

**MEMORANDUM OF UNDERSTANDING  
REGARDING THE TERMS AND CONDITIONS  
AND MARKET VALUATION FOR  
STATE HIGHWAY 161**

**THIS MEMORANDUM OF UNDERSTANDING REGARDING TERMS AND CONDITIONS AND MARKET VALUATION FOR STATE HIGHWAY 161**, dated as of January 25, 2008 (the "MOU"), is entered into by and between **TEXAS DEPARTMENT OF TRANSPORTATION**, an agency of the State of Texas ("TxDOT"), and **NORTH TEXAS TOLLWAY AUTHORITY**, a regional tollway authority authorized under Chapter 366 of the Texas Transportation Code, (the "NTTA") whose service area is composed of Dallas, Tarrant, Collin and Denton counties (the "NTTA Service Area"). TxDOT and NTTA being sometimes collectively referred to as the "Parties" or individually as a "Party."

**WHEREAS**, the State Highway 161 (SH 161) project is located within the NTTA Service Area;

**WHEREAS**, NTTA and TxDOT have agreed that a market valuation of the SH 161 project will be developed pursuant to Transportation Code, Section 228.0111 (the "Market Valuation"), based upon mutually agreed terms, conditions, input assumptions and financial model;

**WHEREAS**, NTTA and TxDOT have agreed to the terms and conditions upon which the Market Valuation will be based, and have further agreed that the Market Valuation will be cooperatively developed in accordance with the process described in this MOU and Transportation Code, Section 228.0111; and

**WHEREAS**, the Parties intend to deliver a market valuation report on or before February 22, 2008, designated as "complete, subject to approval by TxDOT and NTTA."

**NOW, THEREFORE**, for and in consideration of these premises, TxDOT and NTTA agree to this MOU as follows:

**1. PURPOSE**

This MOU has been developed in order to (1) memorialize the agreement between TxDOT and NTTA on: (a) terms and conditions for the development, construction and operation of the SH 161 project, and (b) the input assumptions to be used in the development of the Market Valuation; and (2) facilitate the timely implementation of the process set forth in Transportation Code, Section 228.0111 for the development of the Market Valuation.

**2. TERMS AND CONDITIONS**

Pursuant to Transportation Code, Section 228.0111, the SH 161 project will be developed, constructed and operated in accordance with the terms and conditions set forth in Attachment A to this MOU, except in those instances in which Attachment A indicates that if NTTA exercises its option, the project agreement may provide for different terms and conditions, but only as explicitly provided in Attachment A.

### **3. DEVELOPMENT OF MARKET VALUATION AND INPUT ASSUMPTIONS**

- (a) KPMG Corporate Finance LLC ("KPMG") and RBC Dain Rauscher, Inc., doing business under the name RBC Capital Markets ("RBC"), have been selected by the Parties to cooperatively develop the Market Valuation for the SH 161 project in accordance with the provisions of this MOU and the Financial Model MOU (as hereinafter defined). The Parties shall instruct KPMG and RBC to prepare a market valuation report (the "Market Valuation Report") summarizing and documenting the Parties' mutual agreement regarding (i) the terms and conditions, (ii) the input assumptions, and (iii) a summary of the output of the agreed final form of the financial model ("Final Financial Model") developed for purposes of generating the Market Valuation. The Market Valuation Report shall be subject to the Parties' review and approval prior to its release designated as "complete; subject to approval by TxDOT and NTTA".
- (b) The Market Valuation will be based upon the terms and conditions set forth in Attachment A, and the input assumptions set forth in Attachment B. The cost assumptions in Attachment B do not include the costs of a letter of credit or other type of credit or liquidity facility securing the NTTA's obligations under a tolling services agreement for the SH 161 project. The Parties agree that if the NTTA does not exercise its option, the Regional Transportation Council and TxDOT will develop a form of security that is acceptable to the market for those obligations, and NTTA will not incur any costs for this security under the tolling services agreement that would be required for the SH 161 project. The Parties agree to work with the Regional Transportation Council to develop another form of security that is acceptable to the market for future toll projects, other than the I-635 project, that are located in the NTTA Service Area and for which a tolling services agreement is required.
- (c) The initial financial model that has been developed by KPMG (the "Initial Financial Model") will serve as the starting point for the cooperative development of the Final Financial Model used for purposes of generating the Market Valuation. The Parties will cooperatively develop the Final Financial Model using the process described in this MOU and the memorandum of understanding, dated as of December 21, 2007, and entered into by the Parties regarding access to and use of a financial model to support the market valuation for State Highway 161 (the "Financial Model MOU"), that is set forth in Attachment C.
- (d) Neither Party nor any of their advisors shall declare or otherwise deem the Initial Financial Model or any updates thereof or any valuation resulting therefrom (i) to be

final, agreed, or otherwise binding upon the Parties nor (ii) to constitute either the Final Financial Model or the "final draft version of the market valuation" under Transportation Code, Section 228.0111, unless and until the Parties agree in writing upon such status. Provided that the Parties have reached such agreement, the Market Valuation Report will be delivered on or before February 22, 2008 by RBC and KPMG to the Parties, designated as "complete; subject to approval by TxDOT and NTTA." The approval of either TxDOT or NTTA may be conditioned upon the Parties' satisfaction with the results of any third party model audit described in the Financial Model MOU.

(e) Neither TxDOT, KPMG, Goldman, Sachs & Co., NTTA, RBC nor any other of TxDOT's or NTTA's advisors, assumes any liability associated with any person's use of the Market Valuation Report or the use or validation of the Initial Financial Model, any updated version of the Initial Financial Model, the Final Financial Model, or any of their respective outputs. Any decisions made by NTTA predicated on the Initial Financial Model, updates to the Initial Financial Model, the Final Financial Model or Market Valuation report will be at NTTA's own risk.

#### **4. AMENDMENTS**

This MOU may be amended only by a written instrument duly executed by the Parties or their respective successors or assigns.

#### **5. NOTICES AND COMMUNICATIONS**

Notices under this MOU shall be in writing and (i) delivered personally, (ii) sent by certified mail, return receipt requested, (iii) sent by a recognized overnight mail or courier service, with delivery receipt requested, or (iv) sent by telefacsimile or email communication followed by a hard copy and with receipt confirmed by telephone, to the following addresses (or to such other address as may from time to time be specified in writing by such person):

All correspondence with NTTA shall be addressed to:

North Texas Tollway Authority  
P.O. Box 260729  
Plano, Texas 75026  
Attn: Jorge Figueredo, Ph.D.  
Executive Director  
Telephone: (214) 461-2000  
Facsimile: (214) 528-4826  
E-mail: [jfigueredo@ntta.org](mailto:jfigueredo@ntta.org)

With a copy to:

Locke Lord Bissell & Liddell LLP  
2200 Ross Avenue  
Suite 2200  
Dallas, Texas 75201-6776  
Attn: Frank E. Stevenson, II  
Telephone: (214) 740-8469  
Facsimile: (214) 756-8469  
E-mail: fstevenson@lockelord.com

All correspondence with TxDOT shall be addressed to:

Texas Department of Transportation  
125 East 11th Street  
Austin, Texas 78701  
Attn: Amadeo Saenz, Jr., P.E.  
Executive Director  
Telephone: (512) 305-9501  
Facsimile: (512) 305-9567  
E-mail: asaenz@dot.state.tx.us

With a copy to:

Texas Department of Transportation  
Office of General Counsel  
125 East 11th Street  
Austin, Texas 78701  
Attn: John J. Ingram  
Telephone: (512) 463-8630  
Facsimile: (512) 475-3070  
E-mail: jingram@dot.state.tx.us

## 6. MISCELLANEOUS

(a) Subject to the requirements of the Public Information Act and similar "open government" laws, TxDOT and NTTA and their respective advisors shall refrain from disseminating their respective views on the market valuation for the SH 161 project unless and until the Market Valuation is developed pursuant to this MOU.

(b) The market valuation process described in this MOU and the specific features thereof, including the terms and conditions set forth in Attachment A, the input assumptions set forth in Attachment B, and the intended utilization of the Initial Financial Model as the starting point for the cooperative development of the Final Financial Model, have been agreed upon to facilitate the timely implementation of the statutorily mandated market valuation process for the SH 161 project specifically, and were informed by the challenging time constraints and other unique features of the SH 161 project. While the

process undertaken pursuant to this MOU may be considered in the Parties' undertaking of subsequent market valuations on other projects, neither TxDOT nor NTTA shall be bound to follow any feature of this process, and no terms, conditions, assumptions, or other matters in this MOU or subsequently agreed upon by the Parties shall serve as binding precedent or be presumptively applicable to future market valuations.

(c) The Parties acknowledge and agree that this MOU is fully enforceable in accordance with its terms. If, after taking full advantage of the provisions of Transportation Code, Section 228.0111, any provision of this MOU is found to be inconsistent with Transportation Code, Section 228.0111, the invalidity or unenforceability of any such provision of this MOU shall not affect the validity or enforceability of the remainder of this MOU, which shall be interpreted, to the greatest extent legally permissible, to effect the original intent of the Parties. Notwithstanding the foregoing, if a material provision of this MOU is otherwise found to be invalid or unenforceable, either Party may terminate this MOU.

(d) This MOU shall expire and be of no further force and effect upon the earlier of (i) February 22, 2008 or (ii) the delivery of the Market Valuation Report; provided, however, that the provisions contained in Section 3(e) shall survive the expiration of this MOU.

#### **7. HEADINGS**

The captions of the sections of this MOU are for convenience only and shall not be deemed part of this MOU or considered in construing this MOU.

#### **8. ENTIRE AGREEMENT**

This MOU, together with the exhibits and attachments attached hereto, contain the entire understanding of the parties with respect to the subject matter hereof and supersede all other prior agreements, understandings, statements, representations and negotiations between the parties with respect to its subject matter. In the event of any conflict between the terms of this MOU and the Financial Model MOU, this MOU shall prevail.

#### **9. COUNTERPARTS**

This MOU may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

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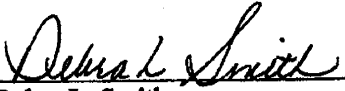


IN WITNESS WHEREOF, the Parties have executed this MOU by their duly authorized representatives to be effective as of date first set forth above.

NTTA:

ATTEST:

**NORTH TEXAS TOLLWAY AUTHORITY,**  
a regional tollway authority

  
Debra L. Smith,  
Secretary

By: 

Jorge Figueredo, Ph.D.  
Executive Director

APPROVED AS TO FORM:

Locke Lord Bissell & Liddell LLP  
General Counsel to NTTA

By: 

Frank E. Stevenson, II

**TxDOT:**

**TEXAS DEPARTMENT OF  
TRANSPORTATION**

By: \_\_\_\_\_

Amadeo Saenz, Jr., P.E.  
Executive Director

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Secretary

By: \_\_\_\_\_  
Jorge Figueredo, Ph.D.  
Executive Director

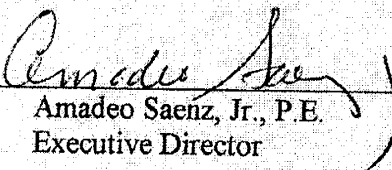
**APPROVED AS TO FORM:**

Locke Lord Bissell & Liddell LLP  
General Counsel to NTTA

By: \_\_\_\_\_  
Frank E. Stevenson, II

**TxDOT:**

**TEXAS DEPARTMENT OF  
TRANSPORTATION**

By:  \_\_\_\_\_  
Amadeo Saenz, Jr., P.E.  
Executive Director

## ATTACHMENT A

### SH 161 – Dallas County Toll Project Market Valuation Final Agreed Terms and Conditions

No.	Category	Terms and Conditions
1.	Market Valuation Basis	Based on a financial model with mutually agreed terms, conditions and assumptions, as reasonably anticipated from a bankable winning proposal, under a competitive CDA procurement. If the NTTA exercises its option, it is not required to utilize a competitive CDA procurement.
2.	Concession Fee	Payment of Concession Fee: (100%) to be delivered on the Effective Date, or if NTTA exercises its option, within two years after all necessary environmental requirements have been secured
3.	Term	52 years from the Effective Date. If the NTTA exercises its option, the project agreement may provide for a longer term as determined by both the Texas Transportation Commission and the NTTA Board of Directors.
4.	Effective Date	January 1, 2009
5.	Phasing	<p><b><u>Phase 1 (funded/constructed by others)</u></b>  <b>Open to traffic mid 2008</b></p> <p>A. All frontage roads from IH 20 to Carrier Parkway (N. of IH 30)</p> <ul style="list-style-type: none"> <li>• Currently under construction by TxDOT</li> <li>• At-grade intersection of UPRR between Main Street and Jefferson Street not included in this phase</li> </ul> <p>B. SH 183/SH 161 Interchange Phase II south to Conflans Road</p> <ul style="list-style-type: none"> <li>• Currently under construction by TxDOT</li> <li>• Project is 99% complete</li> </ul> <p><b><u>Phase 2 (funded by others)</u></b>  <b>Open to traffic No Later Than August 1, 2009</b></p> <ul style="list-style-type: none"> <li>• Open two main lanes each direction (the eastern half of the Bear Creek and Trinity River bridges) by August 1, 2009</li> <li>• Tolloed and non-tolloed ramps to and from the main lane bridges to accommodate 2 lanes each direction</li> </ul> <p>A. SH 161 main lane bridge over Bear Creek &amp; TRE  B. SH 161 main lane bridge over the Trinity River  C. SH 161 frontage roads from Rock Island Road to Oakdale Road  D. SH 161 frontage roads from Lower Tarrant Road to Carrier Parkway</p> <p><b><u>Phase 3 (funded by others)</u></b>  <b>Open to traffic No Later Than December 1, 2010</b></p> <p>A. Three main lanes in each direction from SH 183 to just north of IH 30  B. Temporary ramps to and from the main lanes in most</p>



No.	Category	Terms and Conditions
		<p>appropriate location between Egyptian Way and Carrier Parkway</p> <ul style="list-style-type: none"> <li>• Temporary ramps to and from the main lanes to accommodate minimum 2 lanes each direction</li> <li>• End of main lane construction determined and agreed to by TxDOT/NTTA is Station 450+00</li> </ul> <p><b>Phase 4 (funded by NTTA/CDA Concessionaire)</b>  <b>Open to traffic No Later Than June 1, 2012</b>  Includes remainder of project</p> <ul style="list-style-type: none"> <li>A. main lanes from IH 20 to north of IH 30</li> <li>B. full direct connection interchange at IH 30</li> <li>C. remaining direct connections at IH 20</li> <li>D. UP RR Underpass and frontage road at-grade crossing</li> <li>E. Electronic toll collection and ITS equipment for corridor from IH 20 to SH 183 (phased per opening of main lane segments)</li> </ul>
6.	Design and Construction Standards	<p><b><u>Performance Standards based on the following listed major items from the CDA Programmatic Terms Book 2.</u></b></p> <p>Major items include:</p> <p><b><u>Bridges</u></b></p> <ul style="list-style-type: none"> <li>• Full Width (8-lane) Bridges @ Trinity River and Bear Creek Constructed in Phase 2. All main lane bridges from IH 20 to SH 183 constructed initially to 8-lane ultimate width</li> </ul> <p><b><u>ITS System</u></b></p> <ul style="list-style-type: none"> <li>• Dynamic message signs are assumed to be required every 2 miles in each direction</li> <li>• Fiber optic with 2 operational conduits is assumed to be required along the whole length of the project</li> <li>• CCTV installations assumed to be at 0.75 mile centers</li> </ul> <p><b><u>ETC System</u></b></p> <ul style="list-style-type: none"> <li>• Raytheon System or NTTA existing system</li> <li>• Includes standard gantry (sign bridge truss)</li> </ul> <p><b><u>Utility Relocations</u></b></p> <ul style="list-style-type: none"> <li>• All relevant relocations to be undertaken</li> </ul>
7.	Expansion	<p><b><u>First Widening</u></b></p> <ul style="list-style-type: none"> <li>• Addition of one lane each direction from IH 20 to IH 30 (6 lanes full corridor)</li> <li>• Additional lanes open to traffic January 1, 2020</li> </ul> <p><b><u>Second Widening</u></b></p> <ul style="list-style-type: none"> <li>• Addition of one lane each direction (8 lanes full corridor; ultimate buildout)</li> <li>• Additional lanes open to traffic January 1, 2031</li> </ul>

No.	Category	Terms and Conditions
		Assume full width (8-lane) bridges @ Trinity River and Bear Creek constructed in Phase 2

No.	Category	Terms and Conditions
8.	Operating and Maintenance Standards	<p><b><u>Based on the following listed major items from the CDA Programmatic Terms Book 3</u></b></p> <ul style="list-style-type: none"> <li>• Operating and Maintenance required for Phase 1-4</li> <li>• Driveway and utility permitting per SH 121 Project Agreement</li> <li>• Signalization operation and maintenance per SH 121 Project Agreement</li> <li>• Major items include:</li> </ul> <p><b><u>Vegetated Areas – Except landscaped areas</u></b>  Vegetation is maintained so that:</p> <ul style="list-style-type: none"> <li>• Height of grass and weeds is kept within the limits described for urban and rural areas. Mowing begins before vegetation reaches the maximum height.</li> <li>• Spot mowing at intersections, ramps or other areas maintains visibility of appurtenances and sight distance.</li> <li>• Grass or vegetation does not encroach into or on paved shoulders, main lanes, sidewalks, islands, riprap, traffic barrier or curbs.</li> <li>• A full width mowing cycle is completed after the first frost.</li> <li>• Wildflowers are preserved utilizing the guidelines in the mowing specifications and <i>TXDOT Roadside Vegetation Manual</i>.</li> </ul> <p><b><u>Measurement:</u></b></p> <ul style="list-style-type: none"> <li>• Individual measurement areas to have 95% of height of grass and weeds between 5 in. and 18 in</li> <li>• No Occurrences of vegetation encroachment in each auditable section</li> </ul> <p><b><u>Herbicide:</u></b>  A herbicide program is undertaken in accordance with the TxDOT Herbicide Manual to control noxious weeds and to eliminate grass in pavement or concrete.</p> <p><b><u>Measurement:</u></b>  Adherence to vegetation management manuals</p> <p><b><u>Litter Pickup:</u></b></p> <ul style="list-style-type: none"> <li>• Keep the right of way in a neat condition, remove litter regularly</li> <li>• Pick up large litter items before mowing operations.</li> <li>• Dispose of all litter and debris collected at an approved solid waste site.</li> </ul> <p><b><u>Measurement:</u></b>  No more than 20 pieces of litter per roadside mile shall be visible when traveling at highway speed.</p>

No.	Category	Terms and Conditions
		<p><b><u>Landscape Areas:</u></b></p> <ul style="list-style-type: none"> <li>• All landscaped areas are maintained to their originally constructed condition. Landscaped areas are as designated in the plans.</li> <li>• Mowing, litter pickup, irrigation system maintenance and operation, plant maintenance, pruning, insect, disease and pest control, fertilization, mulching, bed maintenance, watering is undertaken as per FMP.</li> <li>• Damaged or dead vegetation is replaced</li> <li>• Trees, brush and ornamentals on the right of way, except in established no mow areas, are trimmed in accordance with TxDOT standards.</li> <li>• Trees, brush and ornamentals are trimmed to insure they do not interfere with vehicles or sight distance, or inhibit the visibility of signs.</li> <li>• Dead trees, brush, ornamentals and branches are removed. Potentially dangerous trees or limbs are removed.</li> <li>• All undesirable trees and vegetation are removed. Diseased trees or limbs are treated or removed by licensed contractors.</li> </ul> <p><b><u>Measurement:</u></b></p> <ul style="list-style-type: none"> <li>• The height of grass and weeds is kept between 2" and 8".</li> <li>• Mowing begins before vegetation reaches 8".</li> </ul> <p><b><u>Sweeping &amp; Debris Removal</u></b></p> <ul style="list-style-type: none"> <li>• Keep all channels, hard shoulders, gore areas, ramps, intersections, islands and frontage roads swept clean</li> <li>• Clear and remove debris from traffic lanes, hard shoulders, verges and central reservations, footways and cycle ways</li> <li>• Remove all sweepings without stockpiling in the right of way and dispose of at approved tip.</li> </ul> <p><b><u>Measurement:</u></b></p> <ul style="list-style-type: none"> <li>• Buildup of dirt, ice rock, debris, etc. on roadways and bridges not to accumulate greater than 24 in. wide or ½ in. deep</li> </ul> <p><b><u>Graffiti:</u></b></p> <ul style="list-style-type: none"> <li>• Graffiti is removed in a manner and using materials that restore the surface to a like appearance similar to adjoining surfaces</li> </ul> <p><b><u>Measurement:</u></b></p> <ul style="list-style-type: none"> <li>• All graffiti is considered a Category 1 defect (24 Hour Removal)</li> </ul> <p><b><u>Guardrails and Safety Barriers</u></b></p> <ul style="list-style-type: none"> <li>• All guardrails, safety barriers, concrete barriers, etc. are maintained free of Defects. They are appropriately placed and correctly installed at the correct height and distance from roadway or obstacles. Installation and repairs shall be carried</li> </ul>

No.	Category	Terms and Conditions
		<p>out in accordance with the requirements of NCHRP 350 standards.</p> <p><u>Measurement:</u></p> <ul style="list-style-type: none"> <li>• Hazard Mitigation - 24 Hours</li> <li>• Permanent Remedy – 28 Days</li> <li>• Permanent Repair – 6 Months</li> </ul> <p><u>Impact attenuators</u></p> <ul style="list-style-type: none"> <li>• All impact attenuators are appropriately placed and correctly installed</li> </ul> <p><u>Measurement:</u></p> <ul style="list-style-type: none"> <li>• Hazard Mitigation - 24 Hours</li> <li>• Permanent Remedy – 7 Days</li> <li>• Permanent Repair – 6 Months</li> </ul> <p><u>Traffic Signs</u></p> <ul style="list-style-type: none"> <li>• Signs are clean, correctly located, clearly visible, legible, reflective, at the correct height and free from structural and electrical defects</li> <li>• Identification markers are provided, correctly located, visible, clean and legible</li> <li>• Sign mounting posts are vertical, structurally sound and rust free</li> <li>• All break-away sign mounts are clear of silt or other debris that could impede break-away features and shall have correct stub heights</li> <li>• Obsolete and redundant signs are removed or replaced as appropriate</li> <li>• Visibility distances meet the stated requirements</li> <li>• Sign information is of the correct size, location, type and wording to meet its intended purpose and any statutory requirements</li> <li>• All structures and elements of the signing system are kept clean and free from debris and have clear access provided.</li> <li>• All replacement and repair materials and equipment are in accordance with the requirements of the TMUTCD</li> <li>• Dynamic message signs are in an operational condition</li> </ul> <p><u>Measurement:</u></p> <ul style="list-style-type: none"> <li>• Retroreflectivity: Number of signs with reflectivity below the requirements of TxDOT's TMUTCD – Nil</li> <li>• Face damage: Number of signs with face damage greater than 5% of area - Nil</li> <li>• Placement: Signs are placed in accordance with TxDOT's Sign Crew Field Book including not twisted or leaning – 100%</li> <li>• Number of obsolete signs – Nil</li> </ul>



No.	Category	Terms and Conditions
		<p><b><u>General – Safety critical signs</u></b></p> <ul style="list-style-type: none"> <li>• Requirements as Above, Plus: "Stop," "Yield," "Do Not Enter," "One Way" and "Wrong Way" signs are clean, legible and undamaged.</li> </ul> <p><b><u>Measurement:</u></b></p> <ul style="list-style-type: none"> <li>• Hazard Mitigation - 2 Hours</li> <li>• Permanent Remedy – 1 week</li> <li>• Permanent Repair – 6 Months</li> </ul> <p><b><u>Snow and Ice Control</u></b></p> <ul style="list-style-type: none"> <li>• Maintain travel way free from snow and ice</li> <li>• Weather forecast information is obtained and assessed and appropriate precautionary treatment is carried out to prevent ice forming on the travel way</li> <li>• Operate snow and ice clearance plans to maintain traffic flows during and after snowfall and restore the travel way to a clear condition as soon as possible.</li> </ul> <p><b><u>Measurement:</u></b></p> <ul style="list-style-type: none"> <li>• Maximum 1hr response time to complete manning and loading of spreading vehicles Maximum 2hrs from departure from loading point to complete treatment and return to loading point</li> <li>• Maximum 1hr response time for snow and ice clearance vehicles to depart from base</li> </ul> <p><b><u>Drainage Maintenance</u></b></p> <ul style="list-style-type: none"> <li>• Pipes and Channels:</li> <li>• Each element of the drainage system is maintained in its proper function by cleaning, clearing and/or emptying as appropriate from the point at which water drains from the travel way to the outfall or drainage way.</li> <li>• Drainage treatment devices: Drainage treatment and balancing systems, flow and spillage control devices function correctly and their location and means of operation is recorded adequately to permit their correct operation in Emergency.</li> <li>• Travel Way: The travel way is free from water to the extent that such water would represent a hazard by virtue of its position and depth</li> <li>• Discharge systems: Surface water discharge systems perform their proper function and discharge to groundwater and waterways complies with the relevant legislation and permits.</li> </ul> <p><b><u>Measurement:</u></b></p> <ul style="list-style-type: none"> <li>• Length with less than 90% of cross section clear – Nil</li> <li>• Devices functioning correctly with means of operation displayed - 100%</li> <li>• Instances of hazardous water build-up – Nil</li> </ul>

No.	Category	Terms and Conditions
		<p><b><u>Roadway Lighting - General</u></b></p> <ul style="list-style-type: none"> <li>• All lighting is free from defects and provides acceptable uniform lighting quality</li> <li>• Lanterns are clean and correctly positioned</li> <li>• Lighting units are free from accidental damage or vandalism</li> <li>• Columns are upright, correctly founded, visually acceptable and structurally sound</li> <li>• All high mast luminaries functioning on each pole</li> <li>• All obstruction lights are present and working (if required)</li> <li>• Compartment door is secure with all bolts in place</li> <li>• All winch and safety equipment is correctly functioning and maintained without rusting or corrosion (for structural requirements refer to Element Category 3)</li> </ul> <p><b><u>Measurement:</u></b></p> <ul style="list-style-type: none"> <li>• Number of sections with less than 90% of lights functioning correctly at all times – Nil</li> <li>• Instances of more than two consecutive lights out of action – Nil</li> <li>• Instances of two or more lamps not working per high mast pole - Nil</li> </ul>
9.	Asset Renewal Requirements	<p><b><u>Performance Standards based on the following listed major items from the CDA Programmatic Terms Book 3</u></b></p> <ul style="list-style-type: none"> <li>• Asset Renewal for Phases 1-4</li> <li>• Major items include:</li> </ul> <p><b><u>Pavement Condition Score</u></b></p> <ul style="list-style-type: none"> <li>• Unless stated otherwise, measurements shall be conducted using procedures, techniques, and measuring equipment consistent with TxDOT's Pavement Management Information System Rater's Manual. Unless otherwise stated pavement performance measurement records relate to 0.5 mile sections as described in the PMIS Rater's Manual.</li> <li>• Pavement Condition Score: Measurements and inspections necessary to derive Pavement Condition Score</li> </ul> <p><b><u>Measurement:</u></b></p> <ul style="list-style-type: none"> <li>• Pavement Condition Score for 80% of Auditable Sections exceeding: <ul style="list-style-type: none"> <li>- Mainlanes and ramps – 90 - 100%</li> <li>- Frontage roads – 80 - 100%</li> </ul> </li> <li>• Pavement Condition Score for each Auditable Section exceeding: <ul style="list-style-type: none"> <li>- Mainlanes and ramps – 80 - 100%</li> <li>- Frontage roads – 70 - 100%</li> </ul> </li> </ul>

No.	Category	Terms and Conditions
		<p><b><u>Pavement Ruts – Mainlanes, Shoulders &amp; Ramps</u></b></p> <ul style="list-style-type: none"> <li>• Depth as measured using an automated device in compliance with TxDOT Standards.</li> <li>• 10ft straight edge used to measure rut depth for localized areas.</li> </ul> <p><b><u>Measurement:</u></b></p> <ul style="list-style-type: none"> <li>• Percentage of wheel path length with ruts greater than ¼" in depth in each Auditable Section: <ul style="list-style-type: none"> <li>- Mainlanes, shoulders and ramps – 3% - Nil</li> <li>- Frontage roads – 10% - Nil</li> </ul> </li> <li>• Depth of rut at any location greater than 0.5" – Nil</li> </ul> <p><b><u>Pavement Ride Quality</u></b></p> <ul style="list-style-type: none"> <li>• Measurement of International Roughness Index (IRI) according to TxDOT standard Tex-1001-S, Operating Inertial Profilers and Evaluating Pavement Profiles</li> <li>• To allow for measurement bias, an adjustment of -10 (minus ten) is made to IRI measurements for concrete pavements before assessing threshold compliance.</li> <li>• Renewal Work and new construction subject to construction quality standards</li> </ul> <p><b><u>Measurement:</u></b></p> <ul style="list-style-type: none"> <li>• For 80% of all Auditable Sections measured, IRI throughout 98% of each Auditable Section is less than or equal to: <ul style="list-style-type: none"> <li>- Mainlanes, ramps – 95** inches per mile</li> <li>- Frontage roads – 120** inches per mile</li> </ul> </li> <li>• IRI measured throughout 98% of Auditable Section of less than or equal to: <ul style="list-style-type: none"> <li>- Mainlanes, ramps 120** inches per mile</li> <li>- Frontage roads – 150**inches per mile</li> <li>- Mainlanes, ramps, 0.1 mile average – 150** inches per mile</li> <li>- Frontage roads, 0.1 mile average – 180** inches per mile</li> <li>- IRI measured throughout 98% of each lane containing a bridge deck in any Auditable Section , 0.1 mile average – 200** inches per mile</li> <li>- Individual discontinuities greater than 0.75" – Nil</li> </ul> </li> </ul> <p><b><u>Pavement Failures</u></b></p> <ul style="list-style-type: none"> <li>• Instances of failures exceeding the failure criteria set forth in the TxDOT PMIS Rater's Manual, including potholes, base failures, punchouts and jointed concrete pavement failures</li> </ul> <p><b><u>Measurement:</u></b></p> <ul style="list-style-type: none"> <li>• Occurrence of any failure - Nil</li> </ul>

No.	Category	Terms and Conditions
		<ul style="list-style-type: none"> <li>- Hazard Mitigation - 24 Hours</li> <li>- Permanent Remedy – 28 days</li> <li>- Permanent Repair – 6 Months</li> </ul> <p><b><u>Edge drop-offs</u></b></p> <ul style="list-style-type: none"> <li>• Physical measurement of edge drop-off level compared to adjacent surface</li> </ul> <p><b><u>Measurement:</u></b></p> <ul style="list-style-type: none"> <li>• Instances of edge drop-off greater than 2" (Number) – Nil</li> </ul> <p><b><u>Skid Resistance</u></b></p> <ul style="list-style-type: none"> <li>• ASTM E 274 Standard Test Method for Skid Resistance Testing of Paved Surfaces at 50 MPH using a full scale smooth tire meeting the requirements of ASTM E 524</li> </ul> <p><b><u>Measurement:</u></b></p> <ul style="list-style-type: none"> <li>• Mainlanes, shoulders and ramps – Number of sections investigated as to potential risk of skidding accident and appropriate remedial action taken where average Skid Number for 0.5 mile section of mainlanes, shoulders and ramps are in excess of 30 – 100%</li> <li>• Frontage roads –Number of sections investigated as to potential risk of skidding accident and appropriate remedial action taken where average Skid Number for 0.5 mile section of frontage roads is in excess of 30 – 100%</li> <li>• When the Skid Number is below 25 and/or when required by the Wet Weather Accident Reduction Program, areas categorized as high risk, the Concessionaire shall perform a site investigation and perform required corrective action – 100%</li> </ul> <p><b><u>Joints in Concrete</u></b></p> <ul style="list-style-type: none"> <li>• Joints in concrete paving are sealed and watertight</li> <li>• Longitudinal joint separation</li> </ul> <p><b><u>Measurement:</u></b></p> <ul style="list-style-type: none"> <li>• Length unsealed joints greater than ¼" – Nil</li> <li>• Joint width more than 1" or faulting more than ¼" – Nil</li> </ul> <p><b><u>Curbs</u></b></p> <ul style="list-style-type: none"> <li>• Curbs are free of defects</li> </ul> <p><b><u>Measurement:</u></b></p> <ul style="list-style-type: none"> <li>• Length out of alignment – Nil</li> </ul> <p><b><u>Structures</u></b></p> <ul style="list-style-type: none"> <li>• Inspection and assessment in accordance with the requirements of federal National Bridge Inspection Standards</li> </ul>

No.	Category	Terms and Conditions
		<p>(NBIS) of the Code of Federal Regulations, 23 Highways – Part 650, the TxDOT Bridge Inspection Manual, and the Federal</p> <ul style="list-style-type: none"> <li>• Administration's Bridge Inspector's Reference Manual.</li> <li>• Substructures and superstructures are free of: <ul style="list-style-type: none"> <li>- graffiti</li> <li>- undesirable vegetation</li> <li>- debris and bird droppings</li> <li>- blocked drains, weep pipes manholes and chambers</li> <li>- blocked drainage holes in structural components</li> <li>- defects in joint sealants</li> <li>- defects in pedestrian protection measure</li> <li>- scour damage</li> <li>- corrosion of rebar</li> <li>- paint system failures</li> <li>- impact damage</li> </ul> </li> <li>• Expansion joints are free of: <ul style="list-style-type: none"> <li>- dirt debris and vegetation</li> <li>- defects in drainage systems</li> <li>- loose nuts and bolts</li> <li>- defects in gaskets</li> </ul> </li> <li>• The deck drainage system is free of all and operates as intended.</li> <li>• Parapets are free of: <ul style="list-style-type: none"> <li>- loose nuts or bolts</li> <li>- blockages of hollow section drain holes</li> <li>- graffiti</li> <li>- vegetation</li> <li>- accident damage</li> </ul> </li> <li>• Bearings and bearing shelves are clean.</li> <li>• Sliding and roller surfaces are clean and greased to ensure satisfactory performance. Additional advice contained in bearing manufacturers' instructions in the Structure Maintenance Manual is followed. Special finishes are clean and perform to the appropriate standards.</li> <li>• All non-structural items such as hoists and electrical fixings, operate correctly, are clean and lubricated as appropriate, in accordance with the manufacturer's recommendations and certification of lifting devices is maintained.</li> <li>• Sign signal gantries, high masts are structurally sound and free of: <ul style="list-style-type: none"> <li>- loose nuts and bolts</li> <li>- defects in surface protection systems</li> </ul> </li> </ul> <p><u>Measurement:</u> Occurrences of condition rating below seven for any deck, superstructure or substructure – Nil</p>



No.	Category	Terms and Conditions
		<p><b><u>Pavement Markings</u></b></p> <ul style="list-style-type: none"> <li>• Pavement markings are: <ul style="list-style-type: none"> <li>- clean and visible during the day and at night</li> <li>- whole and complete and of the correct color, type, width and length</li> <li>- placed to meet the TMUTCD and TxDOT's Pavement Marking Standard Sheets</li> </ul> </li> <li>• Markings – General Portable retroreflectometer, which uses 30 meter geometry meeting the requirements described in ASTM E 1710</li> </ul> <p><b><u>Measurement:</u></b></p> <ul style="list-style-type: none"> <li>• Length meeting the minimum retroreflectivity 175 mcd/sqm/lx for white - 100%</li> <li>• Length meeting the minimum retroreflectivity 125 mcd/sqm/lx for yellow - 100%</li> <li>• Physical measurement Length with more than 5% loss of area of material at any point – Nil</li> </ul> <p><b><u>Raised reflective markers</u></b></p> <ul style="list-style-type: none"> <li>• Raised reflective pavement markers, object markers and delineators are: <ul style="list-style-type: none"> <li>- clean and clearly visible</li> <li>- of the correct color and type</li> <li>- reflective or retroreflective as TxDOT standard</li> <li>- correctly located, aligned and at the correct level</li> <li>- are firmly fixed</li> <li>- are in a condition that will ensure that they remain at the correct level.</li> </ul> </li> </ul> <p><b><u>Measurement:</u></b></p> <ul style="list-style-type: none"> <li>• Number of markers associated with road markings that are ineffective in any 10 consecutive markers. (Ineffective includes missing, damaged, settled or sunk) – Nil</li> <li>• A minimum of four markers should be visible at 80' spacing when viewed under low beam headlights – 100%</li> <li>• Uniformity (replacement rpms having equivalent physical and performance characteristics to adjacent markers).</li> </ul>
10.	Tolling	<p><b><u>Tolling Type:</u></b> All ETC, supported by video tolling</p> <p><b><u>Toll Rates:</u></b></p> <ul style="list-style-type: none"> <li>• Base toll rate: \$0.145/Mile (in 2010\$)</li> <li>• Video surcharge of 45% for video users</li> <li>• Escalation: 2.75% Compounded Annually – Reset Every 2 Years commencing January 1, 2012</li> <li>• Peak Period Toll Rates 1: If directed by the RTC, Developer: <ul style="list-style-type: none"> <li>- will charge a maximum Peak Period Toll Rate up to 1.17</li> </ul> </li> </ul>

No.	Category	Terms and Conditions
		<p>times the applicable Maximum Base Toll Rate for each User Classification in each direction of travel for the hours from 6:30 to 9:00 am and 3:00 pm to 6:30 pm</p> <ul style="list-style-type: none"> <li>- the permissible maximum toll rates during all other hours of the week shall not exceed a Reduction Factor (<math>R=0.86</math>) times the Maximum Base Toll Rate for each User Classification where the Reduction Factor <math>R</math> is determined such that the revenue impact of Peak Period Toll Rates are revenue neutral</li> <li>• Peak Period Toll Rates 2 : Once the first Capacity Improvement Trigger is reached, Developer: <ul style="list-style-type: none"> <li>- will charge a maximum Peak Period Toll Rate up to 1.30 times the applicable Maximum Base Toll Rate for each User Classification in each direction of travel for the hours from 6:30 to 9:00 am and 3:00 pm to 6:30 pm</li> <li>- will charge during the six lowest volume hours toll rates for the same User Classification not exceeding a Maximum Low Volume Period Toll Rate equal to 0.8 times the applicable Maximum Base Toll Rate for such User Classification</li> <li>- All other hours the maximum base toll rates will be used</li> </ul> </li> <li>• Truck Toll Rates – Per SH 121 Project Agreement</li> </ul>
11.	Handback Provisions	Per SH 121 RFP Requirements. Provided that if NTTA exercises its option, the project agreement may provide for a different arrangement as determined by the Parties and the Regional Transportation Council.
12.	Revenue Sharing	Revenue sharing percentages between TxDOT and NTTA/CDA Concessionaire based on agreed upon revenue bands. Revenue bands to be established once traffic and revenue forecast used for the purposes of the Market Valuation is agreed upon. The agreed revenue forecast used for the purposes of the Market Valuation will establish the floor of the first revenue band.
14.	Right of Way	TxDOT to provide access and use of all necessary TxDOT right of way during the Term. If the NTTA exercises its option, the project agreement may provide for different right of way rights as determined by both the Texas Transportation Commission and the NTTA Board of Directors.

## ATTACHMENT B

### SH 161 – Dallas County Toll Project Market Valuation Final Agreed Assumptions

#### A. Cost Assumptions

No.	Category	Assumptions
1.	Capital Cost	<p><b>Phase 1 (Actual)</b> Construction and ROW costs: \$268,437,074 Pre-Development Costs (last 3 years): \$11,130,487</p> <p><b>Phase 2 (2007\$)</b> \$231,614,424 (Total Project Cost)</p> <p><b>Phase 3 (2007\$)</b> \$90,265,397 (Total Project Cost)</p> <p><b>Phase 4 (2007\$):</b> \$436,670,182 (Construction Cost)</p> <p><b>First Widening (2007\$):</b> \$12,023,301 (Construction Cost)</p> <p><b>Second Widening Lane (2007\$):</b> \$10,626,355 - IH-20 to IH-30 (Construction Cost) \$5,204,460 - IH-30 to SH183 (Construction Cost)</p> <p><b>Construction Contingencies:</b> 16.5% - Phase 4 20% - Future Widening</p> <p><b>Overhead/Engineering Contingencies:</b> 20% (Applied to sum of PS&amp;E, QA/QC incl. IE, ROW, and Utilities)</p> <p><b>PS&amp;E (or Arch/Engr):</b> 6% - Phase 4 7% - Future Widening</p> <p><b>ROW/Easement Definition:</b> \$625,000</p> <p><b>Utilities</b> \$6,250,000</p> <p><b>Construction Management (or QA/QC incl. IE):</b> 6.75%</p>

No.	Category	Assumptions
		<b>Escalation - Short Term:</b> 4.45% (Phase 4 Construction)  <b>Escalation - Long Term:</b> 3.50% (Future Capacity Expansions)  <i>Details and Timing are attached in Appendix A</i>
2.	Toll Operations Costs	<b>Fixed Fee:</b> \$0.045/Transaction <b>Plus</b> <b>Variable Fee:</b> 3.75% of the base toll rate (excluding the video toll premium)  <b>Video Toll Premium</b> 45% of the base toll rate  <b>Inflation of the Fixed Fee:</b> 2.0%  <i>Details/Assumptions contained in Appendix C</i>
3.	Routine Maintenance	<b>Real Cost (2007\$):</b> \$224,388,667  <b>Inflation:</b> 2.75%  <i>Details contained in Appendix D</i>
4.	Lifecycle Maintenance	<b>Real Cost:</b> \$280,502,859  <b>Inflation:</b> 3.50%  <i>Details contained in Appendix E</i>
5.	Taxes	Corporate Tax Rate: 35% Texas Margin Tax: 0.7%

#### B. Traffic and Revenue Assumptions

No.	Category	Assumptions
1.	Traffic and Revenue	<ul style="list-style-type: none"> <li>WSA will derive an 82.5% probability line from its current SH 161 traffic and revenue study which line shall be confirmed by Baez Consulting.</li> <li>This is not binding precedent; the Parties are not agreeing to an 82.5% probability line for future projects. Probability lines for those projects will be based on their specific characteristics.</li> </ul> <i>Details contained in Appendix B</i>

### **C. Financing Assumptions**

1.	Financing	[TO BE FINALIZED]
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### **D. Rating Agency Assistance**

The Parties will submit the WSA traffic and revenue numbers, the agreed-upon terms, conditions and assumptions, and the proposed SH 161 financial plan to a rating agency to confirm that the financial structure used in the Market Valuation will achieve an investment-grade rating.

WSA will answer the rating agency questions about the traffic and revenue report, but the agreed-upon terms, conditions and project assumptions (as distinguished from finance and traffic and revenue assumptions) shall not be revisited.

Financial and technical advisors will be present to answer related questions; whatever accommodations the rating agency believes are necessary in the financial structure or revenue numbers to produce an investment-grade rating, the Parties agree in advance to implement.

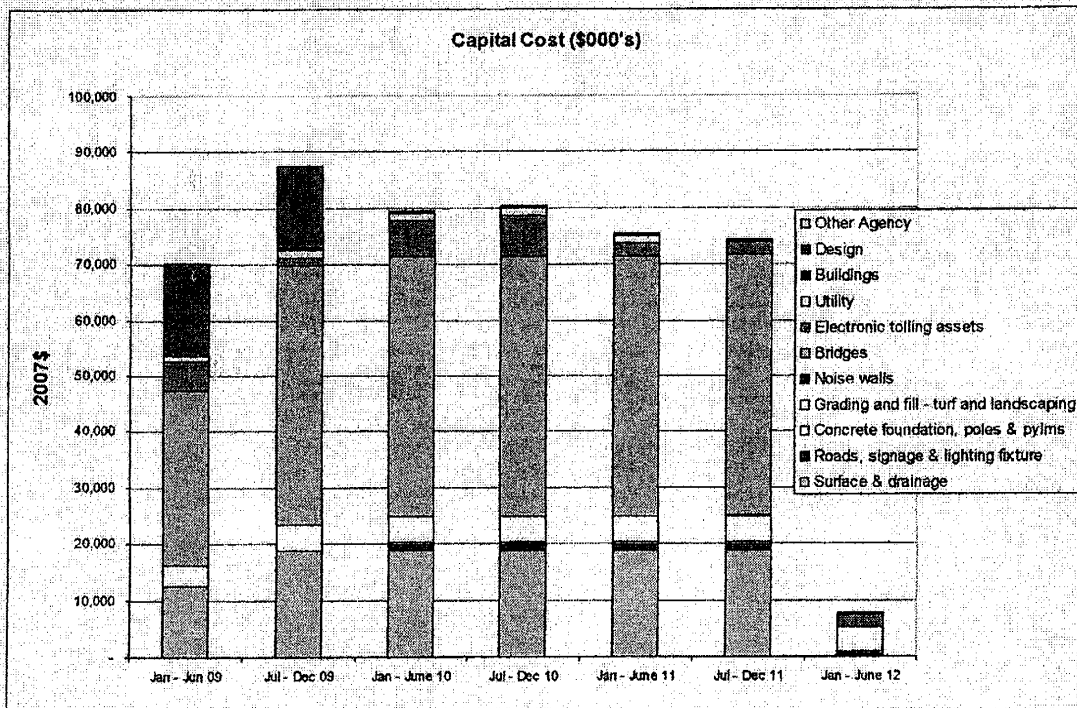
The 82.5% probability line would be the last value to be adjusted. The review will focus on the rating agency questions. WSA and Baez Consulting shall be the sole and exclusive traffic and revenue engineers representing TxDOT and the NTTA, respectively.



## APPENDIX A CAPITAL COSTS

### A. Phase 4 Initial Construction – Capital Costs in 2007\$

Group	Description		Cost	Contingency Rate	Contingency Cost	Total Cost
Group A	Surface & drainage		91,531,897	16.50%	15,102,763	106,634,660
Group B	Roads, signage & lighting fixture		3,854,460	16.50%	635,986	4,490,446
Group C	Concrete foundation, poles & pylms		1,821,600	16.50%	300,564	2,122,164
Group D	Grading and fill - turf and landscaping		26,696,779	16.50%	4,404,968	31,101,747
Group E	Noise walls		274,120	16.50%	45,230	319,350
Group F	Bridges		226,325,335	16.50%	37,343,680	263,669,015
Group G	Electronic tolling assets		22,820,000	16.50%	3,765,300	26,585,300
Group I	Buildings		1,500,000	16.50%	247,500	1,747,500
<b>SUBTOTAL</b>			<b>374,824,190</b>		<b>61,845,991</b>	<b>436,670,182</b>
Group H	Utility		6,250,000	20.00%	1,250,000	7,500,000
	Design	6.00%	26,200,211	20.00%	5,240,042	31,440,253
Agency	ROW/Easement		625,000	20.00%	125,000	750,000
	Construction Mgt (QA/QC)	6.75%	29,475,237	20.00%	5,895,047	35,370,284
<b>TOTAL</b>			<b>437,374,638</b>		<b>74,356,081</b>	<b>511,730,719</b>



**B. Phase 4 – Initial Expansion (South) IH-20 to IH-30 – 1<sup>st</sup> additional lane in each direction (2007\$)**

Group	Description	Cost	Contingency Rate	Contingency Cost	Total Cost	Jan - June 2019	July - Dec 2019
Group A	Surface & drainage	7,878,401	20.00%	1,575,680	9,454,081	4,727,041	4,727,041
Group B	Roads, signage & lighting fixture	-	20.00%	-	-	-	-
Group C	Concrete foundation, poles & pylons	-	20.00%	-	-	-	-
Group D	Grading and fill - turf and landscaping	1,141,017	20.00%	228,203	1,369,220	684,610	684,610
Group E	Noise walls	-	20.00%	-	-	-	-
Group F	Bridges	-	20.00%	-	-	-	-
Group G	Electronic tolling assets	1,000,000	20.00%	200,000	1,200,000	600,000	600,000
Group H	Utility	-	20.00%	-	-	-	-
Group I	Buildings	-	20.00%	-	-	-	-
<b>SUBTOTAL</b>		<b>10,019,418</b>		<b>2,003,884</b>	<b>12,023,301</b>	<b>6,011,651</b>	<b>6,011,651</b>
Design		7.00% 841,631	20.00%	168,326	1,009,957	504,979	504,979
Agency		6.75% 611,573	20.00%	122,315	733,887	366,944	366,944
<b>TOTAL</b>		<b>11,672,622</b>		<b>2,334,524</b>	<b>14,007,146</b>	<b>7,003,573</b>	<b>7,003,573</b>

**C. Phase 4 – Second Expansion IH-20 to IH-30 – 2<sup>nd</sup> additional lane in each direction (2007\$)**

Group	Description	Cost	Contingency Rate	Contingency Cost	Total Cost	Jun - Dec 2029	Jan - Jun 2030	July - Dec 2030
Group A	Surface & drainage	7,739,937	20.00%	1,547,987	9,287,924	3,095,975	3,095,975	3,095,975
Group B	Roads, signage & lighting fixture	-	20.00%	-	-	-	-	-
Group C	Concrete foundation, poles & pylons	-	20.00%	-	-	-	-	-
Group D	Grading and fill - turf and landscaping	115,359	20.00%	23,072	138,431	46,144	46,144	46,144
Group E	Noise walls	-	20.00%	-	-	-	-	-
Group F	Bridges	-	20.00%	-	-	-	-	-
Group G	Electronic tolling assets	1,000,000	20.00%	200,000	1,200,000	400,000	400,000	400,000
Group H	Utility	-	20.00%	-	-	-	-	-
Group I	Buildings	-	20.00%	-	-	-	-	-
<b>SUBTOTAL</b>		<b>8,855,296</b>		<b>1,771,059</b>	<b>10,626,355</b>	<b>3,542,119</b>	<b>3,542,119</b>	<b>3,542,119</b>
Design		7.00% 743,845	20.00%	148,769	892,614	297,538	297,538	297,538
Agency		6.75% 717,279	20.00%	143,456	860,735	286,912	286,912	286,912
<b>TOTAL</b>		<b>10,316,420</b>		<b>\$ 2,063,284</b>	<b>12,379,704</b>	<b>4,126,568</b>	<b>4,126,568</b>	<b>4,126,568</b>

**D. Phase 4 – Second Expansion IH-30 to SH 183 – 2<sup>nd</sup> additional lane in each direction (2007\$)**

Group	Description	Cost	Contingency Rate	Contingency Cost	Total Cost	June - Dec 2029	Jan - Jun 2030	Jul - Dec 2030
Group A	Surface & drainage	2,833,893	20.00%	\$ 566,738.61	\$ 3,400,631.66	1,133,477	1,133,477	1,133,477
Group B	Roads, signage & lighting fixture	-	20.00%	\$ -	\$ -	-	-	-
Group C	Concrete foundation, poles & pylons	-	20.00%	\$ -	\$ -	-	-	-
Group D	Grading and fill - turf and landscaping	503,357	20.00%	\$ 100,671.45	\$ 604,028.70	201,343	201,343	201,343
Group E	Noise walls	-	20.00%	\$ -	\$ -	-	-	-
Group F	Bridges	-	20.00%	\$ -	\$ -	-	-	-
Group G	Electronic tolling assets	1,000,000	20.00%	\$ 200,000.00	\$ 1,200,000.00	400,000	400,000	400,000
Group H	Utility	-	20.00%	\$ -	\$ -	-	-	-
Group I	Buildings	-	20.00%	\$ -	\$ -	-	-	-
<b>SUBTOTAL</b>		<b>4,337,250</b>		<b>\$ 867,410</b>	<b>\$ 5,204,660</b>	<b>1,734,820</b>	<b>1,734,820</b>	<b>1,734,820</b>
Design	Design	7.00% 304,312	20.00%	\$ 72,862.44	\$ 437,174.62	145,725	145,725	145,725
Agency		6.75% 351,301	20.00%	\$ 70,260.21	\$ 421,561.24	140,520	140,520	140,520
<b>TOTAL</b>		<b>5,032,863</b>		<b>\$ 1,010,533</b>	<b>\$ 6,063,196</b>	<b>2,021,065</b>	<b>2,021,065</b>	<b>2,021,065</b>

# **APPENDIX B** **Traffic and Revenue**

Year (A)	Phase	Months	Daily Weekday Transactions			Annual Revenues		
			Total (D)	ETC (E)	Video (F)	Total (I)	ETC (J)	Video (K)
2008	0	0	2,200	1,610	600	\$0	\$0	\$0
2009	2	5	72,090	52,780	19,310	\$8,119,720	\$3,997,480	\$2,122,240
2010	2	11	72,090	52,780	19,310	\$13,463,380	\$8,794,450	\$4,668,930
2010	3	1	83,700	61,180	22,520	\$1,757,850	\$1,145,810	\$611,840
2011	3	12	93,440	68,280	25,160	\$23,692,060	\$15,436,480	\$8,255,580
2012	3	6	93,440	68,280	25,160	\$11,846,030	\$7,718,240	\$4,127,790
2012	4	5	183,070	133,620	49,450	\$25,013,010	\$16,259,070	\$8,753,940
2013	4	12	204,010	148,840	55,170	\$57,167,020	\$37,131,810	\$20,035,210
2014	4	12	225,630	164,540	61,090	\$66,225,180	\$42,888,070	\$23,237,110
2015	4	12	241,300	187,170	54,130	\$68,825,670	\$46,434,520	\$20,391,150
2016	4	12	246,640	191,220	55,420	\$74,375,790	\$52,311,920	\$22,063,870
2017	4	12	252,100	195,370	56,730	\$76,121,310	\$53,511,580	\$22,609,730
2018	4	12	257,730	199,650	58,080	\$82,267,650	\$57,796,680	\$24,460,770
2019	4	12	263,250	203,840	59,410	\$84,091,290	\$59,054,630	\$25,036,660
2020	4	12	270,450	209,260	61,190	\$91,385,470	\$64,110,850	\$27,274,620
2021	4	12	278,320	228,170	50,150	\$92,469,090	\$70,065,660	\$22,403,230
2022	4	12	284,640	233,250	51,390	\$100,069,150	\$75,785,720	\$24,283,430
2023	4	12	289,370	237,050	62,320	\$101,785,510	\$77,036,790	\$24,728,720
2024	4	12	294,220	240,940	63,280	\$109,280,870	\$82,684,690	\$26,586,180
2025	4	12	292,070	239,080	52,990	\$108,164,340	\$81,805,050	\$26,359,290
2026	4	12	299,080	258,550	40,530	\$114,706,850	\$83,417,770	\$21,289,080
2027	4	12	304,550	263,200	41,350	\$116,836,760	\$95,120,560	\$21,716,200
2028	4	12	310,150	267,970	42,180	\$125,654,220	\$102,262,940	\$23,391,280
2029	4	12	315,920	272,880	43,040	\$128,010,890	\$104,145,720	\$23,865,170
2030	4	12	321,750	277,850	43,900	\$137,851,030	\$111,954,970	\$25,696,060
2031	4	12	340,060	309,190	30,870	\$144,263,760	\$125,988,180	\$18,275,580
2032	4	12	347,690	316,050	31,640	\$156,247,910	\$136,404,340	\$19,843,570
2033	4	12	355,460	323,030	32,430	\$180,258,230	\$139,656,430	\$20,401,600
2034	4	12	359,080	326,280	32,820	\$170,913,950	\$149,119,740	\$21,794,210
2035	4	12	362,730	329,520	33,210	\$172,663,690	\$150,610,950	\$22,052,740
2036	4	12	368,090	351,280	16,810	\$181,311,080	\$169,532,800	\$11,778,280
2037	4	12	371,590	354,600	16,990	\$183,007,930	\$171,104,020	\$11,903,910
2038	4	12	375,120	357,950	17,170	\$195,022,810	\$182,322,390	\$12,700,420
2039	4	12	378,690	361,330	17,360	\$196,849,770	\$184,014,980	\$12,834,790
2040	4	12	380,510	363,040	17,470	\$208,818,240	\$195,186,250	\$13,631,990
2041	4	12	382,330	364,750	17,580	\$209,806,600	\$196,093,220	\$13,713,380
2042	4	12	384,160	366,470	17,690	\$222,538,780	\$207,875,930	\$14,563,790
2043	4	12	386,000	368,200	17,800	\$223,593,810	\$208,943,040	\$14,650,770
2044	4	12	387,860	369,950	17,910	\$237,186,360	\$221,625,260	\$15,561,100
2045	4	12	389,720	371,700	18,020	\$238,310,580	\$222,656,510	\$15,654,070
2046	4	12	391,580	373,450	18,130	\$252,759,230	\$236,132,920	\$16,626,310
2047	4	12	393,470	375,230	18,240	\$253,958,110	\$237,232,440	\$16,725,670
2048	4	12	395,360	377,010	18,350	\$269,418,720	\$251,655,060	\$17,793,660
2049	4	12	397,250	378,780	18,470	\$270,697,500	\$252,827,660	\$17,869,840
2050	4	12	399,180	380,580	18,580	\$287,131,360	\$268,152,800	\$18,978,560
2051	4	12	401,080	382,380	18,700	\$288,495,130	\$269,403,090	\$19,092,040
2052	4	12	403,010	384,200	18,810	\$306,039,790	\$285,762,100	\$20,277,660
2053	4	12	404,950	386,020	18,930	\$307,494,350	\$287,095,410	\$20,398,940
2054	4	12	406,900	387,850	19,050	\$326,155,810	\$304,492,390	\$21,663,420
2055	4	12	408,860	389,700	19,160	\$327,707,050	\$305,614,020	\$21,783,030
2056	4	12	410,820	391,540	19,280	\$347,626,950	\$324,480,750	\$23,146,200
2057	4	12	412,800	393,400	19,400	\$349,281,420	\$325,998,700	\$23,284,720
2058	4	12	414,780	395,260	19,520	\$370,509,180	\$345,778,260	\$24,730,900
2059	4	12	416,780	397,140	19,640	\$372,273,700	\$347,394,770	\$24,878,930
2060	4	12	418,680	398,920	19,760	\$394,793,110	\$368,379,090	\$26,414,020
2061	4	12	420,560	400,680	19,880	\$396,528,180	\$369,966,370	\$26,561,810
					<b>TOTAL</b>	<b>\$9,838,613,980</b>	<b>\$8,865,079,790</b>	<b>\$1,033,634,190</b>

## APPENDIX C

### SH 161 Tolling Cost Assumptions

Tolling costs will be based on a proposed NTTA fee which is comprised of three components:

- 1) **Base Fee:** \$0.045/Transaction (2007\$) inflated at 2.00% per annum reset every 2 years commencing January 1, 2009
  - 2) **Variable Fee:** 3.75% of the base toll rate (excluding the video toll premium)
  - 3) **Video Toll Premium:** 45% of the base toll rate
- Proposed Fee will reflect:
    - Transaction processing, including image review, data storage and back-up, infrastructure, toll collection system (back office) maintenance, and business continuity planning.
    - Customer service – transponder issuance, account management, and customer contacts via all contact channels.
    - Clearinghouse functions – payment processing, merchant fees, invoicing, and collection risk.
    - Audit and quality assurance processes, including various required reports as defined in previous TSA's.
    - Attendance at scheduled and unscheduled meetings.
    - NTTA's current level of performance.
  - Formula for proposed Fee will not include:
    - Performance security (e.g. letter of credit).
    - Lane level maintenance or associated responsibilities.
    - Lane equipment malfunction or leakage at the lane.
    - Interoperability fees (e.g. the 8% fee currently under consideration by TTA, HCTRA, CTRMA and NTTA), although variable fee is waived on all interoperable transactions.
  - Assume NTTA's ZipCash and violation enforcement processes are utilized.
  - Assume Tolls are guaranteed for:
    - All NTTA-based transponder transactions, assuming that NTTA can request, and the Developer will provide, an image for unpostable transponder transactions
    - All interoperable transactions with an accompanying video image
    - All video toll transactions, including those without plates, dealer plates, obstructed plates, etc.
  - Assume NTTA takes the collection risk for toll transactions of a Candidate Vehicle, as hereinafter defined, and retains 100% of the video toll premium.
    - Candidate Vehicle means a vehicle for which Developer transmits one of the following to NTTA's CSC Host:
      - (a) A valid Transponder Transaction;
      - (b) An unobstructed readable video image of a license plate that bears a serialized or personalized plate number and means to identify the



issuing jurisdiction, which in the case of a vehicle with a trailer (including a truck with trailer) must be the front license plate; or

(c) Video images of both the front and rear license plates where one of such images (or in the case of a vehicle with a trailer (including a truck with trailer) the front license plate image) is not an unobstructed readable video image of such a license plate due only to one or more of the following conditions:

- (i) The vehicle either has no license plate or the license plate is not mounted in the legally required position;
- (ii) The license plate is covered or obstructed by dirt, snow, grease or other substance or element rendering it unreadable;
- (iii) The license plate is damaged, rusted, bent or broken rendering it unreadable;
- (iv) The license plate is blocked by an object or other obscuring device carried by the vehicle (such as a plate frame, overhanging cargo or a trailer towing ball); or
- (v) The license plate is blocked by something in the lane such as a person or another vehicle.

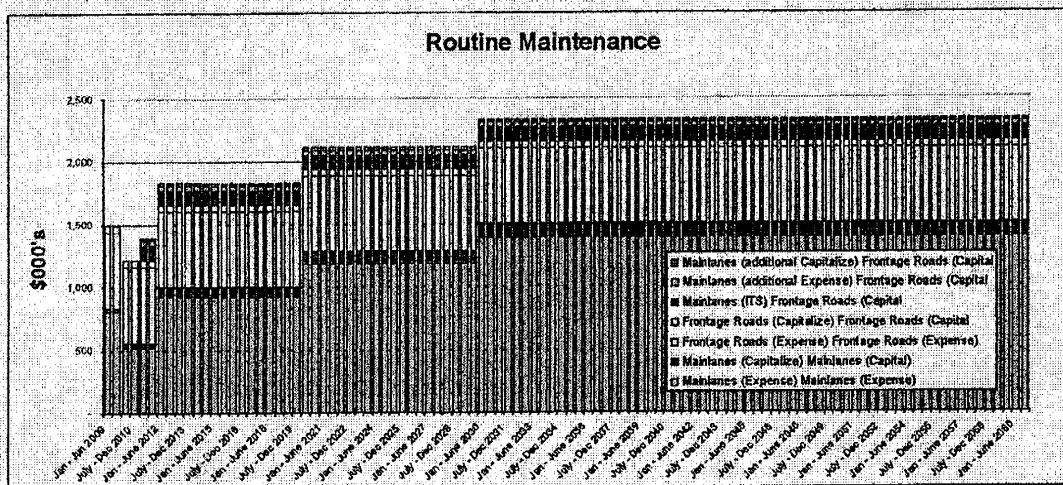
For this purpose, a "readable video image" means an image produced by the VES and transmitted to NTTA's CSC Host in which both plate number and issuing jurisdiction can be reliably read electronically or by the human eye (or but for one of the conditions described in clauses (c)(i) through (c)(v) above would be reliably read electronically or by the human eye).

For the avoidance of doubt, a vehicle is not a Candidate Vehicle under subsection (c) above if none of the video images transmitted to the NTTA's CSC Host is a readable video image due to (A) error or substandard performance of the ETCS, including incorrect focus, misalignment or obstruction of the lens of cameras recording the images, (B) glare in the image, (C) insufficient illumination, (D) substandard image resolution, or (E) any portion of the license plate mounting area of the vehicle lying outside the borders of the video image.



## APPENDIX D Routine Maintenance

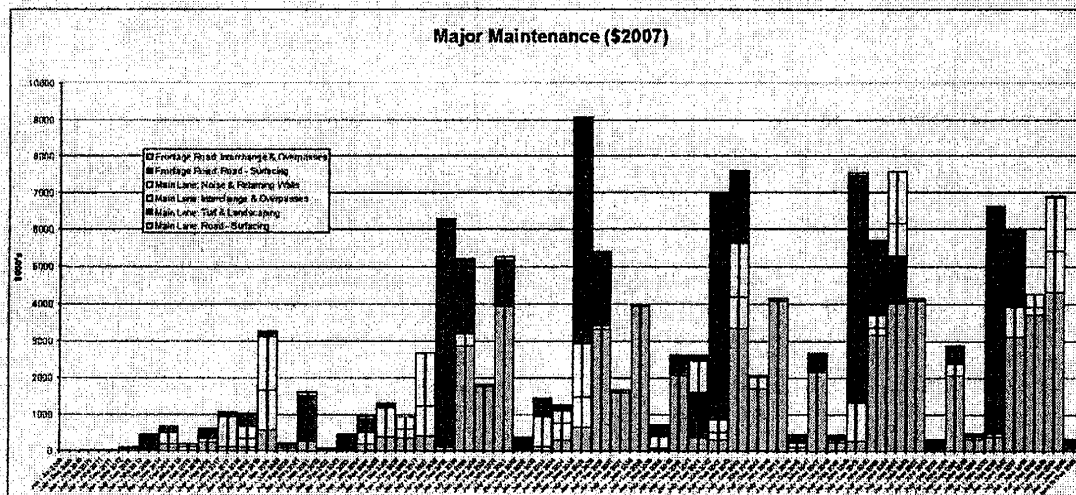
Operations & Maintenance Over Entire Term of Agreement	
Currency	2007 Dollars
Mainlanes (Expense)	128,700,000
Mainlanes (Capitalize)	10,137,000
Frontage Roads (Expense)	63,024,000
Frontage Roads (Capitalize)	5,356,000
Mainlanes (ITS)	11,400,000
Mainlanes (additional Expense)	4,021,667
Mainlanes (additional Capitalize)	1,750,000
<b>Total</b>	<b>224,388,667</b>



## APPENDIX E

### Life Cycle Maintenance

Major Maintenance Over Entire Term of Agreement	
Currency	2007 Dollars
Main Lane: Road - Surfacing	122,774,955
Main Lane: Turf & Landscaping	10,000,000
Main Lane: Interchange & Overpasses	32,025,267
Main Lane: Noise & Retaining Walls	21,322,485
Frontage Road: Road - Surfacing	92,567,800
Frontage Road: Interchange & Overpass	1,812,353
<b>Total</b>	<b>280,502,859</b>



**ATTACHMENT C**

**MEMORANDUM OF UNDERSTANDING  
REGARDING ACCESS TO AND USE OF A FINANCIAL MODEL  
TO SUPPORT THE MARKET VALUATION FOR  
STATE HIGHWAY 161**