, builds, finances, operates, and maintains the project; public owner/agency pays the concessionaire fixed periodic payments and retains the risk of paying the concessionaire from available revenue sources, such as taxes, fees, grants, or tolls, over the term of the agreement. The concessionaire’s payments are adjusted based on the availability of facilities and services, and the extent to which the concessionaire meets performance specifications.</td>
<td>X</td>
</tr>
<tr>
<td>Design-Build-Finance-Operate-Maintain—“Revenue Risk”—concessionaire designs, builds, finances, operates, and maintains the facility, but also assumes the risk of earning adequate toll or user fee revenue and uses this revenue to support and pay the financing for all or part of the project.</td>
<td>X</td>
</tr>
</tbody>
</table>

*Source:* Federal Highway Administration, Office of Innovative Program Delivery.
I-77 HOT Lanes Project Summary

In 2006, the North Carolina Legislature in North Carolina General Statutes (N.C.G.S) Section (§) 136-18(39), authorized the North Carolina Department of Transportation (NCDOT) to begin utilizing the public-private partnership (P3) approach as a delivery method for its highway expansion program. NCDOT utilizes the P3 approach to transfer risks to the private sector in the areas of design, construction, operations, maintenance, tolling and revenue, while minimizing the need for large financial investments from NCDOT in select North Carolina public works projects.

The NCDOT in coordination with the Charlotte Regional Transportation Planning Organization identified the proposed managed lanes project for Interstate-77 (I-77) and pursued this project through the environmental planning and review process. After completion of the environmental planning and review process and in recognition of the importance of traffic congestion relief in Mecklenburg and Iredell Counties, and the Charlotte region as a whole, on February 15, 2012, NCDOT commenced a procurement process for the I-77 managed lanes as a public-private partnership (P3) project. On June 26, 2014, NCDOT and the I-77 Mobility Partners, LLC executed the Comprehensive Agreement (CA) which governs the relationship between NCDOT and I-77 Mobility Partners LLC in what is termed “Commercial Close” in relation to the Project. This agreement was further amended as of January 13, 2015, March 27, 2015, April 28, 2015 and May 12, 2015, and the “Financial Close” which provided the financing for the Project occurred on May 20, 2015. In this report the project will be referred to as the “I-77 P3 Project.”

The Charlotte Regional Transportation Planning Organization and NCDOT principal objectives of the Project are to:

- Ease congestion along the I-77 corridor,
- Ensure seamless integration of the Project with other public works projects along the corridor,
- Establish operating speed standards on the High Occupancy Toll (“HOT”) Lanes during morning and afternoon peak periods, and
- Achieve an average speed of 45 mph on the HOT Lanes (or 80 percent of the current posted speed limit for general purpose lanes that are not tolled, if higher).

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2 I-77 PABs Official Statement dated May 13, 2015
APPENDIX A

I-77 Compliance Review

NCDOT expects that the benefits of the Project will include:

- Decreased fuel consumption and added time savings for motorists,
- Increased incentive for motorists to carpool and take advantage of transit options,
- Provide reliable, superior travel times on the HOT Lanes, especially during peak hours and
- Provide revenue generation to help pay for improvements along I-77.

Upon completion of construction of the Project, motorists will be provided with a choice of driving on non-tolled general-purpose lanes or paying a toll to drive on the HOT Lanes with a more reliable travel time. Under the CA, I-77 Mobility Partners LLC will charge a set of defined toll rates for each hour in non-peak periods and each half hour in peak periods. I-77 Mobility Partners LLC will adjust the tolls on the HOT Lanes based on several factors, including traffic congestion, to best meet the performance goal of steady flow of traffic at or above 45 miles per hour.

As of this report, the project is under construction and is expected to reach Final Completion approximately September 2019.

The I-77 P3 Project falls within the Design-Build-Finance-Operate-Maintain – Revenue Risk P3 delivery approach as described in the table on page 6. Under this approach the selected vendor once the contract is executed becomes the “concessionaire” that is responsible to secure financing and then to design and build the project in accordance with the technical requirements of the CA. Once the I-77 P3 Project is open to traffic the concessionaire is responsible for the operations and maintenance including the toll operations for the I-77 HOT lanes. The toll revenues collected belong to the concessionaire and will be used to repay financing secured for the design-build phase, to pay for operations and maintenance of the Project and if revenues are adequate to pay a rate of return on investor equity provided during the project financing. As described in Section 2 of this report there are provisions in the CA that allow for revenue sharing with NCDOT when performance exceeds predefined levels.

Objectives, Scope and Methodology

On February 27, 2017 the North Carolina Office of State Auditor (OSA) received a request to review and investigate matters for the Request for Proposal (RFP) process, the commercial close and financial close for the final contract for the I-77 P3 Project executed between the NCDOT and I-77 Mobility Partners LLC. In subsequent teleconferences with legislators and the OSA more detailed questions were raised related to the original written request. The report addresses both the individual aspects of the original questions and the more detailed questions from the teleconferences in the findings sections of the report.

The written request identified three specific areas of concern as follows:

First is a call to review all aspects of the formal RFP process to ensure all rules, procedures, protocols and guidelines were followed in accordance with state and federal laws. It is imperative to ensure no single bidder was advantaged purposefully or unintentionally over another.

Second is a call to review and investigate all aspects as to how the contract was constructed, reviewed, and approved. The purpose of the review is to ensure all procedures and
I-77 Compliance Review

processes were followed and that terms and conditions were constructed to optimize the quality of the technical, functional and financial components/arrangements for said contract, so that the final project would both benefit and protect the interest of all the citizens of the State of North Carolina.

Last is a call to evaluate all individuals in direct employment or under contract employment with the state who worked directly on the RFP and/or contract, to ensure no one is in violation of our state’s revolving door statute. It is also important to confirm that in current employment or since leaving employment, no one (state employee, board member, elected official, or vendor) associated with NCDOT has directly or indirectly gained financially from their involvement with the RFP or contracting efforts.³

More detailed questions raised during the teleconferences with legislators and OSA:

RFP Process

• Was the Local Government Commission (LGC) told that they wouldn’t be allowed to review contract and had to approve it (no questions asked)?
• Was the contracting process “skirted around”?
• Did NCDOT pay vendors to respond to its RFP (~$500k)?
• Was there an improper Award of the project to the selected vendor?
  o Did the 2nd place vendor get denied a 6-month extension of RFP process in order to accumulate the required equity?
  o Did NCDOT extend the timeframe for procurement?
  o Did the winning vendor have to hold off on the project for six months because they didn't have the required equity?
  o Did NCDOT waive penalties for delays?
• Was there a redacted letter from a NCDOT employee that outlined “illegal” things that happened during contracting process?
• Did parties speed up timeline to sign contract after the legislature requested review of contract?

Final Contract

• Were roads built with thinner road beds (17 inches) compared to other lanes on I-77? Is this road depth acceptable where semi-trucks will be able to use it?
• Can the vendor “overcharge” expenses to get additional funding streams via contract?
• Does the CA include a provision that the state pays vendor’s federal taxes?
• Did the state give away air rights above the road?
• In the event of an I-77 Mobility Partners LLC default, how much is the state obligated?
  o Would the state be obligated for all outstanding debt?

³ This area was addressed by investigators from the Office of the State Auditor. See questions #18 and #19 on page 12 of the OSA report for OSA investigators’ results and conclusions.
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• Would the state be obligated to repay from portion of toll revenues?
• Is the debt (principal) back loaded? Do principal payments not begin until 203X?
• Did the winning vendor sell an equity percentage in the project?

Other Items

• Was construction on the project scheduled to start in spring 2014 but delayed until fall 2014?
• Were there concerns with the vendor’s default history?

Clary Consulting Team

OSA selected Clary Consulting Company to perform the compliance review. Clary Consulting Company partnered with Bryant Miller Olive P.A. (BMO), legal advisors and Pevida Highway Designers (PHD), technical advisors to bring a multi-disciplinary team to this compliance review. Projects procured using the P3 model are typically complex transactions involving multi-disciplinary teams to complete the project. Our team has served on both the public and private sides of P3 transactions and as such brings a unique combination of skills and experience to the effort for North Carolina.

Clary Consulting Scope Timeline

After a review of the request from legislators and internal discussions among the Clary team members and OSA staff, Clary developed a timeline to guide the scope items in the formal request letter from legislators.

The timeline was defined as the procurement period which began with the issuance of a Request for Qualifications (RFQ) on February 15, 2012, to include initial RFP development through Financial Close for the project in May 2015. The timeline and specific scope items are discussed in more detail below.

Introduction

Clary Project Approach

Our team met with OSA staff and the State Auditor to review the legislative request and frame the project scope and approach. During these meetings the specifics of the request were outlined and the preliminary approach to investigate each were discussed.

To confirm the primary areas of interest and frame the compliance review, a teleconference call was held on September 7, 2017 with legislators who requested the compliance review. Each specific area of the request was reviewed in detail and specific concerns related to each area were defined for additional research.

Our team reviewed applicable federal and state laws, rules, policies and procedures related to public-private partnerships that governed the procurement, negotiations, and contract for the I-77 P3 Project. Our team also reviewed the RFP and CA for the I-77 P3 Project to prepare for next steps on the compliance review.
Our team worked closely with OSA staff to develop a comprehensive project work plan. The work plan was specifically designed and targeted to respond to the three areas of interest as outlined above. As part of the review planning development, a comprehensive information request was developed to initiate the compliance review.

An entrance interview was performed with NCDOT on October 5, 2017 at the NCDOT headquarters located in Raleigh, North Carolina. The team reviewed the specifics of the request and outlined our plan to perform the compliance review with senior NCDOT staff. We also delivered a detailed information request to NCDOT at the meeting.

Due to the volume of information available and required to perform the compliance review, it was agreed that NCDOT would establish a central record depository for the team to use. NCDOT populated this depository with over 2000 documents and technical plans for the project.

In that the scope of the compliance review encompassed a specific period of time during which the RFP process was engaged and working through the development of a CA through financial close, we developed a project timeline to document the activities and to establish their relationship to each other over this defined period.

Central to our compliance review was the identification of NCDOT staff, consultant staff and vendor staff that were directly involved in the development of the RFP, decision making throughout the process and the drafting of the CA. To that end we requested and were provided with a list of more than 72 individuals involved in the development of the project process.

After reviewing the list of individuals, we determined specific staff in which to schedule formal interviews with. To facilitate a consistent and precise sample of information tailored to address the specific areas of concern addressed in the original request for review, a detailed project interview questionnaire was developed and used for all interviews.

Interviews were conducted in-person and by phone where needed. In total 14 individuals were interviewed with a response questionnaire generated for each interview.

To evaluate the project in whole, our approach consisted of extensive research of North Carolina laws, procedures and guidelines regulating the procurement and execution of P3 projects, an in-depth analysis of the executed CA including development of a matrix of the financial structure and as well as a comparison to similar projects with as many like structural design features as possible. (Note: All P3 projects are unique because of varying P3 and procurement laws from state to state, different technical challenges and specifications, individual financial constraints on the public sponsor that lead to specialized terms and conditions tailored specifically for each project). The matrix also incorporated the applicable laws, rules and procedures for the RFP and CA, and a review of the technical standards applied to the I-77 P3 project.

**Expert P3 Advisors**

NCDOT hired a group of expert advisors to advise on the I-77 P3 Project. The advisors all had extensive experience advising public agencies on the analysis, development, procurement, and implementation of P3 projects. The key major advisors included the following:
Appendix A

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- Nossaman LLP – P3 legal advisor. Nossaman has advised on P3 projects in over 30 states. For more firm information see http://www.nossaman.com/infrastructure.


- KPMG LLP – P3 financial advisor. KPMG advisory services advise on infrastructure projects international and are one of the leading P3 financial advisors on the U.S. For more firm information see https://advisory.kpmg.us/deal-advisory/infrastructure.html.

- Parsons Brinckerhoff (now known as WSP) – technical advisor. Parsons Brinckerhoff, now known as WSP is an international engineering firm that has advised on numerous P3 and managed lanes projects. For more firm information see http://www.wsp-pb.com/en/WSP-USA/.

Summary of Key Laws, Rules and Guidelines Governing P3 and the I-77 Project

As the chief executive officer of the State of North Carolina (State), the Governor is responsible for formulating and administering the policies of the executive branch. N.C. Const. art. III, § 1; N.C.G.S. § 143B-4. The executive branch is organized into principal departments, one of which is the Department of Transportation (Department). N.C. Const. art. III, § 11; N.C.G.S. § 143B-6(7).

NCDOT is led by a Secretary of Transportation (Secretary), who is responsible for day-to-day operations. (North Carolina General Statutes (N.C.G.S.) Section (§) 143B-348) The Secretary works in conjunction with the Board of Transportation (Board), which is responsible for formulating policies and priorities for all modes of transportation under the Department. (N.C.G.S. § 143B-350(f)(1) The Board is responsible for approving the overall Transportation Improvement Program and for approving all highway construction programs. (N.C.G.S. § 143B-350(f)(4), (8) The Board may delegate to the Secretary the authority to “promulgate rules, regulations, and ordinances concerning all transportation functions assigned to the Department.” (N.C.G.S. § 143B-350(g). The Board is also required to adopt a code of ethics applicable to its members and to the Secretary. (N.C.G.S. § 143B-350(k)

Chapter 136 of the North Carolina General Statutes governs transportation. Section 136-18 vests the Department with numerous powers, the most relevant of which for this review are subsections (39) and (39a). As presently codified, subsection (39) authorizes the Department:

“To enter into partnership agreements with private entities, and authorized political subdivisions to finance, by tolls, contracts, and other financing methods authorized by law, the cost of acquiring, constructing, equipping, maintaining, and operating transportation infrastructure in this State, and to plan, design, develop, acquire, construct, equip, maintain, and operate transportation infrastructure in this State.”

Article 2 of Chapter 136 is entitled “Powers and Duties of Department and Board of Transportation.” It contains dozens of sections, including section 136-18. Article 2’s “competitive bidding requirements” are located in section 136-28.1 and in section 136-28.11. Department employees explained during interviews that section 136-28.1 applies to traditional design-bid-build projects, while section 136-28.11 applies to design-build projects. Regarding the first category, traditional projects, the statute provides in relevant part:
All contracts over five million dollars ($5,000,000) that the Department of Transportation may let for construction, maintenance, operations, or repair necessary to carry out the provisions of this Chapter, shall be let to a responsible bidder after public advertising under rules and regulations to be made and published by the Department of Transportation.

N.C.G.S § 136-28.1(a) defers the details of the procurement process and award criteria to Department rule and regulations. The only statutory requirement is that the Department advertise the project and award to a “responsible” bidder.

Article 2’s “competitive bidding requirements” governing the second category, design-build projects, are found in section 136-28.11. These requirements govern the I-77 P3 Project and are discussed below in the context of NCDOT’s P3 Policy and Procedures.

In 2012, the Legislature added subsection (39a) to section 136-18, which provided in relevant part:

“...with a private entity as provided under subdivision (39) of this section for which the provisions of this section may apply. The pilot project allowed under this subdivision must be one that is a candidate for funding under the Mobility Fund, that is planned for construction through a public-private partnership, and for which a Request for Qualifications has been issued by the Department no later than June 30, 2012.”

North Carolina Session Law (N.C.S.L.) 2012-184, § 1. Our interviews of NCDOT employees and review of related documents demonstrated that the I-77 project satisfied all three criteria at the time this law was passed.

- The project was a candidate for funding under the Mobility Fund (it scored second-highest of all projects identified as candidates);
- In 2013, the Legislature enacted a law “to strengthen the economy through strategic transportation investments,” N.C.S.L. 2013-183, at 1, amended by N.C.S.L. 2013-410, § 38. The law created a new strategic prioritization funding plan for transportation investments. The legislation was consistent with changes in the Federal transportation act, titled the Moving Ahead for Progress in the 21st Century Act (MAP-21), Public Law 112-141. The new state law expressly excluded nine sources of funds from the new investment formula that it created. One of the excluded sources was “funds obligated for projects in the State Transportation Improvement Program (STIP) that are scheduled for construction as of October 1, 2013, in State fiscal year 2012-2013, 2013-2014, or 2014-2015.” N.C.S.L. 2013-410, § 38(b). Funds for the I-77 P3 Project satisfied these criteria:
  - As of October 1, 2013, the STIP identified the project’s constituent parts as projects I-3311C, I-4750AA, and I-5405; and
  - All three projects were scheduled to be let during fiscal year 2013-2014 (letting was scheduled for March 4, 2014). The project was planned for construction through a public-private partnership; and
  - An Request for Qualification (RFQ) for the I-77 P3 Project had been issued before June 30, 2012 (the RFQ was issued on February 15, 2012).
The I-77 P3 Project was subject to other changes resulting from N.C.S.L. 2013-183. In particular, the law included extensive amendments to section 136-18(39a), which had passed the previous year. The changes loosened the criteria for projects authorized under subdivision (39), and granted the authority for such projects to the Turnpike Authority (in addition to the Department). In addition, the law added new details governing use of toll revenues. Finally, the law added prescriptive requirements governing contracts entered into under subdivision (39a). Particularly relevant to this review are the following requirements:

- Subjecting financial advisors and attorneys contracted by the NCDOT to work on projects authorized by (39a) to State law governing conflicts of interest;
- Requiring the NCDOT to report to the Joint Legislative Transportation Oversight Committee before signing any concession agreement; and
- Requiring the NCDOT to develop standards for entering into agreements authorized by (39a) and to report the standards to Joint Legislative Transportation Oversight Committee by October 1, 2013.

The standards for entering into agreements were important, because, as noted above, in 2008 the Legislature amended section 136-18(39) to require generally that contracts entered into under the section must comply with the “competitive bidding requirements of Article 2 of this Chapter.” Traditional design-bid-build project competitive bidding requirements are specified in section 136-28.1(a), which defers details to NCDOT rules and regulations. Design-build project competitive bidding requirements are specified in section 136-28.11.

The Legislature enacted section 136-28.11 in 2001, authorizing award of design-build “[n]otwithstanding any other provision of law.” Section 136-28.11(b) expressly identifies the basis of award of design-build contracts:

“The Department may award contracts for the construction of transportation projects on a design-build basis of any amount. The Department shall endeavor to ensure design-build projects are awarded on a basis to maximize participation, competition, and cost benefit. On any project for which the Department proposes to use the design-build contracting method, the Department shall attempt to structure and size the contracts for the project in order that contracting firms and engineering firms based in North Carolina have a fair and equal opportunity to compete for the contracts.”

Section 136-28.11(d) provides: “These contracts may be awarded after a determination by the Department … that delivery of the projects must be expedited and that it is not in the public interest to comply with normal design and construction contracting procedures.”

Over the period of time relevant to this review, the NCDOT had three different versions of governing P3 “policy and procedures.” The first version was approved by the Board of Transportation in June 2009. It was effective when the NCDOT issued the I-77 P3 Project Request for Qualifications (RFQ) in February 2012. The second version was approved in October 2012, when the NCDOT revised the document to incorporate the effects of N.C.S.L. 2012-184, which, as described above, created section 136-18(39a) and established the conditions necessary for a pilot project (which I-77 satisfied). The second version was effective when the NCDOT issued the I-77 P3 Project RFP in August 2013. The second version was included with the NCDOT’s report to the Joint Legislative Transportation Oversight Committee in October 2013, as required by N.C.S.L. 2013-183. The report also included as exhibits standard forms of procurement documents, which the NCDOT had
I-77 Compliance Review

developed through the I-77 P3 Project procurement process. The third version, approved in January 2014, was in effect when the NCDOT solicited final offers and entered into the I-77 P3 Project contract in 2014, and it remains in effect today.

While the review focused primarily on the State’s authorization of P3 projects and the NCDOT’s compliance with State statutes, policies, and procedures, the I-77 P3 Project as an interstate transportation project is governed by a wide range of federal laws. In addition to 23 C.F.R. part 636, Design-Build Contracting, of particular relevance to the audit was 23 C.F.R. part 450, Planning Assistance and Standards. Part 450 governs the development of metropolitan transportation plans and programs for urbanized areas, long-range statewide transportation plans and programs, the congestion management process, and the use of products developed during the planning process for project development and the environmental review process. The NCDOT’s efforts in this regard are memorialized primarily in the I-77 P3 Project Environmental Assessment (July 2013) and the I-77 P3 Project Finding of No Significant Impact (October 2013).

Summary of Comprehensive Agreement

The CA is the contract that defines and memorializes the requirements, key concepts and protections related to the I-77 P3 Project. The CA is a long-term partnering agreement between the public agency and the private consortium that defines the business terms, financial terms and technical requirements for the implementation and operations of the I-77 P3 Project during the term of the agreement. The effective date of the Commercial Close for the CA was June 26, 2014. The CA was amended four times between the Commercial Close and the Financial Close in May 20, 2015.

Each CA is a unique document tailored to the specifics of each individual P3 project, however there are many agreement terms and areas that are relatively standard and can be used from one project agreement to another. Through our interview process and review of the CA and similar project’s CAs, we determined that the beginning CA document and structure used for the I-77 P3 Project was a document and structure previously utilized in Texas for a similar P3 project. This is a common practice in the development process for P3 projects and serves to carry forward structure and terms that have become industry standard and to help reduce the costs and time to develop a CA.

The Commercial Close for the CA was June 26, 2014. The Financial Close for the CA was May 20, 2015. Amendments to the CA have been made as follows:

<table>
<thead>
<tr>
<th>Agreement</th>
<th>Date</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensive Agreement</td>
<td>06/26/2014</td>
<td>Original Execution</td>
</tr>
<tr>
<td>Amendment 1</td>
<td>01/13/2015</td>
<td>Extend Financing Deadline from 201 to 280 days</td>
</tr>
<tr>
<td>Amendment 2</td>
<td>03/27/2015</td>
<td>Extend Financing Deadline From 280 to 325 days</td>
</tr>
<tr>
<td>Amendment 3</td>
<td>04/28/2015</td>
<td>Extend Financing Deadline from 325 to 335 days</td>
</tr>
<tr>
<td>Amendment 4</td>
<td>05/12/2015</td>
<td>Technical Provisions Amendment</td>
</tr>
<tr>
<td>Amendment 5</td>
<td>06/01/2015</td>
<td>Public Funds increased to $94,705,000</td>
</tr>
<tr>
<td>Amendment 6</td>
<td>10/04/2016</td>
<td>O&amp;M Technical Provisions</td>
</tr>
</tbody>
</table>
In the Recital Section of the CA the parties summarized key concepts, authority and dates in the P3 process as follows:

- The State desires to facilitate private sector investment and participation in the development of the State’s transportation system via public private partnership agreements and has N.C.G.S. § 136-18(39) et seq. (the “Statute”), to accomplish that purpose.

- The Statute grants NCDOT the authority to enter into agreements with private entities to develop, design, build, finance, operate and maintain transportation facilities.

- Pursuant to the provisions of the Statute and NCDOT’s P3 Policy, NCDOT issued a RFQ on February 15, 2012, as amended.

- NCDOT received four statements of qualification by March 15, 2012, and subsequently shortlisted all four proposers.  

- On August 8, 2013, NCDOT issued to the shortlisted proposers a RFP to Develop, Design, Build, Finance, Operate and Maintain the I-77 HOT Lanes Project (as subsequently amended by addenda, the “RFP”).

- By March 31, 2014, NCDOT received technical and financial responses to the RFP, including the technical and financial response of Cintra Infraestructuras, S.A. on behalf of I-77 Mobility Partners LLC (the “Proposal”).

- The I-77 P3 Project concession was established as a Design, Build, Finance, Operate and Maintain (DBFOM) structure with the I-77 Mobility Partners LLC assuming the risk of future toll revenues collected.

- The I-77 P3 Project has a term defined as 50 years after all project sections have reached substantial completion.

With respect to financial provisions, we focused our review effort on the I-77 CA financing terms and conditions as defined in “I-77 P3 Project Comprehensive Agreement as of Financial Close, and specifically Exhibits (6-26-14R)”. The key concepts and terms are summarized below in the order in which they appear in the document:

### Tolling

The state grants the I-77 Mobility Partners LLC the exclusive right to impose tolls and Incidental Charges upon the Users of the HOT Lanes.

### Toll Services

NCDOT shall provide certain electronic toll collection services, and I-77 Mobility Partners LLC shall pay NCDOT the charges for such services.

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4 Shortlisting is the process of narrowing the field of potential proposer teams once the Statement of Qualifications (RFQ) have been submitted and reviewed by NCDOT. It is an industry standard practice when using a two-step bidding structure.

5 Incidental Charges means: “Reasonable administrative fees for account maintenance and account statements; Reasonable fees and interest for toll violations, including costs of collection, in accordance with applicable Law; and Other reasonable fees and charges for customary incidental services to Users, in accordance with applicable Law.”
Toll Revenue Risk

The I-77 P3 Project is a greenfield toll project for the HOT Lanes, meaning the corridor has not previously had tolling and the surrounding area does not have existing tolled roads. As such, there is a risk associated with drawing customers and generating sufficient revenues to support the project. NCDOT has passed this risk onto the I-77 Mobility Partners LLC in Section 3.2.2 of the CA where it clearly states that I-77 Mobility Partners LLC understands and agrees that, notwithstanding anything to the contrary in this Agreement or any other CA Document, the risk of collection of tolls and Incidental Charges that may be payable to I-77 Mobility Partners LLC remains with I-77 Mobility Partners LLC, and that NCDOT does not, and will not be deemed to, guarantee collection or collectability of such tolls and Incidental Charges to I-77 Mobility Partners LLC or any Person.

Toll Revenues

CA, section 3.6.1 grants the I-77 Mobility Partners LLC the exclusive right, title, entitlement and interest in and to the Toll Revenues, Section 3.6.2 outlines the I-77 Mobility Partners LLC rights to use Toll Revenues, and Section 3.6.3 requires Toll Revenues to be used first to pay all due and payable operations and maintenance costs, specifically including all amounts due to NCDOT. These provisions protect the states interest in having project debt and expenses paid prior to and before any equity distributions can be made.

Toll Revenue Sharing

An additional protection in the CA for the state is revenue sharing built into the agreement through the use of specific revenue performance “bands” as shown below based on the I-77 Mobility Partners LLC's “Internal Rate of Return” (IRR) percentage whereby the state is entitled to share a predetermined share of the excess revenue should the I-77 Mobility Partners LLC's IRR percentage perform at levels above 15%.

<table>
<thead>
<tr>
<th>Band</th>
<th>I-77 Mobility Partners LLC IRR Threshold</th>
<th>NCDOT Revenue Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.00% - 15.00%</td>
<td>0%</td>
</tr>
<tr>
<td>2</td>
<td>15.00% - 17.00%</td>
<td>12.50%</td>
</tr>
<tr>
<td>3</td>
<td>17.00% - 19.00%</td>
<td>25.00%</td>
</tr>
<tr>
<td>4</td>
<td>19.00% - 21.00%</td>
<td>50.00%</td>
</tr>
<tr>
<td>5</td>
<td>21.00%+</td>
<td>75.00%</td>
</tr>
</tbody>
</table>

Return on Investment

In CA, Section 3.6.5 the I-77 Mobility Partners LLC acknowledges and agrees that it shall not be entitled to receive any compensation, return on investment or other profit for providing the services contemplated by this Agreement other than those resulting from cost savings, Toll Revenues, Compensation Amounts, Termination Compensation and any other compensation expressly provided herein in accordance with the provisions of this Agreement, and earnings and interest accruing thereon.

As identified in Exhibit 1 to the CA, Base Case Equity Internal Rate of Return (IRR) means the Equity IRR projected in the Base Case Financial Model as of the Effective Date, which is equal to 14.39%.
I-77 Compliance Review

Project Financing

Section 4 of the CA outlines and defines key issues and positions of both the state and I-77 Mobility Partners LLC related to the projects financing.

- Section 4.1.1 allows I-77 Mobility Partners LLC to grant security interests in or assign the entire I-77 Mobility Partners LLC’s Interest (but not less than the entire I-77 Mobility Partners LLC’s Interest) to Lenders for purposes of securing the Project Debt, subject to the terms and conditions contained in the CA Documents. This provision allows I-77 Mobility Partners LLC to grant or assign an interest in the stream of revenue (cash flow water fall) to the Project lenders in order of priority.

- Section 4.1.2 identifies I-77 Mobility Partners LLC as solely responsible for obtaining and repaying all financing, at its own cost and risk and without recourse to NCDOT.

- Section 4.1.3.1 established the Project Financing Deadline. The Project Financing Deadline (01/22/2015) was established as 210 days after the Effective Date (06/26/2014) of Commercial Close. The project financing deadline was subsequently extended three times to accommodate the Transportation Infrastructure Financing and Investment Act (TIFIA) loan process. Amendments 1-3 extended the number of days from 210 to 335, as a result of delay caused by the TIFIA loan negotiation and closing process. Changes during the negotiations process required an additional commitment by the Proposer/I-77 Mobility Partners LLC and NCDOT as shown in CA Amendment 5, which increased the public share amount from $88 million to $94.7 million and to increase the equity position of the I-77 Mobility Partners LLC from $234.2 million to $247.96 million to help maintain the I-77 P3 Project finance plan and support the proposal costs to make up the reduction in the TIFIA Loan amount from $215 million original proposed to the U.S. Department of Transportation final approved TIFIA loan amount of $189 million. Section 4.1.3.7 defines the parties’ rights and responsibilities related to changes in the TIFIA Term Sheet Assumptions. This section was pivotal in that the TIFIA Program Office made significant changes to the assumptions including reducing the loan amount from $215 million to $189 million. This change required multiple cross team efforts to restructure the project financing including the need to add $13.76 million in private equity and $6.49 million in public funding to re-balance the finance plan. These efforts where supported by multiple CA amendments to the project financing deadline and to increase NCDOT funding and I-77 Mobility Partners LLC equity as described above.

- Section 4.3.1 states the State and NCDOT shall have no obligation to pay debt service on any debt issued or incurred in connection with the Project or this Agreement.

- Section 4.4.1 details the specific allowable uses of debt proceeds and is designed to protect the state from proceeds being used for other purposes by the I-77 Mobility Partners LLC. These provisions are a standard practice and provide a protection from the diversion of proceeds from unintended uses. Section 4.4.5 prevents debt to be issued that has a term in excess of the CA term. The protection here is to the state by not encumbering the project by debt passed the term date. Section 4.5.1.1 allows for debt Refinancing’s under the CA on terms and conditions acceptable to I-77 Mobility Partners LLC. NCDOT shall have no obligations or liabilities in connection with any Refinancing except for the rights, benefits and protections set forth in the CA (Article 20) and only if the Refinancing satisfies the conditions and limitations set forth in Section 20.1 of the CA.
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- The overall Project Finance Plan is developed using an electronic financial model that accompanies and becomes a part of the CA at Financial Close. The electronic financial model and the formal outputs that are included with the CA at Financial Close is termed the “Base Financial Model” for computations that support the Financial Close. The Base Financial Model includes all assumptions and criteria for the revenues, expenditures, and financing for the I-77 P3 Project over the term of the CA. As the I-77 P3 Project moves forward the Base Financial Model will be updated to reflect actual results for revenues, expenditures and financing for the Project.

An overall summary of the Financial Plan for the I-77 P3 Project includes the following:

The tables below illustrate several key strengths for this project. One of these strengths is the relative lack of leverage in this project. For example, the three P3 projects selected for comparison with the I-77 P3 Project have a wide range of debt to equity ratios with a high of 90%/10%, a low of 61%/39% and an average of 74%/26%. The I-77 P3 Project represents the lowest debt to equity ratio of the four projects at 61% debt to 39% equity.

<table>
<thead>
<tr>
<th>Sources</th>
<th>$M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Series 2015 Bond Net Proceeds</td>
<td>100.00</td>
</tr>
<tr>
<td>PABs Premium</td>
<td>3.58</td>
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<tr>
<td>TIFIA Loan</td>
<td>189.00</td>
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<tr>
<td>TIFIA Interest capitalized</td>
<td>12.62</td>
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<tr>
<td>NCDOT Funding</td>
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<tr>
<td>Interest Income</td>
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<tr>
<td>Equity</td>
<td>247.96</td>
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<tr>
<td>TOTAL SOURCES OF FUNDS</td>
<td>648.40</td>
</tr>
</tbody>
</table>

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

The low debt to equity ratio is significant for several reasons:

- Indicates a strong commitment from the I-77 Mobility Partners LLC for the project to succeed as the I-77 Mobility Partners LLC’s equity is “at risk” should cost be higher or toll revenues be lower.
- The State is able to provide a major road improvement on I-77 for an initial investment of $94.7 million.

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6 North Tarrant Express Segments 3A and 3B (Texas), U.S. 36 Managed Lane/Bus Rapid Transit Project: Phase 2 (Colorado), and I-95 HOV/Hot Lanes (Virginia)
The I-77 P3 Project accelerates the road improvements. If NCDOT chose to build on its own, it most likely would have taken much longer to complete and been prohibitively expensive due to inflation of project costs.

**Handback Reserve**

Section 8.10.1.1 states that on or before the last day of the first calendar quarter of the fifth full calendar year before the end of the 50-year term, the I-77 Mobility Partners LLC shall establish and fund a reserve account (the “Handback Requirements Reserve”) exclusively available for the uses set forth in Section 8.10.3.

Handback reserves are a protection to the state. They are designed and created to ensure that the facility will be in good condition at the end of the term.

**Developer Ratio Adjustment Mechanism (DRAM)**

NCDOT established the Developer Ratio Adjustment Mechanism (DRAM) to enhance the overall credit of the project debt financing to help achieve the ratings required to issue bonds and to secure a TIFIA loan. The DRAM was developed in concert with all proposers during the RFP question and answer period. Having the DRAM in place assisted the project in being rated BBB by DBRS rating service and BBB- by Fitch Ratings rating service which were the targeted ratings needed for both Private Activity Bonds and TIFIA loans. Failure to achieve these ratings would have prevented the project’s financial closing from occurring.

The DRAM functions as a revenue reserve and can be used, if needed under certain conditions and restrictions, outlined below, to insure there are sufficient funds to make debt service payments during the ramp-up period of the project term which is generally considered to be the first 5 years of operation. The DRAM funds are also classified as part of the overall NCDOT share but are not subject to a direct payment unless the specific conditions exist under which these funds can be disbursed. If, at the end of the DRAM period, the capped amount has not been fully disbursed, any remaining DRAM funds are returned to the state. Specifics related to the DRAM in the CA include:

- The provisions in Section 13.3 set forth the conditions and requirements under which NCDOT will provide limited credit enhancement support for the Project and to facilitate the financing of the Project (“Developer Ratio Adjustment Mechanism”).
- 13.3.2.1 The Developer Ratio Adjustment Mechanism shall only be available to the Project commencing on the date on which all Project Sections have achieved Substantial Completion and ending on the Final Maturity of the TIFIA Loan (“DRAM Period”).
  - 13.3.2.2 The amounts payable under the Developer Ratio Adjustment Mechanism shall be limited as follows:(a) In any given DRAM Operating Year during the DRAM Period, in no event shall annual payments exceed $12 million (“DRAM Annual Cap Amount”)(b) During the DRAM Period, in no event shall payments in the aggregate exceed the DRAM Aggregate Cap Amount which was set at $75 million in Exhibit 1 to the CA.(c) No DRAM amount will be payable during the 3-year period following Substantial Completion of all Project Sections (“Ramp Up Period”) if the Ramp Up Reserve has not been fully depleted.
I-77 Compliance Review

**Developer Default**

CA Sections 17.1 through 17.4 define specifics related to a developer default and specific actions to cure or remedy a developer default. There are multiple default scenarios and multiple methods to cure or remedy a default scenario detailed as part of these CA sections.

- In the event of a developer default during the construction period the NCDOT has multiple remedies to ensure the project is completed including the right to pursue performance bonds and guarantees to complete the project.

- In the event of a developer default post Substantial Completion the exposure to the NCDOT will be defined by when that default occurs and what type of default occurs. In the case of many items the I-77 Mobility Partners LLC will have a cure period that allows time to remedy the default in accordance with the CA and under review of NCDOT.

- In the case of a bankruptcy of the I-77 Mobility Partners LLC or similar full default there will be a remainder of the project debt to be negotiated and resolved as well as assumption of operational responsibilities by NCDOT or transfer of these responsibilities to a new operator.

**Liquidated Damages**

Liquidated Damages (CA Section 17) are established to incentivize performance and are generally considered a protection to the project sponsor (NCDOT) to have specific dates or performance levels achieved by the I-77 Mobility Partners LLC. They are a standard feature of a CA and the damages amounts are determined by the project sponsor (NCDOT).

**Design and Construction Standards**

The baseline design and construction standards were defined in Book 2 of the Request for Proposal that were incorporated into the CA (Technical Provisions). Book 2 includes twenty-four (24) sections related to the minimum technical and functional requirements including utilities, geotechnical engineering, roadways, pavement, hydraulics, structures, signing and tolling.
Section 1

RFP Development and Procurement Process Review
Review of the RFP Development and Procurement Process

This section focuses on the key question below from the legislative request:

“First is a call to review all aspects of the formal RFP process to ensure all rules, procedures, protocols and guidelines were followed in accordance with state and federal laws. It is imperative to ensure no single bidder was advantaged purposefully or unintentionally over another.”

Clary Consulting Approach and Activities

Our approach was based on a review of the entire I-77 P3 Project Request for Proposal (RFP) process with a focus on areas of legal authority and compliance, and the application of these standards throughout the RFP process.

Specific activities associated with this compliance review included the following:

- Review of all RFP development documentation, including drafts, meeting notes and interviews with staff directly involved in the RFP development process.
- Review of applicable federal, and state laws, procedures, policies and guidelines.
- Development of a project timeline to document the chronological order of events and document the specific key dates in the RFP process and actions associated to those dates.

Authority to Move the I-77 Project Forward

Chapter 136 of the North Carolina General Statutes governs transportation. Section 136-18 vests the Department with numerous powers, the most relevant of which for this review are subsections (39) and (39a). As presently codified, subsection (39) authorizes the NCDOT:

“To enter into partnership agreements with private entities, and authorized political subdivisions to finance, by tolls, contracts, and other financing methods authorized by law, the cost of acquiring, constructing, equipping, maintaining, and operating transportation infrastructure in this State, and to plan, design, develop, acquire, construct, equip, maintain, and operate transportation infrastructure in this State.”

Article 2 of Chapter 136 is entitled “Powers and Duties of Department and Board of Transportation.” It contains dozens of sections, including section 136-18. Article 2’s “competitive bidding requirements” are located in section 136-28.1 and in section 136-28.11. NCDOT employees explained during interviews that section 136-28.1 applies to traditional design-bid-build projects, while section 136-28.11 applies to design-build projects.

N.C.G.S § 136-28.1(a). Notably, the statute defers the details of the procurement process and award criteria to NCDOT rules and regulations. The only statutory requirement is that the NCDOT advertise the I-77 P3 Project and award to a “responsible” bidder.
I-77 Compliance Review

Article 2’s “competitive bidding requirements” governing the second category, design-build projects, are found in section 136-28.11. These requirements govern the I-77 P3 Project and are discussed below in the context of NCDOT’s P3 Policy and Procedures.

In 2012, the Legislature added subsection (39a) to section 136-18, which provided in relevant part:

“The Department of Transportation may enter into a partnership agreement with a private entity as provided under subdivision (39) of this section for which the provisions of this section may apply. The pilot project allowed under this subdivision must be one that is a candidate for funding under the Mobility Fund, that is planned for construction through a public-private partnership, and for which a Request for Qualifications has been issued by the Department no later than June 30, 2012.”

North Carolina Session Law (N.C.S.L.) 2012-184, § 1. Our interviews of NCDOT employees and review of related documents demonstrated that the I-77 project satisfied all three criteria at the time this law was passed:

- The project was a candidate for funding under the Mobility Fund (it scored second-highest of all projects identified as candidates);
- The project was planned for construction through a public-private partnership; and
- An Request for Qualification (RFQ) for the I-77 P3 Project had been issued before June 30, 2012 (the RFQ was issued on February 15, 2012).

Conclusion:

Based on this, the I-77 P3 Project was expressly authorized by statute.

Authority for NCDOT Investment in I-77 P3 Project

In 2013, the Legislature enacted a law “to strengthen the economy through strategic transportation investments,” N.C.S.L. 2013-183, at 1, amended by N.C.S.L. 2013-410, § 38. The law created a new strategic prioritization funding plan for transportation investments. The legislation was consistent with changes in the Federal transportation act, titled the Moving Ahead for Progress in the 21st Century Act (MAP-21), Public Law 112-141. The new state law expressly excluded nine sources of funds from the new investment formula that it created. One of the excluded sources was “funds obligated for projects in the State Transportation Improvement Program [STIP] that are scheduled for construction as of October 1, 2013, in State fiscal year 2012-2013, 2013-2014, or 2014-2015.” N.C.S.L. 2013-410, § 38(b). Funds for the I-77 P3 project satisfied these criteria:

- As of October 1, 2013, the STIP identified the project’s constituent parts as projects I-3311C, I-4750AA, and I-5405; and
- All three projects were scheduled to be let during fiscal year 2013-2014 (letting was scheduled for March 4, 2014).

Conclusion:

Based on this, the NCDOT funds for the I-77 P3 Project were not subject to the new transportation investment formula created by N.C.S.L. 2013-183.
Additional Legislative Direction and Requirements on P3 Projects

The I-77 P3 Project was subject to other changes resulting from N.C.S.L. 2013-183. In particular, the law included extensive amendments to section 136-18(39a), which had passed the previous year. The changes loosened the criteria for projects authorized under subdivision (39) and granted the authority for such projects to the Turnpike Authority (in addition to the NCDOT). In addition, the law added new details governing use of toll revenues. Finally, the law added prescriptive requirements governing contracts entered into under subdivision (39a). Particularly relevant to this review are the following requirements:

- Subjecting financial advisors and attorneys contracted by the NCDOT to work on projects authorized by (39a) to State law governing conflicts of interest;
- Requiring the NCDOT to report to the Joint Legislative Transportation Oversight Committee before signing any concession agreement; and
- Requiring the NCDOT to develop standards for entering into agreements authorized by (39a) and to report the standards to Joint Legislative Transportation Oversight Committee by October 1, 2013.

**Conclusion:**

Regarding the first requirement, we reviewed the executed contracts for Nossaman LLP, KPMG LLP and Parsons Brinckerhoff (now known as WSP). We found that all conflict of interest laws were documented and followed with no evidence indicating a violation of conflict of interest laws.

Regarding the second requirement, NCDOT reported to the designated committee on April 25, 2014, before signing the I-77 P3 Project CA on June 26, 2014. The report provided to the designated committee was a 70-page comprehensive outline of the project activities to date and those planned for moving the project forward to commercial close. It outlined the project selection process, financial terms and conditions as well as an analysis of the risks involved and who would bear those risk in the event of a default. The official committee meeting minutes for April 25, 2014, document the required presentation by NCDOT.

NCDOT also complied with the third requirement by reporting to the committee on October 1, 2013, standards for entering into agreements authorized by (39a). The report provided to the designated committee was a 48-page comprehensive outline of the planned P3 policies and procedures developed by NCDOT and specifically identifies the I-77 project as one of two projects being considered at that time for use of the P3 procurement approach. The official committee meeting minutes for October 1, 2013, document the required presentation by NCDOT.

P3 Program Policies, Procedures and Guidelines

The standards for entering into agreements are important, because, as noted above, in 2008 the Legislature amended section 136-18(39) to require generally that contracts entered into under the section must comply with the "competitive bidding requirements of Article 2 of this Chapter." Traditional design-bid-build project competitive bidding requirements are specified in section 136-28.1(a), which defers details to NCDOT rules and regulations. Design-build project competitive bidding requirements are specified in section 136-28.11.
Appendix A

I-77 Compliance Review

The Legislature enacted section 136-28.11 in 2001, authorizing award of design-build "[n]otwithstanding any other provision of law." Section 136-28.11(b) expressly identifies the basis of award of design-build contracts:

“The Department may award contracts for the construction of transportation projects on a design-build basis of any amount. The Department shall endeavor to ensure design-build projects are awarded on a basis to maximize participation, competition, and cost benefit. On any project for which the Department proposes to use the design-build contracting method, the Department shall attempt to structure and size the contracts for the project in order that contracting firms and engineering firms based in North Carolina have a fair and equal opportunity to compete for the contracts.”

Section 136-28.11(d) provides: “These contracts may be awarded after a determination by the Department … that delivery of the projects must be expedited and that it is not in the public interest to comply with normal design and construction contracting procedures.”

Over the period of time relevant to this review, NCDOT had three versions of governing P3 “policy and procedures.” The first version was approved by the Board of Transportation in June 2009. It was effective when NCDOT issued the I-77 P3 Project RFQ in February 2012. The second version was approved in October 2012, when NCDOT revised the document to incorporate the effects of N.C.S.L. 2012-184, which, as described above, created section 136-18(39a) and established the conditions necessary for a pilot project (which I-77 satisfied). The second version was effective when NCDOT issued the I-77 P3 Project RFP in August 2013. The second version was included with the NCDOT report to the Joint Legislative Transportation Oversight Committee in October 2013, as required by N.C.S.L. 2013-183. The report also included as exhibits standard forms of procurement documents, which NCDOT had developed through the I-77 P3 Project procurement process. The third version, approved in January 2014, was in effect when NCDOT solicited final proposals and entered into the I-77 P3 Project CA in 2014, and it remains in effect as of this report.

Conclusion:

The P3 policies and procedures evolved over time but did not fundamentally change. The P3 policies and procedures are consistent with controlling federal laws and regulations and with practices of other state transportation departments. The review found that the I-77 P3 Project procurement process being the RFQ and RFP followed the P3 policy and procedures in effect at the time for the applicable segment for the procurement process.

An NCDOT presentation in 2011 to the Joint Legislative Transportation Oversight Committee addressed the I-77 P3 Project. NCDOT was developing the first step of the two-step procurement process outlined in the P3 Policy & Procedures. This approach was consistent with state and federal law, which authorizes a two-step procurement process where vendor teams are short-listed based on the best qualified vendor teams and the short-listed prequalified teams may submit a proposal in response to Request for Proposal issued by NCDOT for complex design-build and P3 projects.

In 2012, the General Assembly enacted N.C.S.L. 2012-184, which added subsection (39a) to section N.C.G.S. § 136-18. This law established criteria for a P3 pilot project, which the I-77 P3 Project satisfied: it was a candidate for funding under the Mobility Fund; it was planned as a P3 project; and an RFQ had been issued before June 30, 2012.
Was a single bidder advantaged purposefully or unintentionally over another?

Following the Request for Qualification (RFQ) evaluation process, four vendor teams were shortlisted to move to the RFP stage of the I-77 P3 Project procurement. All four vendor teams participated in many one-on-one meetings with NCDOT that totaled 70 one-on-one meetings during the procurement for the I-77 P3 Project.

By the proposal submission deadline of March 31, 2014, NCDOT received one proposal (from I-77 Mobility Partners LLC). From April 1 through April 10, NCDOT and its advisors evaluated the proposal financial and technical criteria as stipulated in the RFP. Upon satisfying the more than 300 pass/fail and responsiveness criteria, I-77 Mobility Partners LLC was announced as the Apparent Best Value Proposer on April 11, 2014.7

We reviewed technical provisions of the CA. The objective of the technical review was to determine if NCDOT's procurement process favored one vendor team and whether the approved technical solutions provided long term value to the I-77 planned infrastructure improvements.

As discussed above, the NCDOT's procurement process included one-on-one meetings with various vendor teams to solicit feedback on best practices that can be incorporated into the RFP. In general, the RFP included a procurement process that included the following items:

Standard Specifications – The baseline standards were defined in Book 2 (Technical Provisions). Book 2 includes twenty-four (24) sections related to the minimum technical and functional requirements including utilities, geotechnical engineering, roadways, pavement, hydraulics, structures, signing and tolling. Conceptual drawings depicting the planned improvements were provided to all vendor teams.

Design Exceptions - These were produced to allow certain elements to remain or to be designed below the minimum criteria normally accepted by NCDOT. The minimum standards for highway design are established by the American Association of State Highway and Transportation Officials (AASHTO). There are a total of 8 design exceptions authorized for use on the project including minimum shoulder width, stopping sight distance and vertical clearance. The location of the Design Exceptions are detailed in Book 2.

Alternative Technical Concepts (ATC's) - The ATC process is commonly included in P3 or Design Build procurements to inspire innovation. It provides competing vendor teams an opportunity to propose alternative solutions not contemplated with the RFP concept design. The ATC process is confidential to allow an open dialogue among NCDOT and the private vendor team, and to protect the innovations proposed by the private vendor team.

There were two vendor teams that submitted ATC’s during the procurement process. The Charlotte Mobility Access Group (CAMG) submitted 11-ATC’s between October 2013 and February 2014 whereas I-77 Mobility Partners LLC submitted a total of 19-ATC’s between June 2013 and January 2014. The majority of the ATC’s involved petitioning NCDOT to grant design exceptions through constrained sections to minimize bridge replacements.

Question and Answers (Q&A) – Generally, NCDOT administers a Q&A process to clarify the RFP requirements. The Q&A process is administered during procurement in a number of

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7 This is according to NCDOT documentation. The satisfaction of pass-fail and responsiveness criteria was not reperformed by auditors as part of this review.
I-77 Compliance Review

ways. For the I-77 P3 Project, NCDOT created a public project website where all vendor teams could post their questions. Answers were provided to each question. Since the answers were posted on the public website, they were, consequently, made known to not only competing vendor teams but all members of the general public that were interested in following the project procurement.

The Standard Specifications and Design Standards adopted for the project are consistent with American Association of State Highway and Transportation Officials (AASHTO) criteria that are used on a nationwide basis. There were Design Exceptions that were granted where the benefits of the improvements outweighed the costs. Use of Design Exceptions to minimize costs, construction duration or environmental impacts are common. The design exceptions approved were used primarily to avoid bridge replacements enabling the project to remain within budget. None of the Design Exceptions compromised the objective of the improvements. These Design Exceptions have been approved, historically, on similar projects with budgetary constraints.

Conclusion:

After reviewing documentation supporting the one-on-one meetings, correspondence between NCDOT and the potential vendor teams, questions and responses generated from the one-on-one meetings, the review found that all four short-listed vendor teams were provided the opportunity to propose on an equal basis and there was no evidence that any proposer was advantaged purposefully or unintentionally over another.

Furthermore, two short-listed vendor teams provided written letters to NCDOT explaining why they did not submit a proposal.8,9 Neither vendor team cited unfair treatment or expressed feeling disadvantaged. Instead, both vendor teams identified feasibility concerns with the project in its current form. In other words, these vendor teams were not comfortable with the financing terms and structure, amount of equity at risk, toll revenue risk, etc. All of which were put in place as significant protections for the state.

Was the Local Government Commission (LGC) told that they wouldn’t be allowed to review the contract and had to approve it (no questions asked)?

At the June 17, 2014 LGC Special Meeting to approve certain portions of the CA, the meeting minutes expressly state:

“WHEREAS, in accordance with the proposal, NCDOT and I-77 Mobility Partners LLC, a Delaware limited liability company (the "Developer") intend to enter into a Comprehensive Agreement with respect to the Project (the "Agreement"), a draft of which has been submitted to the Commission…

…NOW, THEREFORE, BE IT RESOLVED by the North Carolina Local Government Commission as follows:

Section 1. To the extent required by NCGS Section 136-18(39), the Commission hereby approves the terms and conditions of, and the execution of, the Agreement…”

**Conclusion:**

Our review of NCDOT correspondence, in-person meetings and interviews with NCDOT staff, and review of Local Government Commission (LGC) meeting minutes found that documents, including the CA, were provided to the LGC, for review and approval prior to execution of the CA. The meeting minutes expressly state that the CA was approved unanimously.

Additionally, during a June 3, 2014 LGC meeting, NCDOT presented information to the LGC related to the project including a project overview, key commercial terms of the CA, project readiness, and I-77 Mobility Partners LLC’s qualifications, structure, and proposal.

**Was the contracting process “skirted around”?**

**Conclusion:**

Our review of the RFP, contracting and proposer selection process has found that NCDOT followed applicable laws, policies, and procedures governing the procurement and contracting for the I-77 P3 Project as discussed in more detail in the prior findings.

**Did NCDOT pay four vendors to respond to its RFP?**

**Conclusion:**

The RFP includes the Instructions to Proposers Form T Section (a)(ii) expressly states:

NCDOT will pay a stipend in the amount of $750,000 to each unsuccessful Proposer who submits a compliant and responsive Proposal.

In large complex projects for design-build and P3 approaches the vendor team normally must advance engineering work beyond the minimum level provided by NCDOT to the point the vendor team can provide a firm-fixed price proposal and to outline the technical approach to the project in the proposal. As an incentive for the vendor teams to provide quality proposals for the benefit of NCDOT, stipends were offered as part of the RFP in the amount of $750,000. This is consistent with U.S. DOT guidance for P3 projects as part of their “P3 Toolkit” located on pages 50 to 51 of the document titled “P3 Successful Practices” located on the Build America Bureau web site, where U.S. DOT identified the key points for a stipend as the below items. In addition, upon the payment and acceptance of a stipend the public owner receives all rights to the vendor team’s proposal, including engineering plans, innovations and other key items that can be applied to the final project to help achieve the most effective and cost-efficient project.

1. Stipends help foster competition.
2. Stipends demonstrate a public agency’s commitment to a P3 project.
3. Stipends defray a portion of the bidding costs.
4. An unsuccessful bidder must submit a compliant bid to receive the stipend.
5. Agencies may offer to pay a stipend to all bidders in the event of cancellation or suspension of the procurement.

Because only one vendor team submitted a proposal in response to the RFP, there were no stipends paid.
Was there an improper award of the project to the selected vendor?

- Did the 2nd place vendor want a 6-month extension of RFP process because they didn’t have the required equity?

**Conclusion:**
Only one proposer submitted a proposal; therefore, technically, there was no “second place vendor”.

The Charlotte Access Mobility Group (CAMG) is the only vendor team besides the winning vendor team to submit alternative technical concepts (ATC)\(^\text{10}\) during the RFP process.

However, there is no evidence that they wanted or were denied a 6-month extension of the RFP process because they didn’t have the required equity.

*In a written letter provided to NCDOT,\(^\text{11}\)* CAMG explained that they would not further pursue the preparation or submission of a proposal due to feasibility concerns they had with the project in its current form. Specifically, CAMG cited NCDOT’s maximum available funds as the primary factor in their decision. The letter goes on to state that should NCDOT address their concern, they would need 12 weeks to complete its proposal.

- Did NCDOT extend the timeframe for the procurement?

**Conclusion:**
As part of the compliance review we reviewed correspondence between all potential vendor teams and NCDOT as well as vendor team questions to NCDOT and NCDOT responses. Based on this review, we determined NCDOT reviewed each question and request independently and that any delay in setting the proposal due date applied to all vendor teams to allow for a thorough review of all questions and concerns raised by potential vendor teams during the open comment period.

- Did the winning vendor have to hold off the project for six months because they didn’t have the required equity?

**Conclusion:**
Once Commercial Close was achieved, the I-77 P3 Project was originally scheduled for Financial Close on or before January 22, 2015 (210 days from the “Effective Date”). As outlined by NCDOT in the October 7, 2014\(^\text{12}\) and March 11, 2015\(^\text{13}\) presentations to the LGC, the subsequent delays to Financial Close were due to reasons beyond the control of both NCDOT and I-77 Mobility Partners LLC. The primary cause of the delay was the TIFIA financing as further outlined below.

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\(^{10}\) The ATC process is commonly included in P3 or Design Build procurements to inspire innovation. It provides competing vendor teams an opportunity to propose alternative solutions not contemplated with the RFP concept design.

\(^{11}\) Letter from Charlotte Access Mobility Group dated March 19, 2014.

\(^{12}\) October 7, 2014 LGC Briefing Presentation.

\(^{13}\) March 11, 2015 LGC Briefing Presentation.
As outlined in the March 11, 2015 LGC Briefing Presentation, the primary causes for the TIFIA delay and how the Project financial structure changed as a result of the updated TIFIA terms are detailed below:

- October 23: TIFIA Credit Council expressed a desire to reduce the total amount of the TIFIA loan
- October - January: Negotiations ensued between TIFIA, NCDOT and I-77 Mobility Partners LLC to find a mutually agreeable solution to move the Project forward
- January 13: NCDOT and I-77 Mobility Partners LLC amended the CA to extend the Project Financing Deadline from January 20 to April 2
- January 20: Widen I-77 filed suit against NCDOT and the I-77 Mobility Partners LLC to halt the Project
- January 23: I-77 Mobility Partners LLC (in cooperation with NCDOT) submitted a revised proposal to TIFIA, reducing the TIFIA loan amount by $26 million to $189 million
- March 2: TIFIA Credit Council determined the revised proposal eligible for TIFIA credit assistance
- March 4: USDOT issued the I-77 Mobility Partners LLC a formal invitation to apply for TIFIA
- March 5: I-77 Mobility Partners LLC submitted its TIFIA application; a second Credit Council was expected to consider the deal for final TIFIA approval in 2-3 weeks

Furthermore, as identified in the NCDOT – I-77 Mobility Partners LLC – Financial Proposal Pass-Fail Report, I-77 Mobility Partners LLC provided the required assurance that private equity will be in place in the amounts required in order to fully fund the Project in accordance with Section 4.1.3.1 of the CA, including the required letters from Proposer’s Equity Members and Financially Responsible Parties (if applicable) evidencing their commitment to provide equity funding pursuant to Exhibit C, Section 5.5.

We found no evidence of a delay related to equity concerns with the I-77 Mobility Partners LLC.

- Did NCDOT waive all penalties for delays?

**Conclusion:**

Early delays in the RFP process were mutually agreed to by the NCDOT and the pool of potential vendor teams to allow for the full and final development of the RFP as well as to allow for sufficient time to respond to the large number of potential vendor team questions during the open comment period.

There were no delays subject to penalty prior to financial close. The scope of our review included the time period from initial RFP development through Financial Close, any penalties for delay outside of this time period are beyond the scope of this review and report.
Was there a redacted letter from a NCDOT employee that outlined all “illegal” things that happened during contracting process?

**Conclusion:**

After extensive research, our review did not find the existence of such a letter.

As part of the compliance review we requested NCDOT furnish any correspondence related to a letter from an employee outlining “illegal” things that happened during the contracting process. NCDOT was not able to produce any letter of this form from their extensive project documentation. We also asked each interviewee if they were aware of or had possession of any such letter. Additionally, an internet and social media search did not result in the location of a letter meeting this criteria.

The team did come across various memos/letters on the internet that discuss alleged illegalities and/or perceived issues related to the project. However, none of these appear to have been authored by current or ex-NCDOT employees. Furthermore, the results of our compliance review do not support or reflect items contained in these letters.

Did the parties speed up the timeline to sign the contract after the legislature requested review of contract? (Reportedly in June 2014, Senator Tarte asked NCDOT for a review of the contract – asked again 15 days later. The contract was signed the next day).

We requested, received and reviewed the correspondence between Senator Tarte and NCDOT in the weeks leading up to Commercial Close on the I-77 P3 Project.

**The original E-Mail Request from Senator Tarte is dated June 24, 2014:**

The email reads, “I am requesting that our State Auditor, and elected officials of the NCGA, selected by Present Pro Tem as well as the Speaker, to be allowed to perform a review of the contract between NCDOT and Cintra prior to authorizing the signature of this contract.”

**The NCDOT E-Mail Response is dated June 24, 2014:**

The response email reads:

“Senator Tarte

During yesterday's discussion in Speaker Tillis' office we covered all of the concerns you expressed related to the I-77 managed lanes project.

At the conclusion of the meeting you indicated that you were comfortable that the I-77 project was a "good deal for the state." As you know NCDOT Director of Technical Services Rodger Rochelle and the team of professionals, some of whom were in the meeting yesterday, have performed detailed due diligence on this project.

In accordance with NCGS 136-89.183 (a)(2) a report was submitted to the Joint Legislative Commission on Governmental Operations on April 25, 2014. A similar report was also submitted to the Joint Legislative Transportation Oversight Committee on the same day. As statute allows, NCDOT can provide a full briefing, if requested, to the Joint Legislative Commission on Governmental Operations before signing the final financial contract.
I see no foundation, however, for the delay you now seek in signing the commercial contract for this project.

Respectfully,
Sec. Tony Tata
North Carolina Department of Transportation"

The second request from Senator Tarte is dated June 24, 2014.

“Mr. Secretary:

To clarify the date of my requested contract review be performed, which I reference in my earlier email today, is the signing at financial close targeted for December 2014 - NOT commercial close this month.

The process for getting to successful close of this important highway project per my understanding should not and is not necessary to be delayed at this time to accommodate my request.

Your attention to this matter is most appreciated.

Take care, Jeff”

The Response from NCDOT is dated June 24, 2014

“Senator Tarte,

Thank you for clarifying your earlier request. Having been in Watauga County for a town hall meeting, project review, and ground-breaking ceremony, I am just now reading your second email. As you may know the Treasurer's Office reviewed the agreement in detail and the Local Government Commission approved a resolution to allow the project to move forward. Our technical services’ team has performed expert due diligence in concert with our consulting partners, KPMG. I reiterate what I said in my previous email, that we are prepared to brief the Joint Legislative Committee for Government Operations, should a request be submitted.

Respectfully,
Anthony J. Tata
Secretary
NCDOT”

As shown in the I-77 Mobility Partners LLC Proposal Section C8- Schedule for Commercial and Financial Close

“We expect the announcement of Apparent Best Value Proposer three weeks after Bid submission and have assumed that NCDOT will be reporting to the Join Legislative Transportation Committee concurrently with the announcement of the Apparent Best Value Proposer.

Upon announcement of the Apparent Best Value Proposer, we will finalize the required information to be delivered to NCDOT in the following 15 days as per ITP Section 6.2.1. Out of those deliverables we have already developed a largely-finalized DB term sheet similar to the final version of the contract.
Additionally, we have already audited the financial model, so we therefore do not envision any issues in delivering the required materials.

After the required materials are delivered, we will work together with NCDOT in order to finalize and complete all the CA Documents. We have experience in reaching commercial close on schedule from our previous Projects, so we expect to be ready to sign the CA Documents just after the minimum 60-day period required by the Joint Legislative Transportation Committee. Therefore, our target Commercial Close Date will be June 20, 2014.”

Key dates are highlighted below:

- Bid submission: March 31, 2014
- Announcement of Apparent Best Value Proposer: April 21, 2014
- Reporting to the Joint Legislative Transportation Committee: April 21, 2014
- Delivery of documents as per Section 6.2.1 of ITP: May 6, 2014
- Commercial Close: June 20, 2014

**Joint Legislative Transportation Oversight Committee Report** – April 25, 2014 (Four days later than the I-77 Mobility Partners LLC Proposal “Commercial Close Key Dates” as identified in the I-77 Mobility Partners LLC Proposal section above)

**Commercial Close** – June 26, 2014 (62 Days post JLTOC and six days later than the I-77 Mobility Partners LLC Proposal “Commercial Close Key Dates” as identified in the I-77 Mobility Partners LLC Proposal section above)

**Legislative Government Commission Update** – April 28, 2015 (22 days prior to Financial Close)

**Financial Close** – May 20, 2015

**Conclusion:**

*Based on our review of the final RFP, specifically the Instructions to Proposers (ITP), the I-77 Mobility Partners LLC Proposal, and the legal requirements regarding the contracting process, we found that NCDOT met all legal criteria regarding the timing of the contract signing.*

*Additionally, based on review of these documents, the timeline to sign the contract was not accelerated. As discussed above, the I-77 Mobility Partners LLC proposal submitted on March 31, 2014, stated an expected commercial close of June 20, 2014. Actual commercial close occurred on June 26, 2014.*
Section 2

Comprehensive Agreement Review
APPENDIX A

I-77 Compliance Review

Review of the CA

This section focuses on the key question below from the legislative request

“Second is a call to review and investigate all aspects as to how the contract was constructed, reviewed, and approved. The purpose of the review is to ensure all procedures and processes were followed.”

Clary Consulting Approach and Activities

Our approach was based on a review of the CA development process for the I-77 P3 Project with a focus on the three primary areas of legal authority and compliance; development of financing structure, and business rules; and development of technical standards and the application of these standards throughout the CA. Specific activities associated with this area included the following:

- Review of the detail processes utilized to build the CA for the I-77 P3 Project;
- Legal Analysis of key CA structural points and issues;
- Comparison of key I-77 P3 Project CA elements to other P3 CAs developed during the same time as the I-77 P3 Project;
- Comparison of the I-77 P3 Project Financial Plan structure and supporting Financial Model to the financial plan structure for other similar P3 projects developed near or within the same timeframe as the I-77 P3 Project; and
- Review of Technical elements of the I-77 P3 Project CA.

As discussed in the Introduction Section, the NCDOT hired a group of expert advisors to advise on the I-77 P3 Project. The advisors all had extensive experience advising public agencies on the analysis, development, procurement, and implementation of P3 projects. The key major advisors included the following:

- Nossaman LLP – P3 legal advisor.
- Hunton & Williams LLP – P3 and state legal advisor.
- KPMG LLP – P3 financial advisor.
- Parsons Brinckerhoff (now known as WSP) – technical advisor.

Nossaman was the primary outside P3 legal advisor to the North Carolina Attorney General and NCDOT. Nossaman brought to the project the P3 legal structure and documentation from experience on other P3 projects. Nossaman previously had worked with the North Carolina Turnpike on the Mid-Curritick Bridge P3 project, which did not reach fruition, but which did generate many agreement forms. Nossaman also had worked on multiple P3 projects that included TIFIA loans and tolls. The North Carolina Office of Attorney General had advised the North Carolina Turnpike on the Triangle Expressway project and was the primary in-house counsel for NCDOT on the I-77 project. Together with counsel, NCDOT revised its P3 Policy & Procedures in October 2012. On October 4, 2013, NCDOT presented the October 2012 version of the P3 Policy & Procedures to the Joint Legislative Transportation Oversight Committee, as

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14 Comprehensive Agreement refers to NCDOT I-77 Executed Comprehensive Agreement and Exhibits (6-26-14R), a document dated June 26, 2014
required by North Carolina State Law. 2013-183. In addition, NCDOT included a 28-page outline of the P3 procurement and CA processes and documentation on these elements.

Representatives from NCDOT, North Carolina Office of the Attorney General, and key advisors (Nossaman, Hunton & Williams, KPMG, Parsons Brinckerhoff) developed the draft CA prior to and early in the procurement process for the I-77 P3 Project. It is standard practice in the procurement of a P3 project to provide the draft CA to the vendor teams identified at the end of the Request for Qualifications stage to continue to the Request for Proposal stage of the procurement (called the prequalified teams).

The CA was developed with the understanding that the prequalified teams may seek project financing from the USDOT's loan program created by TIFIA. The TIFIA program provides loans for projects that satisfy the program's rigorous criteria. In the years preceding financial close of the I-77 project, TIFIA had provided assistance to three dozen projects. One of those projects was North Carolina Turnpike's Triangle Expressway, so the State had experience with the program. On many of the other projects, one or more of NCDOT's key advisors (Nossaman, Hunton & Williams, KPMG, Parsons Brinckerhoff) played a role and, as a result, were familiar with the basic agreement structure that USDOT would expect to see before extending credit.

NCDOT shared the draft CA documentation with the prequalified teams when it released the RFP in August 2013. Thereafter, through an extensive, transparent, and extraordinarily well-documented process, NCDOT interacted with all prequalified teams to solicit and respond to feedback on the RFP document and the draft CA. Based on review of project documents, correspondence between NCDOT and the prequalified teams and in-person interviews with NCDOT employees, it was determined that each of the prequalified teams had multiple opportunities, in person and via written submissions, to request revisions to the draft documents. Periodically, NCDOT aggregated comments into tables with its responses, which it provided to all prequalified teams. NCDOT issued seven amendments to the RFP between August 2013 and March 2014, which included multiple revised drafts of the CA in "track changes" form that clearly indicated revisions made along the way, as a result of internal NCDOT discussions as well as prequalified team participation.

While each of the four prequalified teams participated in the eight-month RFP process, ultimately only one prequalified team submitted a proposal - known as "I-77 Mobility Partners LLC." NCDOT and their advisors evaluated that proposal against extensive, objective, acceptability criteria as outlined in the RFP. NCDOT announced I-77 Mobility Partners LLC as the apparent best-value proposer on April 11, 2014. NCDOT reported the decision to both the North Carolina Joint Legislative Commission on Governmental Operations and the North Carolina Transportation Oversight Committee on April 25, 2014 and then undertook to negotiate a final form of CA with I-77 Mobility Partners LLC. The process for negotiations followed the requirements of the RFP and draft CA for the I-77 P3 Project.

Generally, P3 projects will have what is termed two "closings" with one being the signing of the CA between the public agency and the private proposer. This documents the agreement for the P3 project implementation and operations period for the term of the project. The signed CA must be reviewed by the lenders and investors as part of their final due diligence prior to providing financing for the P3 project. In select instances the lenders and investors may request some changes to the CA prior to agreement to fund the P3 project. Once the private partner and lenders/investors are in agreement and any required changes are made
to the CA a financial close occurs to provide the financing to the private prequalified team to implement the P3 project.

The commercial close for the I-77 P3 Project occurred on June 26, 2014. The time period between commercial close and the financial close in June 2015 involved discussions to secure project financing. It should be noted that financing for a P3 project that involves “revenue risk” where the private prequalified team accepts the risk of future toll revenues tends to involve longer time periods to secure financing compared to P3 projects that do not involve revenue risk. For example, the Colorado US-36 P3 Project reached commercial close in June 2013 and reached financial close in February 2014. A key element that was essential to the I-77 P3 Project was securing a USDOT TIFIA loan. The time involved to negotiate the TIFIA loan added time to the process that included NCDOT obtaining three legal opinions from reputable counsel familiar with the project and P3 contracting requirements: the NC Attorney General’s office Special Counsel; Nossaman; and Hunton & Williams; the TIFIA program conducting its own independent and extensive review of the I-77 P3 Project executed CA and Financial Plan before approving the loan for the I-77 P3 Project, which took until May 2015.

**Conclusion:**

In response to the question at the beginning of section 2, our review indicates the CA was constructed, reviewed and approved in conformance with all laws, procedures and guidelines and signed effective June 26, 2014.

The review also considered the arguments made in a lawsuit filed by project opponents in January 2015, some of which claimed that the CA violated State law. The NC Attorney General’s office defended NCDOT in the lawsuit. The lawsuit was finally resolved in NCDOT’s favor. See *WidenI77 v. NCDOT*, 800 S.E.2d 441 (N.C. App. 2017).

Were the terms and conditions constructed to optimize the quality of the technical, functional and financial components/arrangements for the contract?

The CA is the document utilized to define and memorialize the requirements, key concepts, rights and responsibilities, technical specifications and protections related to the I-77 P3 Project. The CA document is a partnering agreement between the public agency and the private prequalified team that defines the business terms, financial terms and technical requirements for the implementation and operations of the P3 project during the term of the agreement. The effective date of the CA for the I-77 P3 Project was June 26, 2014, when Commercial Close occurred.

**Conclusion:**

As detailed in the Introduction Section of this report under the Summary of the CA, and based on our expert review, NCDOT negotiated terms and conditions in the CA to ensure both the implementation of the project as intended and to protect the state from unintended financial exposure.

Given the requirements in Book 2 – Technical Provisions and based on our review, the State of North Carolina has obtained a reasonable pavement structure for the HOT lanes and General-Purpose Lanes for the I-77 P3 Project which was compliant with the Technical Provisions. The life cycle used to determine the pavement design is 30 years per Table 11.1 which is significantly greater than what is used in other States such as Florida where a 20-year design life is required. The 30-year design life produces a more robust structural pavement system. The design life is
used for computing the structural loading and subsequent material layer thickness constituting the total pavement depth.

The I-77 Mobility Partners LLC team proposed three (3) Alternative Technical Concept’s (ATC’s) related to pavement design.

- **ATC 18** – Proposed an alternative pavement design to support 2% of the full travel lane traffic. This ATC was denied.

- **ATC 19** – Proposed to allow I-77 Mobility Partners LLC to determine the traffic and design life of the HOT Lanes pavement design – This ATC was allowed, and an Addendum 2 was issued to address the topic. Addendum 2 was provided to all interested bidders.

- **ATC 20** – Proposed to relieve I-77 Mobility Partners LLC from using the layer coefficients and maximum layer depths specified in the Interim Pavement Design Procedure. This ATC was denied. The I-77 Mobility Partners LLC was instructed to use the Technical Provisions.

ATC 19 resulted in a change to the Book 2 requirements and proposers were provided an opportunity to propose an alternative pavement design for the HOT lanes. Through the interview process, it was confirmed that this was not the typical approach used by NCDOT on Design Build projects. However, given that this project is a P3 and that proposer is responsible for maintenance of the HOT lanes for the 50-year term of the CA, NCDOT agreed to provide more flexibility.

Section 11.2.1 of the Technical Provisions states the following, “Developer’s traffic forecast shall be used for design of the I-77 HOT lanes, including the buffer, but in no case shall the pavement structure and thickness be less than the minimum specified in Section 11.2.1 of the Technical Provisions and such pavement design and traffic forecasts shall be submitted to NCDOT for review and comment”. Although the Developer had to use the traffic data provided in Section 11.2.1 for the General Purpose Lanes, they could use their own forecast for the pavement design of the HOT Lanes. It is important to note that the structural loading of the HOT lanes is commonly much less than the General Purpose lanes. This is due to the restriction of large heavy trucks to general purpose lanes only (e.g. multiple axles) and overall lower volumes of traffic on the HOT lanes. However, the Developer could not propose a pavement structure less than the minimum specified in Section 11.2.1. This minimum pavement thickness applied for both the HOT lanes and the General Purpose Lanes. It is also important to note that the I-77 Mobility Partners LLC has the responsibility under the CA to operate, maintain and if necessary resurface the lanes to ensure the roadway surface meets the standards required in the Technical Provisions for the 50-year term of the CA.

We also compared the I-77 P3 Project financing metrics with other P3 projects of similar type and time frames. This comparison indicated that the I-77 P3 Project financing structure and terms were consistent with the industry best practices at the time the CA was developed and executed. In some respects, the financing structure and terms, such as the debt to equity ratio, were strongly favorable to the state. It is important to note that the I-77 Mobility Partners LLC has the risk of project costs and future toll revenues on the I-77 P3 Project. The I-77 Mobility Partners LLC’s equity is at risk if there are cost overruns or a major shortfall in actual toll revenues compared to forecasted toll revenues.

Note: according to the CA, there are certain scenarios in which the state may be required to provide additional funds to I-77 Mobility Partners LLC. However, these scenarios are very prescriptive and pertain to specific events called “Relief Events”. See pages 45-48 for further discussion.
Were the terms and conditions of the Project’s CA constructed to both benefit and protect the interest of all the citizens of the State of North Carolina?

Evaluating a project’s benefit must start with the original intent for and specific issues needing to be addressed. The I-77 corridor north of Charlotte has suffered for years with heavy congestion in a critical corridor for the movement of people and goods through North Carolina and the greater Charlotte Mecklenburg County area. The corridor had been studied for years for various much needed improvements. The I-77 P3 project concept as implemented through the P3 process was fully vetted through the transportation planning and environmental processes used by NCDOT to evaluate transportation improvements. This was coordinated with the Charlotte Regional Transportation Planning Organization (CRTPO). The Charlotte Regional Transportation Planning Organization (CRTPO) includes the I-77 P3 project as part of the Transportation Improvement Plan (TIP) as follows:

2016-2025 TIP

The CRTPO took action to approve the 2016-2025 TIP, amendments to the 2040 MTP, and an air quality conformity determination report at its August 19, 2015 meeting. Following CRTPO’s approval, the USDOT (FHWA) approved program years 2016 through 2019 of the TIP, and NCDOT approved the 2016-2025 TIP. The approvals by CRTPO, NCDOT, and FHWA allow for work to begin on projects within the 2016-2025 TIP.

Projects identified through the Strategic Transportation Investments (STI) process and Transition Projects are those projects that were programmed to the 2012-2018 TIP prior to the adoption of the STI legislation. Examples of transition projects within CRTPO included:

- I-4750, I-5405 I-77 Express Lanes Project
- R-3329 US 74 Monroe Bypass
- I-3819A: I-40 & I-77 Interchange Improvements

These Transition projects have been incorporated into the 2016-2025 TIP during the adoption process.

On October 16, 2013 the United States Department of Transportation, Federal Highways Administration issued a Finding of No Significant Impact (FONSI). As part of this approval action the following excerpts detail the projects need and purpose which are critical elements to gain approval:

2.1 Summary of Project Need

“I-77 is part of the national Interstate Highway System and is a critical, north-south transportation corridor for the Charlotte-metro region and beyond. Within the immediate study area for this project, I-77 links the major employment center of downtown Charlotte, known locally as “Uptown”, with the rapidly growing residential communities of northern Mecklenburg and southern Iredell counties. I-77 serves traffic demands and travel patterns for commuters (single-occupant vehicles, carpools, and transit) and other travelers within and outside of the project study area, and is a vital route for regional commerce. Currently, heavy traffic occurs during peak periods within the project limits, resulting in frequent congestion and delays.
The project study area has grown faster than the financial resources available to complete long-term transportation improvements. Existing traffic congestion within the I-77 corridor results in unpredictable delays, as well as excessive travel times for commuters and travelers. Predicted growth in the northern communities of Mecklenburg and southern Iredell Counties will continue to increase these delays and travel times.

2.2 Summary of Project Purpose

“The purpose of the proposed action is to provide immediate travel time reliability along I-77 from Uptown Charlotte to the Lake Norman area. Because the project is designed to address an immediate need, the opening and design years are both proposed for 2017.”

As mentioned above in the Introduction section of this report, North Carolina Session Law (N.C.S.L.) 2012-184, § 1. Department interviews as well as relevant documentation supports that the I-77 project satisfied all three criteria at the time this law was passed:

- The I-77 P3 Project was a candidate for funding under the Mobility Fund (it scored second-highest of all projects identified as candidates);
- In 2013, the Legislature enacted a law “to strengthen the economy through strategic transportation investments,” N.C.S.L. 2013-183, at 1, amended by N.C.S.L. 2013-410, § 38. The law created a new strategic prioritization funding plan for transportation investments. The legislation was consistent with changes in the Federal transportation act, titled the Moving Ahead for Progress in the 21st Century Act (MAP-21), Public Law 112-141. The new state law expressly excluded nine sources of funds from the new investment formula that it created. One of the excluded sources was “funds obligated for projects in the State Transportation Improvement Program [STIP] that are scheduled for construction as of October 1, 2013, in State fiscal year 2012-2013, 2013-2014, or 2014-2015.” N.C.S.L. 2013-410, § 38(b). Funds for the I-77 project satisfied these criteria:
  - As of October 1, 2013, the STIP identified the project's constituent parts as projects I-3311C, I-4750AA, and I-5405; and
  - All three projects were scheduled to be let during fiscal year 2013-2014 (letting was scheduled for March 4, 2014). The project was planned for construction through a public-private partnership; and
  - An RFQ for the I-77 P3 Project had been issued before June 30, 2012 (the RFQ was issued on February 15, 2012).

During our interview process we asked each interviewee to outline the NCDOT’s ability to produce this project using traditional funding approaches. It was commonly agreed that this project as currently scoped would not have been delivered for an extended period of time if traditional funding approaches were utilized.

Another view is to look at what the project demanded in the form of public funding support versus what is the value of works in the ground at the end of the construction period. In the case of the I-77 P3 Project the maximum public funding exposure (other than in the event of a termination event) is $190.7 million which includes costs of $21 million incurred prior to financial close, the Developer Ratio Adjustment Mechanism (DRAM) amount at maximum exposure of $75 million (note this is a reserve and some or all of this may not be used...
I-77 Compliance Review

depending on the performance of the I-77 HOT lanes) and $94.7 million defined as the public share in the CA for a project value of $648.40 million.

In addition to the low debt to equity ratio for the I-77 P3 Project, the use of tolls will also reduce the direct funding burden on the taxpayers of North Carolina because the corridor is a major interstate and regional connector that draws a good portion of its traffic from travelers moving into and through the project area.

The intangible benefit of the I-77 P3 Project will be measured over time with respect to reduced congestion in the corridor and economic impact of this improved mobility to the surrounding area and state as a whole.

With respect to protecting the interest of the state, our previous discussion related to specific CA terms and conditions, frames and outlines the protections built into the CA. At the time the CA was constructed, the structure and terms and conditions were consistent with industry best practices.

Conclusion:

In conclusion, the CA when constructed and how constructed appears to provide significant protections and terms favorable to the state.

While not required by state law or policy in effect during the project procurement or implementation, it should be noted that based on our review NCDOT did not prepare a Value for Money analysis which compares the P3 approach to a traditional delivery approach to help ensure that the results of the proposal from the I-77 Mobility Partners LLC provides the best value for the public owner. Value for Money or similar “Cost Benefit” analysis is required in the law or policies for other states that have extensive experience in P3 projects like Florida, Virginia and Texas.
Additional Questions from Legislators related to or covered by the CA:

Were roads built with thinner road beds (17 inches)? Is this road depth acceptable where semi-trucks will be able to use it?

**Conclusion:**

The pavement design requirements for all roadway pavements are documented in Book 2 - Technical Provisions, Section 11 – Pavement for the CA. This section contains verbiage that stipulates the minimum pavement thickness to be used for both asphaltic and concrete pavements. TAs specifically noted in Book 2:

Technical Provisions, Section 11 – Pavement, the Developer’s design had to provide a minimum pavement thickness for I-77 and the shoulders of I-277 including ramps for both asphalt and rigid type pavements. For asphalt pavement, three alternative pavement structures were permitted. The minimums required for each are described below:

1. **Asphalt thickness:** 11 inches
2. **Asphalt/ABC (Aggregate Base Course):**
   - a. **minimum thickness of ABC layer:** eight inches
   - b. **Minimum thickness of asphalt over ABC:** six inches
3. **Asphalt/CABC (Cement Treated Aggregate Base Course):**
   - a. **CTABC thickness:** eight inches
   - b. **Minimum thickness of asphalt over CTABC:** seven inches

For rigid pavement, the minimum thickness is ten inches for the pavement. Note: while allowed, rigid pavement was not proposed or used on the project.

These minimum requirements noted above applied for both the HOT lanes and General Purpose lanes. However, if the pavement design required greater thickness than the minimums noted above, then the Developer would have to construct a thicker pavement structure. The following table summarizes the minimum thickness required in comparison with the proposed pavement layers by the Developer in Figure 5-4 of their Proposal:

<table>
<thead>
<tr>
<th>Item</th>
<th>Min. Required by 11.2.1</th>
<th>Developer Proposed (Figure 5-4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-77 General Purpose Lanes – South and Central Sections</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asphalt Concrete thickness (Surface Course + Intermediate Course + Base Course)</td>
<td>6</td>
<td>12 (Exceeds)</td>
</tr>
<tr>
<td>Aggregate Base Course (ABC)</td>
<td>8</td>
<td>12 (Exceeds)</td>
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<tr>
<td><strong>TOTAL for General Purpose Lanes</strong></td>
<td><strong>14</strong></td>
<td><strong>24</strong></td>
</tr>
<tr>
<td>I-77 HOT Lanes – South and Central Sections</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asphalt Concrete thickness (Surface Course + Intermediate Course + Base Course)</td>
<td>6</td>
<td>6 (Meets)</td>
</tr>
<tr>
<td>Aggregate Base Course (ABC)</td>
<td>8</td>
<td>11 (Exceeds)</td>
</tr>
<tr>
<td><strong>Total for HOT Lanes</strong></td>
<td><strong>14</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

The Developer proposed a thicker pavement structure than the minimum required for both the HOT lanes and the General Purpose Lanes. The reference to “17 inches” of pavement may involve the combination of the asphalt concrete (6”) and the aggregate base course (ABC) (11”) which when combined total 17 inches for the HOT lanes. The proposed
I-77 Compliance Review

Pavement structure can handle multi-axle vehicles as they are taken into consideration when designing the overall pavement structure. Since the HOT lanes restrict use of large heavy trucks, the projected traffic loading is less than what is projected for the General Purpose Lanes. Thus, the heavier pavement structure was provided for the General Purpose Lanes.

Furthermore, according to a response from NCDOT to this question on April 19, 2018:

“The pavement thickness and quality is governed by testing and sampling as specified in the NCDOT Standard Specifications for Roads and Structures. Construction contract administration is managed by the Division, anchored by a Resident Engineer and his staff, with support from central staff. The Department decided that a firm would be hired to support and augment the NCDOT Resident’s Engineer’s staff in regards to inspection and quality assurance. In addition, the Developer and the contractor were required to hire an additional firm to assist their staff regarding quality control and quality assurance on the project. At last count, more than 50 personnel (excluding the NCDOT Resident Engineer’s personnel and NCDOT central staff) are conducting inspections, testing, and other quality assurance functions. In regard to asphalt quality, over 800 quality assurance tests have been performed to date with an additional 300 independent verification tests performed. In specific regard to pavement thickness, the thickness is monitored by inspection during placement, automatic grade control, and the drilling of core samples.”

Did the winning vendor sell an equity percentage in the project?

A CA establishes a long-term relationship between the project partners. As such, it is important to set some ground rules with respect to any changes to the partnership structure and how it can be affected over the long term of the agreement, 50 years in the case of the I-77 P3 Project. A key element working in NCDOT’s favor is the right to approve in advance any change or transfer in the ownership structure of the concessionaire. NCDOT retained this right as outlined in the CA section 21.2:

**Conclusion:**

At financial close on May 20, 2015, the equity holdings were as follows:

- Cintra Infraestructuras, S.A. 90%
- Aberdeen Infrastructure Partners II LP 10%

While outside the scope of this review which ends at Financial Close for the I-77 P3 Project, a report on the I-77 P3 Project produced by Mercator Advisors LLC on September 19, 2017, noted that the equity structure as of December 31, 2016, was as shown below with Cintra still holding a controlling interest in the project equity, but with the share dropping from 90% at Financial Close May 20, 2015 to 50.10% by December 21, 2016. It should be noted that the CA requires the major equity owner to maintain majority interest in the ownership of the I-77 P3 Project.

Note: It is common practice for the initial P3 developer to sell part of their share to generate funds to pursue new projects and to repay investors that invested for the "development period" of the project.
**Yes the CA Include a provision that the state pays vendor’s federal taxes?**

**Conclusion:**
The CA expressly provides that the “I-77 Mobility Partners LLC shall pay, prior to delinquency, all applicable Taxes.” CA § 24.1, at page 190.

**Did the state give away air rights above the road?**

**Conclusion:**
The CA expressly provides that the “I-77 Mobility Partners LLC’s rights and interests specifically exclude any and all Airspace and any and all improvements and personal property above … the surface of the Project Right of Way.” CA § 11.2.1, at page 86.

**Was the Project scheduled to start in spring 2014 but delayed until fall 2014?**

**Conclusion:**
There is no evidence that the project was scheduled to start in the spring of 2014. Proposals from interested vendor teams were not due until March 31, 2014. I-77 Mobility Partners LLC was selected by NCDOT as the Apparent Best Value Proposer on April 11, 2014. Commercial Close was June 26, 2014. I-77 Mobility Partners LLC officially received notice from NCDOT granting NTP1 (Notice to Proceed) status on August 22, 2014. NTP1 is the official notice from NCDOT for I-77 Mobility Partners LLC to begin certain work within NCDOT Right of Way along the I-77 corridor. Therefore, I-77 Mobility Partners LLC would have been unable to begin work on the I-77 corridor until August 22, 2014.

**Can the vendor overcharge expenses to get additional funding streams via the contract?**

**Conclusion:**
NCDOT is currently investing a little more than $90 million into the Project. Through the public-private partnership, I-77 Mobility Partners LLC, is responsible for the remainder of the $655 million to design, construct, operate and maintain the new optional express lanes. However, there are multiple scenarios defined in the CA where the vendor can ask for reimbursement of expenses.

Typical to CA development, these sections are very prescriptive and pertain to specific events often called “Relief Events”. Our review of these sections noted that each proposed
relief event would include a presentation by the I-77 Mobility Partners LLC, review by NCDOT, and negotiation as to the facts and events related to the proposed relief event before any additional state funds would be provided to the I-77 Mobility Partners LLC.

Monitoring for “Relief Events” (full list below) should be incorporated into the NCDOT’s program of monitoring for the I-77 P3 Project. See Items for NCDOT Consideration on page 48.

A list of Relief Events in the CA includes the following items that would only become a relief event should the item occur:

- (a) Force Majeure Event;
- (b) Latent defects in Existing Assets, to the extent provided in Section 7.11 of the Agreement;
- (c) Change in Law impacting the CA;
- (d) Discriminatory Action impacting the CA;
- (e) NCDOT failure to perform or observe any of its covenants or obligations under the CA or other CA Documents, including failure to issue a certificate of Substantial Completion or certificate of satisfaction of conditions precedent to Final Acceptance or Final Completion after Developer satisfies all applicable conditions and requirements for obtaining such a certificate;
- (f) NCDOT Change to the CA or I-77 Project scope;
- (g) NCDOT-Caused Delay;
- (h) Performance of works in the vicinity of the Project Right of Way carried out by NCDOT, Utility Owner or a Governmental Entity that disrupts Developer’s onsite Work;
- (i) Development or operation of a Business Opportunity in the Airspace by NCDOT or anyone (other than a Developer-Related Entity) claiming under or through NCDOT, to the extent set forth in Section 11.2.4 of the Agreement;
- (j) Discovery at, near or on the Project Right of Way of any Hazardous Materials (including NCDOT Release(s) of Hazardous Material) or archeological, paleontological or cultural resources (including historic properties), excluding any such substances or resources known to Developer prior to the Technical Proposal Due Date or that would have become known to Developer by undertaking Reasonable Investigation (provided that the records described in clause (i) of the definition of Pre-existing Hazardous Materials is deemed to be a Reasonable Investigation of Hazardous Materials prior to the Technical Proposal Due Date);
- (k) Discovery at, near or on the Project Right of Way of any Threatened or Endangered Species (regardless of whether the species is listed as threatened or endangered as of the Technical Proposal Due Date), excluding any such presence of species known to Developer prior to the Technical Proposal Due Date or that would become known to Developer by undertaking Reasonable Investigation;
- (l) Any spill of Hazardous Material by a third party who is not acting in the capacity of a Developer-Related Entity which (i) occurs after the Technical Proposal Due Date, (ii) is required to be reported to a Governmental Entity and (iii) renders use of the
roadway or construction area unsafe or potentially unsafe absent assessment, containment and/or remediation;

- (m) Issuance of a temporary restraining order or other form of injunction by a court that prohibits prosecution of any portion of the Work;

- (n) Suspension, termination or interruption of a NEPA Approval, except to the extent that such suspension, termination or interruption results from failure by any Developer-Related Entity to locate or design the Project or carry out the work in accordance with the NEPA Approval or other Governmental Approval (which failure may include (i) modification by or on behalf of Developer of the design concept included in the NEPA Approval, (ii) means or methods used by any Developer-Related Entity for carrying out the Work, or (iii) decision or action by or on behalf of Developer to use or acquire Additional Property);

- (o) Any change in the design concept of the Project or any portion thereof resulting from judicial or administrative action taken with respect to a legal challenge to any NEPA Approval or Major Permit as compared to the design concept indicated in the alternative that was the subject of the NEPA Approval, except to the extent the change in design concept had already been incorporated into Developer’s design schematics assumed in connection with the Base Case Financial Model;

- (p) A failure to obtain, or delay in obtaining, a Major Permit from the applicable Governmental Entity by the deadline set forth in Exhibit 12 of the Agreement, except to the extent that such failure or delay results from failure by any Developer-Related Entity to (i) meet the conditions and requirements set forth in Section 4.2.3.2 of the Technical Provisions with respect to such Major Permit or (ii) locate or design the Project or carry out the work in accordance with the NEPA Approval or other Governmental Approval (which Developer-Related Entity’s failure may include (A) modification by or on behalf of Developer of the design concept included in the NEPA Approval, (B) means or methods used by any Developer-Related Entity for carrying out the Work, or (C) decision or action by or on behalf of Developer to use or acquire Additional Property);

- (q) (i) NCDOT’s lack of good and sufficient title to or right to enter and occupy any parcel in the Project Right of Way after conclusion of NCDOT’s purported acquisition of the parcel or right of entry or occupancy through negotiation, settlement or condemnation proceeding, to the extent it interferes with or adversely affects performance of Work or imposition of tolls, or (ii) the existence at any time following issuance of NTP2 of any title reservation, condition, easement or encumbrance on any parcel in the Project Right of Way owned by NCDOT, of record or not of record, to the extent it interferes with or adversely affects performance of Work or imposition of tolls, except any title reservations, conditions, easements or encumbrances (A) concerning Utilities; (B) caused, permitted or suffered by a Developer-Related Entity; or (C) concerning rights of access for Governmental Entities and Utility Owners as provided by Law;

- (r) Delay by a Utility Owner in connection with a Utility Adjustment, provided that all of the “conditions to assistance” described in Section 7.4.6.2 of the Agreement have been satisfied; or

- (s) Discovery of subsurface or latent physical conditions at the actual boring holes identified in the geotechnical reports included in the Reference Information Documents that differ materially from the subsurface conditions indicated in the
geotechnical reports at such boring holes, excluding any such conditions known to Developer prior to the Technical Proposal Due Date or that would have become known to Developer undertaking Reasonable Investigation.

Our review also included a detailed review of the Developer Ratio Adjustment Mechanism (DRAM). The DRAM was designed as a credit enhancement to secure a credit rating that supported the rating needed for the project lenders (TIFIA loan and Private Activity Bonds). A DRAM event is triggered when the I-77 P3 Project revenues do not cover required expenses in a given year composed primarily of annual operations and maintenance cost and annual debt payments on the bonds and TIFIA loan. This is defined in the CA as a “coverage ratio” below a ratio of (1.0 times) of these required I-77 P3 Project expenses.

As part of our review we examined the project cash flow waterfall which indicated that I-77 P3 Project annual operations and maintenance costs as well as periodic renewal and replacement cost are paid prior to debt service. While there are numerous requirements for the I-77 Mobility Partners LLC to detail and forecast these costs, there is the potential for these costs to trigger a DRAM event, which would then require the contribution of NCDOT funds up to a maximum of $12 million in any one year and an overall maximum of $75 million over the term of the CA. Also related to the potential to trigger a DRAM event would be a situation where the I-77 Mobility Partners LLC lowers toll rates to a level that revenues are not sufficient to satisfy the debt service requirements. It is not the interest of I-77 Mobility Partners LLC to accelerate costs that trigger a DRAM event that could put I-77 Mobility Partners LLC in a potential default status with the project lenders.

Note: Each project is unique, however, for a P3 that is revenue risk based (risk of future toll revenues) these relief events are in line with similar P3 projects.

**Items for NCDOT Consideration:**

We recommend that as part of the NCDOT program of monitoring the I-77 P3 Project that the monitoring team consider the following key aspects that could trigger a DRAM event:

- Coordinate the review and acceptance of periodic renewal and replacement costs among the technical and financial team to consider the impact of these costs on the Project Financial Model to help ensure a DRAM event is not triggered by incurring these costs unnecessarily.

- Increase the monitoring level when budgets and/or actual annual costs exceed those forecasted in the I-77 P3 Project Financial Model for annual operations and maintenance costs to determine how this might impact the coverage of overall expenses and whether this could lead to a DRAM event.

- Monitor toll rate setting actions closely and include as part of that process a financial review to determine potential for DRAM impacts.

In the event of an I-77 Mobility Partners LLC default, how much is the state obligated? (Would the state be obligated for all outstanding debt?)

**Conclusion:**

The amount for a default depends on when the default occurs such as during construction of the I-77 P3 Project or after the project is finished and open to traffic. The below examples assume the I-77 P3 Project is open to traffic in 2023 and the cost are the amounts included in the CA as of financial close. The 2023 period was selected because this represents the highest point for debt outstanding balances and as such under the default calculation shows...
the highest level of exposure for NCDOT. At any point before 2023 interest is still accruing to the overall debt balance and at any point after 2023 the debt balance should be lower as the developer begins making interest and principal payments.

According to Exhibit 15 Section D.3 of the CA, under a developer default scenario, the NCDOT would be responsible for the lesser of the following:

(a) 80% of the Senior Debt Termination Amount minus (i) 80% of all Borrowed Cash and Credit Balances (if any), minus (ii) 80% of the portion of any Compensation Amounts previously paid to I-77 Mobility Partners LLC that (A) compensated I-77 Mobility Partners LLC for cost and revenue impacts attributable to the period after the Early Termination Date and (B) were not previously used to reduce Project Debt within the definition of Senior Debt Termination Amount; According to the Financial Close Model, the maximum potential dollar amount owed under the Senior Debt Termination Amount is Private Activity Bonds (PABs) - $100 million plus TIFIA - $218 million (2023) for a total of $318 million. 80% of $318 million comes to $254 million. Or

(b) 80% of the Initial Senior Debt Termination Amount, plus (i) 80% of any increase in the Initial Senior Debt Termination Amount directly attributable to a Refinancing of the Initial Base Case Senior Project Debt that (A) was fully and specifically identified and taken into account in the Base Case Financial Model and calculation of the Public Funds Amount and (B) occurs prior to the date notice of termination is delivered, minus (ii) 80% of all Borrowed Cash and Credit Balances (if any), minus (iii) 80% of the portion of any Compensation Amounts previously paid to I-77 Mobility Partners LLC that (A) compensated I-77 Mobility Partners LLC for cost and revenue impacts attributable to the period after the Early Termination Date and (B) were not previously used to reduce Project Debt within the definition of Senior Debt Termination Amount; or - Using 2023 as a calculation date as we did for part (a) above, the Initial Senior Debt Termination Amount would be equal to only the outstanding principal amounts for both PABs ($100 million) and TIFIA ($189 million). As of 2023 assuming there are no refinancing of debt and equity, which leaves a maximum potential amount owed of 80% of $289 million, which is equal to $231 million. Or

(c) The Fair Market Value, if any, of the I-77 Mobility Partners LLC’s Interest as of the Valuation Date; minus (i) the amount of any damages due to NCDOT resulting from the I-77 Mobility Partners LLC Default, including NCDOT’s reasonable costs to terminate and take over the Project, but without double counting where such costs are part of the determination of Fair Market Value (if applicable), minus (ii) 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 (iii) 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 (iv) a return on the outstanding balance of the Fair Market Value amount between the Valuation Date and the Early Termination Date equal to I-77 Mobility Partners LLC’s weighted average cost of capital as of the Valuation Date (determined according to the procedures set forth in Section B.5 above). As calculated in a previous report done by Clary Consulting for the North Carolina Office of the State Auditor, the Fair Market Value was calculated at $295 million as of 2023, the same time period as above.

The lesser of a, b and c from above is $231 million.
I-77 Compliance Review

Assuming a default “Post Completion” it is important to realize NCDOT will have a completed project open for tolling with an approximate project value of $648.40 million (as computed from the base case financial model) in place.

Is the debt (principal) back loaded? Do principal payments not begin until 203X?

**Conclusion:**
According to the Base Case Financial Model that was used at Financial Close for the I-77 P3, Project plans for debt repayment for Senior Bonds to commence in 2025 and TIFIA Loan payments to begin in 2023.

The Base Case Financial Model shows that by 2033, the TIFIA Loan Balance is reduced by over half ($90 million) of the original loan balance ($189 million).

Were there concerns with the winning vendor’s default history?

**Conclusion:**
Cintra Infraestructuras, S.A. as part of the I-77 Mobility Partners LLC vendor team made full disclosure of their history as part of the pre-qualification process and, according to the proposal evaluation documents, met all criteria to be short-listed and selected. As part of a response to a citizen’s concern the NCDOT Office of Inspector General conducted a full review of the proposer disclosure process and found that all proposers had complied with the full requirements (See NCDOT Inspector General's Report titled “I-77 Mobility Partners LLC, Case # OIG 2016-EXT03-14” dated January 4, 2016).

In accordance with the CA as discussed previously in the report, the I-77 Mobility Partners LLC invested $247.96 million of equity at Financial Close that is “at risk” should the I-77 P3 Project cost be significantly higher or the toll revenues be significantly lower than included in the I-77 Mobility Partners LLC’s Financial Model at Financial Close.

During the RFQ phase of the procurement, potential bidders were required to submit information related to defaults/bankruptcies on Form C of the RFQ submittal. Each potential bidder was required to disclose information regarding whether the firm or any affiliate has sought protection under any provision of any bankruptcy act within the past 10 years. This information was submitted to NCDOT in 2012 and again in 2013. At the time of the submittal of Form C during the RFQ phase, the Indiana Toll Road and SH-130 in Austin, Texas were both operating and solvent toll roads. The Indiana Toll Road went into bankruptcy proceedings in September of 2014 and SH-130 did not file for bankruptcy protection until March 2016. More detail related to the bankruptcy disclosures required by NCDOT and made by I-77 Mobility Partners, LLC can be found in the NCDOT Office of the Inspector General Report issued on January 4, 2016.

NCDOT also added the following in a response on April 19, 2018, with regard to why NCDOT felt comfortable with I-77 Mobility Partners, LLC given the recent defaults:

“In addition to the 170+ pass/fail criteria contained in the Instruction to Proposers and specifically those related to financial capability, the developer had to submit their financial model, assumptions, instructions, sensitivity capabilities, audited financial statements, etc. at or before the time of bid. In addition, that financial model had to be audited by a model auditor whose qualifications had to be submitted to NCDOT and our advisors (and approved) before they could use that auditor. The Department required financial proposal securities, performance and payment bonds, equity commitments, and parent guarantees as additional
protections. The presence of an SPV also places a fence around each project’s financial status; the status of one project has no bearing on another. The scrutiny that the USDOT TIFIA office, underwriters and rating agencies place on managed lanes projects, especially in post-recession deals, is important as well. You may wish to note the timing of the bankruptcy of the developers in which Cintra was a partner. I believe the Indiana Toll Road was after contract execution and the SH130 occurred well after financial close.

Three separate firms performed traffic and revenue studies on the project. Stantec was an agent for the NCDOT and did projections to inform the development of the project. C&M Associates prepared the traffic projections for the developer and Arup performed the traffic projections for the lender (TIFIA). The Arup work informed the size of the debt, and although performed primarily to protect the lenders, their work also provides additional and critical post-recession scrutiny on the developer’s projections (and protection to the owners).”
APPENDIX B
## NCDOT I-77 Express Lanes Project Timeline

<table>
<thead>
<tr>
<th>Events</th>
<th>Initial&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Actual&lt;sup&gt;2&lt;/sup&gt;</th>
</tr>
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<tbody>
<tr>
<td>Proposals Due to NCDOT</td>
<td>07/26/2013</td>
<td>03/31/2014</td>
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<tr>
<td>Commercial Close</td>
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<td>60 days after NCDOT report to JLTOC</td>
<td>06/20/2014</td>
<td>06/26/2014</td>
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<td>Notice to Proceed 1.&lt;sup&gt;3&lt;/sup&gt;</td>
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<td>30 days after commercial close</td>
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<td>08/22/2014</td>
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<td>Financial Close</td>
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<td>210 days after commercial close</td>
<td>12/28/2014</td>
<td>05/20/2015</td>
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<tr>
<td>Notice to Proceed 2.&lt;sup&gt;4&lt;/sup&gt;</td>
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<tr>
<td>210 days after commercial close</td>
<td>12/28/2014</td>
<td>05/28/2015</td>
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<tr>
<td>Begin Construction</td>
<td>Spring 2015</td>
<td>11/16/2015</td>
</tr>
<tr>
<td>Project Completion</td>
<td>02/05/2019</td>
<td>Estimated Fall 2019</td>
</tr>
</tbody>
</table>

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<sup>1</sup> Per I-77 Mobility Partners LLC submitted proposal documents.

<sup>2</sup> Per Project documents.

<sup>3</sup> Notice to Proceed 1 (NTP1) is the official notice from DOT for I-77 Mobility Partners LLC to begin certain work with the DOT Right of Way along the I-77 corridor. This work included but was not limited to: submission of staffing plans, quality management plans, conceptual traffic management plans, project baseline schedules, ensuring training is provided, ensuring insurance policies are in effect. NTP1 does not authorize actual construction.

<sup>4</sup> Notice to Proceed 2 (NTP2) is the official notice from DOT for I-77 Mobility Partners LLC to begin actual construction within the DOT Right of Way along the I-77 corridor.
RESPONSE FROM DEPARTMENT OF TRANSPORTATION
June 14, 2018

The Honorable Beth A. Wood, CPA
State Auditor
North Carolina Office of the State Auditor
20601 Mail Service Center
Raleigh, North Carolina 27600-0600

Re: Performance Report Titled I-77 Express Lanes Project

Dear Ms. Wood:

As it relates to the audit conducted by your office concerning the Department’s I-77 Express Lanes Project, I would like to thank you for the effort put forth by you, your staff, and the consultant subject matter experts. We have reviewed the report and agree with the findings. In addition, we noted the report contained two general recommendations regarding future monitoring of relief events and DRAM trigger events. We are pleased to submit the following response:

- Monitoring for relief events should be incorporated into the NCDOT’s program of monitoring for the I-77 P3 Project. The NC Turnpike Authority has hired a General Engineering Consultant with personnel well versed in P3 contracts to assist in continuing contract administration items and this firm will be tasked with such monitoring.

- Budgets, actual costs and other information contained in the Project financial model should be constantly monitored by DOT to ensure that a DRAM event is not triggered. The Department will be monitoring costs and other information as suggested on pages 60 and 61 of the report.

Thank you for the time and opportunity to review and respond to these findings. Please contact me if you have any questions regarding DOT’s response to any of the findings and recommendations.

Sincerely,

[Signature]

MG(R) James H. Trogdon, III, PE
Secretary, Department of Transportation

cc: Robert W. Lewis, Chief Operating Officer
    Beau Memory, Executive Director NC Turnpike Authority
This audit required 829.5 hours of auditor effort at an approximate cost of $85,439. The cost of the specialist’s effort was $180,878. As a result, the total cost of this audit was $266,317.