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December 10, 2013

Gerald Carrigan
Executive Director
North Texas Tollway Authority
5900 W. Plano Parkway
Plano, Texas 75093

**Re: North Texas Tollway Authority (NTTA)
2014 Valuation Estimates for Insurance Coverage**

Dear Mr. Carrigan:

In accordance with Section 705 of the Amended and Restated Trust Agreement for the NTTA System and Section 5.05 (g) of the Toll Equity Loan Agreement for the Special Projects System (SPS), Atkins North America, Inc. (Atkins), as the NTTA's General Engineering Consultant (GEC), is providing the GEC's recommendation for insurance coverage for roadway and operation assets (excluding vehicles and rolling equipment covered by automobile liability insurance) for the NTTA's 2014 calendar year.

We have worked diligently with NTTA staff and consultants throughout the year to identify, review and assess the property values for the System and SPS assets. We provided valuations to staff earlier in the year to allow staff adequate time to solicit and receive insurance premium quotes and incorporate these into the 2014 budgets. For the System, the property values include the operations and administration buildings, ramp and main lane toll gantries, tunnel and bridges for the Addison Airport Toll Tunnel (AATT), the Dallas North Tollway (DNT), Lewisville Lake Toll Bridge (LLTB), Mountain Creek Lake Bridge (MCLB), President George Bush Turnpike (PGBT), PGBT Eastern Extension (PGBT EE), and the Sam Rayburn Tollway (SRT). The System assets also include non-rolling maintenance equipment, IT /ETC equipment, the Maintenance Service Center, the Frisco Warehouse (contents only), the Gleneagles office complex (buildings and Authority-owned contents).

For the SPS, the property values include the toll gantries, IT/ETC equipment, and bridges for the President George Bush Turnpike Western Extension (PGBT WE). The SPS also includes the Chisholm Trail Parkway (CTP) which is currently under construction. The insurance for the CTP will be effective upon NTTA acceptance of the project from the contractors. The acceptance for CTP is currently scheduled to occur in Spring 2014.

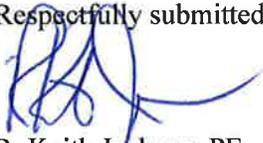
The estimated 100% replacement valuation (without depreciation) of the Real and Personal Property insurance coverage for each insured item for the System and SPS (not including the CTP) is shown in Exhibit A (attached). The Total Insured Value has been estimated for 2014 to be \$2,825,788,443.

The recommended Single Loss Limit for Real and Personal Property (SLLRP) was based on the identification of the single most costly facility to replace in the System and SPS. This is a reasonable means to protect any other asset that is less than this value. For the System, the SLLRP is based on the replacement cost for the Lewisville Lake Toll Bridge (estimated at \$119,784,200). For the SPS, the SLLRP is based on the replacement cost for the southbound PGBT WE main lane bridge over the Trinity River (estimated at \$58,770,886) as shown in Exhibit A.

Regarding the recommended Single Loss Limit for Loss of Revenue and Extra Expense (SLLLR), the recommended amount due to a qualified event is determined by calculating the essential expenses of the NTTA during a period of estimated reduced income resulting from said event affecting the NTTA's operations. This amount was calculated from the costs associated with operations, debt service payments and required deposits to the Reserve Maintenance Fund (RMF) for the System and Major Maintenance Fund (MMF) for the SPS. Based on the specific conditions of the System and SPS and expert advice provided by the NTTA, it is recommended that three to six months is a reasonable period of time to restore the operations and make sufficient repairs to the System and SPS due to a qualified event. Thus, we recommend insuring no less than 50% of the combined Systems' obligated costs for the duration of a failure, which account for the fact that only a portion of the Systems would likely be affected and not the whole system. The SLLLR amount represents the estimated SLLLR amount necessary to cover 50% of the combined expenses for the duration of an event lasting six months. For the System, the SLLLR for 2014 was determined to be \$123,405,000. For the SPS, the SLLLR was calculated to be \$8,569,000. The total for both Systems is \$131,974,000 (see Exhibit A).

Detailed listings of all assets and SLLLR calculations have been provided to Ms. Sylvia Collins (NTTA).

Respectfully submitted,



R. Keith Jackson, PE
General Engineering Consultant Project Director

Enclosure

cc: Horatio Porter (w/ enc.)
Elizabeth Mow, PE (w/ enc.)
Marty Legé (w/ enc.)
Sylvia Collins (w/ enc.)



NTTA SYSTEM and SPECIAL PROJECTS SYSTEM - 2014
Summary of Total Insured Value and Loss of Revenue Limits

	NTTA System	Special Projects System	TOTAL ALL SYSTEMS
Recommended Single Loss Limit for Loss of Revenue in 2014.....	\$123,405,000 0%	\$8,569,000 55%	\$131,974,000 4%
Recommended Single Loss Limit for Real & Personal Property in 2014.....	\$119,784,200 -19%	\$58,770,886 4%	\$178,555,086 -12%
Mobile Equipment.....	\$5,654,297 18%	\$0	\$5,654,297 18%
Total Insured Value for 2014.....	\$2,322,909,150 -36%	\$502,879,293 -3%	\$2,825,788,443 -30%

Quick Comparison to 2013

Recommended Single Loss Limit for Loss of Revenue in 2013.....	\$123,384,000	\$3,833,000	\$127,217,000
Recommended Single Loss Limit for Real & Personal Property in 2013.....	\$142,878,300	\$56,713,100	\$199,591,400
Mobile Equipment.....	\$4,656,962	\$0	\$4,656,962
Total Insured Value for 2013.....	\$3,150,685,399	\$516,118,932	\$3,666,804,331

Notes and changes from the prior year

I. The largest single loss item for the NTTA System is the Lewisville Lake Toll Bridge. The value has decreased substantially from last year due to a reevaluation of the original construction cost. The largest single loss item for the Special Projects System is the southbound PGBT WE main lane bridge over the Trinity River.

II. The CTP will be added to the Special Projects Systems upon acceptance of the project.

III. NTTA System Revenue Replacement:

- a. 6.16% Percent change for Operations cost versus the prior year.
- b. -1.94% Percent change for Debt Service versus the prior year.
- c. 0.00% There is no planned deposit into the RMF fund for this year.
- d. 4.44% Percent change of Toll Revenue from prior year for Revenue replacement.
- e. -30.12% Percent change of Administration Fees & Fines Revenue from prior year for Revenue replacement.

IV. Special Projects System Revenue Replacement:

- a. 11.51% Percent change for Operations cost versus the prior year.
- b. 100.0% Percent change for Debt Service versus the prior year.
- c. 49.15% There is a planned deposit into the RMF fund for this year of \$2.2M for 2014 versus \$1.14M in 2013.
- d. 33.56% Percent change of Toll Revenue from prior year for Revenue replacement includes the addition of CTP.
- e. -30.51% Percent change of Administration Fees & Fines Revenue from prior year for Revenue replacement.

V. Changes Affecting Total Insured Value:

- a. Bridges - New pricing methodology using historical costs-per-square-foot, rather than escalating assumed original construction costs. Also added 3 bridges, deleted 11 culverts, deleted 2 demolished bridges and 1 duplicate.
- b. Gantries - Added 2.75 % inflation rate to existing gantries per NTTA IT Department. Also added 15 new gantries.
- c. IT Equipment - Received new values from the IT department. Does not include the new equipment at the CTP gantries.
- e. Non-Rolling Equipment - Additional non-rolling equipment purchases increased value.



NTTA SYSTEM and SPECIAL PROJECTS SYSTEM - 2014
Single Loss Limit for Loss of Revenue

NTTA COMBINED SYSTEM & SPS OPERATIONS COSTS

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>% Chg</u>
Estimated Cost of Operations	\$ (117,389,388)	\$ (126,052,473)	\$ (135,242,233)	6.8%
Estimated Cost of Debt Service	\$ (287,203,944)	\$ (381,674,887)	\$ (390,412,362)	2.2%
Estimated Cost of RMF Deposit	\$ (8,815,969)	\$ (1,140,222)	\$ (2,242,244)	49.1%
Combined Total Estimated NTTA System & SPS Operations Costs	\$ (413,409,301)	\$ (508,867,582)	\$ (527,896,839)	3.6%
Total Revenues (Calendar Year 2014)	\$ 468,158,035	\$ 538,233,138	\$ 570,401,900	
Ratio of Operations and Debt Service to Estimated Total Revenues	88%	95%	93%	-2.2%
Recommended Combined Single Loss Limit for Loss of Revenue in 2014 (25% of NTTA System Operation Costs)	\$ 103,352,000	\$ 127,217,000	\$ 131,974,000	
Ratio of Combined Single Loss Limit to Estimated Total Revenues	22%	24%	23%	-2.2%



NTTA SYSTEM - 2014
Insurable Asset Summary

Single Loss Limit Real and Personal Property

Lewisville Lake Toll Bridge	\$119,784,200
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Tollway Assets

	Bridges and Tunnel	Gantries & Operations Buildings	Total 2014 Replacement Value
Addison Airport Toll Tunnel (AATT)	\$51,091,295	\$3,650,600	\$54,741,895
Dallas North Tollway (DNT)	\$192,352,675	\$55,865,900	\$248,218,575
Lewisville Lake Toll Bridge (both bridges) (LLTB)	\$125,414,908	\$1,575,500	\$126,990,408
Mountain Creek Lake Bridge (MCLB)	\$24,557,675	\$962,300	\$25,519,975
President George Bush Turnpike (PGBT)	\$875,629,399	\$82,922,000	\$958,551,399
Sam Rayburn Tollway (SRT)	\$548,483,672	\$26,217,300	\$574,700,972
President George Bush Turnpike, Eastern Expansion (PGBT EE)	\$213,489,059	\$7,718,100	\$221,207,159
	\$2,031,018,684	\$178,911,700	\$2,209,930,384
Prior Year:	\$2,886,220,550	\$171,457,000	\$3,057,677,550
Chg from Prior Year:	-42.11%	4.17%	-38.36%

Facilities / Equipment

	Buildings, Equipment	Contents, Inventory	Total 2014 Replacement Value
Plano Service Center	\$12,120,156	\$3,181,145	\$15,301,300
Gleneagles Complex	\$35,936,401	\$4,009,500	\$39,945,901
Frisco Service Center & Warehouse	\$12,151,756	\$792,429	\$12,944,185
Main Gantry Building Contents		\$330,000	\$330,000
IT & Toll Collection Equipment	\$38,803,082		\$38,803,082
	\$99,011,396	\$8,313,073	\$107,324,469
Prior Year:	\$81,323,458	\$6,391,192	\$87,714,650
Chg from Prior Year:	17.86%	23.12%	18.27%

Mobile Equipment Schedule (Maintenance)

	Equipment	Total 2014 Replacement Value
Non-Rolling Equipment ¹	\$5,654,297	\$5,654,297
Prior Year:	\$4,656,962	\$4,656,962
Chg from Prior Year:	17.64%	17.64%

TOTAL INSURED VALUE

\$2,322,909,150

Prior Year: **\$3,120,290,829**
Chg from Prior Year: -34.33%

Notes:

- 1) Non-rolling equipment consists of portable maintenance items, but excludes cars and trucks. Items include roadway, landscaping and traffic control equipment valued at \$2,500 or greater.



NTTA SYSTEM - 2014
Single Loss Limit for Loss of Revenue

NTTA SYSTEM OPERATIONS COSTS

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>% Chg</u>
Estimated Cost of Operations ¹	\$ (117,389,388)	\$ (111,860,605)	\$ (119,203,758)	6.2%
Estimated Cost of Debt Service ²	\$ (287,203,944)	\$ (381,674,887)	\$ (374,416,150)	-1.9%
Estimated Cost of RMF Deposit ³	\$ (8,815,969)	\$ -	\$ -	0.0%
Total Estimated NTTA System Operations Costs	\$ (413,409,301)	\$ (493,535,492)	\$ (493,619,908)	0.0%
 Total Revenues (Calendar Year 2014) ⁴	 \$ 468,158,035	 \$ 505,173,865	 \$ 522,450,700	
Ratio of Operations and Debt Service to Estimated Total Revenues	88%	98%	94%	-3.4%
Recommended Single Loss Limit for Loss of Revenue in 2014 (25% of NTTA System Operation Costs) ⁵	\$ 103,352,000	\$ 123,384,000	\$ 123,405,000	
Ratio of Single Loss Limit to Estimated Total Revenues	22%	24%	24%	-3.4%

¹ Provided by Armando Garza, Budget and Compliance Manager, dated May 2, 2013.

² Provided by Horatio Porter, CFO, dated August 5, 2013. (1st Tier = \$285,000,000, 2nd Tier = \$58,000,000, CIF = \$23,416,150 and ISTEAs = \$8,000,000)

³ There are no anticipated deposits into the RMF for Systems for 2014, per Armando Garza, Budget and Compliance Manager, on 5/1/2013.

⁴ Provided by CDM Smith.

⁵ Based on the specific conditions of the NTTA System and Special Projects System and the expert advice provided by NTTA and the GEC, it is the GEC's recommendation that three months of a portion of the revenue is an acceptable Business Interruption insurance period to address the relative risk for both Systems until operations are sufficiently restored. The value shown above represents the estimated revenue necessary to cover three months' projected operations, major maintenance and debt service costs.



**NTTA SPECIAL PROJECTS SYSTEM - 2014
Insurable Asset Summary**

Single Loss Limit Real and Personal Property

SB PGBT WE over Trinity River

\$58,770,886

Tollway Assets:

President George Bush Turnpike,
Western Expansion (PGBT WE)

Bridges
\$481,613,323

Gantries
\$19,577,000

Total 2014 Replacement Value
\$501,190,323

\$481,613,323

\$19,577,000

\$501,190,323

Prior Year: **\$495,487,300**

\$18,869,700

\$514,357,000

Chg From Prior Year: **-2.88%**

3.61%

-2.63%

Facilities / Equipment

IT & Toll Collection Equipment

Equipment
\$1,688,970

Total 2014 Replacement Value
\$1,688,970

\$1,688,970

Prior Year: **\$1,762,440**

\$1,762,440

Chg From Prior Year: **-4.35%**

-4.35%

Mobile Equipment Schedule (Maintenance)

Non-Rolling Equipment ¹

TOTAL INSURED VALUE

\$502,879,293

Prior Year: **\$516,118,972**

Chg from Prior Year: **-2.63%**

Notes:

- 1) Non-rolling equipment consists of portable maintenance items, but excludes cars and trucks. These items are not needed for SPS, as the maintenance operations are performed by contractors.
- 2) CTP Facilities & Equipment will be added upon final acceptance of project.



NTTA SPECIAL PROJECTS SYSTEM - 2014
Single Loss Limit for Loss of Revenue

NTTA SPECIAL PROJECTS SYSTEM OPERATIONS COSTS

	<u>2013</u>	<u>2014</u>	<u>% Chg</u>
Estimated Cost of Operations ¹	\$ (14,191,868)	\$ (16,038,475)	11.5%
Estimated Cost of Debt Service ⁵	\$ -	\$ (15,996,212)	100.0%
Estimated Cost of RMF Deposit ³	\$ (1,140,222)	\$ (2,242,244)	49.1%
Total Estimated NTTA Special Projects System (SPS) Operations Costs	\$ (15,332,090)	\$ (34,276,931)	55.3%
Total Revenues (Calendar Year 2014) ³	\$ 33,059,273	\$ 47,951,200	
Ratio of Operations and Debt Service to Estimated Total Revenues	46%	71%	35%
Recommended Single Loss Limit for Loss of Revenue in 2014 (25% of NTTA Special Projects System Operation Costs) ⁴	\$ 3,833,000	\$ 8,569,000	124%
Ratio of Single Loss Limit to Estimated Total Revenues	12%	18%	35%

¹ Provided by Armando Garza, Budget and Compliance Manager, dated May 2, 2013.

² There are no anticipated deposits into the RMF for Systems for 2014, per Armando Garza, Budget and Compliance Manager, on

³ Provided by CDM Smith

⁴ Based on the specific conditions of the NTTA System and Special Projects System and the expert advice provided by NTTA and the GEC, it is the GEC's recommendation that three months of a portion of the revenue is an acceptable Business Interruption insurance period to address the relative risk for both Systems until operations are sufficiently restored. The value shown above represents the estimated revenue necessary to cover three months' projected operations, major maintenance and debt service costs.

⁵ Debt Service during traffic ramp up period partially funded by Special Projects System financing and other funds. SPS revenues fund (\$64,467,629-\$33,576,603-\$14,894,814 = \$15,996,212)