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March 9, 2011

Ms. Janice Davis  
Chief Financial Officer  
North Texas Tollway Authority  
5900 West Plano Parkway, Suite 100  
Plano, TX 75093

**Re: PRESIDENT GEORGE BUSH TURNPIKE-WESTERN EXTENSION (PGBT-WE) TRAFFIC AND REVENUE**

Dear Ms. Davis:

Per your request, Wilbur Smith Associates (WSA) is pleased to provide this letter regarding the PGBT-WE traffic and revenue (T&R) estimates. WSA submitted a T&R report titled "Investment Grade Traffic and Toll Revenue Study: President George Bush Turnpike-Western Extension", which was completed in December 2010 ("December 2010 Report"). We reviewed the December 2010 Report in the context of current conditions and any changes that may have taken place to key project assumptions since the report's completion in December 2010. This letter serves to summarize our review as well as confirm that the T&R estimates included in the December 2010 report are still suitable for use in the upcoming financing of the PGBT-WE. We are aware of no changes in the assumptions or projected traffic outlook that would cause material changes to the anticipated T&R performance of the PGBT-WE and invalidate the T&R forecasts included in the December 2010 report.

**BACKGROUND AND ASSUMPTIONS**

In 2007, WSA began work on a preliminary T&R study on PGBT-WE (formerly SH 161) for NTTA. Work on the project was halted during the market valuation negotiations between NTTA and the Texas Department of Transportation (TxDOT). After the completion of the initial market valuation negotiations in December 2007, WSA was tasked with upgrading the preliminary T&R study to an investment grade T&R study. An investment grade study report was completed in October 2008 by WSA. Due to the economic downturn, changes to the NTTA System toll rate schedules, update to the regional mobility plan, revenue recovery assumption changes and PGBT-WE phasing changes, NTTA authorized WSA to update the PGBT-WE investment grade T&R study in 2009. A draft investment grade report summarizing that work was completed in August 2009. Following the completion of that study, key project assumptions changed again, and WSA revisited the T&R forecasts for PGBT-WE and drafted the December 2010 Report. The following is some new information that has become available after the completion of the December 2010 Report.

**Regional Mobility Plan and Demographics**

The North Central Texas Council of Governments (NCTCOG) is currently in the process of developing new regional demographic forecasts and a new long range transportation plan, "Mobility 2035". NCTCOG's executive board approved the new demographic forecasts for years 2035 and 2040 on February 24, 2011. The Mobility 2035 plan is expected to be approved by the Regional Transportation Council (RTC) on March 10, 2011. Air

quality conformity determination of the Mobility 2035 plan is expected to be received from FHWA in late spring/summer 2011.

NCTCOG is expected to review and update the regional demographics datasets throughout 2011. NCTCOG staff intends to provide an opportunity for local government review (including a review by NTTA) of the finer-level geographic distribution of the demographics after the Mobility 2035 plan is approved. NCTCOG would also like to integrate in the review process the 2010 Census information. Subsequent modifications, if any, would be taken into account in a future update of the conformity determination currently anticipated some time in 2012. The long range transportation plan will need to be updated again by 2015 which will include the utilization of an updated travel demand model, integrating new information acquired from the 2011 household survey and other data collection efforts.

The following are observations regarding the new Mobility 2035 plan and the new demographics:

- There are three major components in any metropolitan transportation plan:
  - Demographics (transportation demand)
  - Roadway and transit networks (transportation supply)
  - Algorithms used in the travel demand models that determine the trip generation rates, roadway/transit shares, traffic assignment, etc.

In the new Mobility 2035 plan, there are changes in all of the above three components. In addition, the study area has doubled (10,000 square miles vs. 5,000 square miles).

- Greatly reduced fiscal capacity of the transportation system. There is expected to be a \$44 billion reduction in funding in the new plan for transportation infrastructure, which is about a third of the funding in the current Mobility 2030: 2009 Amendment. Most of the reduction in commitments in the Mobility 2035 plan is in roadway infrastructure.
- Slowing of the regional expansion (“sprawl”) and denser metro area than in previous forecasts.
- Due to the drastic reduction in the transportation infrastructure, there is an expectation of drastic increase in congestion in the future travel demand model years.
- Some planned transportation improvements near the PGBT-WE that were assumed in the current long range transportation plan have been removed in the Mobility 2035 plan. These include:
  - Expansion of IH 20 from PGBT-WE to Spur 408 (originally planned by 2025)
  - Expansion of IH 20 from Spur 408 to US 175 (originally planned by 2030)
  - Expansion of IH 30 from SH 360 to IH 820 (originally planned by 2025)
  - Construction of HOV lanes on SH 114 and Loop 12 (originally planned by 2025)

The current schedule of approval and release of the Mobility 2035 plan does not allow time for WSA to fully assess the combined T&R impacts of all the above changes related to the Mobility 2035 plan for the upcoming PGBT-WE financing. However, the December 2010 PGBT-WE report contains various stress tests related to the following parameter changes, which should give a reasonable range of the associated T&R risk:

- Severe demographic growth stagnation
- Use of the “official” NCTCOG demographics instead of “revised-lag” demographics
- Changes to short-term toll traffic ramp-up factors
- Changes to vehicle operating costs
- Changes to values of time, truck shares, proportion of weekend traffic and TollTag/ZipCash shares

WSA has no additional information regarding the new demographics and Mobility 2035 plan at this time that would necessitate revisions of the previous forecasts. WSA expects that the information needed to perform a full assessment will not be available for at least a few months.

## **2010 United States Census**

In February 2011, the US Census Bureau released the 2010 population numbers. As noted earlier, NCTCOG is expected to incorporate the 2010 Census information in the demographic updates that will be done later this year. Given that the travel demand model is composed of small geographic areas (traffic survey zones) and the 2010 census population has not yet been aggregated to this level, WSA is unable to incorporate the census information in the PGBT-WE T&R forecasts at this time. However, the December 2010 PGBT-WE report contains demographic growth stress tests to gauge the T&R risk.

## **Inclement Weather in February 2011**

It should be noted that the inclement weather in early February 2011 that impacted the activities prior to the Super Bowl also had a negative impact on the PGBT-WE toll revenue by at least \$60,000 in that month (based on unaudited data from NTTA). This drop in revenue is about 11 percent of the estimated PGBT-WE revenue in February 2011. However, this represents 0.75 percent of the expected toll revenue from PGBT-WE in calendar year 2011, meaning that there would be no material impact to the 2011 PGBT-WE toll revenue due to the inclement weather in February 2011.

## **Rising Gasoline Prices**

Gasoline prices in Texas have risen steadily over the past couple of months and are currently well above \$3.00/gallon. The continued turmoil in the Middle East and northern Africa is triggering concerns about the crude oil supply. As was shown in WSA's report, "The Impacts of Gasoline Price on Traffic and Toll Revenue", dated August 2008, transactions on the NTTA System facilities seem to be relatively inelastic to gasoline price increases. However, sharp increases in gasoline price in mid-2008 combined with the recession produced some small noticeable impacts on NTTA system transactions at that time. The following are some excerpts from the recently published toll road sector study by National Public Finance Guarantee:

- "....it is apparent that Vehicle Miles Traveled (VMT) is more closely correlated to Gross Domestic Product than to the price of gasoline."
- "Regardless of the price of gasoline, individuals still need to commute for employment and businesses requiring an efficient road network for the shipment of manufactured products. On a more discretionary basis, family members go shopping and transport children to and from activities. There may be an inflection point where higher energy prices trigger a decline in GDP and thereby indirectly lead to a decline in VMT but the direct correlation between gasoline prices and toll ridership appears weak."

If the current turmoil in the Middle East and North Africa results in higher gasoline prices, reduces consumer sentiment, and negatively impacts the growth in the Gross Domestic Product (GDP) and employment, then there could be material impacts to the PGBT-WE toll transactions and revenue. At this time, we believe it is premature to update the forecasts in response to this developing situation. We will continue to monitor and will update the T&R forecasts as necessary. It should be noted that the December 2010 Report includes stress tests related to the increase in the vehicle operating cost (which includes the price of gasoline).

## **VALIDITY OF THE DECEMBER 2010 REPORT**

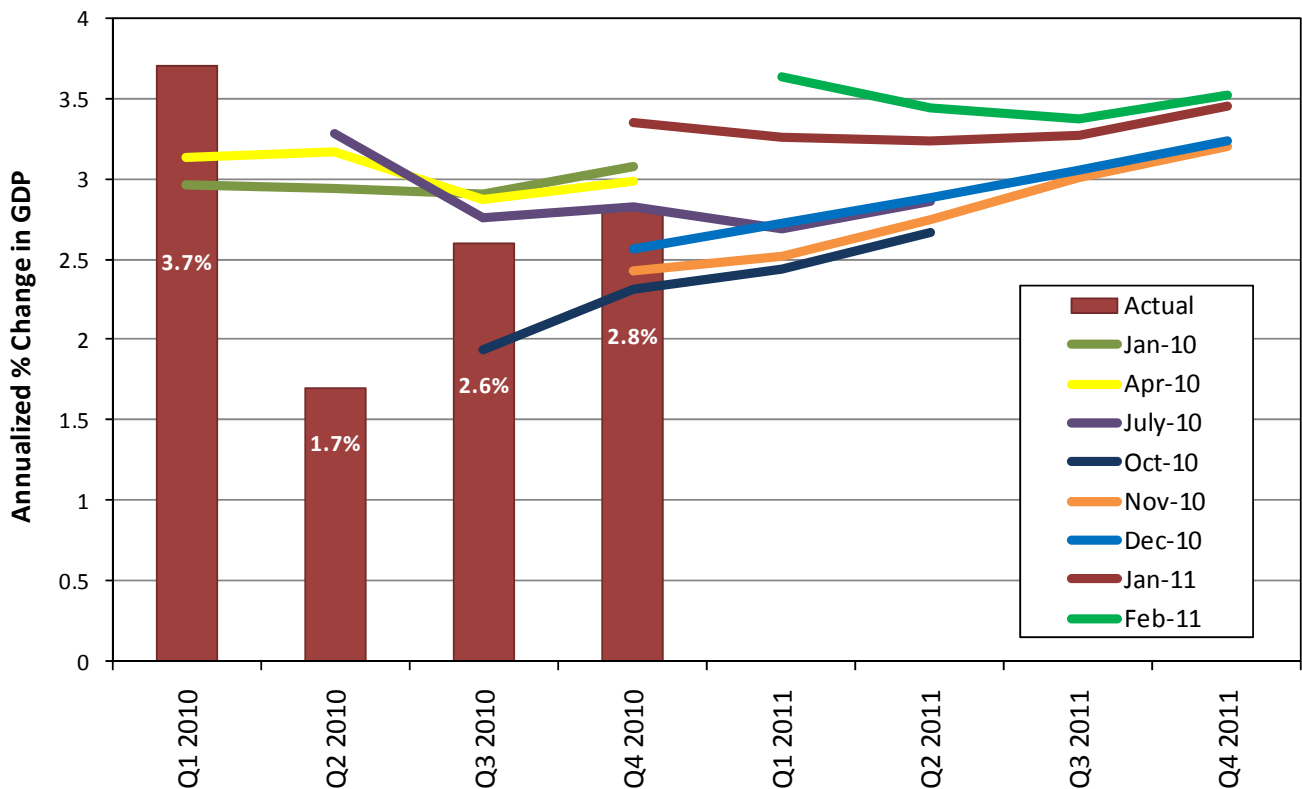
### **Underlying Demographic Forecasts**

- The underlying demographic forecasts used for the December 2010 Report are based on the results of three independent economists previously retained by WSA to review and revise NCTCOG's 2003 official demographic forecasts. The December 2010 Report utilized a "revised-lag" set of demographics encompassing revisions from prior analyses as well as employing a lagging effect of some of the projected population and employment growth due to the recent recession. While only limited new data

is available at this time, WSA believes that the new demographic forecasts from NCTCOG do not invalidate the traffic and revenue forecasts in the December 2010 Report.

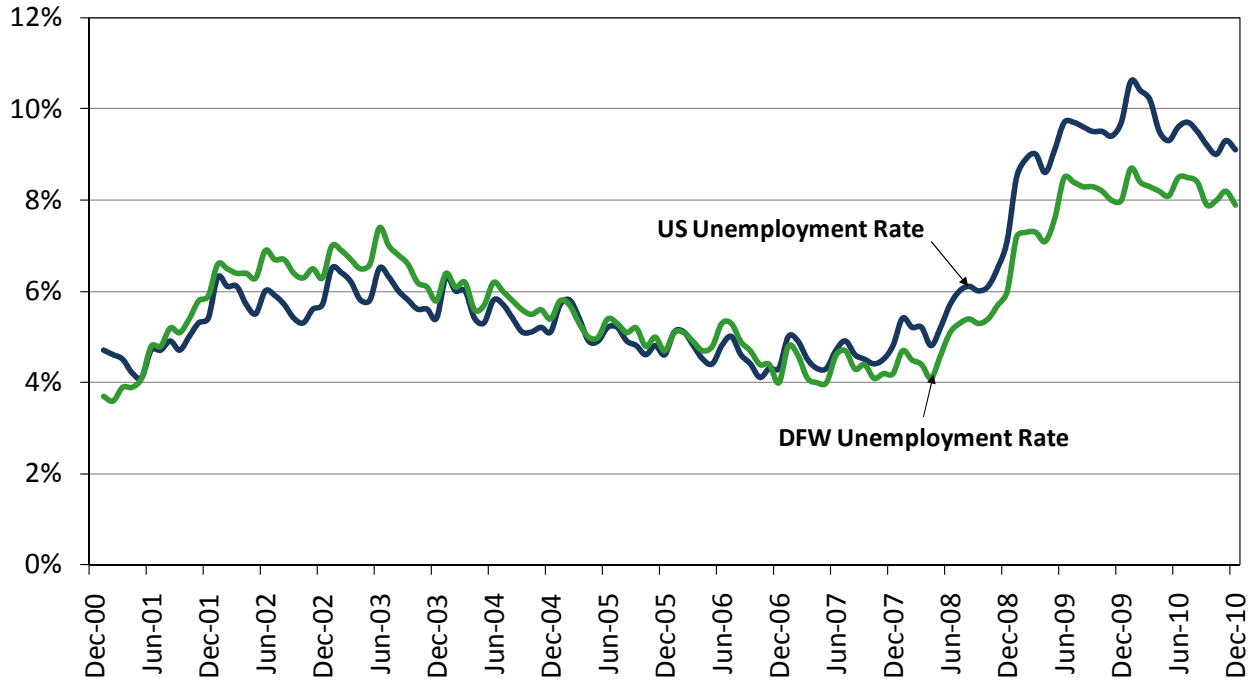
**Underlying Economic Climate**

- In September 2010 the National Bureau of Economic Research (NBER) announced that the nation-wide recession that started in December 2007 ended in June 2009 and that recovery began in that month. Economic conditions appear to be improving after a noticeable stabilization in the latter part of 2009. As can be seen in Figure 1, the actual annualized percentage change in the national Gross Domestic Product (GDP) was positive throughout 2010 and is forecasted to continue growing through the end of 2011. WSA tracks the monthly Economic Forecasting Surveys published by The Wall Street Journal (WSJ), and shown in Figure 1 are the average GDP change monthly forecasts from the WSJ Economic Forecasting Survey from January 2010 to February 2011. It should be noted that the most recent estimates from January and February of this year anticipate greater GDP growth than previously forecasted.
- Texas continues to experience a relatively smaller impact from the recent recession and seems to be on a faster track for recovery than many other parts of the country. Economists have referred to this as the “last in-first out” effect. Within Texas, the DFW area remains one of the strongest regional economies continuing to show modest recovery in job growth.
- Figures 2 and 3 show that the DFW area is performing much better than the rest of the nation in terms of unemployment rates and employment growth. Signs that the DFW economy is under recovery have provided assurance that the lagging effect of the demographic growth assumed in the December 2010 Report remains a valid assumption.

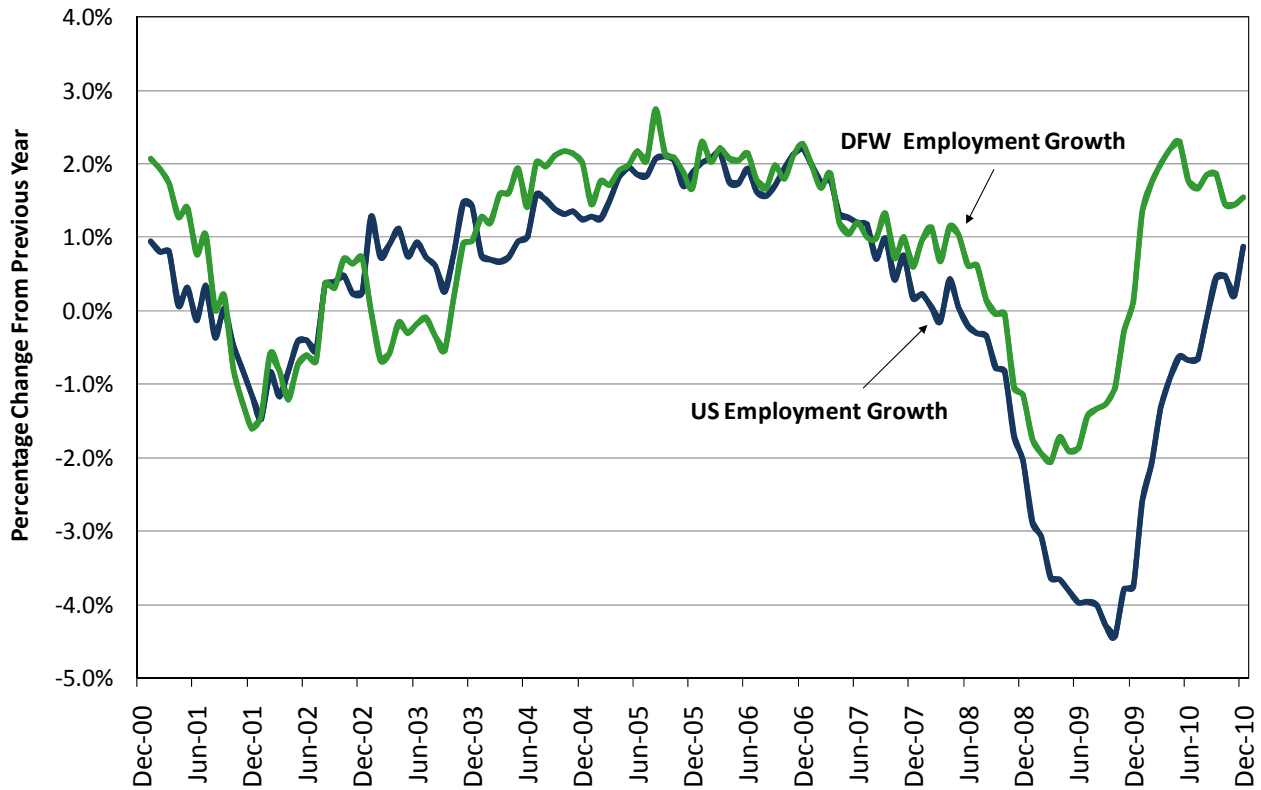


**Figure 1: GDP Growth Forecast Comparisons**

Source: Wall Street Journal Economic Forecasting Survey, US Bureau of Economic Analysis (March 2011)



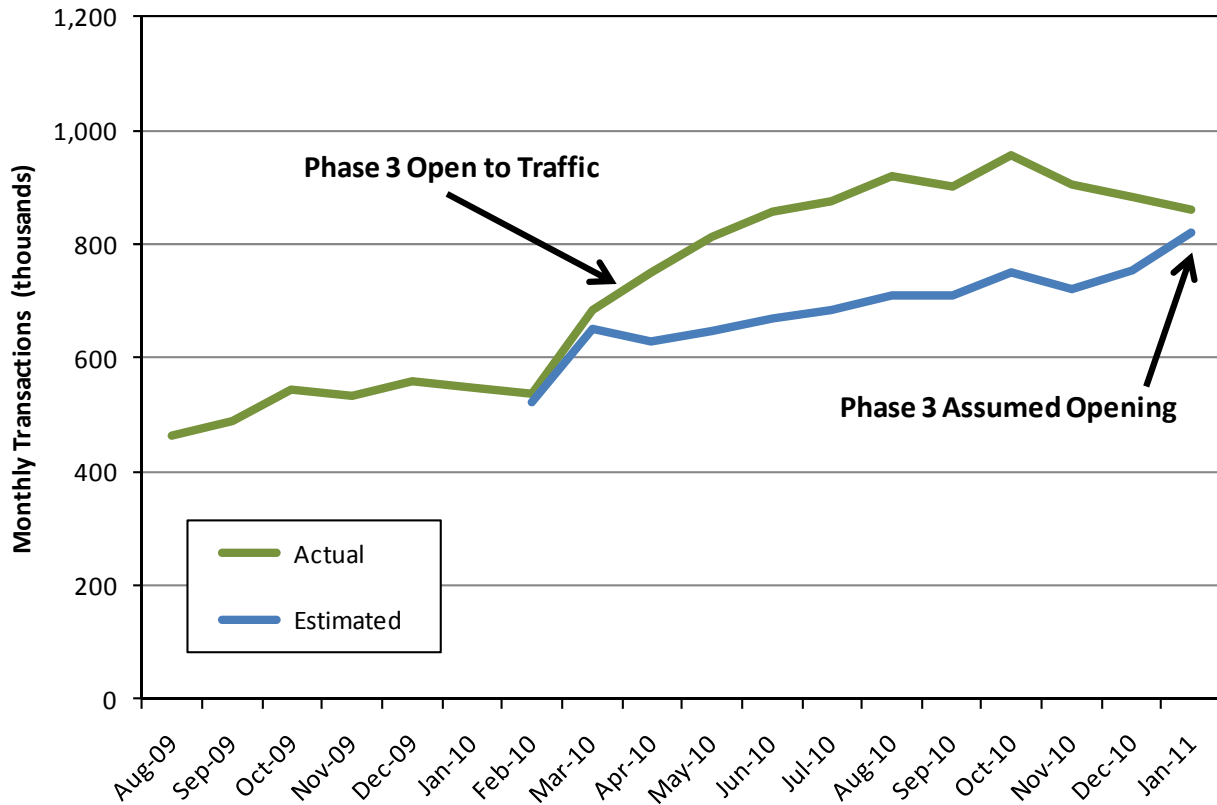
**Figure 2: Unemployment Rate Comparison**  
Source: Texas Workforce Commission (March 2011)



**Figure 3: Employment Growth Comparison**  
Source: Texas Workforce Commission (March 2011)

**Recent Traffic Patterns and Characteristics**

Figure 4 shows the total monthly transactions for the PGBT-WE since its opening in August 2009. As illustrated in the figure, by October 2010 total monthly transactions on the PGBT-WE had more than doubled since the main lanes were opened to traffic. Figure 4 also shows the estimated transactions that were produced by WSA in February 2010. The actual transactions on PGBT-WE exceeded those projections, although it is necessary to point out that a portion of the transaction growth was due to the early opening of Phase 3 in April 2010 as opposed to the assumed opening in January 2011.



**Figure 4: Actual and Estimated PGBT-WE Transactions**  
 Source: NTTA Unaudited Transaction Data

**CONCLUSION AND RECOMMENDATIONS**

Based upon the review of all pertinent assumptions supporting the December 2010 Report, it is WSA’s opinion that the resulting PGBT-WE T&R estimates are still valid. We have assessed, to the extent possible, the new information mentioned above and conclude that there should be no material impact to the PGBT-WE T&R estimates included in the December 2010 Report. However, as was noted above, a detailed analysis is needed to quantify the T&R impacts of the new Mobility 2035 plan and the demographic forecasts once the detailed datasets and models from NCTCOG become available.

Therefore, at this time WSA recommends that the December 2010 Report can be used to support the upcoming PGBT-WE financing. Table 1 shows the PGBT-WE T&R estimates from 2011 through 2061, which are the estimates included in the December 2010 Report.

| <b>Table 1</b>                          |                            |                     |
|---|----------------------------|---------------------|
| <b>PGBT-WE Transactions and Revenue</b> |                            |                     |
| <b>Calendar Year</b>                    | <b>Annual Transactions</b> | <b>Toll Revenue</b> |
| 2011                                    | 13,277,000                 | \$8,106,900         |
| 2012                                    | 23,390,200                 | \$15,004,800        |
| 2013                                    | 52,451,900                 | \$38,521,200        |
| 2014                                    | 62,477,500                 | \$48,282,600        |
| 2015                                    | 68,052,500                 | \$54,743,500        |
| 2016                                    | 70,781,900                 | \$58,846,700        |
| 2017                                    | 73,641,600                 | \$63,058,800        |
| 2018                                    | 76,637,100                 | \$67,723,000        |
| 2019                                    | 80,081,500                 | \$72,976,300        |
| 2020                                    | 85,759,900                 | \$81,075,600        |
| 2021                                    | 87,783,600                 | \$85,652,200        |
| 2022                                    | 89,858,700                 | \$90,474,900        |
| 2023                                    | 91,986,900                 | \$95,257,600        |
| 2024                                    | 94,169,200                 | \$100,433,900       |
| 2025                                    | 89,847,900                 | \$97,434,400        |
| 2026                                    | 92,091,300                 | \$102,712,600       |
| 2027                                    | 94,400,900                 | \$108,265,100       |
| 2028                                    | 96,779,700                 | \$114,224,100       |
| 2029                                    | 99,229,000                 | \$120,613,300       |
| 2030                                    | 101,751,700                | \$127,521,700       |
| 2031                                    | 112,213,300                | \$145,927,200       |
| 2032                                    | 115,075,500                | \$154,268,100       |
| 2033                                    | 118,022,900                | \$163,126,000       |
| 2034                                    | 121,058,600                | \$172,641,200       |
| 2035                                    | 124,185,600                | \$182,235,700       |
| 2036                                    | 125,800,000                | \$189,819,700       |
| 2037                                    | 127,435,500                | \$197,326,100       |
| 2038                                    | 129,092,100                | \$205,296,300       |
| 2039                                    | 130,770,400                | \$213,525,600       |
| 2040                                    | 132,470,000                | \$222,203,900       |
| 2041                                    | 133,794,900                | \$230,307,800       |
| 2042                                    | 135,133,000                | \$238,846,800       |
| 2043                                    | 136,484,500                | \$248,149,800       |
| 2044                                    | 137,849,300                | \$258,000,800       |
| 2045                                    | 139,227,700                | \$267,466,900       |
| 2046                                    | 140,620,000                | \$277,545,700       |
| 2047                                    | 142,026,100                | \$288,185,900       |
| 2048                                    | 143,446,500                | \$299,411,500       |
| 2049                                    | 144,880,900                | \$310,006,500       |
| 2050                                    | 146,329,800                | \$321,246,900       |
| 2051                                    | 147,792,800                | \$333,345,800       |
| 2052                                    | 149,270,800                | \$346,188,100       |
| 2053                                    | 150,763,500                | \$359,201,400       |
| 2054                                    | 152,271,400                | \$372,958,000       |
| 2055                                    | 153,793,900                | \$387,019,700       |
| 2056                                    | 155,331,600                | \$401,898,100       |
| 2057                                    | 156,885,000                | \$416,709,700       |
| 2058                                    | 158,454,000                | \$432,515,500       |
| 2059                                    | 160,038,600                | \$449,026,900       |
| 2060                                    | 161,638,800                | \$466,470,100       |
| 2061                                    | 163,255,300                | \$483,499,700       |

**Key Assumptions:**

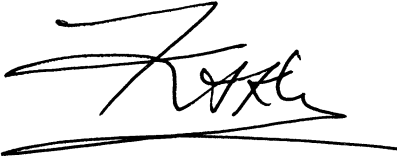
1. Travel demand models based on MTP 2030:2009 Amendment
2. "Revised-lag" demographics
3. Toll rate increases on July 1 of every odd year starting July 1, 2011
4. Mainlanes to IH 20 open to traffic by October 2012
5. Expansion of southern half of facility to six lanes by January 1, 2020
6. Expansion of entire facility to eight lanes by January 1, 2031

Ms. Janice Davis  
March 9, 2011  
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We hope this summary meets your needs. Please do not hesitate to call if you have any questions or if any additional information is required.

Sincerely,

WILBUR SMITH ASSOCIATES

A handwritten signature in black ink, appearing to read 'Kamran Khan', with a long horizontal line underneath.

Kamran Khan

Senior Vice President

**DISCLAIMER**

Results, findings, conclusions and recommendations found in this letter are the direct result of the application of current state-of-the-practice processes and procedures in traffic and toll revenue forecasting. WSA believes that projections and other forward-looking statements contained within this letter are based on reasonable assumptions as of the date of this letter. However, there is considerable uncertainty inherent in forecasting traffic and revenue for any toll facility. There may sometimes be differences between forecasted and actual results caused by events and circumstances beyond the control of the forecasters. These differences could be material. Also, it should be recognized that traffic and revenue forecasts in this letter reflect the overall estimated long-term trend. Actual experience in any given year may vary due to changing economic conditions or other factors.

In developing these forecasts, WSA has reasonably relied upon the accuracy and completeness of information provided (both written and oral) by North Texas Tollway Authority staff and consultants, other local and state agencies. WSA has also relied upon the reasonable assurances of some independent parties and is not aware of any facts that would make such information misleading. Determination of several key variables impacting the traffic and revenue forecasts are the result of WSA's professional qualitative judgment based upon years of industry experience. These variables must be considered together as a whole rather than as discrete variables. Misleading or inaccurate conclusions could result without appropriate consideration of the intent or application of these variables or the underlying methodologies used to obtain the results.